

APPENDIX L

Chapter 11 Supplemental Information

**Air Quality and Greenhouse Gas
Technical Memorandum for
Dana Reserve Specific Plan
(February 29, 2024)**



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AIR QUALITY & GREENHOUSE GAS TECHNICAL MEMORANDUM

Date: February 29, 2024

To: Emily Creel, Principal Planning Team Lead
SWCA Environmental Consultants

From: Kurt Legleiter, Principal

Subject: **Air Quality and Greenhouse Gas Technical Memorandum – Dana Reserve Specific Plan, San Luis Obispo County**

INTRODUCTION

This technical memorandum provides updated operational air quality and greenhouse gas (GHG) emissions estimates for the proposed housing component of the Dana Reserve Specific Plan Project (project), with and without the inclusion of age-restricted housing. Both modeled scenarios include an additional 52 accessory dwelling units. Housing-related emissions, including both onsite and offsite emissions, were quantified using the most recent version of the California Emissions Estimator Model (CalEEMod 2022.1.1.21), based on updated vehicle trip-generation rates and population estimates provided for the two modeled housing scenarios (CCTC 2024, SWCA 2024). Emissions were modeled with and without the inclusion of the proposed air quality and GHG mitigation measures derived from the Draft Environmental Impact Report (DEIR) prepared for this project (County of San Luis Obispo 2022). The proposed hotel and commercial land uses, as depicted in the DEIR prepared for this project, and associated emissions remain unchanged and have also been incorporated into this memorandum along with the updated housing-related emissions for purposes of comparing to San Luis Obispo County Air Pollution Control District (SLOAPCD)-recommended significance thresholds. Updated vehicle trip-generation rates and CalEEMod output modeling files for both modeled housing scenarios have been included in Appendix A of this memorandum.

PROJECT WITHOUT AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS

Operational emissions of criteria air pollutants, without and with mitigation, are depicted in Tables 1 and 2, respectively. Tables 3 and 4 provide a summary of annual operational GHG emissions for both an unmitigated and mitigated scenario, respectively. Estimated operational emissions of criteria air pollutants and GHG emissions are discussed, as follows:



Estimated Operational Criteria Air Pollutants without Mitigation

As depicted in Table 1, unmitigated maximum daily operational emissions would total approximately 209.27 lbs/day of ROG+NO_x, 570.51 lbs/day of CO, 113.58 lbs/day of fugitive PM₁₀, and 2.09 lbs/day of exhaust PM₁₀. Daily emissions of ROG+NO_x, CO, fugitive PM₁₀, and exhaust PM₁₀ would exceed SLOAPCD's corresponding significance thresholds. Annual emissions would total approximately 31.93 tons/year of ROG+NO_x and 15.26 tons/year of fugitive PM₁₀. Estimated annual operational emissions of ROG+NO_x would exceed SLOAPCD's recommended significance thresholds. Annual emissions of fugitive PM₁₀ would not exceed SLOAPCD's recommended significance thresholds.

Table 1
Operational Emissions Without Mitigation
(PROJECT WITHOUT AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS)

Operational	Emissions ^{1,3}						
	ROG	NO _x	ROG+NO _x	CO	PM ₁₀		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	62.17	0.80	62.97	86.78	0	0.04	0.04
Energy Use	0.91	14.42	15.33	6.74	0	1.15	1.15
Mobile ²	71.59	59.36	130.96	476.98	113.58	0.89	114.47
Total Project Emissions	134.69	74.58	209.27	570.51	113.58	2.09	115.67
SLOAPCD Significance Threshold	--	--	25	550	25	1.25	--
Exceed SLOAPCD Thresholds?	--	--	Yes	Yes	Yes	Yes	--
Annual Emissions (tons/year)							
Total Project Emissions	20.81	11.12	31.93	79.22	15.26	0.33	15.60
SLOAPCD Significance Threshold	--	--	25	--	25	--	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	--	No	--	--
<p>1. Daily emissions are based on the highest emissions for summer or winter operational conditions for buildout conditions.</p> <p>2. Mobile emissions were based on CalEEMod, a default fleet mix.</p> <p>3. Estimated emissions reflect total project-generated emissions, with the inclusion of the proposed commercial, educational, and hotel land use components. Hotel, commercial and educational, emissions based on previously calculated emissions (County San Luis Obispo 2024). Commercial land uses noted in this table include educational land uses. Emissions do not include air quality mitigation measures, as noted in the DEIR prepared for this project (County of San Luis Obispo 2024).</p> <p>Totals may not sum due to rounding. Refer to Appendix A for modeling assumptions and results.</p>							



Estimated Operational Criteria Air Pollutants with Mitigation

As depicted in Table 2, mitigated maximum daily operational emissions would total approximately 177.61 lbs/day of ROG+NO_x, 506.17 lbs/day of CO, 96.46 lbs/day of fugitive PM₁₀, and 0.97 lbs/day of exhaust PM₁₀. Mitigated daily emissions of ROG+NO_x and fugitive PM₁₀ would exceed SLOAPCD's corresponding significance thresholds. Mitigated annual emissions would total approximately 26.98 tons/year of ROG+NO_x and 12.99 tons/year of fugitive PM₁₀. Estimated annual operational emissions of ROG+NO_x would exceed SLOAPCD's recommended significance thresholds. Annual emissions of fugitive PM₁₀ would not exceed SLOAPCD's recommended significance thresholds.

Table 2
Operational Emissions With Mitigation
(PROJECT WITHOUT AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS)

Operational	Emissions ^{1,3}						
	ROG	NOX	ROG+NO _x	CO	PM ₁₀		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	58.47	0.80	59.27	86.78	0	0.040	0.04
Energy Use	0.15	1.42	1.57	1.19	0	0.10	0.10
Mobile ²	65.10	51.66	116.77	418.19	96.46	0.82	97.25
Total Project Emissions	123.73	53.88	177.61	506.17	96.46	0.97	97.40
SLOAPCD Significance Threshold	--	--	25	550	25	1.25	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	No	Yes	No	--
Annual Emissions (tons/year)							
Total Project Emissions	19.36	7.61	26.98	67.86	12.99	0.32	13.31
SLOAPCD Significance Threshold	--	--	25	--	25	--	--
Exceeds SLOPACD Thresholds?	--	--	Yes	--	No	--	--
<p>1. Daily emissions are based on the highest emissions for summer or winter operational conditions for buildout conditions.</p> <p>2. Mobile emissions were based on CalEEMod, a default fleet mix.</p> <p>3. Estimated emissions reflect total project-generated emissions, with the inclusion of the proposed commercial, educational, and hotel land use components. Hotel, commercial, and educational emissions are based on previously calculated emissions (County San Luis Obispo 2024). Commercial land uses noted in this table include educational land uses. Emissions include air quality mitigation measures, as noted in the DEIR prepared for this project (County of San Luis Obispo 2024).</p> <p>Totals may not sum due to rounding. Refer to Appendix A for modeling assumptions and results.</p>							



Estimated Operational GHG Emissions without Mitigation

As depicted in Table 3, annual unmitigated GHG emissions with the inclusion of amortized construction and loss of carbon sequestration would total approximately 18,855.90 Metric tons of carbon dioxide (MTCO_{2e}). The calculated annual MTCO_{2e} per service population per year (MTCO_{2e}/SP/yr) would be 3.71 which would exceed the significance threshold of 2.9 MTCO_{2e}/SP/yr.

Table 3
Operational GHG Emissions Without Mitigation
(PROJECT WITHOUT AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS)

Year 2030 GHG Emissions (MTCO _{2e} /Year) ^{8,9}				
Source	Residential	Hotel	Commercial	Total
Area ¹	34.67	<0.01	0.02	34.69
Energy ²	2,860.98	167.24	272.57	3,300.80
Motor Vehicles ³	9120.30	577.46	4,151.21	13,849.00
Waste ⁴	115.24	15.14	36.92	167.31
Water ⁵	87.23	4.00	28.21	119.42
Total Operational Emissions:				17,471.23
Amortized Construction Emissions:				987.30
Amortized Loss of Carbon Sequestration Emissions ⁶ :				394.90
Total with Loss of Carbon Sequestration and Amortized Construction Emissions:				18,855.90
Service Population (SP) ⁷ :				5,082
MTCO _{2e} /SP:				3.71
GHG Efficiency Significance Threshold:				2.9
Exceeds Threshold?				Yes
<p>1. Area source includes emissions associated primarily with the use of landscape maintenance equipment.</p> <p>2. Includes adjustment for California Renewable Portfolio Standards requirements and a minimum average reduction of 70 percent in residential electricity use with installation of on-site residential solar PV systems and compliance with applicable building energy-efficiency standards (PG&E 2022). Does not include a reduction for mitigated natural gas use.</p> <p>3. Based on the default fleet mix for land uses contained in CalEEMod for San Luis Obispo County.</p> <p>4. To be conservative, based on statewide annual average waste diversion rate of 60%. County of San Luis Obispo's 2006 waste diversion rate was 63% (Calrecycle 2024).</p> <p>5. Includes use of low-flow water fixtures and water-efficient irrigation systems, per current building code requirements.</p> <p>6. Calculated in CalEEMod based on loss of a total of approximately 266.5 acres, including 21.7 acres of coast live oak forest, 75.3 acres of coast live oak woodland, 35.0 acres of Burton Mesa chaparral, 125.0 acres of California perennial grassland, 3.2 acres of annual brome grassland, and 5.1 acres of Mediterranean California naturalized perennial grassland. Offsite improvements would impact approximately 0.05 acres of scrubland and 0.81 acres of grassland.</p> <p>7. Service population based on an estimated number of 4,809 residents and 273 employees (SWCA 2024).</p> <p>8. Refrigerant emissions included.</p> <p>9. Estimated emissions reflect total project-generated emissions, with the inclusion of the proposed commercial, educational, and hotel land use components. Hotel, commercial, and educational emissions are based on previously calculated emissions (County San Luis Obispo 2024). Commercial land uses noted in this table include educational land uses. Emissions do not include GHG mitigation measures, as noted in the DEIR prepared for this project (County of San Luis Obispo 2024).</p> <p>Totals may not sum due to rounding. Refer to Appendix A for modeling assumptions and results.</p>				



Estimated Operational GHG Emissions with Mitigation

As depicted in Table 4, annual mitigated GHG emissions with the inclusion of amortized construction and loss of carbon sequestration would total approximately 14,192.20 MTCO_{2e}. As depicted in Table 4, with mitigation, the calculated MTCO_{2e}/SP/yr would be 2.79 which would not exceed the significance threshold of 2.9 MTCO_{2e}/SP/yr.

Table 4
Operational GHG Emissions With Mitigation
(PROJECT WITHOUT AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS)

Year 2030 GHG Emissions (MTCO _{2e} /Year) ^{8,9}				
Source	Residential	Hotel	Commercial	Total
Area ¹	34.67	<0.01	0.02	34.69
Energy ²	111.98	166.69	271.98	550.66
Motor Vehicles ³	8,374.00	542.49	3,018.94	11,935.40
Waste ⁴	115.24	15.14	36.92	167.31
Water ⁵	87.23	4.00	28.21	119.45
Total Operational Emissions:				12,807.55
Amortized Construction Emissions:				987.30
Amortized Loss of Carbon Sequestration Emissions ⁶ :				394.90
Total with Loss of Carbon Sequestration and Amortized Construction Emissions:				14,192.20
Service Population (SP) ⁷ :				5,082
MTCO _{2e} /SP:				2.79
GHG Efficiency Significance Threshold:				2.9
Exceeds Threshold?				No
<p>1. Area source includes emissions associated primarily with the use of landscape maintenance equipment.</p> <p>2. Includes adjustment for California Renewable Portfolio Standards requirements and a minimum average reduction of 70 percent in residential electricity use with installation of on-site residential solar PV systems and compliance with applicable building energy-efficiency standards (PG&E 2022). Does not include emissions associated with natural gas per mitigation measure GHG-1.</p> <p>3. Based on the default fleet mix for land uses contained in CalEEMod for San Luis Obispo County.</p> <p>4. To be conservative, based on statewide annual average waste diversion rate of 60%. The County of San Luis Obispo 2006 waste diversion rate was 63% (Calrecycle 2024).</p> <p>5. Includes use of low-flow water fixtures and water-efficient irrigation systems, per current building code requirements.</p> <p>6. Calculated in CalEEMod based on loss of a total of approximately 266.5 acres, including 21.7 acres of coast live oak forest, 75.3 acres of coast live oak woodland, 35.0 acres of Burton Mesa chaparral, 125.0 acres of California perennial grassland, 3.2 acres of annual brome grassland, and 5.1 acres of Mediterranean California naturalized perennial grassland. Offsite improvements would impact approximately 0.05 acres of scrubland and 0.81 acres of grassland.</p> <p>7. Service population based on an estimated number of 4,809 residents and 273 employees (SWCA 2024).</p> <p>8. Refrigerant emissions included.</p> <p>9. Estimated emissions reflect total project-generated emissions, with the inclusion of the proposed commercial, educational, and hotel land use components. Hotel, commercial, and educational emissions are based on previously calculated emissions (County San Luis Obispo 2024). Commercial land uses noted in this table include educational land uses. Emissions include GHG mitigation measures, as noted in the DEIR prepared for this project (County of San Luis Obispo 2024).</p> <p>Totals may not sum due to rounding. Refer to Appendix A for modeling assumptions and results.</p>				



PROJECT WITH AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS

Operational emissions of criteria air pollutants, with and without mitigation, are depicted in Tables 5 and 6, respectively. Tables 7 and 8 provide a summary of annual operational GHG emissions for both an unmitigated and mitigated scenario, respectively. Estimated operational emissions of criteria air pollutants and GHG emissions are discussed, as follows:

Estimated Operational Criteria Pollutants without Mitigation

As depicted in Table 5, unmitigated maximum daily operational emissions would total approximately 209.27 lbs/day of ROG+NO_x, 570.51 lbs/day of CO, 113.58 lbs/day of fugitive PM₁₀, and 1.25 lbs/day of exhaust PM₁₀. Daily emissions of ROG+NO_x, CO, fugitive PM₁₀, and exhaust PM₁₀ would exceed SLOAPCD’s corresponding significance thresholds. Annual emissions would total approximately 30.19 tons/year of ROG+NO_x and 13.92 tons/year of fugitive PM₁₀. Annual emissions of ROG+NO_x would exceed SLOAPCD’s recommended significance thresholds. Annual emissions of fugitive PM₁₀ would not exceed SLOAPCD’s recommended significance thresholds.

Table 5
Operational Emissions Without Mitigation
(PROJECT WITH AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS)

Operational	Emissions ^{1,3}						
	ROG	NO _x	ROG+NO _x	CO	PM ₁₀		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	62.17	0.80	62.97	86.78	0	0.040	0.04
Energy Use	0.91	14.42	15.33	6.74	0	1.15	1.15
Mobile ²	71.59	59.36	130.96	476.98	113.58	0.89	114.47
Total Project Emissions	134.69	74.58	209.27	570.51	113.58	2.09	115.67
SLOAPCD Significance Threshold	--	--	25	550	25	1.25	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	Yes	Yes	Yes	--
Annual Emissions (tons/year)							
Total Project Emissions	19.81	10.38	30.19	73.52	13.93	0.32	14.25
SLOAPCD Significance Threshold	--	--	25	--	25	--	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	--	No	--	--
<p>1. Daily emissions are based on the highest emissions for summer or winter operational conditions for buildout conditions.</p> <p>2. Mobile emissions were based on CalEEMod, a default fleet mix.</p> <p>3. Estimated emissions reflect total project-generated emissions, with the inclusion of the proposed commercial, educational, and hotel land use components. Hotel, commercial, and educational emissions are based on previously calculated emissions (County San Luis Obispo 2024). Commercial land uses noted in this table include educational land uses. Emissions do not include air quality mitigation measures, as noted in the DEIR prepared for this project (County of San Luis Obispo 2024).</p> <p>Totals may not sum due to rounding. Refer to Appendix A for modeling assumptions and results.</p>							



Estimated Operational Criteria Pollutants with Mitigation

As depicted in Table 6, mitigated maximum daily operational emissions would total approximately 177.63 lbs/day of ROG+NO_x, 506.17 lbs/day of CO, 96.19 lbs/day of fugitive PM₁₀, and 0.97 lbs/day of exhaust PM₁₀. Daily emissions of ROG+NO_x, CO, and fugitive PM₁₀ would exceed SLOAPCD's corresponding significance thresholds. Annual emissions of ROG+NO_x would total approximately 25.23 tons/year and fugitive PM₁₀ would total approximately 11.76 tons/year. Annual emissions of ROG+NO_x would exceed SLOAPCD's recommended significance thresholds. Annual emissions of fugitive PM₁₀ would not exceed SLOAPCD's recommended significance thresholds.

Table 6
Operation Emissions With Mitigation
(PROJECT WITH AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS)

Operational	Emissions ^{1,3}						
	ROG	NO _x	ROG+NO _x	CO	PM ₁₀		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	58.47	0.80	59.27	86.78	0	0.04	0.04
Energy Use	0.15	1.42	1.57	1.19	0	0.10	0.10
Mobile ²	65.10	51.67	116.78	418.19	96.19	0.82	97.22
Total Project Emissions	123.73	53.89	177.63	506.17	96.19	0.97	97.37
SLOAPCD Significance Threshold	--	--	25	550	25	1.25	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	No	Yes	No	--
Annual Emissions (tons/year)							
Total Project Emissions	18.25	6.98	25.23	62.66	11.76	0.31	11.95
SLOAPCD Significance Threshold	--	--	25	--	25	--	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	--	No	--	--

1. Daily emissions are based on the highest emissions for summer or winter operational conditions for buildout conditions.

2. Mobile emissions were based on CalEEMod, a default fleet mix.

3. Estimated emissions reflect total project-generated emissions, with the inclusion of the proposed commercial, educational, and hotel land use components. Hotel, commercial, and educational emissions are based on previously calculated emissions (County San Luis Obispo 2024). Commercial land uses noted in this table include educational land uses. Emissions include air quality mitigation measures, as noted in the DEIR prepared for this project (County of San Luis Obispo 2024).

Totals may not sum due to rounding. Refer to Appendix A for modeling assumptions and results.



Estimated Operational GHG Emissions without Mitigation

Operational GHG emissions without and with mitigation, are depicted in Tables 7 and 8, respectively. As depicted in Table 7, annual unmitigated GHG emissions with the inclusion of amortized construction and loss of carbon sequestration would total approximately 17,562.90 MTCO_{2e}. Without mitigation, the calculated MTCO_{2e}/SP/yr would be 3.46 which would exceed the significance threshold of 2.9 MTCO_{2e}/SP/yr.

Table 7
Operational GHG Emissions Without Mitigation
(PROJECT WITH AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS)

Year 2030 GHG Emissions (MTCO _{2e} /Year) ^{8,9}				
Source	Residential	Hotel	Commercial	Total
Area ¹	34.67	<0.01	0.02	34.69
Energy ²	2,868.28	167.24	272.57	3,308.10
Motor Vehicles ³	7,820.00	577.46	4,151.21	12,548.70
Waste ⁴	115.24	15.14	36.92	167.31
Water ⁵	87.23	4.00	28.21	119.45
Total Operational Emissions:				16,178.23
Amortized Construction Emissions:				987.30
Amortized Loss of Carbon Sequestration Emissions ⁶ :				394.90
Total with Loss of Carbon Sequestration and Amortized Construction Emissions:				17,562.90
Service Population (SP) ⁷ :				5,082
MTCO _{2e} /SP:				3.46
GHG Efficiency Significance Threshold:				2.9
Exceeds Threshold?				Yes
<p>1. Area source includes emissions associated primarily with the use of landscape maintenance equipment.</p> <p>2. Includes adjustment for California Renewable Portfolio Standards requirements and a minimum average reduction of 70 percent in residential electricity use with installation of on-site residential solar PV systems and compliance with applicable building energy-efficiency standards (PG&E 2022). Does not include a reduction for mitigated natural gas use.</p> <p>3. Based on the default fleet mix for land uses contained in CalEEMod for San Luis Obispo County.</p> <p>4. To be conservative, based on statewide annual average waste diversion rate of 60%. The County of San Luis Obispo 2006 waste diversion rate was 63% (Calrecycle 2024).</p> <p>5. Includes use of low-flow water fixtures and water-efficient irrigation systems, per current building code requirements.</p> <p>6. Calculated in CalEEMod based on loss of a total of approximately 266.5 acres, including 21.7 acres of coast live oak forest, 75.3 acres of coast live oak woodland, 35.0 acres of Burton Mesa chaparral, 125.0 acres of California perennial grassland, 3.2 acres of annual brome grassland, and 5.1 acres of Mediterranean California naturalized perennial grassland. Offsite improvements would impact approximately 0.05 acres of scrubland and 0.81 acres of grassland.</p> <p>7. Service population based on an estimated number of 4,809 residents and 273 employees (SWCA 2024).</p> <p>8. Refrigerant Emissions included.</p> <p>9. Estimated emissions reflect total project-generated emissions, with the inclusion of the proposed commercial, educational, and hotel land use components. Hotel, commercial, and educational emissions are based on previously calculated emissions (County San Luis Obispo 2024). Commercial land use components as noted in this table include educational land uses. Emissions do not include GHG mitigation measures, as noted in the DEIR prepared for this project (County of San Luis Obispo 2024).</p> <p>Totals may not sum due to rounding. Refer to Appendix A for modeling assumptions and results.</p>				



Estimated Operational GHG Emissions with Mitigation

As depicted in Table 8, annual mitigated GHG emissions with the inclusion of amortized construction and loss of carbon sequestration would total approximately 12,993.00 MTCO_{2e}. As depicted calculated MTCO_{2e}/SP/yr would be 2.56 which would not exceed the significance threshold of 2.9 MTCO_{2e}/SP/yr.

Table 8
Operational GHG Emissions With Mitigation
(PROJECT WITH AGE-RESTRICTION – WITH ADDITIONAL 52 UNITS)

Year 2030 GHG Emissions (MTCO _{2e} /Year) ^{8,9}				
Source	Residential	Hotel	Commercial	Total
Area ¹	34.67	<0.01	0.02	34.69
Energy ²	118.98	166.69	271.98	550.66
Motor Vehicles ³	7174.80	542.49	3,018.94	10,736.20
Waste ⁴	115.24	15.14	36.92	167.311
Water ⁵	87.23	4.00	28.21	119.45
Total Operational Emissions:				11,608.35
Amortized Construction Emissions:				987.30
Amortized Loss of Carbon Sequestration Emissions ⁶ :				394.90
Total with Loss of Carbon Sequestration and Amortized Construction Emissions:				12,993.00
Service Population (SP) ⁷ :				5,082
MTCO _{2e} /SP:				2.56
GHG Efficiency Significance Threshold:				2.9
Exceeds Threshold?				No
<p>1. Area source includes emissions associated primarily with the use of landscape maintenance equipment.</p> <p>2. Includes adjustment for California Renewable Portfolio Standards requirements and a minimum average reduction of 70 percent in residential electricity use with installation of on-site residential solar PV systems and compliance with applicable building energy-efficiency standards (PG&E 2022). Does not include emissions associated with natural gas per mitigation measure GHG-1.</p> <p>3. Based on the default fleet mix for land uses contained in CalEEMod for San Luis Obispo County.</p> <p>4. To be conservative, based on statewide annual average waste diversion rate of 60%. The County of San Luis Obispo 2006 waste diversion rate was 63% (Calrecycle 2024).</p> <p>5. Includes use of low-flow water fixtures and water-efficient irrigation systems, per current building code requirements.</p> <p>6. Calculated in CalEEMod based on loss of a total of approximately 266.5 acres, including 21.7 acres of coast live oak forest, 75.3 acres of coast live oak woodland, 35.0 acres of Burton Mesa chaparral, 125.0 acres of California perennial grassland, 3.2 acres of annual brome grassland, and 5.1 acres of Mediterranean California naturalized perennial grassland. Offsite improvements would impact approximately 0.05 acres of scrubland and 0.81 acres of grassland.</p> <p>7. Service population based on an estimated number of 4,809 residents and 273 employees (SWCA 2024).</p> <p>8. Refrigerant emissions included.</p> <p>9. Estimated emissions reflect total project-generated emissions, with the inclusion of the proposed commercial, educational, and hotel land use components. Hotel commercial and educational emissions are based on previously calculated emissions (County San Luis Obispo 2024). Commercial land uses noted in this table include educational land uses. Emissions include GHG mitigation measures, as noted in the DEIR prepared for this project (County of San Luis Obispo 2024).</p> <p>Totals may not sum due to rounding. Refer to Appendix A for modeling assumptions and results.</p>				



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- SWCA, Inc. (SWCA). February 2024. Email Correspondence with Kurt Legleiter, Principal, Ambient Air Quality & Noise Consultants.



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APPENDIX A



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No Senior Housing (Unmitigated)

Operational	Emissions						Total
	ROG	NOX	ROG+NO _x	CO	Fugitive	PM10 Exhaust	
Daily Emissions (lbs/day)							
Area Source	62.176	0.8008	62.977	86.786	0	0.0403	0.0403
Energy Use	0.9162	14.42	15.337	6.7431	0	1.158	1.158
Mobile	71.539	53.365	130.96	476.99	113.58	0.8952	114.48
Total Project Emissions	134.7	74.59	209.3	570.5	113.6	2.094	115.7
SLDAPCD Significance Threshold							
Exceed Threshold?			Yes	Yes	Yes		
Annual Emissions (tons/year)							
Total Project Emissions	20.81	11.13	31.94	79.22	15.27	0.339	15.61
SLDAPCD Significance Threshold							
Exceed Threshold?			Yes		No		

No Senior Housing (Mitigated)

Operational	Emissions						Total
	ROG	NOX	ROG+NO _x	CO	Fugitive	PM10 Exhaust	
Daily Emissions (lbs/day)							
Area Source	58.471	0.8008	59.272	86.786	0	0.0403	0.0403
Energy Use	0.1562	14.204	15.766	1.1931	0	0.108	0.108
Mobile	65.104	51.666	116.77	418.19	96.469	0.8285	97.258
Total Project Emissions	123.7	53.89	177.6	506.2	96.47	0.977	97.41
SLDAPCD Significance Threshold							
Exceed Threshold?			Yes	No	Yes		
Annual Emissions (tons/year)							
Total Project Emissions	19.37	7.614	26.98	67.87	12.99	0.32	13.32
SLDAPCD Significance Threshold							
Exceed Threshold?			Yes		No		

Senior Housing (Unmitigated)

Operational	Emissions						Total
	ROG	NOX	ROG+NO _x	CO	Fugitive	PM10 Exhaust	
Daily Emissions (lbs/day)							
Area Source	62.176	0.8008	62.977	86.786	0	0.0403	0.0403
Energy Use	0.9162	14.42	15.337	6.7431	0	1.158	1.158
Mobile	71.539	53.365	130.96	476.99	113.58	0.8952	114.48
Total Project Emissions	134.69	74.586	209.28	570.52	113.58	2.0935	115.68
SLDAPCD Significance Threshold							
Exceed Threshold?			Yes	Yes	Yes		
Annual Emissions (tons/year)							
Total Project Emissions	19.81	10.39	30.2	73.52	13.93	0.329	14.26
SLDAPCD Significance Threshold							
Exceed Threshold?			Yes		No		

Senior Housing (Mitigated)

Operational	Emissions						Total
	ROG	NOX	ROG+NO _x	CO	Fugitive	PM10 Exhaust	
Daily Emissions (lbs/day)							
Area Source	58.471	0.8008	59.272	86.786	0	0.0403	0.0403
Energy Use	0.1562	14.204	15.766	1.1931	0	0.108	0.108
Mobile	65.104	51.679	116.78	418.19	96.199	0.8285	97.228
Total Project Emissions	123.7	53.9	177.6	506.2	96.2	0.977	97.38
SLDAPCD Significance Threshold							
Exceed Threshold?			Yes	No	Yes		
Annual Emissions (tons/year)							
Total Project Emissions	18.25	6.984	25.24	62.67	11.76	0.31	11.95
SLDAPCD Significance Threshold							
Exceed Threshold?			Yes		No		

Unmitigated No Senior Housing MTCO₂e Annual

	Residential	Hotel	Commercial	Total
Area	34.67	0.00384	0.0258	34.69964
Energy	2860.98	167.2488	272.576	3300.805
Motor Vehicles	9120.3	577.46	4151.21	13848.97
Waste	115.24	15.1449	36.9255	167.3104
Water	87.23	4.006	28.2156	119.4516
Total				18855.9
Service Population (at 3.16 pph)				5082
MTCO ₂ e/SP				3.71033
GHG Threshold				2.9
Exceeds?				Yes

Mitigated No Senior Housing MTCO₂e Annual

	Residential	Hotel	Commercial	Total
Area	34.67	0.00384	0.0258	34.69964
Energy	111.98	166.694	271.9869	550.6609
Motor Vehicles	8374	542.4917	3018.94	11935.43
Waste	115.24	15.1449	36.9255	167.3104
Water	87.23	4.006	28.2156	119.4516
Total				14192.21
Service Population (at 3.16 pph)				5082
MTCO ₂ e/SP				2.792643
GHG Threshold				2.9
Exceeds?				No

Unmitigated Senior Housing MTCO₂e Annual

	Residential	Hotel	Commercial	Total
Area	34.67	0.00384	0.0258	34.69964
Energy	2868.28	167.2488	272.576	3308.105
Motor Vehicles	7820	577.46	4151.21	12548.67
Waste	115.24	15.1449	36.9255	167.3104
Water	87.23	4.006	28.2156	119.4516
Total				17562.9
Service Population (at 3.16 pph)				5082
MTCO ₂ e/SP				3.455902
GHG Threshold				2.9
Exceeds?				Yes

Mitigated Senior Housing MTCO₂e Annual

	Residential	Hotel	Commercial	Total
Area	34.67	0.00384	0.0258	34.69964
Energy	111.98	166.694	271.9869	550.6609
Motor Vehicles	7174.8	542.4917	3018.94	10736.23
Waste	115.24	15.1449	36.9255	167.3104
Water	87.23	4.006	28.2156	119.4516
Total				12993.01
Service Population (at 3.16 pph)				5082
MTCO ₂ e/SP				2.556673
GHG Threshold				2.9
Exceeds?				No



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Trip Generation (2024 DRSP)																	
Land Use	Size	Unit	Weekday			AM Peak Hour			PM Peak Hour			Sunday			Sunday MID ⁷		
			Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total				
Single Family Residential ¹	831	DU	7,294	149	446	595	489	287	776	7,306	354	314	668				
Multi Family Residential ²	383	DU	2,855	39	132	171	123	72	195	2,405	129	128	257				
Affordable Housing ³	308	DU	1,481	45	109	154	84	58	142	1,248	94	93	187				
Commercial Services ⁴	113,000	SF	6,533	129	79	208	286	309	595	2,384	154	161	315				
Education ⁵	30,000	SF	608	48	14	62	28	28	56	36	3	3	6				
Hotel ⁶	110	Rooms	920	31	21	52	34	32	66	655	29	33	62				
Gross Trips (2024 DRSP)			19,691	441	801	1,242	1,044	786	1,830	14,034	763	732	1,495				
Internal Trips ⁸			1,270	15	15	30	127	127	254	1,040	104	104	208				
Pass-by Trips ⁹			800	0	0	0	80	80	160	270	27	27	54				
Net New Trips (2024 DRSP)			17,621	426	786	1,212	837	579	1,416	12,724	632	601	1,233				
7/2021 TIS Trips - 2024 DRSP Trips			271	-	-	-56	-	-	-37	206	-	-	-32				
Percentage Change from 7/2021 TIS			-2%	-	-	5%	-	-	3%	-2%	-	-	3%				
10/2021 +15% Commercial - 2024 DRSP			1,041	-	-	-27	-	-	10	484	-	-	-1				
Percentage change from 10/2021 Memo			-6%	-	-	2%	-	-	-1%	-4%	-	-	0%				

DU=Dwelling Unit; SF= Square Feet

1) ITE 10th Ed. Land Use Code #210, Single-Family Detached Housing. Fitted curve equations used for weekday and Sunday.
 2) ITE 10th Ed. Land Use Code #220, Multifamily Housing (Low-Rise). Fitted curve equations used for weekday; Average rate used for Sunday.
 3) ITE 11th Ed. Land Use Code #223, Affordable Housing. Average rates used for weekday; Sunday rate developed using Land Use #220.
 4) ITE 10th Ed. Land Use Code #820, Shopping Centers. Fitted curve equation used for weekday; Average rate used for Sunday.
 5) ITE 10th Ed. Land Use Code #540, Junior/Community College. Average rates used for weekday and Sunday.
 6) ITE 10th Ed. Land Use Code #310, Hotel. Average rate used for weekday and Sunday.
 7) Sunday, Peak Hour of Generator rates and equations used for midday.
 8) Internal trips calculated using TripGen 10 software. Sunday mid-day internal capture assumed same as weekday PM. PM and mid-day internal trips multiplied by factor of 5 to determine daily internal trips.
 9) Pass-by rates from ITE Trip Generation Handbook, 3rd Edition. PM peak hour and Sunday Mid-day volumes both multiplied by a factor of 5 to determine weekday and Sunday daily pass-by trips, respectively. Saturday Mid-day pass-by rates used for Sunday Mid-day.
 Source: ITE Trip Generation Manual; CCTC, 2024.

Trip Generation (2024 DRSP with Senior Housing Units)																	
Land Use	Size	Unit	Weekday			AM Peak Hour			PM Peak Hour			Sunday			Sunday MID ⁸		
			Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total				
Single Family Residential ¹	414	DU	3,842	75	224	299	250	147	397	3,607	179	159	338				
Multi Family Residential ²	383	DU	2,855	39	132	171	123	72	195	2,405	129	128	257				
Affordable Housing ³	308	DU	1,481	45	109	154	84	58	142	1,248	94	93	187				
Senior Housing ⁴	417	DU	1,977	40	81	121	89	57	146	967	45	43	88				
Commercial Services ⁵	113,000	SF	6,533	129	79	208	286	309	595	2,384	154	161	315				
Education ⁶	30,000	SF	608	48	14	62	28	28	56	36	3	3	6				
Hotel ⁷	110	Rooms	920	31	21	52	34	32	66	655	29	33	62				
Gross Trips (Preferred Alternative)			18,216	407	660	1,067	894	703	1,597	11,302	633	620	1,253				
Internal Trips ⁹			1,280	13	13	26	128	128	256	1,000	100	100	200				
Pass-by Trips ¹⁰			800	0	0	0	80	80	160	280	28	28	56				
Net New Trips (Preferred Alternative)			16,136	394	647	1,041	686	495	1,181	10,022	505	492	997				
7/2021 TIS Trips - 2024 DRSP Trips			1,756	-	-	115	-	-	198	2,908	-	-	204				
Percentage Change from 7/2021 TIS			-10%	-	-	-10%	-	-	-14%	-22%	-	-	-17%				

DU=Dwelling Unit; SF= Square Feet

1) ITE 10th Ed. Land Use Code #210, Single-Family Detached Housing. Fitted curve equations used for weekday and Sunday.
 2) ITE 10th Ed. Land Use Code #220, Multifamily Housing (Low-Rise). Fitted curve equations used for weekday; Average rate used for Sunday.
 3) ITE 11th Ed. Land Use Code #223, Affordable Housing. Average rates used for weekday; Sunday rate developed using Land Use #220.
 4) ITE 10th Ed. Land Use Code #251, Senior Adult Housing - Detached. Fitted curve equation used for weekday; Average rate used for Sunday.
 5) ITE 10th Ed. Land Use Code #820, Shopping Centers. Fitted curve equation used for weekday; Average rate used for Sunday.
 6) ITE 10th Ed. Land Use Code #540, Junior/Community College. Average rates used for weekday and Sunday.
 7) ITE 10th Ed. Land Use Code #310, Hotel. Average rate used for weekday and Sunday.
 8) Sunday, Peak Hour of Generator rates and equations used for midday.
 9) Internal trips calculated using TripGen 10 software. Sunday mid-day internal capture assumed same as weekday PM. PM and mid-day internal trips multiplied by factor of 5 to determine daily internal trips.
 10) Pass-by rates from ITE Trip Generation Handbook, 3rd Edition. PM peak hour and Sunday Mid-day volumes both multiplied by a factor of 5 to determine weekday and Sunday daily pass-by trips, respectively. Saturday Mid-day pass-by rates used for Sunday Mid-day.
 Source: ITE Trip Generation Manual; CCTC, 2024.

DRSP Residential (with age restriction) Detailed Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
 - 2.6. Operations Emissions by Sector, Mitigated
- 4. Operations Emissions Details
 - 4.1. Mobile Emissions by Land Use
 - 4.1.1. Unmitigated
 - 4.1.2. Mitigated
 - 4.2. Energy
 - 4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	DRSP Residential (with age restriction)
Operational Year	2031
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	10.0
Location	35.01999129346255, -120.49550913909462
County	San Luis Obispo
City	Unincorporated
Air District	San Luis Obispo County APCD
Air Basin	South Central Coast
TAZ	3321
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	691	Dwelling Unit	23.5	610,000	0.00	—	1,658	—

Single Family Housing	831	Dwelling Unit	150	1,499,400	9,733,384	—	1,994	—
Other Non-Asphalt Surfaces	55.0	Acre	55.0	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-1	Increase Residential Density
Transportation	T-4	Integrate Affordable and Below Market Rate Housing
Energy	E-2	Require Energy Efficient Appliances
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Waste	S-1/S-2	Implement Waste Reduction Plan
Refrigerants	R-5	Reduce Service Leak Emissions
Area Sources	AS-1	Use Low-VOC Cleaning Supplies
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	63.0	108	49.1	385	0.82	1.70	69.0	70.7	1.65	17.5	19.1	586	93,715	94,300	63.9	3.68	197	97,190
Mit.	58.6	100	46.2	361	0.76	1.65	63.3	64.9	1.61	16.0	17.7	279	85,819	86,098	32.7	3.35	182	88,094

% Reduced	7%	7%	6%	6%	7%	3%	8%	8%	3%	8%	8%	52%	8%	9%	49%	9%	8%	9%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54.6	99.8	51.3	301	0.79	1.66	69.0	70.6	1.62	17.5	19.1	586	91,213	91,798	64.2	3.86	19.8	94,575
Mit.	50.2	92.4	48.1	277	0.73	1.61	63.3	64.9	1.58	16.0	17.6	279	83,504	83,783	33.0	3.52	19.2	85,675
% Reduced	8%	7%	6%	8%	7%	3%	8%	8%	3%	8%	8%	52%	8%	9%	49%	9%	3%	9%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	42.4	88.5	38.0	270	0.54	1.48	44.0	45.4	1.45	11.2	12.6	586	65,850	66,435	62.9	2.56	65.5	68,835
Mit.	39.6	82.5	36.0	255	0.51	1.45	40.3	41.8	1.42	10.2	11.6	279	60,240	60,519	31.7	2.32	61.1	62,066
% Reduced	7%	7%	5%	6%	7%	2%	8%	8%	2%	8%	8%	52%	9%	9%	50%	9%	7%	10%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.74	16.1	6.94	49.3	0.10	0.27	8.02	8.29	0.26	2.04	2.30	96.9	10,902	10,999	10.4	0.42	10.8	11,396
Mit.	7.23	15.1	6.57	46.5	0.09	0.26	7.36	7.63	0.26	1.87	2.13	46.2	9,973	10,020	5.26	0.38	10.1	10,276
% Reduced	7%	7%	5%	6%	7%	2%	8%	8%	2%	8%	8%	52%	9%	9%	50%	9%	7%	10%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	53.6	50.4	35.2	293	0.73	0.60	69.0	69.6	0.57	17.5	18.1	—	74,294	74,294	3.27	3.38	182	75,566
Area	7.88	56.8	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	231	231	0.01	< 0.005	—	232

DRSP Residential (with age restriction) Detailed Report, 2/29/2024

Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	18,906	18,906	1.84	0.07	—	18,973
Water	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Waste	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	63.0	108	49.1	385	0.82	1.70	69.0	70.7	1.65	17.5	19.1	586	93,715	94,300	63.9	3.68	197	97,190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	53.0	49.8	38.2	295	0.71	0.60	69.0	69.6	0.57	17.5	18.1	—	72,023	72,023	3.57	3.57	4.72	73,182
Area	0.00	49.3	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	18,906	18,906	1.84	0.07	—	18,973
Water	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Waste	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	54.6	99.8	51.3	301	0.79	1.66	69.0	70.6	1.62	17.5	19.1	586	91,213	91,798	64.2	3.86	19.8	94,575
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	33.7	31.7	24.3	186	0.46	0.39	44.0	44.3	0.37	11.2	11.5	—	46,452	46,452	2.23	2.27	50.4	47,233
Area	7.13	56.1	0.73	78.4	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	209	209	0.01	< 0.005	—	209
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	18,906	18,906	1.84	0.07	—	18,973
Water	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Waste	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	42.4	88.5	38.0	270	0.54	1.48	44.0	45.4	1.45	11.2	12.6	586	65,850	66,435	62.9	2.56	65.5	68,835
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.16	5.78	4.43	34.0	0.08	0.07	8.02	8.09	0.07	2.04	2.10	—	7,691	7,691	0.37	0.38	8.34	7,820
Area	1.30	10.2	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	34.6	34.6	< 0.005	< 0.005	—	34.7
Energy	0.28	0.14	2.38	1.01	0.02	0.19	—	0.19	0.19	—	0.19	—	3,130	3,130	0.30	0.01	—	3,141
Water	—	—	—	—	—	—	—	—	—	—	—	14.6	47.0	61.6	1.50	0.04	—	110

Waste	—	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.50	2.50
Total	7.74	16.1	6.94	49.3	0.10	0.27	8.02	8.29	0.26	2.04	2.30	96.9	10,902	10,999	10.4	0.42	10.8	11,396

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	49.2	46.3	32.3	269	0.67	0.55	63.3	63.8	0.52	16.0	16.6	—	68,176	68,176	3.00	3.11	167	69,343
Area	7.88	53.4	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	231	231	0.01	< 0.005	—	232
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	17,230	17,230	1.57	0.04	—	17,282
Water	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Waste	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Total	58.6	100	46.2	361	0.76	1.65	63.3	64.9	1.61	16.0	17.7	279	85,819	86,098	32.7	3.35	182	88,094
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	48.7	45.7	35.1	271	0.65	0.55	63.3	63.8	0.52	16.0	16.6	—	66,091	66,091	3.28	3.28	4.33	67,155
Area	0.00	45.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	17,230	17,230	1.57	0.04	—	17,282
Water	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Waste	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Total	50.2	92.4	48.1	277	0.73	1.61	63.3	64.9	1.58	16.0	17.6	279	83,504	83,783	33.0	3.52	19.2	85,675
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	31.0	29.0	22.3	171	0.42	0.36	40.3	40.7	0.34	10.2	10.6	—	42,619	42,619	2.05	2.08	46.2	43,336
Area	7.13	52.7	0.73	78.4	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	209	209	0.01	< 0.005	—	209
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	17,230	17,230	1.57	0.04	—	17,282
Water	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Waste	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Total	39.6	82.5	36.0	255	0.51	1.45	40.3	41.8	1.42	10.2	11.6	279	60,240	60,519	31.7	2.32	61.1	62,066
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.65	5.30	4.06	31.2	0.08	0.06	7.36	7.43	0.06	1.87	1.93	—	7,056	7,056	0.34	0.34	7.65	7,175
Area	1.30	9.62	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	34.6	34.6	< 0.005	< 0.005	—	34.7
Energy	0.28	0.14	2.38	1.01	0.02	0.19	—	0.19	0.19	—	0.19	—	2,853	2,853	0.26	0.01	—	2,861
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	30.2	43.4	1.36	0.03	—	87.2
Waste	—	—	—	—	—	—	—	—	—	—	—	32.9	0.00	32.9	3.29	0.00	—	115
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.47	2.47
Total	7.23	15.1	6.57	46.5	0.09	0.26	7.36	7.63	0.26	1.87	2.13	46.2	9,973	10,020	5.26	0.38	10.1	10,276

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

DRSP Residential (with age restriction) Detailed Report, 2/29/2024

Apartments Low Rise	22.2	20.9	14.6	121	0.30	0.25	28.6	28.9	0.24	7.26	7.50	—	30,835	30,835	1.36	1.40	75.5	31,363
Single Family Housing	31.3	29.5	20.6	171	0.43	0.35	40.3	40.7	0.33	10.2	10.6	—	43,460	43,460	1.91	1.98	106	44,204
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	53.6	50.4	35.2	293	0.73	0.60	69.0	69.6	0.57	17.5	18.1	—	74,294	74,294	3.27	3.38	182	75,566
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	22.0	20.7	15.9	123	0.29	0.25	28.6	28.9	0.24	7.26	7.50	—	29,892	29,892	1.48	1.48	1.96	30,373
Single Family Housing	31.0	29.1	22.4	173	0.41	0.35	40.3	40.7	0.33	10.2	10.6	—	42,131	42,131	2.09	2.09	2.76	42,809
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	53.0	49.8	38.2	295	0.71	0.60	69.0	69.6	0.57	17.5	18.1	—	72,023	72,023	3.57	3.57	4.72	73,182
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	2.62	2.46	1.89	14.5	0.04	0.03	3.42	3.45	0.03	0.87	0.90	—	3,278	3,278	0.16	0.16	3.56	3,333
Single Family Housing	3.53	3.31	2.54	19.5	0.05	0.04	4.60	4.64	0.04	1.17	1.21	—	4,413	4,413	0.21	0.22	4.79	4,487
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.16	5.78	4.43	34.0	0.08	0.07	8.02	8.09	0.07	2.04	2.10	—	7,691	7,691	0.37	0.38	8.34	7,820

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	20.2	19.0	13.3	111	0.28	0.23	26.0	26.3	0.22	6.61	6.82	—	28,057	28,057	1.23	1.28	68.7	28,537
Single Family Housing	28.9	27.2	19.0	158	0.39	0.33	37.2	37.6	0.31	9.44	9.75	—	40,118	40,118	1.76	1.83	98.2	40,805
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	49.2	46.3	32.3	269	0.67	0.55	63.3	63.8	0.52	16.0	16.6	—	68,176	68,176	3.00	3.11	167	69,343
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	20.0	18.8	14.4	112	0.27	0.23	26.0	26.3	0.22	6.61	6.82	—	27,199	27,199	1.35	1.35	1.78	27,637
Single Family Housing	28.6	26.9	20.6	160	0.38	0.33	37.2	37.6	0.31	9.44	9.75	—	38,892	38,892	1.93	1.93	2.55	39,518
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	48.7	45.7	35.1	271	0.65	0.55	63.3	63.8	0.52	16.0	16.6	—	66,091	66,091	3.28	3.28	4.33	67,155
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	2.39	2.24	1.72	13.2	0.03	0.03	3.11	3.14	0.03	0.79	0.82	—	2,982	2,982	0.14	0.15	3.24	3,033

Single Family Housing	3.26	3.06	2.34	18.0	0.04	0.04	4.25	4.29	0.04	1.08	1.11	—	4,074	4,074	0.20	0.20	4.42	4,142
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.65	5.30	4.06	31.2	0.08	0.06	7.36	7.43	0.06	1.87	1.93	—	7,056	7,056	0.34	0.34	7.65	7,175

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	708	708	0.11	0.01	—	715
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,637	1,637	0.26	0.03	—	1,652
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,346	2,346	0.38	0.04	—	2,367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	708	708	0.11	0.01	—	715

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,637	1,637	0.26	0.03	—	1,652
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,346	2,346	0.38	0.04	—	2,367
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	117	117	0.02	< 0.005	—	118
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	271	271	0.04	< 0.005	—	274
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	388	388	0.06	0.01	—	392

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	200	200	0.03	< 0.005	—	201
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	471	471	0.08	0.01	—	475

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	670	670	0.11	0.01	—	676
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	200	200	0.03	< 0.005	—	201
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	471	471	0.08	0.01	—	475
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	670	670	0.11	0.01	—	676
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	33.0	33.0	0.01	< 0.005	—	33.3
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	77.9	77.9	0.01	< 0.005	—	78.6
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	111	111	0.02	< 0.005	—	112

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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DRSP Residential (with age restriction) Detailed Report, 2/29/2024

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.55	0.27	4.67	1.99	0.03	0.38	—	0.38	0.38	—	0.38	—	5,934	5,934	0.53	0.01	—	5,950
Single Family Housing	0.98	0.49	8.37	3.56	0.05	0.68	—	0.68	0.68	—	0.68	—	10,626	10,626	0.94	0.02	—	10,656
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	16,560	16,560	1.47	0.03	—	16,606
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.55	0.27	4.67	1.99	0.03	0.38	—	0.38	0.38	—	0.38	—	5,934	5,934	0.53	0.01	—	5,950
Single Family Housing	0.98	0.49	8.37	3.56	0.05	0.68	—	0.68	0.68	—	0.68	—	10,626	10,626	0.94	0.02	—	10,656
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	16,560	16,560	1.47	0.03	—	16,606
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.10	0.05	0.85	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	982	982	0.09	< 0.005	—	985
Single Family Housing	0.18	0.09	1.53	0.65	0.01	0.12	—	0.12	0.12	—	0.12	—	1,759	1,759	0.16	< 0.005	—	1,764
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.28	0.14	2.38	1.01	0.02	0.19	—	0.19	0.19	—	0.19	—	2,742	2,742	0.24	0.01	—	2,749
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4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.55	0.27	4.67	1.99	0.03	0.38	—	0.38	0.38	—	0.38	—	5,934	5,934	0.53	0.01	—	5,950
Single Family Housing	0.98	0.49	8.37	3.56	0.05	0.68	—	0.68	0.68	—	0.68	—	10,626	10,626	0.94	0.02	—	10,656
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	16,560	16,560	1.47	0.03	—	16,606
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.55	0.27	4.67	1.99	0.03	0.38	—	0.38	0.38	—	0.38	—	5,934	5,934	0.53	0.01	—	5,950
Single Family Housing	0.98	0.49	8.37	3.56	0.05	0.68	—	0.68	0.68	—	0.68	—	10,626	10,626	0.94	0.02	—	10,656
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	16,560	16,560	1.47	0.03	—	16,606
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	0.10	0.05	0.85	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	982	982	0.09	< 0.005	—	985
Single Family Housing	0.18	0.09	1.53	0.65	0.01	0.12	—	0.12	0.12	—	0.12	—	1,759	1,759	0.16	< 0.005	—	1,764
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.28	0.14	2.38	1.01	0.02	0.19	—	0.19	0.19	—	0.19	—	2,742	2,742	0.24	0.01	—	2,749

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	45.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.88	7.46	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	—	231	231	0.01	< 0.005	—	232
Total	7.88	56.8	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	231	231	0.01	< 0.005	—	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	45.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	49.3	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	8.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.30	1.23	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	34.6	34.6	< 0.005	< 0.005	—	34.7
Total	1.30	10.2	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	34.6	34.6	< 0.005	< 0.005	—	34.7

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	42.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.88	7.46	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	—	231	231	0.01	< 0.005	—	232
Total	7.88	53.4	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	231	231	0.01	< 0.005	—	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	42.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	45.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	7.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.30	1.23	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	34.6	34.6	< 0.005	< 0.005	—	34.7
Total	1.30	9.62	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	34.6	34.6	< 0.005	< 0.005	—	34.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	40.0	36.7	76.7	4.11	0.10	—	209
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	48.1	247	295	4.97	0.12	—	456
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	40.0	36.7	76.7	4.11	0.10	—	209
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	48.1	247	295	4.97	0.12	—	456
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	6.63	6.08	12.7	0.68	0.02	—	34.6

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.97	40.9	48.9	0.82	0.02	—	75.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14.6	47.0	61.6	1.50	0.04	—	110

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	36.3	33.3	69.6	3.73	0.09	—	189
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	43.7	149	193	4.50	0.11	—	338
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	36.3	33.3	69.6	3.73	0.09	—	189
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	43.7	149	193	4.50	0.11	—	338

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	6.01	5.52	11.5	0.62	0.01	—	31.4
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.23	24.7	31.9	0.75	0.02	—	55.9
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.2	30.2	43.4	1.36	0.03	—	87.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	275	0.00	275	27.5	0.00	—	—	963
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	222	0.00	222	22.2	0.00	—	—	777
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	275	0.00	275	27.5	0.00	—	963
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	222	0.00	222	22.2	0.00	—	777
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	45.6	0.00	45.6	4.56	0.00	—	159
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	36.8	0.00	36.8	3.67	0.00	—	129
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

DRSP Residential (with age restriction) Detailed Report, 2/29/2024

Apartments	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	88.8	0.00	88.8	8.88	0.00	—	311
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	88.8	0.00	88.8	8.88	0.00	—	311
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	18.2	0.00	18.2	1.82	0.00	—	63.8
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.7	0.00	14.7	1.47	0.00	—	51.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	32.9	0.00	32.9	3.29	0.00	—	115

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.37	4.37
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.7	10.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.37	4.37
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.7	10.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.72	0.72
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.78	1.78
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.50	2.50

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.31	4.31
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.6	10.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.31	4.31
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.6	10.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71	0.71
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.47	2.47

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	3,447	5,625	3,085	1,352,831	24,824	40,507	22,217	9,742,549
Single Family Housing	4,628	7,928	3,862	1,821,336	33,329	57,092	27,813	13,116,530
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	3,136	5,118	2,807	1,230,968	22,588	36,858	20,215	8,864,943
Single Family Housing	4,272	7,318	3,565	1,681,313	30,767	52,703	25,674	12,108,143
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0

No Fireplaces	691
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	831
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	691
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	831
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
4598673.75	1,532,891	0.00	0.00	143,748

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	330

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	330

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	2,179,826	119	0.0190	0.0020	18,514,270
Single Family Housing	5,038,646	119	0.0190	0.0020	33,156,998
Other Non-Asphalt Surfaces	0.00	119	0.0190	0.0020	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	614,100	119	0.0190	0.0020	18,514,270
Single Family Housing	1,448,531	119	0.0190	0.0020	33,156,998
Other Non-Asphalt Surfaces	0.00	119	0.0190	0.0020	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	20,883,402	0.00
Single Family Housing	25,114,482	161,368,073
Other Non-Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
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Apartments Low Rise	18,947,511	0.00
Single Family Housing	22,786,370	86,566,491
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	511	—
Single Family Housing	412	—
Other Non-Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	204	—
Single Family Housing	165	—
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.00	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	—	1.00
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.00	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	—	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.34	annual days of extreme heat
Extreme Precipitation	4.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	49.6	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	13.6
AQ-PM	16.6
AQ-DPM	31.6
Drinking Water	92.6
Lead Risk Housing	17.8
Pesticides	94.9
Toxic Releases	19.8
Traffic	64.0
Effect Indicators	—
CleanUp Sites	17.1
Groundwater	23.4
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	33.2
Solid Waste	42.3
Sensitive Population	—
Asthma	48.1
Cardio-vascular	50.9
Low Birth Weights	14.8
Socioeconomic Factor Indicators	—

Education	45.2
Housing	18.5
Linguistic	21.4
Poverty	42.1
Unemployment	57.2

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	43.05145644
Employed	84.60156551
Median HI	45.43821378
Education	—
Bachelor's or higher	52.44450148
High school enrollment	10.76607212
Preschool enrollment	64.57076864
Transportation	—
Auto Access	76.73553189
Active commuting	23.46978057
Social	—
2-parent households	69.98588477
Voting	79.69973053
Neighborhood	—
Alcohol availability	79.73822661
Park access	23.36712434
Retail density	14.0639035

Supermarket access	20.1334531
Tree canopy	49.1979982
Housing	—
Homeownership	69.39561145
Housing habitability	55.24188374
Low-inc homeowner severe housing cost burden	34.14602849
Low-inc renter severe housing cost burden	79.98203516
Uncrowded housing	36.04516874
Health Outcomes	—
Insured adults	47.32452201
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	48.2
Cognitively Disabled	68.5
Physically Disabled	50.9
Heart Attack ER Admissions	80.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	85.6
Physical Health Not Good	0.0

Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	45.9
Elderly	28.2
English Speaking	70.1
Foreign-born	16.6
Outdoor Workers	8.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	88.4
Traffic Density	33.1
Traffic Access	0.0
Other Indices	—
Hardship	50.4
Other Decision Support	—
2016 Voting	77.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	33.0
Healthy Places Index Score for Project Location (b)	57.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Utility Intensity Factor based on renewable portfolio standards for PG&E for the year of 2031.
Land Use	Lot acreage based on specific plan, other non-asphalt surfaces is included to account for grading of entire project.
Operations: Vehicle Data	Trip gen for Weekday and Sunday is based on traffic report, sat was left default. Trip length was also left as default. Trip type was based on traffic report.
Operations: Architectural Coatings	Use low VOC paint (50g/L)

DRSP Residential (without age restriction) Detailed Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
 - 2.6. Operations Emissions by Sector, Mitigated
- 4. Operations Emissions Details
 - 4.1. Mobile Emissions by Land Use
 - 4.1.1. Unmitigated
 - 4.1.2. Mitigated
 - 4.2. Energy
 - 4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	DRSP Residential (without age restriction)
Operational Year	2031
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	10.0
Location	35.01999129346255, -120.49550913909462
County	San Luis Obispo
City	Unincorporated
Air District	San Luis Obispo County APCD
Air Basin	South Central Coast
TAZ	3321
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	691	Dwelling Unit	23.5	610,000	0.00	—	1,658	—

Single Family Housing	831	Dwelling Unit	150	1,499,400	9,733,384	—	1,994	—
Other Non-Asphalt Surfaces	55.0	Acre	55.0	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-1	Increase Residential Density
Transportation	T-4	Integrate Affordable and Below Market Rate Housing
Energy	E-2	Require Energy Efficient Appliances
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Waste	S-1/S-2	Implement Waste Reduction Plan
Refrigerants	R-5	Reduce Service Leak Emissions
Area Sources	AS-1	Use Low-VOC Cleaning Supplies
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	63.0	108	49.1	385	0.82	1.70	69.0	70.7	1.65	17.5	19.1	586	93,715	94,300	63.9	3.68	197	97,190
Mit.	58.6	100	46.2	361	0.76	1.65	63.3	64.9	1.61	16.0	17.7	279	85,819	86,098	32.7	3.35	182	88,094

% Reduced	7%	7%	6%	6%	7%	3%	8%	8%	3%	8%	8%	52%	8%	9%	49%	9%	8%	9%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54.6	99.8	51.3	301	0.79	1.66	69.0	70.6	1.62	17.5	19.1	586	91,213	91,798	64.2	3.86	19.8	94,575
Mit.	50.2	92.4	48.1	277	0.73	1.61	63.3	64.9	1.58	16.0	17.6	279	83,504	83,783	33.0	3.52	19.2	85,675
% Reduced	8%	7%	6%	8%	7%	3%	8%	8%	3%	8%	8%	52%	8%	9%	49%	9%	3%	9%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	48.0	93.7	42.1	301	0.62	1.54	51.3	52.8	1.51	13.0	14.5	586	73,574	74,160	63.2	2.94	73.9	76,689
Mit.	44.8	87.3	39.7	284	0.58	1.51	47.1	48.6	1.47	11.9	13.4	279	67,363	67,642	32.1	2.67	68.9	69,309
% Reduced	7%	7%	6%	6%	7%	2%	8%	8%	2%	8%	8%	52%	8%	9%	49%	9%	7%	10%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.76	17.1	7.68	55.0	0.11	0.28	9.36	9.64	0.28	2.37	2.65	96.9	12,181	12,278	10.5	0.49	12.2	12,697
Mit.	8.17	15.9	7.25	51.7	0.10	0.27	8.59	8.87	0.27	2.18	2.45	46.2	11,153	11,199	5.31	0.44	11.4	11,475
% Reduced	7%	7%	6%	6%	7%	2%	8%	8%	2%	8%	8%	52%	8%	9%	49%	9%	7%	10%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	53.6	50.4	35.2	293	0.73	0.60	69.0	69.6	0.57	17.5	18.1	—	74,294	74,294	3.27	3.38	182	75,566
Area	7.88	56.8	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	231	231	0.01	< 0.005	—	232

DRSP Residential (without age restriction) Detailed Report, 2/29/2024

Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	18,906	18,906	1.84	0.07	—	18,973
Water	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Waste	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	63.0	108	49.1	385	0.82	1.70	69.0	70.7	1.65	17.5	19.1	586	93,715	94,300	63.9	3.68	197	97,190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	53.0	49.8	38.2	295	0.71	0.60	69.0	69.6	0.57	17.5	18.1	—	72,023	72,023	3.57	3.57	4.72	73,182
Area	0.00	49.3	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	18,906	18,906	1.84	0.07	—	18,973
Water	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Waste	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	54.6	99.8	51.3	301	0.79	1.66	69.0	70.6	1.62	17.5	19.1	586	91,213	91,798	64.2	3.86	19.8	94,575
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	39.3	36.9	28.3	217	0.53	0.45	51.3	51.7	0.43	13.0	13.4	—	54,176	54,176	2.60	2.64	58.8	55,087
Area	7.13	56.1	0.73	78.4	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	209	209	0.01	< 0.005	—	209
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	18,906	18,906	1.84	0.07	—	18,973
Water	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Waste	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	48.0	93.7	42.1	301	0.62	1.54	51.3	52.8	1.51	13.0	14.5	586	73,574	74,160	63.2	2.94	73.9	76,689
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.18	6.74	5.16	39.7	0.10	0.08	9.36	9.44	0.08	2.37	2.45	—	8,969	8,969	0.43	0.44	9.73	9,120
Area	1.30	10.2	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	34.6	34.6	< 0.005	< 0.005	—	34.7
Energy	0.28	0.14	2.38	1.01	0.02	0.19	—	0.19	0.19	—	0.19	—	3,130	3,130	0.30	0.01	—	3,141
Water	—	—	—	—	—	—	—	—	—	—	—	14.6	47.0	61.6	1.50	0.04	—	110

Waste	—	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.50	2.50
Total	8.76	17.1	7.68	55.0	0.11	0.28	9.36	9.64	0.28	2.37	2.65	96.9	12,181	12,278	10.5	0.49	12.2	12,697

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	49.2	46.3	32.3	269	0.67	0.55	63.3	63.8	0.52	16.0	16.6	—	68,176	68,176	3.00	3.11	167	69,343
Area	7.88	53.4	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	231	231	0.01	< 0.005	—	232
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	17,230	17,230	1.57	0.04	—	17,282
Water	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Waste	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Total	58.6	100	46.2	361	0.76	1.65	63.3	64.9	1.61	16.0	17.7	279	85,819	86,098	32.7	3.35	182	88,094
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	48.7	45.7	35.1	271	0.65	0.55	63.3	63.8	0.52	16.0	16.6	—	66,091	66,091	3.28	3.28	4.33	67,155
Area	0.00	45.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	17,230	17,230	1.57	0.04	—	17,282
Water	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Waste	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Total	50.2	92.4	48.1	277	0.73	1.61	63.3	64.9	1.58	16.0	17.6	279	83,504	83,783	33.0	3.52	19.2	85,675
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	36.1	33.9	26.0	200	0.49	0.42	47.1	47.5	0.39	11.9	12.3	—	49,742	49,742	2.39	2.43	54.0	50,579
Area	7.13	52.7	0.73	78.4	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	209	209	0.01	< 0.005	—	209
Energy	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	17,230	17,230	1.57	0.04	—	17,282
Water	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Waste	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Total	44.8	87.3	39.7	284	0.58	1.51	47.1	48.6	1.47	11.9	13.4	279	67,363	67,642	32.1	2.67	68.9	69,309
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.59	6.19	4.74	36.4	0.09	0.08	8.59	8.67	0.07	2.18	2.25	—	8,235	8,235	0.40	0.40	8.93	8,374
Area	1.30	9.62	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	34.6	34.6	< 0.005	< 0.005	—	34.7
Energy	0.28	0.14	2.38	1.01	0.02	0.19	—	0.19	0.19	—	0.19	—	2,853	2,853	0.26	0.01	—	2,861
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	30.2	43.4	1.36	0.03	—	87.2
Waste	—	—	—	—	—	—	—	—	—	—	—	32.9	0.00	32.9	3.29	0.00	—	115
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.47	2.47
Total	8.17	15.9	7.25	51.7	0.10	0.27	8.59	8.87	0.27	2.18	2.45	46.2	11,153	11,199	5.31	0.44	11.4	11,475

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

DRSP Residential (without age restriction) Detailed Report, 2/29/2024

Apartments Low Rise	22.2	20.9	14.6	121	0.30	0.25	28.6	28.9	0.24	7.26	7.50	—	30,835	30,835	1.36	1.40	75.5	31,363
Single Family Housing	31.3	29.5	20.6	171	0.43	0.35	40.3	40.7	0.33	10.2	10.6	—	43,460	43,460	1.91	1.98	106	44,204
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	53.6	50.4	35.2	293	0.73	0.60	69.0	69.6	0.57	17.5	18.1	—	74,294	74,294	3.27	3.38	182	75,566
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	22.0	20.7	15.9	123	0.29	0.25	28.6	28.9	0.24	7.26	7.50	—	29,892	29,892	1.48	1.48	1.96	30,373
Single Family Housing	31.0	29.1	22.4	173	0.41	0.35	40.3	40.7	0.33	10.2	10.6	—	42,131	42,131	2.09	2.09	2.76	42,809
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	53.0	49.8	38.2	295	0.71	0.60	69.0	69.6	0.57	17.5	18.1	—	72,023	72,023	3.57	3.57	4.72	73,182
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	2.70	2.53	1.94	14.9	0.04	0.03	3.51	3.54	0.03	0.89	0.92	—	3,368	3,368	0.16	0.16	3.65	3,424
Single Family Housing	4.48	4.21	3.22	24.8	0.06	0.05	5.84	5.90	0.05	1.48	1.53	—	5,602	5,602	0.27	0.27	6.08	5,696
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.18	6.74	5.16	39.7	0.10	0.08	9.36	9.44	0.08	2.37	2.45	—	8,969	8,969	0.43	0.44	9.73	9,120

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	20.2	19.0	13.3	111	0.28	0.23	26.0	26.3	0.22	6.61	6.82	—	28,057	28,057	1.23	1.28	68.7	28,537
Single Family Housing	28.9	27.2	19.0	158	0.39	0.33	37.2	37.6	0.31	9.44	9.75	—	40,118	40,118	1.76	1.83	98.2	40,805
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	49.2	46.3	32.3	269	0.67	0.55	63.3	63.8	0.52	16.0	16.6	—	68,176	68,176	3.00	3.11	167	69,343
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	20.0	18.8	14.4	112	0.27	0.23	26.0	26.3	0.22	6.61	6.82	—	27,199	27,199	1.35	1.35	1.78	27,637
Single Family Housing	28.6	26.9	20.6	160	0.38	0.33	37.2	37.6	0.31	9.44	9.75	—	38,892	38,892	1.93	1.93	2.55	39,518
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	48.7	45.7	35.1	271	0.65	0.55	63.3	63.8	0.52	16.0	16.6	—	66,091	66,091	3.28	3.28	4.33	67,155
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	2.45	2.30	1.76	13.6	0.03	0.03	3.20	3.22	0.03	0.81	0.84	—	3,064	3,064	0.15	0.15	3.32	3,116

Single Family Housing	4.14	3.88	2.98	22.9	0.06	0.05	5.39	5.44	0.04	1.37	1.41	—	5,171	5,171	0.25	0.25	5.61	5,258
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.59	6.19	4.74	36.4	0.09	0.08	8.59	8.67	0.07	2.18	2.25	—	8,235	8,235	0.40	0.40	8.93	8,374

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	708	708	0.11	0.01	—	715
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,637	1,637	0.26	0.03	—	1,652
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,346	2,346	0.38	0.04	—	2,367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	708	708	0.11	0.01	—	715

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,637	1,637	0.26	0.03	—	1,652
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,346	2,346	0.38	0.04	—	2,367
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	117	117	0.02	< 0.005	—	118
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	271	271	0.04	< 0.005	—	274
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	388	388	0.06	0.01	—	392

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	200	200	0.03	< 0.005	—	201
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	471	471	0.08	0.01	—	475

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	670	670	0.11	0.01	—	676
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	200	200	0.03	< 0.005	—	201
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	471	471	0.08	0.01	—	475
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	670	670	0.11	0.01	—	676
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	33.0	33.0	0.01	< 0.005	—	33.3
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	77.9	77.9	0.01	< 0.005	—	78.6
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	111	111	0.02	< 0.005	—	112

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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DRSP Residential (without age restriction) Detailed Report, 2/29/2024

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.55	0.27	4.67	1.99	0.03	0.38	—	0.38	0.38	—	0.38	—	5,934	5,934	0.53	0.01	—	5,950
Single Family Housing	0.98	0.49	8.37	3.56	0.05	0.68	—	0.68	0.68	—	0.68	—	10,626	10,626	0.94	0.02	—	10,656
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	16,560	16,560	1.47	0.03	—	16,606
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.55	0.27	4.67	1.99	0.03	0.38	—	0.38	0.38	—	0.38	—	5,934	5,934	0.53	0.01	—	5,950
Single Family Housing	0.98	0.49	8.37	3.56	0.05	0.68	—	0.68	0.68	—	0.68	—	10,626	10,626	0.94	0.02	—	10,656
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	16,560	16,560	1.47	0.03	—	16,606
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.10	0.05	0.85	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	982	982	0.09	< 0.005	—	985
Single Family Housing	0.18	0.09	1.53	0.65	0.01	0.12	—	0.12	0.12	—	0.12	—	1,759	1,759	0.16	< 0.005	—	1,764
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.28	0.14	2.38	1.01	0.02	0.19	—	0.19	0.19	—	0.19	—	2,742	2,742	0.24	0.01	—	2,749
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4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.55	0.27	4.67	1.99	0.03	0.38	—	0.38	0.38	—	0.38	—	5,934	5,934	0.53	0.01	—	5,950
Single Family Housing	0.98	0.49	8.37	3.56	0.05	0.68	—	0.68	0.68	—	0.68	—	10,626	10,626	0.94	0.02	—	10,656
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	16,560	16,560	1.47	0.03	—	16,606
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.55	0.27	4.67	1.99	0.03	0.38	—	0.38	0.38	—	0.38	—	5,934	5,934	0.53	0.01	—	5,950
Single Family Housing	0.98	0.49	8.37	3.56	0.05	0.68	—	0.68	0.68	—	0.68	—	10,626	10,626	0.94	0.02	—	10,656
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.53	0.76	13.0	5.55	0.08	1.05	—	1.05	1.05	—	1.05	—	16,560	16,560	1.47	0.03	—	16,606
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	0.10	0.05	0.85	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	982	982	0.09	< 0.005	—	985
Single Family Housing	0.18	0.09	1.53	0.65	0.01	0.12	—	0.12	0.12	—	0.12	—	1,759	1,759	0.16	< 0.005	—	1,764
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.28	0.14	2.38	1.01	0.02	0.19	—	0.19	0.19	—	0.19	—	2,742	2,742	0.24	0.01	—	2,749

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	45.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.88	7.46	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	—	231	231	0.01	< 0.005	—	232
Total	7.88	56.8	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	231	231	0.01	< 0.005	—	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	45.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	49.3	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	8.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.30	1.23	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	34.6	34.6	< 0.005	< 0.005	—	34.7
Total	1.30	10.2	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	34.6	34.6	< 0.005	< 0.005	—	34.7

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	42.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.88	7.46	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	—	231	231	0.01	< 0.005	—	232
Total	7.88	53.4	0.80	86.7	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	231	231	0.01	< 0.005	—	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	42.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	45.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	7.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.30	1.23	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	34.6	34.6	< 0.005	< 0.005	—	34.7
Total	1.30	9.62	0.13	14.3	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	34.6	34.6	< 0.005	< 0.005	—	34.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	40.0	36.7	76.7	4.11	0.10	—	209
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	48.1	247	295	4.97	0.12	—	456
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	40.0	36.7	76.7	4.11	0.10	—	209
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	48.1	247	295	4.97	0.12	—	456
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	88.1	284	372	9.08	0.22	—	664
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	6.63	6.08	12.7	0.68	0.02	—	34.6

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.97	40.9	48.9	0.82	0.02	—	75.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14.6	47.0	61.6	1.50	0.04	—	110

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	36.3	33.3	69.6	3.73	0.09	—	189
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	43.7	149	193	4.50	0.11	—	338
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	36.3	33.3	69.6	3.73	0.09	—	189
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	43.7	149	193	4.50	0.11	—	338

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.0	182	262	8.23	0.20	—	527
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	6.01	5.52	11.5	0.62	0.01	—	31.4
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.23	24.7	31.9	0.75	0.02	—	55.9
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.2	30.2	43.4	1.36	0.03	—	87.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	275	0.00	275	27.5	0.00	—	—	963
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	222	0.00	222	22.2	0.00	—	—	777
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	275	0.00	275	27.5	0.00	—	963
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	222	0.00	222	22.2	0.00	—	777
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	497	0.00	497	49.7	0.00	—	1,740
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	45.6	0.00	45.6	4.56	0.00	—	159
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	36.8	0.00	36.8	3.67	0.00	—	129
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

DRSP Residential (without age restriction) Detailed Report, 2/29/2024

Apartments	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	88.8	0.00	88.8	8.88	0.00	—	311
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	88.8	0.00	88.8	8.88	0.00	—	311
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	199	0.00	199	19.9	0.00	—	696
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	18.2	0.00	18.2	1.82	0.00	—	63.8
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.7	0.00	14.7	1.47	0.00	—	51.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	32.9	0.00	32.9	3.29	0.00	—	115

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.37	4.37
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.7	10.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.37	4.37
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.7	10.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.72	0.72
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.78	1.78
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.50	2.50

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.31	4.31
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.6	10.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.31	4.31
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.6	10.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	14.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71	0.71
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.47	2.47

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	3,563	5,625	3,216	1,389,908	25,659	40,507	23,161	10,009,563
Single Family Housing	5,996	7,928	6,433	2,312,081	43,182	57,092	46,328	16,650,685
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	3,242	5,118	2,926	1,264,706	23,348	36,858	21,074	9,107,904
Single Family Housing	5,535	7,318	5,938	2,134,331	39,862	52,703	42,766	15,370,595
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0

No Fireplaces	691
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	831
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	691
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	831
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
4598673.75	1,532,891	0.00	0.00	143,748

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	330

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	330

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	2,179,826	119	0.0190	0.0020	18,514,270
Single Family Housing	5,038,646	119	0.0190	0.0020	33,156,998
Other Non-Asphalt Surfaces	0.00	119	0.0190	0.0020	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	614,100	119	0.0190	0.0020	18,514,270
Single Family Housing	1,448,530	119	0.0190	0.0020	33,156,998
Other Non-Asphalt Surfaces	0.00	119	0.0190	0.0020	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	20,883,402	0.00
Single Family Housing	25,114,482	161,368,073
Other Non-Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
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Apartments Low Rise	18,947,511	0.00
Single Family Housing	22,786,370	86,566,491
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	511	—
Single Family Housing	412	—
Other Non-Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	204	—
Single Family Housing	165	—
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.00	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	—	1.00
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.00	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	—	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.34	annual days of extreme heat
Extreme Precipitation	4.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	49.6	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events.

Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	13.6
AQ-PM	16.6
AQ-DPM	31.6
Drinking Water	92.6
Lead Risk Housing	17.8
Pesticides	94.9
Toxic Releases	19.8
Traffic	64.0
Effect Indicators	—
CleanUp Sites	17.1
Groundwater	23.4
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	33.2
Solid Waste	42.3
Sensitive Population	—
Asthma	48.1
Cardio-vascular	50.9
Low Birth Weights	14.8
Socioeconomic Factor Indicators	—

Education	45.2
Housing	18.5
Linguistic	21.4
Poverty	42.1
Unemployment	57.2

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	43.05145644
Employed	84.60156551
Median HI	45.43821378
Education	—
Bachelor's or higher	52.44450148
High school enrollment	10.76607212
Preschool enrollment	64.57076864
Transportation	—
Auto Access	76.73553189
Active commuting	23.46978057
Social	—
2-parent households	69.98588477
Voting	79.69973053
Neighborhood	—
Alcohol availability	79.73822661
Park access	23.36712434
Retail density	14.0639035

Supermarket access	20.1334531
Tree canopy	49.1979982
Housing	—
Homeownership	69.39561145
Housing habitability	55.24188374
Low-inc homeowner severe housing cost burden	34.14602849
Low-inc renter severe housing cost burden	79.98203516
Uncrowded housing	36.04516874
Health Outcomes	—
Insured adults	47.32452201
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	48.2
Cognitively Disabled	68.5
Physically Disabled	50.9
Heart Attack ER Admissions	80.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	85.6
Physical Health Not Good	0.0

Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	45.9
Elderly	28.2
English Speaking	70.1
Foreign-born	16.6
Outdoor Workers	8.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	88.4
Traffic Density	33.1
Traffic Access	0.0
Other Indices	—
Hardship	50.4
Other Decision Support	—
2016 Voting	77.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	33.0
Healthy Places Index Score for Project Location (b)	57.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Utility Intensity Factor based on renewable portfolio standards for PG&E for the year of 2031.
Land Use	Lot acreage based on specific plan, other non-asphalt surfaces is included to account for grading of entire project.
Operations: Vehicle Data	Trip gen for Weekday and Sunday is based on traffic report, sat was left default. Trip length was also left as default. Trip type was based on traffic report.
Operations: Architectural Coatings	Use low VOC paint (50g/L)

**Dana Reserve Updated VTTM 3159
Brief Oak/Pismo Clarkia Impact Review
(December 19, 2023)**



1650 Ramada Drive, Suite 180, Paso Robles, CA 93446
(805) 237-9626 • Fax (805) 237-9181 • www.althouseandmeade.com

Memo

To: Laurie Tamura and Robert Camacho
From: LynneDee Althouse and Sully France
Date: 12/19/2023
Copy: Nick Tomkins, Matt Ottoson, Vic Montgomery
Re: **Dana Reserve – Updated VTTM 3159 – Brief Oak/Pismo Clarkia Impact Review**

Althouse and Meade, Inc. reviewed the revised VTTM 3159 provided 12/5/2023 by RRM Design Group. Revised VTTM map areas included the following:

- Lot 44 increased by approximately 1 acre
- Lot F/26 reduced by approximately 1 acre
- Lot 45 increased by approximately 0.50 acre
- Lot M/33 reduced by approximately 0.50 acre
- Lot 10 property line was adjusted to centerline of Cherokee Place – Net acreage revised to 4.53 from 4.65 acre
- Lot 20 footprint was adjusted but acreage remained the same

Summary of Impacts Changed from Revised Areas

Pismo Clarkia impact remains the same, with slight additional distance from fill at Collector C.

Fifty (50) additional oak trees would be impacted from an increase in multi-family housing footprint (Neighborhood 10A/10B).

- 56 additional oak trees impacted by Lot 44/F26 adjustments.
- 6 trees (net) preserved from Lot 20 adjustment;
(impacted 12 previously determined to be preserved and avoid 18 previously determined to be impacted).

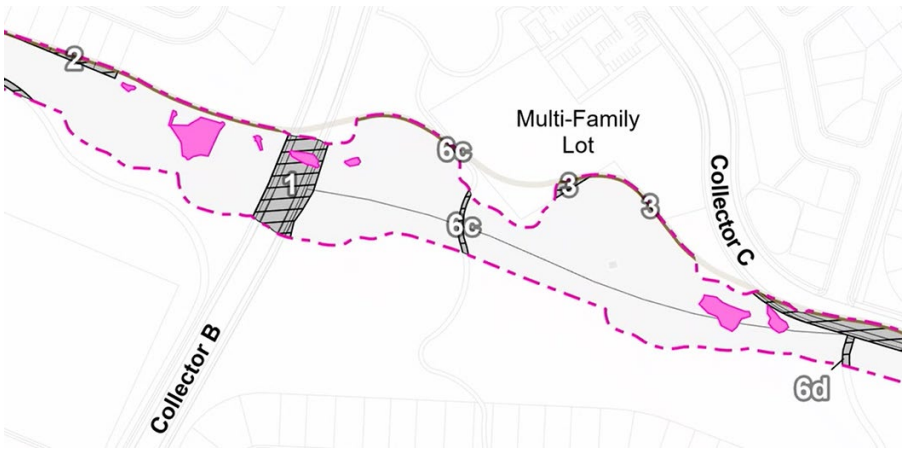


Exhibit 1. Excerpt from Suitable Habitat Figure 4 for Proposed ITP Project Area.



Exhibit 2. Collector C pulled back from Pismo Clarkia Patch 8 (white line is new alignment).

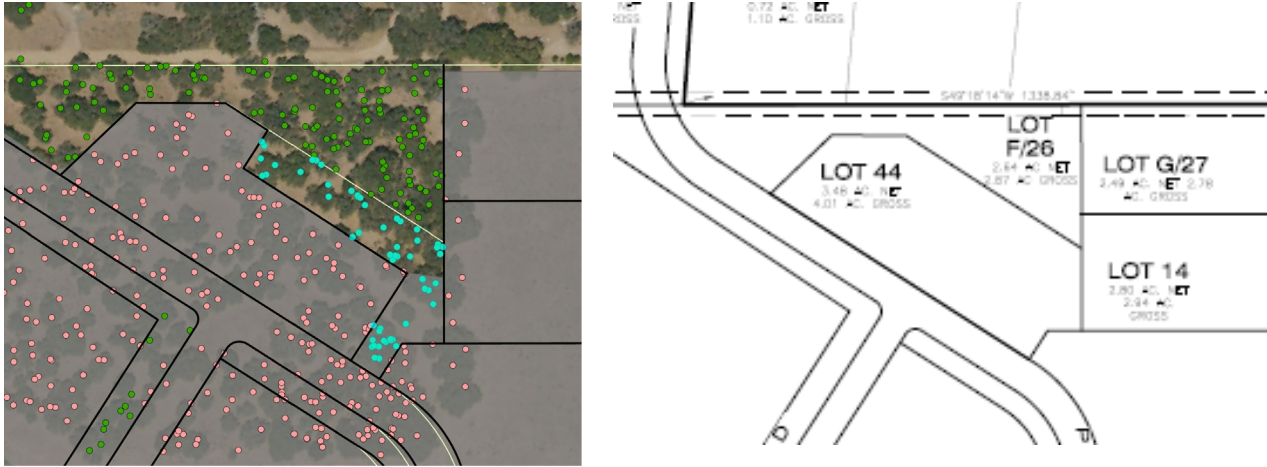


Exhibit 3. Lot 44 was increased by approximately 1 acre and Lot F/26 was reduced by approximately 1 acre resulting in impacts to 56 oak trees previously determined to be preserved.



Exhibit 4. The revised grading for the adjustments to Lot 20 pushed into the adjacent oak canopy along Collector C and will impact 12 trees previously determined to be preserved in Lot M/33. Conversely, 18 trees previously determined to be impacted south of that area would now be preserved within Lot M/33.



Exhibit 5. The Lot 10 adjustments pose no change to the associated limits of grading and thus no change in oak tree impacts.

**Nipomo Community Services District
2020 Urban Water Management Plan
(December 2021)**



Nipomo Community Services District



2020 Urban Water Management Plan

Final December 2021

Prepared for:

Nipomo Community Services District
P.O. Box 326
Nipomo, CA 93444

Prepared by:

MKN & Associates, Inc.
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Nipomo Community Services District
2020 Urban Water Management Plan
Final December 2021

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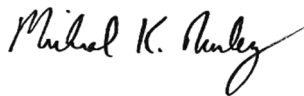
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Table of Contents

CHAPTER 1 INTRODUCTION AND OVERVIEW 1-1

 New Requirements for 2020 Update 1-1

 1.1 UWMP Organization 1-2

 1.2 UWMP in Relation to Other Efforts 1-4

 1.3 UWMPs and Grant or Loan Eligibility..... 1-4

CHAPTER 2 PLAN PREPARATION 2-1

 New Requirement for 2020 Update 2-1

 2.1 Plan Preparation 2-1

 2.2 Basis for Preparing a Plan 2-1

 2.2.1 Public Water Systems2-1

 2.2.2 Suppliers Serving Multiple Service Areas/Public Water Systems2-1

 2.3 Regional Planning..... 2-1

 2.4 Individual or Regional Planning and Compliance..... 2-1

 2.4.1 Regional UWMP2-1

 2.4.2 Regional Alliance.....2-2

 2.5 Fiscal or Calendar Year and Units of Measure 2-2

 2.5.1 Fiscal or Calendar Year.....2-2

 2.5.2 Reporting Complete 2020 Data2-2

 2.5.3 Units of Measure2-2

 2.6 Coordination and Outreach 2-2

 2.6.1 Wholesale and Retail Coordination2-2

 2.6.2 Coordination with Other Agencies and the Community2-3

 2.6.3 Notice to Cities and Counties.....2-3

CHAPTER 3 SYSTEM DESCRIPTION..... 3-1

 New Requirements for 2020 Update 3-1

 3.1 General Description 3-1

 3.2 Service Area Boundary Maps 3-1

3.3 Service Area Climate 3-1

3.4 Service Area Population and Demographics 3-6

 3.4.1 Service Area Population 3-6

 3.4.2 Other Social, Economic, and Demographic Factors 3-8

3.5 Land Uses within Service Area 3-10

CHAPTER 4 WATER USE CHARACTERIZATION 4-1

 New Requirements for 2020 Update 4-1

 4.1 Non-Potable Versus Potable Water Use 4-1

 4.2 Past, Current, and Projected Water Use by Sector 4-1

 4.2.1 Water Use Sectors Listed in Water Code 4-1

 4.2.2 Water Use Sectors in Addition to Those Listed in Water Code 4-2

 4.2.3 Past Water Use 4-2

 4.2.4 Distribution System Water Loss 4-2

 4.2.5 Current Water Use 4-2

 4.2.6 Projected Water Use 4-3

 4.2.7 Characteristic Five-Year Water Use 4-5

 4.3 Worksheets and Reporting Tables 4-5

 4.4 Water Use for Lower Income Households 4-5

 4.5 Climate Change Considerations 4-6

CHAPTER 5 SBX7-7 Baselines, Targets, and 2020 Compliance 5-1

 New Requirements for 2020 Update 5-1

 5.1 Guidance for Wholesale Suppliers 5-1

 5.2 SB X7-7 Forms and Summary Tables 5-1

 5.2.1 SB X7-7 Verification Form (Baselines and Targets) 5-1

 5.2.2 SB X7-7 2020 Compliance Form 5-1

 5.2.3 Submittal Tables 5-1 and 5-2 5-1

 5.2.4 Regional UWMP/Regional Alliance 5-1

 5.3 Baseline and Target Calculations for 2020 UWMPs 5-1

 5.3.1 Supplier Submitted 2015 UMWP, No Change to Service Area 5-1

5.3.2 Supplier Did Not Submit 2015 UWMP 5-1

5.3.3 Supplier Newly Subject to UWMP Requirements 5-1

5.3.4 Distribution Area Expansion 5-2

5.3.5 Distribution Area Contraction 5-2

5.3.6 Large Partial Customers Become Whole Customers 5-2

5.4 Methods for Calculating Population and Gross Water Use 5-2

5.4.1 Service Area Population 5-2

5.4.2 Gross Water Use 5-2

5.5 2020 Compliance Daily Per-Capita Water Use (GPCD) 5-2

5.5.1 2020 Adjustments for Factors Outside of Supplier’s Control 5-3

5.5.2 Special Situations 5-3

5.5.3 If Supplier Does Not Meet 2020 Target 5-3

5.6 Regional Alliance 5-3

CHAPTER 6 WATER SUPPLY CHARACTERIZATION 6-1

New Requirements for 2020 Update 6-1

6.1 Water Supply Analysis Overview 6-1

6.2 Water Supply Characterization 6-1

6.2.1 Purchased or Imported Water 6-1

6.2.2 Groundwater 6-2

6.2.3 Surface Water 6-6

6.2.4 Stormwater 6-6

6.2.5 Wastewater and Recycled Water 6-6

6.2.6 Desalinated Water Opportunities 6-11

6.2.7 Water Exchanges and Transfers 6-11

6.2.8 Future Water Projects 6-11

6.2.9 Summary of Existing and Planned Sources of Water 6-11

6.2.10 Special Conditions 6-13

6.3 Submittal Tables 6-13

6.4 Energy Intensity 6-13

CHAPTER 7 WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT 7-1

 New Requirements for 2020 Update 7-1

 7.1 Introduction 7-1

 7.2 Water Service Reliability Assessment 7-1

 7.2.1 Service Reliability - Constraints on Water Sources 7-3

 7.2.2 Service Reliability - Year Type Characterization..... 7-3

 7.2.3 Water Service Reliability 7-5

 7.2.4 Description of Management Tools and Options..... 7-7

 7.3 Drought Risk Assessment..... 7-7

 7.3.1 Data, Methods, and Basis for Water Shortage Condition..... 7-7

 7.3.2 DRA Individual Water Source Reliability..... 7-7

 7.3.3 Total Water Supply and Use Comparison 7-7

CHAPTER 8 WATER SHORTAGE CONTINGENCY PLAN 8-1

 8.1 Water Supply Reliability Analysis..... 8-1

 8.2 Annual Water Supply and Demand Assessment Procedures 8-1

 8.2.1 Decision- Making Process 8-1

 8.2.2 Data and Methodologies 8-1

 8.3 Six Standard Water Shortage Levels 8-1

 8.4 Shortage Response Actions..... 8-4

 8.4.1 Demand Reduction 8-4

 8.4.2 Supply Augmentation 8-4

 8.4.3 Operational Changes 8-5

 8.4.4 Additional Mandatory Restrictions..... 8-5

 8.4.5 Emergency Response Plan 8-5

 8.4.6 Seismic Risk Assessment and Mitigation Plan 8-5

 8.4.7 Shortage Response Action Effectiveness..... 8-6

 8.5 Communication Protocols..... 8-6

 8.6 Compliance and Enforcement..... 8-6

 8.7 Legal Authorities 8-6

8.8 Financial Consequences of WSCP 8-6

8.9 Monitoring and Reporting 8-6

8.10 WSCP Refinement Procedures 8-6

8.11 Special Water Feature Distinction 8-6

8.12 Plan Adoption, Submittal and Availability 8-6

CHAPTER 9 DEMAND MANAGEMENT MEASURES 9-1

New Requirements for 2020 Update 9-1

9.1 Demand Management Measures for Wholesale Suppliers 9-1

9.2 Existing Demand Management Measures for Retail Suppliers..... 9-1

 9.2.1 Water Waste Prevention Ordinances 9-1

 9.2.2 Metering 9-1

 9.2.3 Conservation Pricing 9-1

 9.2.4 Public Education and Outreach 9-1

 9.2.5 Programs to Assess and Manage Distribution System Real Loss 9-2

 9.2.6 Water Conservation Program Coordination and Staffing Support 9-2

 9.2.7 Other Demand Management Measures 9-2

9.3 Reporting Information 9-3

 9.3.1 Implementation Over the Past Five years 9-3

 9.3.2 Implementation to Achieve Water Use Targets 9-3

9.4 Water Use Objectives (Future Requirements) 9-3

CHAPTER 10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION 10-1

New Requirements 10-1

10.1 Inclusion of all 2015 Data 10-1

10.2 Notice of Public Hearing 10-1

 10.2.1 Notice to Cities and Counties 10-1

 10.2.2 Notice to the Public 10-1

10.3 Public Hearing and Adoption 10-1

 10.3.1 Public Hearing 10-1

 10.3.2 Adoption 10-2

10.4 Plan Submittal 10-2

 10.4.1 Submitting a UWMP and Water Shortage Contingency Plan to DWR.....10-2

 10.4.2 Electronic Data Submittal10-2

 10.4.3 Submitting a UWMP to the California State Library10-2

 10.4.4 Submitting a UWMP to Cities and Counties10-2

10.5 Public Availability 10-2

10.6 Notification to Public Utilities Commission 10-2

10.7 Amending an Adopted UWMP or Water Shortage Contingency Plan 10-3

 10.7.1 Amending a UWMP10-3

 10.7.2 Amending a Water Shortage Contingency Plan10-3

List of Tables

Table 1-1: Water Code Changes Since 2015 UWMP 1-3

Table 2-1 Retail Only: Public Water Systems..... 2-1

Table 2-2 Plan Identification..... 2-2

Table 2-3: Supplier Identification 2-2

Table 2-4 Retail: Water Supplier Information Exchange 2-3

Table 2-5 Agency Coordination 2-3

Table 3-1: Growth Scenario 1 Population Estimate..... 3-6

Table 3-1a: Growth Scenario 2 Population Estimate..... 3-7

Table 3-2: Developed Land Use Summary within Service Area 3-10

Table 3-3: Land Uses Not Currently Served by the District 3-12

Table 4-0: Retail: Historical Water Usage 4-2

Table 4-1: Retail: Demands for Potable Water - Actual..... 4-3

Table 4-1a: Historical Use Rates (GPCD)..... 4-3

Table 4-2: Retail: Demands for Potable Water - Projected..... 4-4

Table 4-3: Retail: Total Water Demands (AF) 4-4

Table 4-4: Retail: 12 Month Water Loss Audit Reporting..... 4-4

Table 4-5 Retail Only: Inclusion in Water Use Projections 4-5

Table 4-6: Low-income Residential Demand Projections 4-6

Table 5-1 Baselines and Targets Summary 5-2

Table 5-2: 2020 Compliance 5-2

Table 6-0a : Wholesale Water Agreement Delivery Schedule..... 6-2

Table 6-0b: NSWP Replenishment Agreement Allocation (AFY) 6-2

Table 6-0c: NMMA Water Shortage Response Stages..... 6-5

Table 6-1: Retail: Groundwater Volume Pumped 6-6

Table 6-2 Retail: Wastewater Collected Within Service Area in 2020..... 6-7

Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2020 6-7

Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area..... 6-10

Table 6-5 Retail: 2015 UWMP Recycled Water Use Projection Compared to 2020 Actual..... 6-10

Table 6-6 Retail: Methods to Expand Future Recycled Water Use..... 6-10

Table 6-7 Retail: Expected Future Water Supply Projects or Programs 6-11

Table 6-8 Retail: Water Supplies — Actual..... 6-12

Table 6-9 Retail: Water Supplies — Projected..... 6-12

Table 7-0: Climate Change Vulnerability Screening..... 7-2

Table 7-1 Retail: Basis of Water Year Data 7-3

Table 7-2 Retail: Normal Year Supply and Demand Comparison 7-5

Table 7-3 Retail: Single Dry Year Supply and Demand Comparison 7-5

Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison..... 7-6

Table 8-1: Water Shortage Contingency Plan Levels 8-2

Table 8-2 Demand Reduction Actions 8-4

Table 8-3: Supply Augmentation and Other Actions 8-5

Table 10-1 Retail: Notification to Cities and Counties..... 10-1

List of Figures

Figure 3-1: District Location Map 3-3

Figure 3-2: District Service Area Map 3-4

Figure 3-3: District Annexation Map..... 3-5

Figure 3-4: Service Area 20-year Population and Growth Rate Chart 3-7

Figure 3-5: Land Uses within Service Area..... 3-11

Figure 6-1: Santa Maria Groundwater Basin and Management Areas..... 6-3

Figure 6-2: Septic System Prohibition Boundary 6-8

Figure 7-1: District Historic Rainfall Data..... 7-5

Figure 8-1: Comparison for the District’s 2015 Shortage Levels and the 2020 WSCP Mandated Shortage Levels..... 8-3

Appendices

- Appendix A - 13th Annual Nipomo Mesa Management Area Annual Report
- Appendix B - DWR Population Tool Results
- Appendix C - SB X7-7 Verification Form submitted for the 2015 UWMP
- Appendix D - SB X7-7 2020 Compliance Form
- Appendix E - Wholesale Water Supply Agreement
- Appendix F - Supplemental Water Management and Groundwater Replenishment Agreement
- Appendix G - Final Santa Maria River Valley Groundwater Basin Judgement
- Appendix H - Board Resolution 2014-1335 Water Shortage Response and Management Plan
- Appendix I - Consumer Confidence Report
- Appendix J - Water Shortage Contingency Plan
- Appendix K - 60 Day Notification to Cities and Counties
- Appendix L - Newspaper Notification
- Appendix M - Adoption Resolution
- Appendix N - 2020 UWMP Checklist
- Appendix O - UWMP Water Code

Bibliography

The following reports, studies, and other material were reviewed during preparation of this Urban Water Management Plan update.

- 1) City of Santa Maria 2020 Urban Water Management Plan adopted June 2021 and prepared by the City of Santa Maria.
- 2) 2020 Urban Water Management Plans Guidebook for Urban Water Suppliers dated March 2020 and prepared by the California Department of Water Resources.
- 3) Nipomo Mesa Management Area 13th Annual Report (NMMA TG Annual Report) Calendar Year 2020 dated April 2021 and prepared by NMMA Technical Group.
- 4) 2050 Regional Growth Forecast for San Luis Obispo County Population, Housing, and Employment Projections for San Luis Obispo Council of Governments dated June 2017 and prepared by Beacon Economics.
- 5) House Element 2014-2019 - County of San Luis Obispo General Plan Adopted June 17, 2014 and prepared by the San Luis Obispo County Department of Planning and Building.
- 6) Nipomo Community Services District 2015 Urban Water Management Plan dated June 2016 and prepared by Michael K. Nunley and Associates, Inc.
- 7) San Luis Obispo County 2040 Population, Housing & Employment Forecast for San Luis Obispo Council of Governments dated August 11, 2011 and prepared by AECOM.
- 8) Nipomo Mesa Management Area Water Shortage Conditions and Response Plan dated April 2009 and prepared by NMMA Technical Group.

List of Acronyms

AB - Assembly Bill	IRWMP - Integrated Regional Water Management Plans
ADU – Accessory Dwelling Unit	KWI – Key Wells Index
AF – Acre-Foot	MG – Million Gallons
AFY – Acre-Feet per Year	MGY – Million Gallons per Year
AMI – Advanced Metering Infrastructure	NA – Not Applicable
AWIA – America’s Water Infrastructure Act	NCMA - Northern Cities Management Area
AWWA – American Water Works Association	NCS D - Nipomo Community Services District
BMP – Best Management Practice	NMMA – Nipomo Mesa Management Area
CASGEM – California Statewide Groundwater Elevation Monitoring Program	NMMA TG – Nipomo Mesa Management Area Technical Group
CA – California	NMWCA – Nipomo Mesa Water Conservation Area
CD – Compact Disc	PWS – Public Water System
CII – Commercial, Industrial, Institutional, water use sectors	Report – NMMA TG’s Annual Report
CIMIS – California Irrigation Management Information System	RRA – Risk and Assessment
City – City of Santa Maria	RUWMP – Regional Urban Water Management Plan
CUWCC – California Urban Water Conservation Council	SB – Senate Bill
CWC – California Water Code	SWRCB – State Water Resources Control Board
DACs – Disadvantaged Communities	SLOCOG – San Luis Obispo Council of Governments
DMMs – Demand Management Measures	SLO-PD - San Luis Obispo Planning and Development
DOF – Department of Finance	SOI- Sphere of Influence
DRA – Drought Risk Assessment	SQ FT – Square Feet
DU – Dwelling Unit	SMVMA - Santa Maria Valley Management Area
DWR – Department of Water Resources	NSWP - Nipomo Supplemental Water Project
eARDWP - Electronic Annual Reports to the Drinking Water Program (SWRCB)	SB X7-7 – Senate Bill Seven of the Senate’s Seventh Extraordinary Session of 2009
ETo - Reference Evapotranspiration	UMWP - Urban Water Management Plan
GIS - Geographic Information System	US EPA - United States Environmental Protection Agency
GPCD - Gallons per Capita per Day	WMWC - Woodlands Mutual Water Company
GSA - Groundwater Sustainability Agency	WRF - Water Reclamation Facility
GSWC - Golden State Water Company	WSCP - Water Shortage Contingency Plan
GSWCCR – Golden State Water Company Cypress Ridge	WSS - WaterSense Specification
HECW - High-Efficiency Clothes Washer	WUE - Water Use Efficiency
HET/DFT - High-Efficiency Toilet	WWTP - Wastewater Treatment Plant
ID - Identifier	

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CHAPTER 1 INTRODUCTION AND OVERVIEW

This report comprises the 2020 Urban Water Management Plan (UWMP) update for the Nipomo Community Services District (District). The District is located in Nipomo, California, an unincorporated community in southern San Luis Obispo County. The District serves portions of the Nipomo community and the greater Nipomo Mesa. The District is an independent Special District formed and operated pursuant to Government Code §61000 et seq. The District provides water, wastewater, solid waste, landscape maintenance, street lighting, and drainage services to its customers pursuant to Government Code §61600(a), (b), and (c). The District does not have land planning authority, which is retained by the County of San Luis Obispo (County); however, County land use planning authority is subordinated to resource limitations such as water and sewer capacity as established by the District.

The UWMP is a valuable planning document used for the following purposes:

- Meet a statutory requirement of the California Water Code (CWC)
- Provide a key source of information for Water Supply Assessments (WSAs) and Written Verifications of Water Supply required by SB 610 and SB 221
- Support regional long-range planning documents including County General Plans
- Provide a standardized methodology for water utilities to assess their water resource needs and availability
- Serve as a critical component of developing Integrated Regional Water Management Plans (IRWMPs)

As a part of the California Water Code, the California Urban Water Management Planning Act (UWMP Act) requires all urban water suppliers with more than 3,000 connections or distributing more than 3,000 acre feet per year (AFY) to complete an UWMP every five years ending in '5' and '0'. The UWMP Act is administered by the California Department of Water Resources (DWR), who is responsible for developing guidance for preparation of the UWMPs, reviewing the submitted plans for completeness, compiling the data for statewide and regional analysis, and publishing the documents online for public access.

In 2020, the District produced approximately 1,267 acre-feet (AF) of water, imported 781 AF of supplemental water from the City of Santa Maria, and had 4,300 customer connections. The District adopted its first UWMP in January 2004. Since the first adopted UWMP in 2004, the District has completed and submitted the 2005, 2010, and 2015 updates.

New Requirements for 2020 Update

The following new requirements have been identified in the 2020 Urban Water Management Plan Guidebook for Urban Water Suppliers and have been addressed in the District's 2020 UWMP update:

- Five Consecutive Dry-Year Water Reliability Assessment
- Drought Risk Assessment
- Seismic Risk
- Energy Use Information
- Water Loss Reporting for Five Years
- Water Shortage Contingency Plan (WSCP)
- Groundwater Supplies Coordination
- Lay Person Description

1.1 UWMP Organization

This UWMP update was prepared based on guidance from the final draft of the California Department of Water Resources (DWR) “2020 Urban Water Management Plan Guidebook for Urban Water Suppliers” dated March 2021 and follows the recommended chapter formatting identified in the guidebook and briefly described below.

Chapter 1 – UWMP Introduction and Lay Description: This chapter identifies changes since the 2015 UWMP, fundamentals of the 2020 UWMP, and the required lay description of the District and its service area. Some subsequent chapters also include an initial lay description.

Chapter 2 – Plan Preparation: This chapter provides information on processes used to develop the UWMP, including efforts in coordination and outreach.

Chapter 3 – System Description: This chapter includes maps of the service area, an explanation of the service area and climate, and detail on the public water system.

Chapter 4 – Water Use Characterization: This chapter provides a description and quantification of the current and projected water uses within the District’s service area.

Chapter 5 – Conservation Target Compliance: This chapter describes the District’s compliance with the 2020 per-capita water conservation mandate, presents the District’s 2020 per-capita target value that was adopted in the 2015 UWMP, and compliance with per-capita target based upon actual 2020 customer water use.

Chapter 6 – Water Supply Characterization: This chapter provides a description and quantification of current and projected potable and non-potable water supplies. A narrative description of each supply source and quantification of the supply availability for each supply source was identified.

Chapter 7 – Water Service Reliability and Drought Risk Assessment: This chapter describes the Districts’ water system reliability through at least a 20-year planning horizon. The description includes normal, single dry year, and five consecutive dry years. The water system reliability differs from the Drought Risk Assessment (DRA) by allowing a different basis for characterizing the five consecutive dry years.

Chapter 8 – Water Shortage Contingency Plan: This chapter provides a structured plan for dealing with water shortages, incorporating prescriptive information and standardized action levels, along with implementation actions in the event of a catastrophic supply interruption.

Chapter 9 – Demand Management Measures: This chapter identifies the District’s efforts to promote conservation and to reduce demand on the water supply; specifically including a narrative describing efforts to implement demand management measures.

Chapter 10 – Plan Adoption, Submittal, and Implementation: This chapter describes and documents the steps taken to make the UWMP publicly available, as well as the steps taken to adopt and submit the UWMP in accordance with the Water Code, and also describes the District’s plan to implement the UWMP.

Appendices: To support and further clarify information included in the main chapters of the UWMP, relevant information has been included in the appendix of this UWMP.

Table 1-1 provides an overview of the applicable changes to the Water Code since the 2015 UWMP, which have been included in this 2020 update.

Table 1-1: Water Code Changes Since 2015 UWMP				
Change Number	Topic	CWC Section	Summary	Guidebook Section
1	System Description	10631(a)	Suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land uses information for projecting water use in five-year increments, up to the year 2045.	3.0
2	Other Social, Economic, and Demographic Factors	10631	Describe the service area of the supplier, including current and projected population, climate, and other social, economic and demographic factors affecting the supplier’s water management planning.	3.4.2
3	Land Uses within Service Area	10631(a)	The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier’s water management planning.	3.5
4	Distribution System Water Loss	10635	Suppliers shall provide a simple lay description of their projected water use for the foreseeable future.	4.2.4
5	Distribution System Water Loss	10631(d)(3) (A) and (C)	Suppliers shall provide quantified distribution system losses for each of the five preceding years and whether or not the state standard was met.	4.2.4
6	Characteristic Five-Year Water Use	10635(b)	The Supplier must produce a projected water use for the years 2021 through 2025 as part of the water use projections, up to the year 2040.	4.2.7
7	Climate Change Effects	10635(b)(1)	Consideration of climate change in future projections in regards to water supply.	6.2. & 10.1
8	Drought Risk Assessment	10635(b)	DRA prepared as a component of the 2020 UWMP	7.3
9	Water Service Reliability – Five Consecutive Dry Years	10635(a); 10631 (b)(1)	Submittal Table 7-4 is used for the Supplier’s water service reliability assessment for five consecutive dry years, for each of the five-year projection increments out to at least 2040	7.2.1 & 7.2.3.3
10	Water Supply Reliability Analysis	10632(a)(1)	Key attributes of its water supply reliability analysis	8.1
11	Six Standard Water Shortage Levels	10632 (a)(3)(A)	Six standard water shortage levels corresponding to progressive ranges of up to 10-, 20-, 30-, 40-, and 50-percent shortages and greater than 50-percent shortage.	8.3
12	Shortage Response Actions	10632 (a)(4)	Locally appropriate “shortage response actions” for each shortage level, with a corresponding estimate of the extent the action will address the gap between supplies and demands.	8.4
13	Annual Water Supply and Demand Assessment Procedures	10632 (a)(2)	Suppliers are required to submit, by July 1 of each year, beginning in the year following adoption of the 2020 UWMP, an annual water shortage assessment report to the California Department of Water Resources (DWR).	8.2

Table 1-1: Water Code Changes Since 2015 UWMP				
14	Communication Protocols	10632 (a)(5)	Communication protocols and procedures to inform customers, the public, and government entities of any current or predicted water shortages and associated response actions.	8.5
15	Monitoring and reporting	10632(a)(9)	Monitoring and reporting procedures to assure appropriate data is collected to monitor customer compliance and to respond to any state reporting requirements.	8.9
16	WSCP Refinement Procedures	10632(a)(10)	A reevaluation and improvement process to assess the functionality of its WSCP and to make appropriate adjustments as may be warranted.	8.10

1.2 UWMP in Relation to Other Efforts

An UWMP is prepared by local Suppliers that have the in-depth and practical knowledge of their water systems. The information contained in each Supplier’s UWMP reflects the operations of its system in the context of the Supplier’s customers, supplies, and service area. This local planning and preparation remains the fundamental focus of the UWMP.

In addition to the local Supplier focus, the UWMP requires coordination with other planning agencies and is most effective when integrated with other planning efforts. Land-use planning agencies, such as cities and counties, prepare General Plans and Specific Plans that affect a Supplier’s analysis provided in its UWMP, and vice versa. Moreover, Water Master Plans, facility plans, Recycled Water Master Plans, Integrated Regional Water Management Plans, Regional Climate Action Plans, Groundwater Sustainability Plans, AB 3030 Groundwater Management Plans, local or regional Hazard Mitigation Plans, and others need to be synthesized with a Supplier’s UWMP to ensure a holistic planning process.

For the District’s UWMP, elements of the following reports and documents were utilized to develop the required sections of the plan (a brief description is provided for the relevant information contained in each document):

- 2015 Urban Water Management Plan: Served as the basis for the 2020 update.
- Nipomo Mesa Management Area (NMMA) 13th Annual Report (Calendar Year 2020) and prepared by the NMMA Technical Group, submitted April 2021: Used for the development of the water shortage contingency plan and identification of existing groundwater pumping.
- San Luis Obispo County 2040 Population, Housing & Employment Forecast for San Luis Obispo Council of Governments dated August 11, 2011 and prepared by AECOM: Used to estimate future population projections throughout 2045 within the service area.
- San Luis Obispo County Multi-Jurisdictional Hazard Mitigation Plan: Contained information to address the seismic risk assessment and mitigation requirement of the UWMP update.

The District’s latest water master plan was developed in December 2007 and was not used to inform this UWMP update since it does not contain current information related to existing water usage, future demand projections, and water supply availability.

1.3 UWMPs and Grant or Loan Eligibility

For a Supplier to be eligible for any water grant or loan administered by DWR, the Supplier must have a current UWMP on file that has been determined by DWR to address the requirements of the Water Code. A current UWMP must also be maintained by the Supplier throughout the term of any grant or loan administered by DWR. An UWMP may also be required in order to be eligible for other state funding, depending on the conditions that are specified in the funding guidelines. Suppliers are encouraged to seek guidance on the specifics of any state funding source from the respective funding agencies.

CHAPTER 2 PLAN PREPARATION

New Requirement for 2020 Update

The preparation and periodic update of a Water Shortage Contingency Plan (WSCP) is now required per the final Guidebook. The WSCP is included in the UWMP, but adopted and amended independently of the UWMP. Coordination with land use agencies, and other relevant regional or local authorities is now required as part of preparing the UWMP and the WSCP.

2.1 Plan Preparation

This chapter includes information about the following sections for the 2020 UWMP:

- Basis for Preparing a Plan
- Regional Planning
- Individual or Regional Planning and Compliance
- Fiscal or Calendar Year and Units of Measure
- Coordination and Outreach

2.2 Basis for Preparing a Plan

2.2.1 Public Water Systems

The District is a public urban water supplier serving an estimated population of 13,771 people. **Table 2-1** provides a summary of the number of connections and total volume of water supplied by the District to its customers for calendar year 2020.

Table 2-1 Retail Only: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2020	Volume of Water Supplied 2020 (MG)
CA4010026	NCS D	4,470	2,048
TOTAL		4,470	2,048

2.2.2 Suppliers Serving Multiple Service Areas/Public Water Systems

The District serves a single public water system and service area.

2.3 Regional Planning

The District is located in the NMMA and acts to assist in coordinate regional water resource planning efforts as mandated by the Court. The Nipomo Mesa Management Area Technical Group (NMMA TG) is the court appointed responsibly for assessing groundwater within the NMMA of the Santa Maria Groundwater Basin.

2.4 Individual or Regional Planning and Compliance

2.4.1 Regional UWMP

The District has developed an UWMP that reports solely on its service area as identified in **Table 2-2**. This plan addresses all requirements of the Water Code including water use targets and baselines for Senate Bill Extraordinary Session 7-7 (SB X7-7) Water Conservation Act of 2009 reporting.

2.4.2 Regional Alliance

The District has developed an UWMP that reports solely on its service area. The individual UWMP addresses all requirements of the CWC. The District has notified and coordinated with appropriate regional agencies and constituents during the development of this UWMP update. Those agencies contacted are identified in **Table 2-5**.

Table 2-2 Plan Identification		
Select Only One	Type of Plan	Name of RUWMP or Regional Alliance if applicable
<input checked="" type="checkbox"/>	Individual UWMP	
<input type="checkbox"/>	Water Supplier is also a member of a RUWMP	
<input type="checkbox"/>	Water Supplier is also a member of a Regional Alliance	
<input type="checkbox"/>	Regional Urban Water Management Plan (RUWMP)	

2.5 Fiscal or Calendar Year and Units of Measure

2.5.1 Fiscal or Calendar Year

The District has reported water-related information included in this UWMP based on calendar basis and all units are measured in acre-feet (AF) as identified in **Table 2-3**.

Table 2-3: Supplier Identification	
Type of Supplier	
<input type="checkbox"/>	Supplier is a wholesaler
<input checked="" type="checkbox"/>	Supplier is a retailer
Fiscal or Calendar Year	
<input checked="" type="checkbox"/>	UWMP Tables Are in Calendar Years
<input type="checkbox"/>	UWMP Tables Are in Fiscal Years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of Measure Used in UWMP	
Unit	AF

2.5.2 Reporting Complete 2020 Data

The 2020 UWMP includes water use and planning data for the entire calendar year of 2020.

2.5.3 Units of Measure

Water volumes presented in this 2020 UWMP are measured in acre-feet (AF) as identified in **Table 2-3**.

2.6 Coordination and Outreach

2.6.1 Wholesale and Retail Coordination

As shown in **Table 2-4**, the District has provided the City of Santa Maria, a regional wholesale supplier, with projected water demands in five-year increments for the next 20 years.

Table 2-4 Retail: Water Supplier Information Exchange
The retail supplier has informed the following wholesale supplier(s) of projected water use in accordance with CWC 10631.
Wholesale Water Supplier Name
City of Santa Maria

2.6.2 Coordination with Other Agencies and the Community

The District has coordinated with multiple neighboring and stakeholder agencies in the preparation of this UWMP. The coordination efforts were conducted to: 1) inform the agencies of the planning activities of the District; 2) gather data for use in developing this UWMP update; and 3) coordinate planning activities with other related regional plans and initiatives. The coordination activities conducted by the District in preparation of this plan are summarized in **Table 2-5**.

Table 2-5 Agency Coordination							
Agency	Sent a notice of public hearing for draft UWMP	Commented on the draft	Attended public meetings	Contacted for assistance	Sent a copy of the draft plan	Sent a notice of intention to adopt	Notice of Plan Availability
California Department of Water Resources	X						
City of Santa Maria	X						
County of San Luis Obispo Public Works	X						
Golden State Water Company	X						
Woodlands Mutual Water Company	X						

2.6.3 Notice to Cities and Counties

The District has notified the County of San Luis Obispo, City of Santa Maria, Woodlands Mutual Water Company, and Golden State Water Company of the public hearing and this notification has been reported in Chapter 10 **Table 10-1**.

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CHAPTER 3 SYSTEM DESCRIPTION

New Requirements for 2020 Update

Per the Water Code the following new requirements are necessary for this chapter of the UWMP 2020 update.

- Inclusion of service area socioeconomic information as part of the system description
- Coordination with land use agencies and a description of current and projected land uses within the service area

3.1 General Description

The District was formed on January 28, 1965 to provide water and sewer services as allowed under the Community Service District Law of Government Code Section 61000 et. seq. The current service area boundary encompasses approximately 3,907 acres (parcel acreage only and excludes right-of-way) in the Nipomo area of southern San Luis Obispo County, and serves water to an estimated current population of 13,771 people (based 2020 Census data within the DWR population tool). The District service area is primarily residential land uses, with some light commercial and suburban residential. The District is comprised of one water system with three pressure zones; one zone serves the Blacklake Specific Plan area, one zone serves the Maria Vista Pressure Zone, and the third zone serves the rest of the District's service area.

3.2 Service Area Boundary Maps

Figure 3-1 illustrates the location of the District within the State of California and **Figure 3-2** shows the extents of the current service area and Sphere of Influence (SOI) boundary. In addition, **Figure 3-3** shows historical areas of annexation for the service area.

3.3 Service Area Climate

The Mediterranean climate of Nipomo and the surrounding southern San Luis Obispo County area is moderate as a result of the marine influence of the nearby Pacific Ocean. The winter season is usually cool and moist and the summer months are warm and dry, with relatively consistent temperatures averaging 58 degrees. Hills border Nipomo on the north, northeast, and east. The orientation of Nipomo's topography with respect to the Pacific Ocean produces consistent winds from the Pacific in an on-shore direction. During the warmer summer months, heat rises above the surrounding hills, pulling in cooler moist air from the coast. As a result, temperatures stay relatively consistent. Rainfall usually occurs between the months of November and April. **Table 3-0** illustrates monthly and annual average Potential Evapotranspiration (ET_o), precipitation and temperature data for the Nipomo area for calendar year 2020.

Table 3-0: Climate Conditions for Calendar Year 2020			
Month	Monthly Average ETo¹	Monthly Rainfall²	Monthly Average Temperature¹
	Inches	Inches	Fahrenheit
Jan	2.13	0.91	53.3
Feb	2.87	0.00	53.9
Mar	2.96	4.57	53.4
Apr	4.41	1.77	56.3
May	5.70	0.40	59.6
Jun	5.02	0.04	60.0
Jul	5.09	0.00	59.4
Aug	4.56	0.00	61.5
Sep	3.16	0.04	60.7
Oct	2.98	0.00	63.4
Nov	2.37	0.43	56.1
Dec	2.09	1.18	53.7
Average	3.61	0.78	57.6
Total	43.34	9.34	-

NOTES:

1. Data from CIMIS Station #202 Nipomo, January 1, 2020 to December 31, 2020.
2. Data from SLO County Rain Gauge, Nipomo (East), January 1, 2020 to December 31, 2020.

With respect to climate change, the District has not conducted an official climate change vulnerability or risk assessment for the existing water service area. However, climate change considerations for the District’s groundwater supply are incorporated into the Nipomo Mesa Management Area Annual Reports and Chapter 7 of the 13th Annual Report has been included in Appendix A.



Nipomo Community Services District

2020 Urban Water Management Plan

Figure 3-1:

Nipomo CSD Location Map



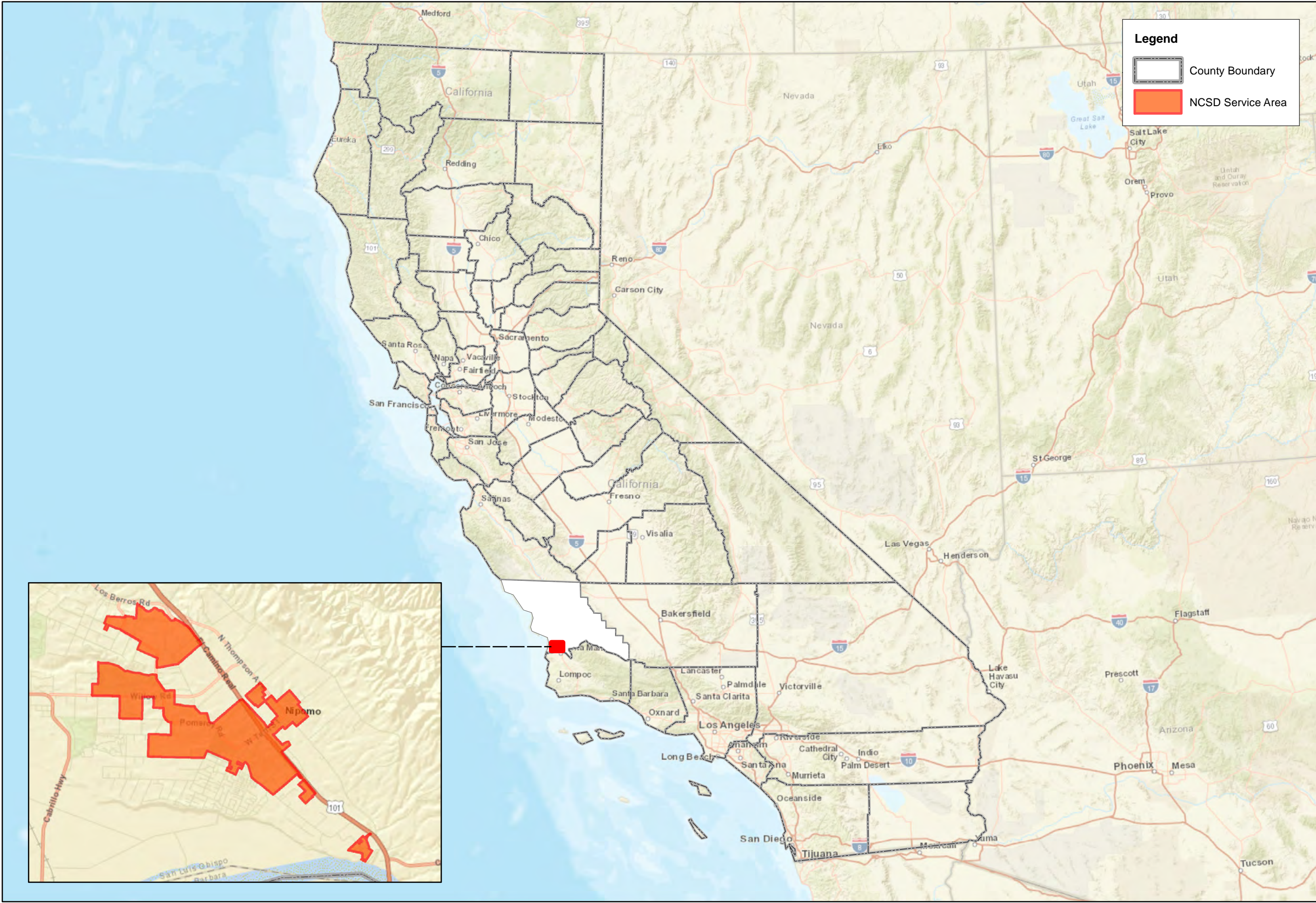
Scale: NTS

Service Layer Credits:
Sources: Esri, HERE,
Garmin, USGS,
Intermap, INCREMENT
P, NRCAn, Esri Japan,
METI, Esri China (Hong

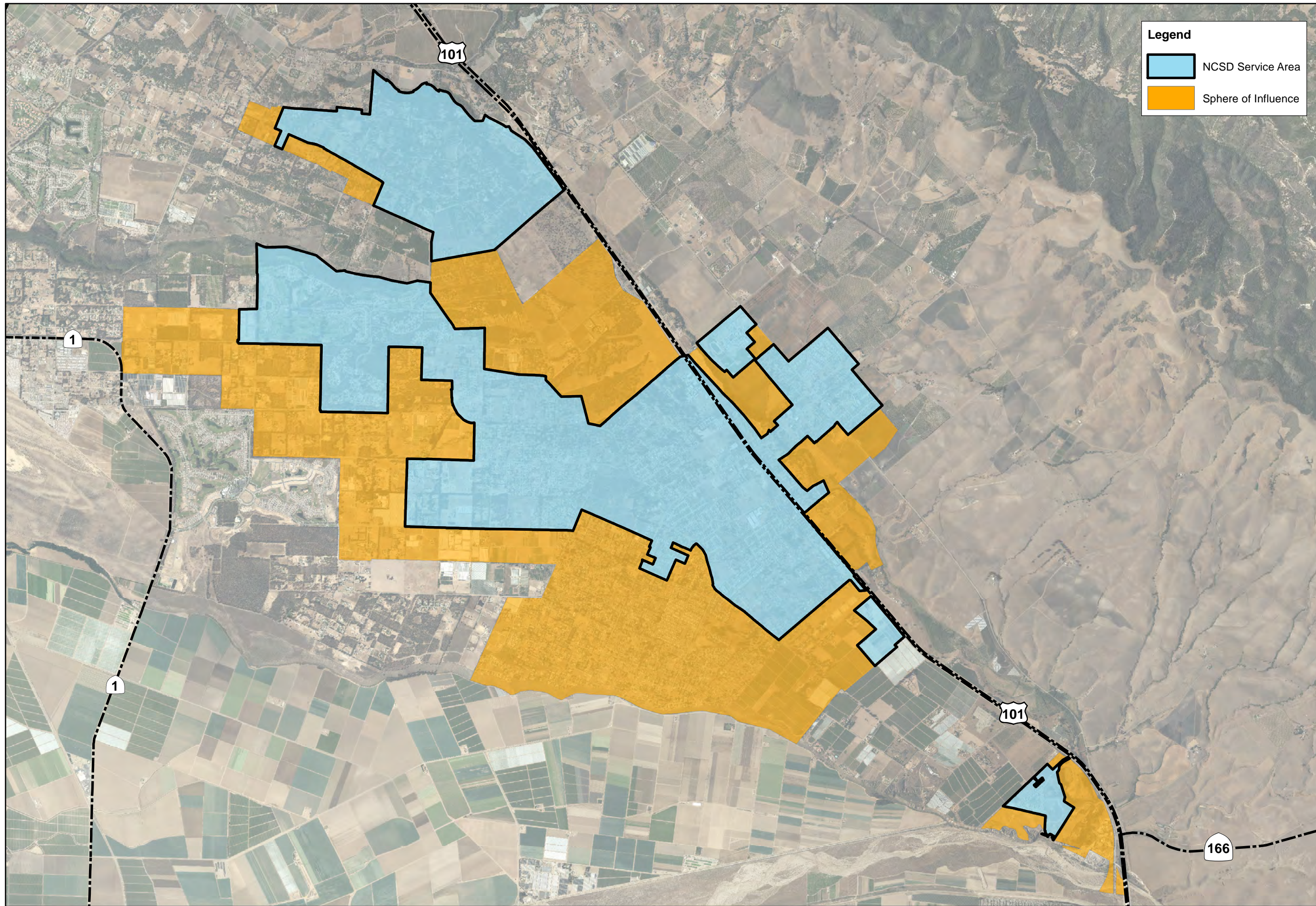


Legend



- County Boundary
- NCS D Service Area



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Legend

-  NCSD Service Area
-  Sphere of Influence

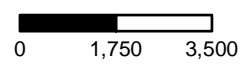


Nipomo Community Services District
2020 Urban Water Management Plan

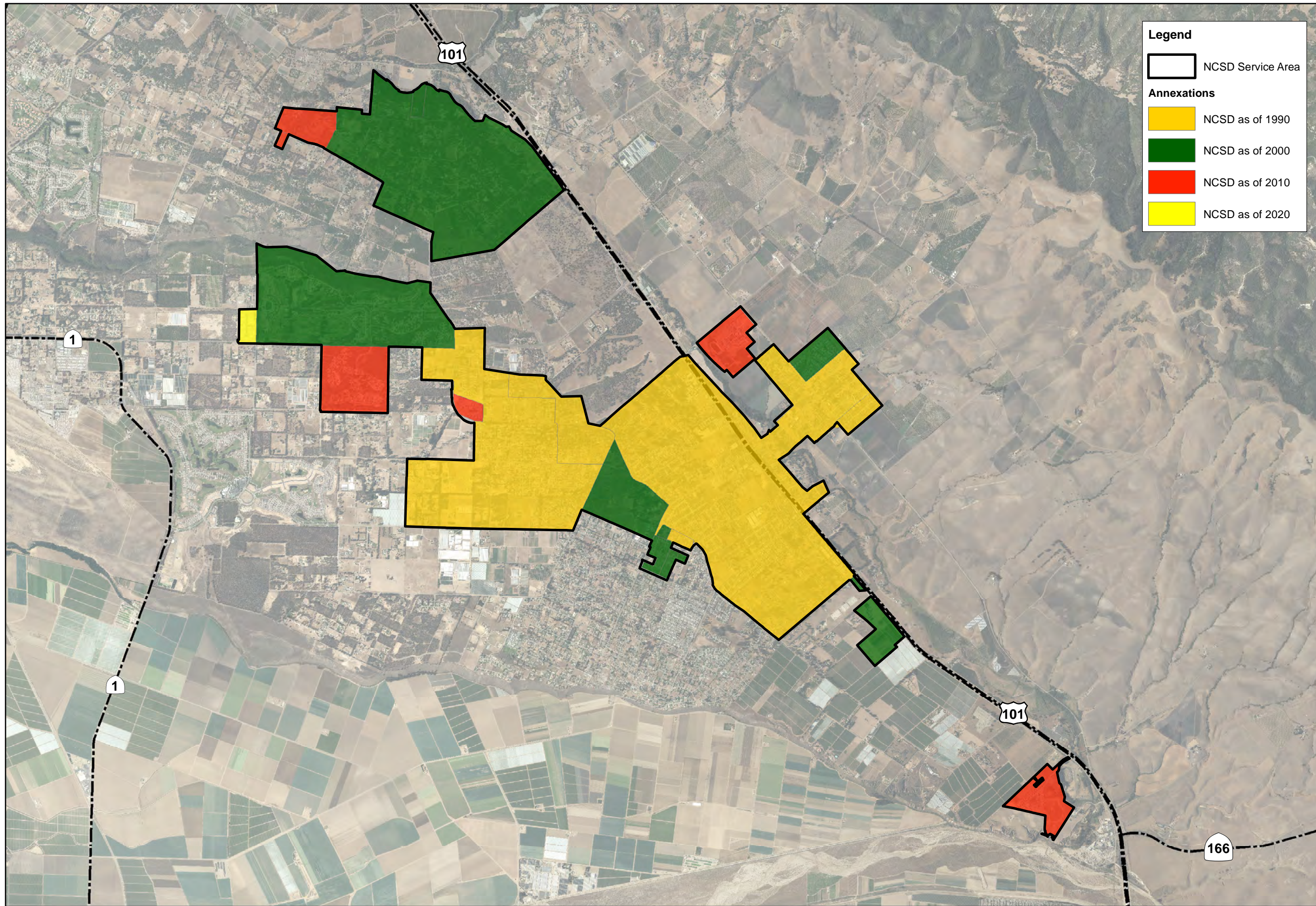
Figure 3-2:
Nipomo CSD Service Area Map








1 inch = 3,500 feet



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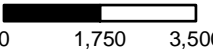
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 NCSD Service Area
Annexations
 NCSD as of 1990
 NCSD as of 2000
 NCSD as of 2010
 NCSD as of 2020



Nipomo Community Services District
2020 Urban Water Management Plan

Figure 3-3:
 NCSD
 Annexation
 Map


 1 inch = 3,500 feet




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3.4 Service Area Population and Demographics

3.4.1 Service Area Population

The 2020 population within the District service area was determined by using the Department of Water Resources (DWR) Population Tool, since the service area is not a City limit or Census designated place. To determine historical population data within the District service area using the DWR Population Tool, service area maps were prepared to reflect the service area boundaries for 1990, 2000, and 2010 Census years. Since the District boundary has changed over the course of the above Census years, three service area map layers (see **Figure 3-3**) were uploaded into the DWR Population Tool. The DWR Population Tool was used to estimate historical population from 1990 through 2020. Output from the DWR Population Tool for current and historical population is included in Appendix B.

The District does not have land use planning authority and relies on the County to identify potential new developments and overall population growth within the service area. With respect to population growth within the service area, several planning documents were reviewed to determine the appropriate growth rate to use for the 2020 update. The following planning documents included proposed population estimates through 2050 for the Nipomo area:

- 2050 Regional Growth Forecast for San Luis Obispo County Population, Housing, and Employment Projections for San Luis Obispo Council of Governments (June 2017)
- Nipomo Urban Reserve 2050 population of 18,598 with an annual average growth rate of 0.30% (2020 to 2050)
- San Luis Obispo County 2040 Population, Housing & Employment Forecast for San Luis Obispo Council of Governments (August 2011)
- Nipomo Urban Reserve 2040 population of 19,007 with an annual average growth rate of 0.83% (2020 to 2040)

The Nipomo Urban Reserve represents the limits of the Nipomo community located in southern San Luis Obispo County and encompasses approximately 3,900 acres. It should be noted that the Nipomo Urban Reserve boundary and the District water service area boundary are not the same. Approximately 2,300 acres of the Nipomo Urban Reserve boundary falls within the current District water service area, with approximately 1,300 acres within the Golden State Water Company service area, and the remaining 300 acres within the District’s SOI.

The District’s 2020 population estimate was based on the DWR population tool (including 2020 Census data) for the current service area only and is the best information currently available for population estimates. At the time this UWMP was prepared the current population within the District’s service area was estimated at 13, 771 people. With respect to future population growth and demands two conditions were reviewed and are briefly described below:

- Growth Scenario 1: Existing District population, infill development within the existing service area (parcels with reserved District capacity, parcels currently served by private wells, and development of vacant parcels) and future population associated with annexations under review
- Growth Scenario 2: Existing District population and infill development within the existing service area (parcels with reserved District capacity, parcels currently served by private wells, and development of vacant parcels)

Table 3-1 provides a summary of existing and future population projections for the District through 2045 assuming Growth Scenario 1 as described above.

Table 3-1: Growth Scenario 1 Population Estimate						
Year	2020	2025	2030	2035	2040	2045
Population Served	13,771	15,407	17,042	17,494	17,946	18,398
NOTES: 2020 population based on 2020 Census Data included in DWR population tool.						

Table 3-1a provides a summary of existing and future population projections for the District through 2045 assuming Growth Scenario 2 as described above.

Table 3-1a: Growth Scenario 2 Population Estimate						
Year	2020	2025	2030	2035	2040	2045
Population Served	13,771	14,223	14,675	15,127	15,579	16,031

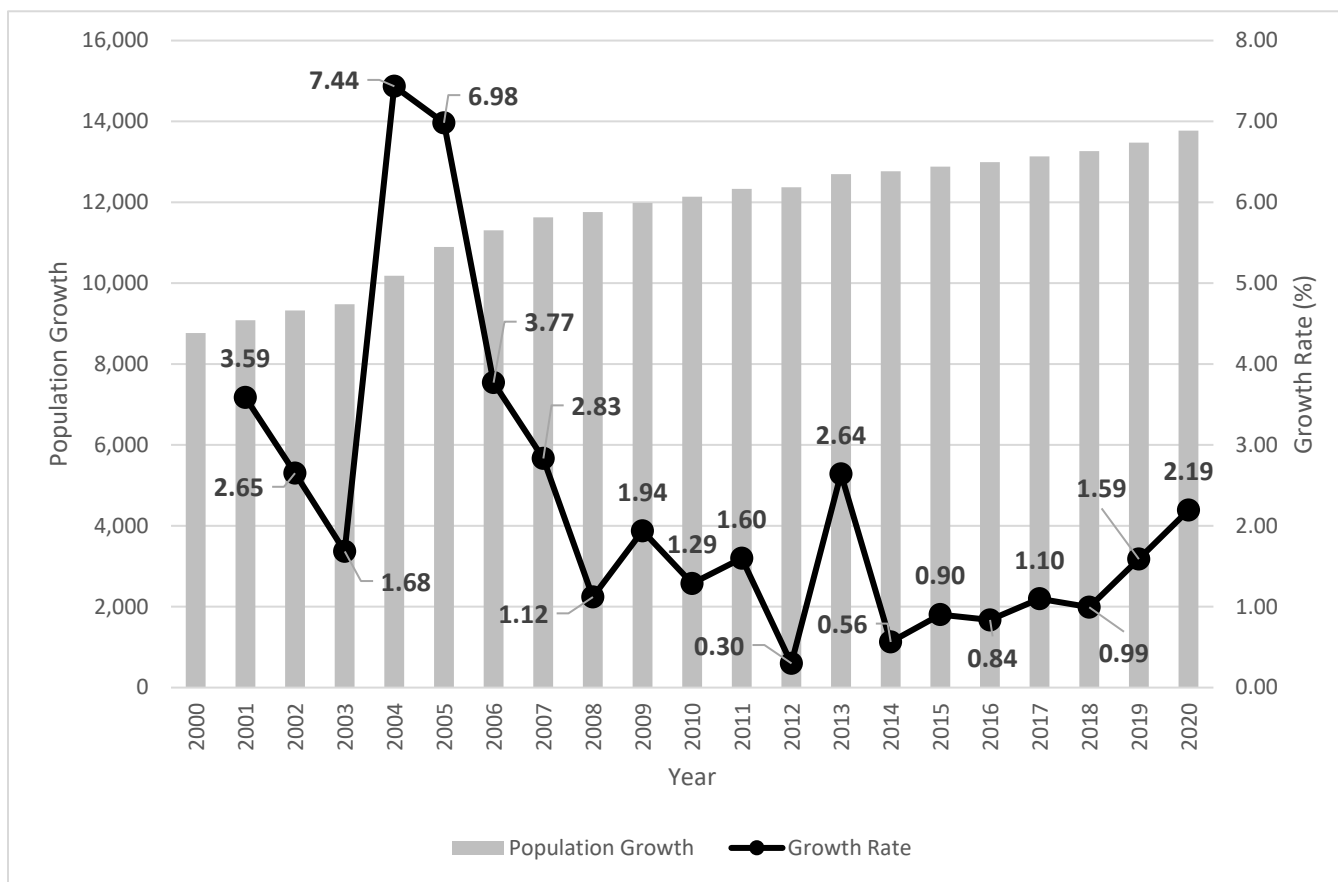
NOTES: 2020 population based on 2020 Census Data included in DWR population tool.

It should be noted that County of San Luis Obispo Growth Management Ordinance (Title 26 of the County Code) limits population growth in the Nipomo Mesa area to 1.8%. For the purpose of the UWMP update, the population estimates associated with Growth Scenario 1 was utilized throughout the report.

In addition, Figure 3-4 provides a summary of historical growth rates within the District service area only over the last twenty years (based on values from the DWR population tool) with the following average growth rates:

- 5-year growth rate of 1.3% (2015-2020)
- 10-year growth rate of 1.27% (2010-2020)
- 20-year growth rate of 2.3% (2000-2020)

Figure 3-4: Service Area 20-year Population and Growth Rate Chart



3.4.2 Other Social, Economic, and Demographic Factors

Total water use increases from year to year due to the growth within the service area. The direct relationship between growth and water consumption should increase at the same rate as population increases. Historically, low water rates and large residential lot sizes allowed for the irrigation of large landscaped areas at relatively low cost to the resident. Future water use patterns will be influenced by the implementation of rate increases, conservation outreach, and State Government Mandates.

The following data was obtained from the US Census Bureau and was the best available information to describe the demographics of the customer base within the District’s service area:

- The population includes 51% male and 49% female with 61% of the population between the ages of 18 and 65
- Approximately 49.1% of the population is White with 45% Hispanic or Latino
- The median household income was identified to be \$82,500 with 9% of the population within the poverty level

In addition to population, there are several additional factors that may affect water management and planning and are important to consider in the context of this UWMP update:

- Current development in Nipomo is mainly residential
- The County Housing Element identifies Nipomo as a community with realistic development capacity for low-income to above moderate income residential uses
- The County has a need for additional housing units and Nipomo is one of the unincorporated communities with the capacity to absorb population increases
- Development in the Nipomo area has slowed recently as a result of economic conditions and water supply constraints
- Severe Water Shortage Conditions exist in the Nipomo Mesa Management Area (NMMA)¹
- Update to Accessory Dwelling Unit (ADU) ordinance would allow more residential lots to add a secondary unit
- Availability of imported water to serve future demands

3.4.2.1 Relevant County of San Luis Obispo Land Use Ordinances

In 2015, the County passed Ordinance No. 3307, amending Title 19 of the County’s Building and Construction Ordinance relating to water conservation. Under Chapter 19.07 – Plumbing Code, section 19.07.042 – Water Conservation Provisions, all new development and, in certain cases, existing structures within the Paso Robles Groundwater Basin and Nipomo Mesa Water Conservation Area (NMWCA) are subject to the following requirements:

(d) Paso Robles Groundwater Basin and Nipomo Mesa Water Conservation Area. In addition to the requirements in Subsections a, b and c above, the requirements of Subsections d.1 through d.4 shall apply to all new development that uses water from the Paso Robles Groundwater Basin (excluding the Atascadero Sub-basin), and the Nipomo Mesa Water Conservation Area as shown on maps in this Subsection.

(1) Offset Required. Prior to issuance of a construction permit for a new structure with plumbing fixtures on property that overlies and/or uses water from the Paso Robles Groundwater Basin (excluding the Atascadero

¹ Nipomo Mesa Management Area 2020 Key Wells Index Status Statement dated June 2020 and prepared by NMMA Technical Group

Sub-basin) or the Nipomo Mesa Water Conservation Area the developer of such new structure shall obtain an Offset Clearance from the Department of Planning and Building verifying that new water use has been offset at a 1:1 ratio. Water savings must come from the same groundwater basin as the proposed new development. Applicants shall meet offset requirements by complying with Sub-section 2 or 3 below.

All development not subject to a general plan amendment or land divisions are subject to sub-section (2) County Approved Water Conservation Program or (3) Alternatives.

In 2006, the County passed Ordinance 3090, an amendment to its Title 22 Land Use Ordinances which established the NMWCA and stipulated requirements for the general plan amendments and land divisions with the NMWCA as summarized below:

Applications for general plan amendments and land divisions in the Nipomo Mesa Water Conservation Area shall include documentation regarding estimated existing and proposed nonagricultural water demand for the land division or development that could occur with the general plan amendment. If this documentation indicates that the proposed nonagricultural water demand exceeds the demand without the requested amendment or land division, the application shall include provisions for supplemental water as follows:

a. General Plan Amendments. Where the estimated nonagricultural water demand resulting from the amendment would exceed the existing nonagricultural demand, the application shall not be approved unless supplemental water to off-set the proposed development's estimated increase in nonagricultural demand has been specifically allocated for the exclusive use of the development resulting from the general plan amendment, and is available for delivery to the Nipomo Mesa Water Conservation Area.

b. Land Divisions. Where the estimated nonagricultural water demand resulting from the land division would exceed the existing nonagricultural demand, a supplemental water development fee shall be paid for each dwelling unit or dwelling unit equivalent, at the time of building permit issuance, in the amount then currently imposed by county ordinance, not to exceed thirteen thousand two hundred dollars. If the development resulting from the land division is subject to payment of supplemental water development fees to an entity other than San Luis Obispo County, the amount of these other fees shall be deducted from the county fee.

3.4.2.2 Nipomo Mesa Management Area

The District extracts groundwater from the Santa Maria River Valley Groundwater Basin and coordinates with the NMMA TG, which is the court-assigned entity responsible for assessing groundwater within the Nipomo Mesa Management Area of the Santa Maria Groundwater Basin.

Severe water shortage conditions within the Santa Maria River Valley Groundwater Basin are defined in the NMMA TG’s Annual Report (Report) as is a response plan to be implemented when this condition exists. The Report is filed with the Court overseeing the Final Judgement no later than 120 days after the end of the calendar year; for calendar year 2020 the Report is filed by April 2021. Once filed, water users subject to the Final Judgement are to take actions in accordance with the Report.

3.4.2.3 Accessory Dwelling Unit (ADU) Ordinance

On May 25, 2017, the County Board of Supervisors approved Phase I of the Accessory Dwelling Unit (ADU) Ordinance. The Phase I amendment eliminated County requirements for road surfacing and owner-occupancy for secondary dwellings. On September 12, 2019, the Planning Commission recommended approval of the amendments to the Board of Supervisors with the following changes:

- Prohibiting ADUs in the Very High Fire Hazard Severity Zone countywide
- Allowing one ADU on Agriculture and Rural Lands parcels in addition to the two primary dwellings allowed

- Adding language that an ADU is considered Residential Accessory Use for the purpose of determining land use limitations in Article 9 (Planning Area Standards) and Article 10 (Community Planning Standards)
- Allowing ADUs in front of the primary residence as long as it still meets the setback requirements
- Reduces required minimum site area to 1,750 square feet (previously 6,000 square feet) for sites served by community water and sewer facilities

3.5 Land Uses within Service Area

The current District service area encompasses 4,479 acres with approximately 4,635 parcels (3,907 land acres). **Table 3-2** shows a summary of the currently developed land uses throughout the existing service area.

Table 3-2: Developed Land Use Summary within Service Area			
Land Use Category	Number of Parcels	Gross Land Acres	Percent of Total
Agriculture	4	97	3%
Commercial Retail	73	66	2%
Commercial Retail / Office Professional	1	3	<1%
Commercial Retail / Residential Multi Family	2	8	<1%
Commercial Service	19	42	1%
Office Professional	22	11	<1%
Office Professional / Residential Multi Family	1	4	<1%
Public Facility	6	22	1%
Recreation	598	454	16%
Rural Lands	1	3	<1%
Residential Multi Family	544	98	3%
Residential Rural	201	817	28%
Residential Suburban	803	765	27%
Residential Single Family	1,982	480	17%
Residential Single Family / Office Professional	3	7	<1%
Total	4,260	2,876	100%

NOTES: Information in this table reflect current District customers only.

Figure 3-5 provides an overview of the overall land use categories within the District’s service area.

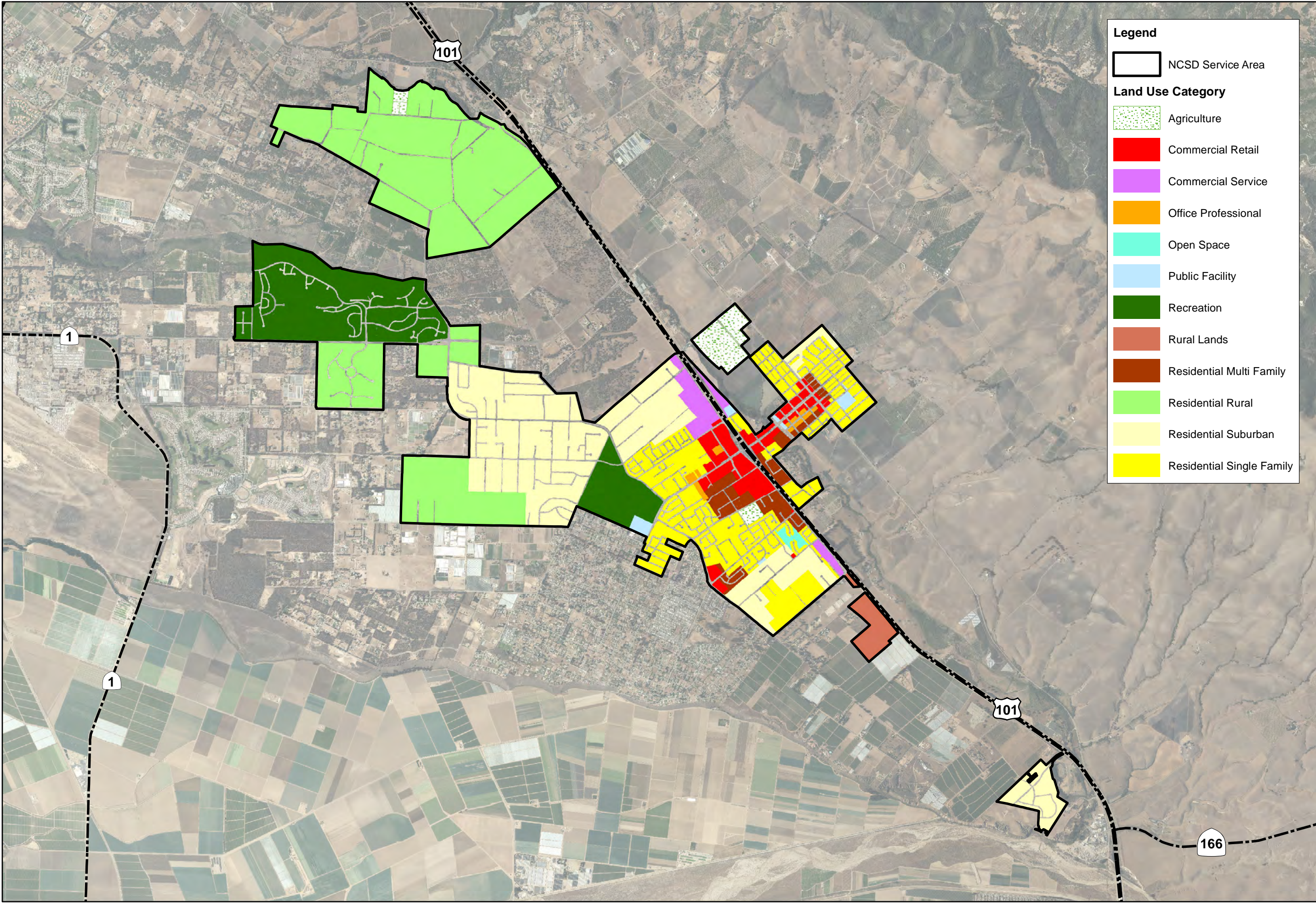


Nipomo Community Services District

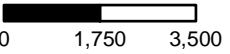
2020 Urban Water Management Plan

Figure 3-5:

Nipomo CSD Land Use Map



1 inch = 3,500 feet



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Table 3-3 shows a summary of the land uses throughout the existing service area that are not currently served by the District, but could receive water service in the future.

Table 3-3: Land Uses Not Currently Served by the District			
Land Use Category	Number of Parcels	Gross Land Acres	Percent of Total
Agriculture	1	6	1%
Commercial Retail	52	40	6%
Commercial Retail / Office Professional	2	10	2%
Commercial Retail / Residential Multi Family	2	12	2%
Commercial Service	5	19	3%
Commercial Service / Commercial Retail	2	9	1%
Office Professional	10	3	0%
Public Facility	1	1	0%
Recreation	4	9	1%
Residential Multi Family	14	9	1%
Residential Rural	69	431	67%
Residential Suburban	37	52	8%
Residential Single Family	60	43	7%
Total	259	646	100%

In addition, there are approximately 117 parcels covering 385 acres that are not developable (drainage basins, parking areas, well site parcel, etc) and will not require water service by the District in the future.

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CHAPTER 4 WATER USE CHARACTERIZATION

New Requirements for 2020 Update

Per Water Code, the following new requirements are necessary for this chapter of the UWMP 2020 update.

- Suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land uses information for projecting water use in five-year increments, up to the year 2045.
- Suppliers shall provide a simple lay description of their projected water use for the foreseeable future.
- Suppliers shall provide quantified distribution system losses for each of the five preceding years and whether or not the state standard was met.
- Both Wholesale and Retail Suppliers shall include a DRA for a drought period that lasts five consecutive water years, starting from the year following the assessment, which would be 2021 for this round of UWMPs (see Chapter 7). The DRA requires a comparison of water supplies with total projected water use. Therefore, the Supplier must produce a projected water use for the years 2021 through 2025 as part of the water use projections, up to the year 2040.
- Both Wholesale and Retail Suppliers will have to conduct an annual water supply and demand assessment on or before July 1 of each year, starting in 2022. The annual assessment will include current year unconstrained demand. Suppliers are encouraged to consider unconstrained demand as the expected water use in the upcoming year, based on recent water use, and before any projected response actions a Supplier may trigger under its Water Shortage Contingency Plan (see Chapter 8).

4.1 Non-Potable Versus Potable Water Use

Recycled water is addressed comprehensively in Section 6.5, however a summary of recycled water demand is included in **Table 4-3**.

4.2 Past, Current, and Projected Water Use by Sector

In this section current and projected water usage is addressed. **Table 4-3** displays water use in five-year increments from 2020 to 2045.

4.2.1 Water Use Sectors Listed in Water Code

The District's service area includes the following water demand sectors listed in the California Water Code applicable to the UWMP update:

- Single Family: Single family detached dwellings
- Multi-Family: Apartments, condominiums, town houses, duplexes and trailer parks
- Commercial: Retail establishments, office buildings, laundries, schools, prisons, hospitals, dormitories, nursing homes, hotels, churches, campgrounds
- Institutional and governmental: Tracked under Commercial customer class
- Landscape: Parks, play fields, cemeteries, median strips, golf courses
- Agricultural
- Distribution system water loss
- Sales to other agencies (projected to start July 2025)

The following sectors are not applicable to the District’s UWMP update:

- Industrial
- Saline water intrusion barriers, groundwater recharge, or conjunctive use

4.2.2 Water Use Sectors in Addition to Those Listed in Water Code

To provide clarity, the following sectors are not currently applicable to the District’s current demands in this UWMP update:

- Exchanges
- Surface Water Augmentation
- Wetlands or Wildlife Habitat

For the District’s imported water source, as described in Section 6.2.1, the District, Golden State Water Company, and Woodlands Mutual Water Company are required by Court Order to purchase water through the Nipomo Supplemental Water Project (NWSP) per the Supplemental Water Management and Groundwater Replenishment Agreement (Replenishment Agreement) to offset groundwater pumping. Supplemental water to Golden State Water Company (GSWC) and Woodlands Mutual Water Company (WMWC) has been included as a water “Sales to Other Agencies” for future demand projections (Table 4-2).

4.2.3 Past Water Use

Table 4-0 provides historical water usage by customer type from 2015 through 2019.

Table 4-0: Retail: Historical Water Usage						
Use Type	Water Use (AF)					% of Total
	2015	2016	2017	2018	2019	
Single Family	1,312	1,234	1,262	1,316	1,215	66
Multi-Family	151	121	116	111	112	6
Commercial	85	88	86	91	90	5
Landscape Irrigation	238	222	251	252	231	13
Other	7	5	1	3	15	0
Agricultural Irrigation	17	19	20	17	7	1
Losses	138	147	203	171	198	9
Total (AF)	1,948	1,837	1,940	1,961	1,868	100

NOTES: Values represent metered use as reported to DWR.

4.2.4 Distribution System Water Loss

Table 4-2 includes projected water losses, reported in five-year increments for the next 20 years. Section 4.2.6 contains Table 4-4 which identifies distribution system water losses for each of the five years preceding the plan update.

4.2.5 Current Water Use

Table 4-1 provides an overview of the existing water demands by use type within the District’s service area for calendar year 2020.

Table 4-1: Retail: Demands for Potable Water - Actual		
Use Type	2020 Actual	
	Level of Treatment When Delivered	Volume (AF)
Single Family	Drinking Water	1,326
Multi-Family	Drinking Water	122
Commercial	Drinking Water	76
Landscape	Drinking Water	271
Other	Drinking Water	4
Agricultural Irrigation	Drinking Water	12
Losses	Drinking Water	237
	TOTAL (AF)	2,048
NOTES:		
1. Demands = Annual water consumption by customer type as shown above.		
2. Values represent use as reported to DWR for 2020.		

4.2.6 Projected Water Use

Based on the 2015 UWMP, the District is required to comply with an urban water use target of 184 gallons per capita per day (gpcd) by 2020. **Table 4-1a** provides a summary of historical gpcd within the service area and years of mandatory conservation with requested conservation level (% reduction).

Table 4-1a: Historical Use Rates (GPCD)						
Year	Service Area Population	Water Production (AFY)	Gross Water Use (gpcd)	Meter Residential Use (AFY)	Residential Water Use (gpcd)	Mandatory Conservation (%)
2010	12,140	2,367	174	1,899	140	-
2011	12,334	2,488	180	1,868	135	-
2012	12,370	2,473	178	1,952	141	-
2013	12,697	2,646	186	1,996	140	-
2014	12,769	2,310	161	1,868	131	28
2015	12,884	1,948	135	1,463	101	28
2016	12,992	1,837	126	1,356	93	28
2017	13,134	1,940	132	1,378	94	23
2018	13,265	1,961	132	1,427	96	-
2019	13,476	1,868	124	1,327	88	-
2020	13,771	2,048	133	1,448	94	-
5-Year Average			129		94	
10-Year Average			149		112	
NOTES:						
1. Water Production = Pumped groundwater from the Santa Maria Groundwater Basin and supplemental imported water from the City of Santa Maria through the Nipomo Supplemental Water Project						
2. Potable Demand based on historical production values provided by the District. The 5-year average includes 2016-2020 and 10-year average includes 2011-2020.						

Annual water demand within the service area was assumed to increase in proportion to the population projected in **Table 3-1**. The demand projections in **Table 4-2** are based on population projections multiplied by the year 2020 gpcd of 133 and aggregated for each use type per the customer type percentages in **Table 4-0**. **Table 4-2** also includes water sales to WMWC and GSWC starting in 2025. The following equation was used to determine demand projections:

$$Demands = Population \times 133 \text{ GPCD} \times \text{Use Type Percentage}$$

Table 4-2: Retail: Demands for Potable Water - Projected					
Use Type	Projected Water Use (AF)				
	2025	2030	2035	2040	2045
Single Family	1,406	1,450	1,495	1,540	1,584
Multi-Family	136	140	144	149	153
Commercial	97	100	104	107	110
Landscape	265	273	282	290	299
Other	7	7	7	7	8
Agricultural Irrigation	18	18	19	20	20
Losses	190	196	202	208	214
District Subtotal (AF)	2,118	2,186	2,253	2,320	2,388
Annexations Under Review	176	352	352	352	352
Subtotal (AF)	2,294	2,538	2,605	2,672	2,740
Sales to Other Agencies	833	833	833	833	833
TOTAL (AF)	3,127	3,371	3,438	3,505	3,573
NOTES: District subtotal demand includes existing District demand and future infill development (parcels with reserved District capacity, parcels currently served by private wells, and development of vacant parcels). It was assumed that infill development would occur from 2025 through 2045 within the existing service area					

Table 4-3 summarizes projected water demands through 2045.

Table 4-3: Retail: Total Water Demands (AF)						
	2020	2025	2030	2035	2040	2045
District Retail Water Demand	2,048	2,118	2,186	2,253	2,320	2,388
Annexations Under Review	0	176	352	352	352	352
District Wholesale Water Demand	0	833	833	833	833	833
Total Water Demand (AF)	2,048	3,127	3,371	3,438	3,505	3,573

Table 4-4 summarizes the distribution system water losses for each of the five years preceding the plan update.

Table 4-4: Retail: 12 Month Water Loss Audit Reporting	
Reporting Period Start Date	Volume of Water Loss (AF)
01/2015	113
01/2016	175
01/2017	239
01/2018	256
01/2019	231
NOTES: Water loss based on AWWA worksheet values.	

4.2.7 Characteristic Five-Year Water Use

Future demands and the characteristic five-year water use represent unconstrained demands as shown in **Tables 4-2, 4-3, and 4-4a.**

Table 4-4a: Characteristic Five-Year Water Use					
Demand (AFY)	2021	2022	2023	2024	2025
District Retail Water Demand	2062	2076	2090	2104	2118
Annexations Under Review	0	0	0	0	176
District Wholesale Water Demand	0	0	0	0	833

4.2.8 Worksheets and Reporting Tables

All required worksheets and reporting tables have been provided throughout this Chapter.

4.3 Water Use for Lower Income Households

The District’s water use projections through 2045 include water demands for lower income single-family and multi-family households. The total number of lower income households within the District’s service area was estimated based on the County of San Luis Obispo’s General Plan, a review of median household income statistics provided by the U.S. Census Bureau’s American FactFinder, and a review of GIS maps of Disadvantaged Communities (DACs), including block groups, tracts, and places, provided by DWR. The County of San Luis Obispo’s Housing Element for 2014-2019 reported 547 very low and low-income housing units. The water need for low-income housing units is approximately 0.44 AFY, as shown in **Table 4-6.** Since there is approximately one low-income unit projected to be needed in the District’s service area, it is not possible to separate the demand into multi-family and single-family residential projected water use. The projected water demands for lower income households were included in the District’s total projected water demands, as indicated in **Table 4-5.**

Table 4-5 Retail Only: Inclusion in Water Use Projections	
Are Future Water Savings Included in Projections?	No
If "Yes" to above, state the section/page where citations of the codes, are found.	-
Are Lower Income Residential Demands Included In Projections?	Yes

Section 10631.1 of the California Water Code requires 2020 UWMPs to include projected water use for lower income single-family and multi-family residential households. Lower Income is defined by Health and Safety Code Section 50079.5 as 80% of County median income or less. The projections are meant to assist water purveyors in complying with the requirements of Government Code Section 65589.7, which requires water purveyors to “grant a priority for the provision of [water and sewer] services to proposed developments that include housing units affordable to lower income households.”

Low-income households in the Nipomo area are estimated from the “County of San Luis Obispo General Plan – Housing Element 2014-2019”. Estimated low-income residential demands are summarized in **Table 4-6**.

Table 4-6: Low-income Residential Demand Projections	
Portion of unincorporated County overlaid by NCSO (1)	0.22%
# of very low and low-income housing units needed for 2014-2019 for the unincorporated County (2)	547
NCSO's share of very low and low-income housing units needed 2014-2019 (3)	1.20
Single-family residential water use factor (afy/connection) (4)	0.36
Water Needed for low income housing units, 2014-2019 (afy) (5)	0.44
(1) Calculated by dividing NCSO's service area by the total unincorporated area of San Luis Obispo County. (2) Source: Housing Element 2014-2019 – County of San Luis Obispo General Plan. (3) The portion of NCSO overlaying the unincorporated County applied to the number of very low and low- income housing units needed for the total unincorporated County. (4) Calculated by dividing the single-family residential deliveries by the single-family residential connections for 2015. (5) Since there is approximately one low-income unit projected to be needed in NCSO's service area for 2014-2019, it is not possible to separate the demand into multi-family and single-family residential projected water use.	

4.4 Climate Change Considerations

The District has not conducted an official climate change vulnerability or risk assessment for the existing water service area. However, climate change considerations for the District's groundwater supply are incorporated into the Nipomo Mesa Management Area Annual Reports and Chapter 7 of the 13th Annual Report has been included in Appendix A.

CHAPTER 5 SBX7-7 BASELINES, TARGETS, AND 2020 COMPLIANCE

With the adoption of the Water Conservation Act of 2009, also known as the SB X7-7, the State is required to set a goal of reducing urban water use by 20 percent by the year 2020. Each retail urban water supplier must determine baseline water use during their baseline period and also target water use for the years 2020 and 2025 in order to help the State achieve the 20 percent reduction. The District has updated their baseline water usage and goal of reducing urban water use by 20 percent by the year 2020.

New Requirements for 2020 Update

Per the Water Code there are no new requirements for this chapter of the UWMP 2020 update.

5.1 Guidance for Wholesale Suppliers**5.2 SB X7-7 Forms and Summary Tables****5.2.1 SB X7-7 Verification Form (Baselines and Targets)**

The District's SB X7-7 Verification Form submitted for the 2015 UWMP has been included as a reference document in the 2020 UWMP as Appendix C.

5.2.2 SB X7-7 2020 Compliance Form

The District has completed the 2020 SB X7-7 Compliance Form and is included as Appendix D.

5.2.3 Submittal Tables 5-1 and 5-2

Submittal **Table 5-1** and **Table 5-2** from the 2020 SB X7-7 Compliance are included in Section 5.5.

5.2.4 Regional UWMP/Regional Alliance

The District has developed an UWMP that reports solely on its service area. The individual UWMP addresses all requirements of the CWC. The District has notified and coordinated with appropriate regional agencies and constituents during the development of this UWMP update.

5.3 Baseline and Target Calculations for 2020 UWMPs

Suppliers that have submitted a 2015 UWMP with the SB X7-7 Verification Form and have not had a change to their service area will not need to recalculate their baselines and targets in their 2020 UWMPs.

5.3.1 Supplier Submitted 2015 UWMP, No Change to Service Area

The District submitted a 2015 UWMP and has expanded the service area based on new construction of a residential development. The expansion was solely due to new construction, therefore, there was no need to recalculate baselines and targets for this update.

5.3.2 Supplier Did Not Submit 2015 UWMP

This topic does not apply to the District.

5.3.3 Supplier Newly Subject to UWMP Requirements

This topic does not apply to the District.

5.3.4 Distribution Area Expansion

The District’s service area has expanded based on new construction of a residential development. The expansion was solely due to new construction, therefore, there is no need to recalculate baselines and targets for this update.

5.3.5 Distribution Area Contraction

This topic does not apply to the District.

5.3.6 Large Partial Customers Become Whole Customers

This topic does not apply to the District.

5.4 Methods for Calculating Population and Gross Water Use

5.4.1 Service Area Population

Since the District’s service area is not a City limit or Census designated place the DWR population tool and the District’s service area boundaries for Census years 1990, 2000, and 2010 were used to estimate historical population.

5.4.2 Gross Water Use

Historical gross water use for this UWMP used information from the District’s annual DWR Public Water System Statistics reports (DWR 38) from 1999-2008.

5.5 2020 Compliance Daily Per-Capita Water Use (GPCD)

The baseline daily per capita water use for the District for this UWMP update is shown in **Table 5-1**.

Table 5-1 Baselines and Targets Summary					
Baseline Period	Start Year	End Year	Average Baseline GPCD*	2015 Interim Target *	Confirmed 2020 Target*
10-15 year	1999	2008	232	208	184
5 Year	2004	2008	224		
*All values are in Gallons per Capita per Day (GPCD)					

The District has not applied any adjustments to the 2020 gross water use for this UWMP update.

Table 5-2: 2020 Compliance							
Actual 2020 GPCD	Optional Adjustments to 2020 GPCD Enter "0" for adjustments not used <i>From Methodology 8</i>					Adjusted 2020 GPCD	2020 GPCD <i>(Adjusted if applicable)</i>
	Extraordinary Events	Economic Adjustment	Weather Normalization	TOTAL Adjustments			
133	0	0	0	0	133	133	
*All values are in Gallons per Capita per Day (GPCD)							

5.5.1 2020 Adjustments for Factors Outside of Supplier's Control

The District has not included any adjustments (including Extraordinary Institutional Water Use, Economic Adjustment (CI), or Weather Normalization) for their 2020 GPCD compliance.

5.5.2 Special Situations

The District does not have any special situations that requires a recalculation of the baselines and 2020 Target in the 2020 UWMP.

5.5.3 If Supplier Does Not Meet 2020 Target

As shown in **Table 5-2**, the District has met the 2020 GPCD compliance target.

5.6 Regional Alliance

The District has developed an UWMP that reports solely on its service area. The individual UWMP addresses all requirements of the CWC. The District has notified and coordinated with appropriate regional agencies and constituents during the development of this UWMP update.

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CHAPTER 6 WATER SUPPLY CHARACTERIZATION

New Requirements for 2020 Update

Per Water Code, the following new requirements are necessary for this chapter of the UWMP 2020 update.

- The new requirements for a water supply analysis are largely in the application of that analysis to the new DRA, WSCP, and consideration of climate change in future projections.
- The conclusions drawn from the water supply characterization integrate into a specific understanding of a Supplier’s new drought risk in the DRA and inform the management and mitigation actions a Supplier must address in the newly required WSCP, along with consideration of climate change and coordination with land use and planning authorities for future projections. For example, an analysis that concludes that a water supply portfolio is reliable under all conditions conceivable may have fewer supply augmentation actions or demand management actions in a WSCP.
- Water supply analysis conclusions translate into a realistic DRA and implementable actions listed in the WSCP in the event of water shortage conditions.

6.1 Water Supply Analysis Overview

The District’s water supply sources include groundwater from the Santa Maria River Valley Groundwater Basin and imported water from the Nipomo Supplemental Water Project. The following sections describe these sources.

6.2 Water Supply Characterization

6.2.1 Purchased or Imported Water

Groundwater was the sole source of the District’s water supply until 2015, when the District began importing water from the City as part of the NSWP. The NSWP included the design and construction of the following infrastructure to deliver supplemental water to the District from the City’s existing water distribution system:

- Approximately 5,000 feet of 24-inch transmission pipeline located within the City
- Flow control and meter station located within the City
- Santa Maria River crossing including 2,600 feet of 24-inch pipeline
- Joshua Road Pump Station with four 800 gpm pumps with onsite generator and 0.5 MG storage tank
- Approximately 1,700 feet of 24-inch transmission pipeline from the Joshua Road Pump Station to the District’s existing distribution system
- Approximately 12,000 feet of 16-inch transmission pipeline located within the District’s service area

The District executed the Wholesale Water Supply Agreement (Wholesale Agreement) with the City on May 7, 2013, which is included as Appendix E. Supplemental Water consists of a “municipal mix” of both surface water from the State Water Project and groundwater from the City of Santa Maria. The Wholesale Agreement dictates a minimum water delivery to the District of 2,500 AFY by fiscal year 2025-26 with a maximum allowable delivery of 6,200 AFY. It should be noted that the existing Santa Maria River crossing, pump station and portion of transmission pipeline were designed to deliver 6,200 AFY. However, pump replacements and additional pipelines would be required to deliver the full 6,200 AFY to the District service area. While the District is obligated to meet the minimum delivery from the Wholesale Agreement, the District will continue operating the groundwater wells to serve existing and future demands. **Table 6-0a** outlines the required Wholesale Agreement water delivery schedule.

AFY	Effective Delivery Date
645	7/1/2015
800	7/1/2016
1,000	7/1/2020
2,500	7/1/2025
6,200	Maximum Capacity

These deliveries also include delivery to Woodlands Mutual Water Company (WMWC), Golden State Water Company (GSWC), and Golden State Water Company Cypress Ridge (GSWCCR). **Table 6-0b** summarizes the required NSWP purchase allocations for the District, GSWC, and Woodlands Mutual Water Company (WMWC) per the Supplemental Water Management and Groundwater Replenishment Agreement (Replenishment Agreement) as of October 16, 2015. The Replenishment Agreement is included as Appendix F.

Water Purveyor	Percent Allocation	NSWP (1000 AFY)	NSWP (2500 AFY)
NCSD	66.68	667	1,667
NCSD (as needed)	-	-	500
GSWC	8.33	83	208
GSWCCR	8.33	83	208
WMWC	16.66	167	417
Total	100.00	1,000	3,000

Through this supply source, the District has a maximum supply capacity of 2,167 AFY (including the remaining 500 AFY of NSWP water to serve new development demands). This excludes the 833 AFY allocation for WMWC and GSWC. Based on the existing infrastructure of the NSWP and contractual obligations, between the District and the City, this water supply source is considered 100% reliable and available during normal, single, and multiple dry year conditions.

6.2.2 Groundwater

The District extracts groundwater from the Santa Maria River Valley Groundwater Basin. The Nipomo Mesa Management Area Technical Group (NMMA TG), which is the court-assigned entity responsible for assessment of groundwater within the Nipomo Mesa Management Area of the Santa Maria Groundwater Basin, declared a Stage IV water severity condition for subbasin purveyors. This condition results in voluntary groundwater reduction goal of 1,267 AFY for the District. The District’s past groundwater production in the Santa Maria Valley Groundwater Basin over the past five years is shown in **Table 6-1** (Section 6.2.2.4). The District owns five wells, 4 of which are active, and one currently being rehabilitated. These five well have a combined pumping capacity of 3,100 gallons per minute (gpm) or 5,000 AFY. However, for planning purposes 2,100 gpm is available assuming the largest well is out of service.

6.2.2.1 Basin Description

Underlying the District is portion of Santa Maria River Valley Groundwater Basin (Basin 3-12 per DWR Bulletin 118). The Santa Maria River Valley Groundwater Basin covers about 288 square miles. It is bordered by the Santa Lucia mountain ranges to the north, the Casmalia-Solomon Hills to the south, the San Rafael Mountains to the east, and the Pacific Ocean to the west. The geologic makeup of the Santa Maria River Valley Groundwater Basin is composed of alluvial deposits covers underlying consolidated rock which usually yields small quantities of water. Most of the water is contained in the alluvial sediments. Recharge of the Santa Maria River Valley Groundwater Basin occurs in four main ways: rainfall percolation, river bed recharge, subsurface inflows, and return flows. As mentioned in the NMMA TG Annual Report, the long-term average precipitation from 1958 to 2020 is 15.65 inches.

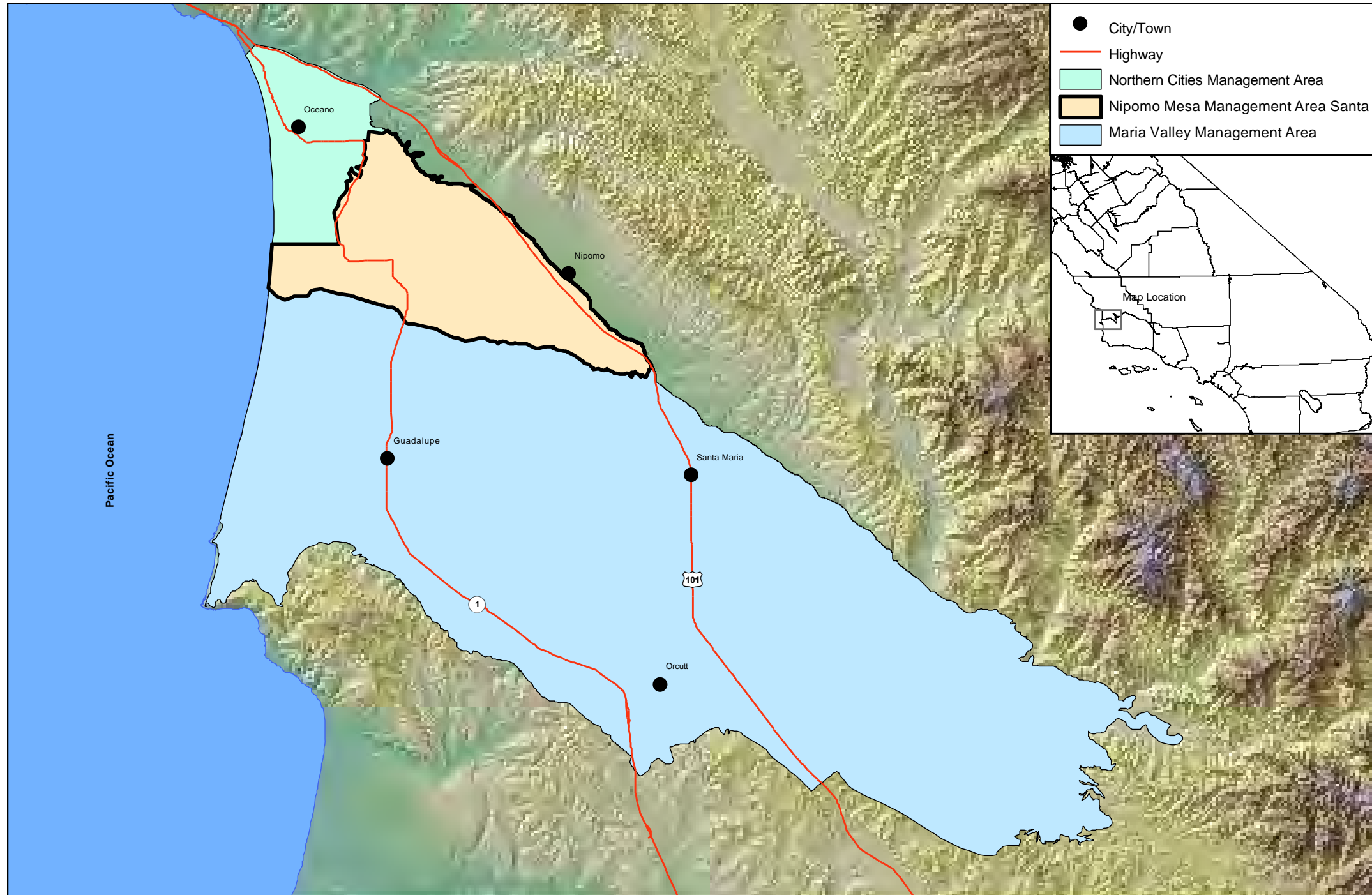


Nipomo Community Services District


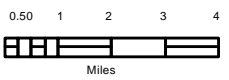
2020 Urban Water Management Plan

Figure 6-1:

Santa Maria Groundwater Basin and Management Areas



NOTES:
 Coordinate System: UTM Zone 10N Horizontal
 Datum: NAD 83

NMMA
 Technical
 Group

DATE: 4/5/12 BY: B. Newton

Notes:
 Figure 1-1. Santa Maria Groundwater Basin and Management Areas from the Nipomo Mesa Management Area 12th Annual Report – Calendar Year 2019 (Submitted April 2020).



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6.2.2.2 Groundwater Management

The Santa Maria River Valley Groundwater Basin has been the subject of ongoing litigation since 1997 and is an adjudicated basin. **Figure 6-1** provides an overview of the adjudicated basin boundary. The District signed a June 30, 2005 Stipulation in the case that was ultimately approved by the Court and incorporated into the final judgment ("Final Judgment") that was filed on January 25, 2008. The Judgment is included in Appendix G. The Court has the jurisdiction to make orders to enforce the rights of the parties outlined in the judgment. The Stipulation has five primary effects:

- 1) For purposes of management only, it divides the Santa Maria River Valley Groundwater Basin into three separate administrative management sub-areas: the Northern Cities Management Area (NCMA), the Nipomo Mesa Management Area (NMMA), and the Santa Maria Valley Management Area (SMVMA).
- 2) It establishes the NMMA TG that includes representatives appointed by the District, Golden State Water Company (GSWC) formally Southern California Water Company, ConocoPhillips, Woodlands Mutual Water Company (WMWC) and an agricultural overlying owner that signed the Stipulation.
- 3) It provides that a minimum of 2,500 AFY of supplemental water from the City of Santa Maria with an additional 500 AFY for growth for NCSO be transmitted to the NMMA by the District with funding participation from Woodlands Mutual Water Company and Golden State Water Company.
- 4) It contains specific provisions with regard to groundwater conditions, development of groundwater monitoring programs, and development of plans and programs to respond to Potentially Severe and Severe Water Shortage Conditions. The NMMA TG developed criteria to track groundwater levels and quality throughout the basin using the Key Wells Index (KWI), which collect data from eight selected wells distributed throughout the management area.
- 5) It contains provisions that each management area prepare an annual report to summarize monitoring results, water balance data and threats to groundwater supplies. The NMMA TG filed its 2020 annual report with the Superior Court in April 2021.

The Nipomo Mesa Management Area (NMMA) is an administrative management sub-area of the Santa Maria River Valley Groundwater Basin. The NMMA is bordered on the north by the Northern Cities Management Area (NCMA) and on the south by the Santa Maria Valley Management Area (SMVMA).

The NMMA covers approximately 33 square miles or 21,100 acres, which accounts for approximately 13 percent of the Santa Maria River Valley Groundwater Basin. The geology underlying the NMMA is comprised of 150 to 250 feet thick sand dune deposits overlying the Paso Robles Formation, the primary groundwater aquifer. There are no significant streams within the NMMA and the sand dune deposits are highly porous and permeable. Recharge to the aquifer only occurs through precipitation, agricultural and urban return flows, and subsurface inflows.

The District has a current voluntary groundwater reduction goal of 1,267 AFY. The availability of this source is governed by the water severity conditions identified by the NMMA based on groundwater levels through the Key Wells Index as described below:

The Nipomo Mesa Management Area Technical Group ("NMMA TG") established groundwater level and groundwater quality criteria to track overall basin conditions within the NMMA. The criteria include the Key Wells Index ("KWI"), which combines groundwater level data from eight selected wells distributed throughout the inland portion of the Management Area. Water level measurements are made in NMMA groundwater wells representing the basin as a whole and are used to compute the KWI during the spring of each year.

The TG uses the KWI to help identify trends in basin groundwater levels and has compiled KWI data for the period from 1975 to the present. Groundwater levels have changed in the NMMA over time, and in the last seven years are at levels that are lower than at any other time from 1975

One of the NMMA TG's court-required duties is to determine when conditions of "Potentially Severe Water Shortage Conditions" or "Severe Water Shortage Conditions" have been reached. The 2020 KWI value (11.7 feet mean sea level [ft msl]) has decreased from the previous year (15.9 ft msl) but remains within the Severe Water Shortage Conditions (below 16.5 ft msl). This is the sixth consecutive year the KWI value is in Severe Water Shortage Conditions, which signifies a Stage IV NMMA Water Shortage Response.²

The following lists the NMMA Water Shortage Response Stages (Endorsed by NMMA Technical Group April 14, 2014), groundwater supply conditions, and response actions by the District and other purveyors within the NMMA:

- Stage I: Always in place
- Voluntary measures and outreach
- Stage II: Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan
- Goal of voluntary 20% reduction in groundwater production
- Stage III: Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.
- Goal of voluntary 30% reduction in groundwater production
- Stage IV: Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion.
- Goal of voluntary 50% reduction in groundwater production
- Stage V: Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion.
- Goal of voluntary 60% reduction in groundwater production

To achieve the voluntary reduction goals (described above), the District Board adopted Resolution 2014-1335 "Water Shortage Response and Management Plan" (included as Appendix H) during the April 2014 board meeting. Voluntary reduction goals for the District were based on groundwater production for calendar years 2009-2013 with average production of 2,533 AFY.

The NMMA TG has identified the current water shortage conditions within the Santa Maria Valley Groundwater Basin as "Severe Water Shortage Conditions." This signifies a Stage IV NMMA Water Shortage Response in which the District would have a voluntary groundwater reduction goal of 1,267 AFY or 50% of 2,533 AFY. However, the District's voluntary pumping limit from the basin is variable depending on the NMMA TG defined drought levels. **Table 6-0c** summarizes the District's voluntary groundwater reduction goals per NMMA TG defined drought levels.

Table 6-0c: NMMA Water Shortage Response Stages		
NMMA Defined Drought Levels	Groundwater Reduction Goal (%)	Available Groundwater (AF)
Stage 1	0	2,533
Stage 2	20	2,027
Stage 3	30	1,733
Stage 4	50	1,267
Stage 5	60	1,013

²Nipomo Mesa Management Area Technical Group - Nipomo Mesa Management Area 2020 Key Wells Index Severe Water Shortage Conditions June 25, 2020.

However, for future groundwater supply availability for this UWMP update, it was assumed that the District would have a maximum groundwater pumping limit of 2,533 AFY from the Santa Maria Valley Groundwater Basin.

6.2.2.3 Overdraft Conditions

The Santa Maria River Valley Groundwater Basin is an adjudicated basin as described in Section 6.1. Therefore, overdrafting conditions do not apply.

6.2.2.4 Past Five Years

Table 6-1 provides an overview of the groundwater sources and the annual quantity pumped to meet the demands of the District customers from 2016 to 2020.

Table 6-1: Retail: Groundwater Volume Pumped						
☐	Supplier does not pump groundwater. The supplier will not complete the table below.					
Groundwater Type	Location or Basin Name	2016	2017	2018	2019	2020
Alluvial Basin	Santa Maria Groundwater Basin	1,078	999	1,003	901	1,007
TOTAL (AF)		1,078	999	1,003	901	1,007

Through this supply source, the District has self-allocated 2,533 AFY with a maximum pumping capacity of 2,100 gpm or 3,387 AFY. With several active wells and current operational practices this water supply source is considered 100% reliable and available during normal, single and multiple dry year conditions.

6.2.3 Surface Water

The District does not have a self-supplied surface water supply source, but does receive a blend of imported surface water and groundwater (“municipal mix”) from the City of Santa Maria as part of the NSWP as described in Section 6.1 and summarized in Tables 6-8 and 6-9.

6.2.4 Stormwater

The District does not currently supplement water supply demands through the capture and reuse of stormwater due to the underlying geology of the Nipomo Mesa.

6.2.5 Wastewater and Recycled Water

6.2.5.1 Recycled Water Coordination

The District currently operates two wastewater treatment facilities within the water service area. The Southland WWTF collects and treats wastewater from the majority of the District and discharges treated effluent back into the Santa Maria River Valley Groundwater Basin via percolation ponds. The Blacklake WRF treats wastewater through secondary treatment. The treated plant’s effluent is discharged to the water hazards at Blacklake Golf Course. Water is extracted from the water hazards as necessary and discharged to a spray field. Blacklake WRF operates under Reclamation Orders from Regional Water Quality Control Board.

6.2.5.2 Wastewater Collection, Treatment, and Disposal

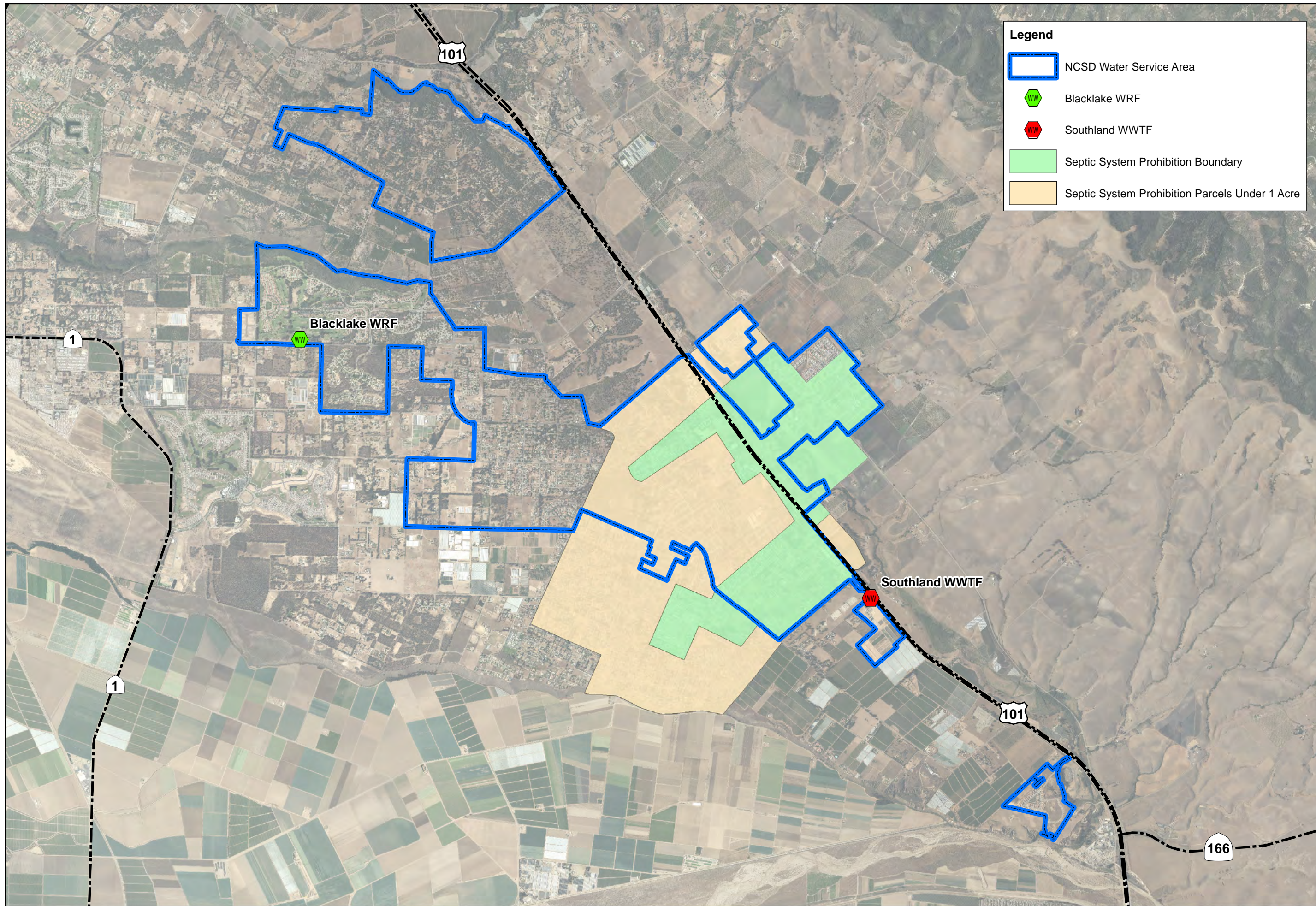
The District operates two wastewater collection systems within the water service area. The Town System collects wastewater on the easterly side of the service area from Orchard Road to Cedarwood Street and on the southerly side of the service area from Juniper Street to Southland Street. The Blacklake System collects wastewater from the Blacklake community north of Willow Road. However, it should be noted that the Blacklake WRF is planned to be decommissioned in 2024 and replaced with a new lift station and force main, which will convey wastewater to the Town System for treatment and disposal. Table 6-2 provides an overview of the quantity of wastewater collected within the District water service area.

Table 6-2 Retail: Wastewater Collected Within Service Area in 2020						
<input type="checkbox"/> There is no wastewater collection system. The supplier will not complete the table below.						
Wastewater Collection			Recipient of Collected Wastewater			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area in 2020 (AF)	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area?	Is WWTP Operation Contracted to a Third Party?
Nipomo CSD	Metered	554	Nipomo CSD	Southland WWTF	Yes	No
Nipomo CSD	Metered	52	Nipomo CSD	Blacklake WRF	Yes	No
Total Wastewater Collected from Service Area in 2020 (AF):		606				

Table 6-3 provides an overview of the quantity of wastewater treated and discharged within the District’s water service area.

Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2020								
<input type="checkbox"/> No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.								
WWTP Name	Discharge Location Name	Discharge Location Description	Method of Disposal	WWTP Outside the Service Area?	Treatment Level	2020 Volumes (AF)		
						WW Treated	Discharged Treated WW	Recycled Within Service Area
Southland WWTF	Infiltration Ponds onsite	Southland WWTF #R3-2012-0003	Perc. ponds	No	Secondary, Undisinfected	554	554	0
Blacklake WRF	Treated effluent storage ponds onsite	Treated effluent storage ponds onsite	Other	No	Secondary, Disinfected - 23	52	52	0
Total (AF)						606	606	0

It should be noted that a portion of the District water service area is not sewered and utilizes onsite septic systems. Figure 6-2 provides an overview of the existing septic system prohibition boundary and location of the two existing wastewater treatment facilities.



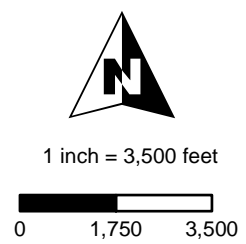
Legend

- NCSD Water Service Area
- ⬠ Blacklake WRF
- ⬠ Southland WWTF
- Septic System Prohibition Boundary
- Septic System Prohibition Parcels Under 1 Acre



Nipomo Community Services District
2020 Urban Water Management Plan

Figure 6-2:
 Septic System Prohibition Boundary



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6.2.5.3 Recycled Water System Description

The District owns and operates the Blacklake WRF, as described in Section 6.2.5.2. Treated water use within the District water service area is limited to the treated water discharged to the Blacklake Golf Course spray field. **Table 6-4** provides a summary of current and projected recycled water use within the golf course.

However, as stated in Section 6.2.5.1 the Southland WWTF collects and treats wastewater from the majority of the District and discharges treated effluent back into the Santa Maria River Valley Groundwater Basin via percolation ponds. Per the Final Judgement for the Santa Maria River Valley Groundwater Basin this “return flow” is credited towards the District’s overall consumptive use. Sections 5.6 and 5.7 of the current NMMA annual report³ states the following:

Wastewater discharges include wastewater effluent discharged by the six wastewater treatment facilities located within the NMMA, and ocean discharge of treated wastewater from the P66 industrial facility. In addition, discharges are estimated for septic tanks where centralized sewer service is not provided. The WWTFs include the Southland WWTF, the Blacklake WWTF, the Cypress Ridge WWTF, the Woodlands WWTF, and La Serena and Osage (GSWC). The Southland WWTF discharges treated wastewater into infiltration basins (see Section 3.1.11 Wastewater Discharge and Reuse). A portion of the water percolates and returns to the groundwater system and the remaining portion evaporates. The estimated percolation from Southland WWTF is 482 AF. GSWC delivered 741 AF of groundwater to their Nipomo system customers, where a small number of customers are connected to the Southland WWTF. The amount of groundwater produced that was delivered to customers connected to the Southland WWTF was 112 AF in CY 2020. The remaining GSWC Nipomo system customers discharged an estimated 277 AF of wastewater to septic systems. GSWC’s La Serena and Osage iron and manganese removal treatment facilities treat water from GSWC’s La Serena and Osage wells. Filter backwash water is discharged to percolation ponds, where water infiltrates into the basin. La Serena discharged 9 AF and Osage discharged 1 AF. The total WWTF effluent to infiltration basins in the NMMA was 504 AF (Table 3-9). The treated effluent from Blacklake WWTF (42 AF), Cypress Ridge WWTF (31 AF), and Woodlands WWTF (92 AF) is used to irrigate golf course landscaping. The estimated amount of wastewater discharge from indoor use by rural residences is 183 AF. The wastewater discharged in septic systems percolates downward and may recharge the shallow aquifers, the deep aquifers, or become shallow subsurface flow outside the NMMA.

Return flow is defined as the amount of recharge to the aquifers resulting from applied water that percolates past the root zone to recharge the aquifer(s). This functional definition differs somewhat from that used in the Stipulation to apportion the right to use water that was imported to the basin. However, the physical process of recharge by return flow of applied water is the same regardless of where the water originated.

The TG currently assumes that, all groundwater produced for outdoor use is attributable to sustaining plant life and replenishing soil profile storage, and that only rainfall generates percolation. Rural residences produced 203 AF of groundwater for indoor use in CY 2020. The estimated amount of return flow in CY 2020 from indoor use by rural residences is 183 AF, which is 90 percent of the 203 AF estimated indoor water use of rural residents plus the 250 AF of estimated return flow from indoor water use of GSWC’s Nipomo system. There is no return flow from P66’s groundwater production. The estimated total return flow from applied water, which includes 433 AF from indoor use and 504 AF from infiltration at WWTPs, is 937 AF in CY 2020.

The estimated consumptive use of water in the NMMA, computed by subtracting the total return flow (937 AF) from the groundwater production (14,313 AF), is 13,376 AF in CY 2020.

While groundwater recharge via wastewater treatment percolation basins is not considered a reportable recycled water use by DWR, the Superior Court of the State of California considers return flow to the groundwater basin as a beneficial use of recycled water.

³ Nipomo Mesa Management Area 13th Annual Report Calendar Year 2020 Prepared by NMMA Technical Group Submitted April 2021

6.2.5.4 Potential, Current, and Projected Recycle Water Uses

Table 6-4 provides a summary of the expected recycled water use within the Blacklake service area through 2045.

Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area							
<input type="checkbox"/>	Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below.						
Name of Agency Producing (Treating) the Recycled Water:	Nipomo Community Services District						
Name of Supplier Operating the Recycled Water Distribution System	Nipomo Community Services District						
Supplemental Water Added in 2020	N/A						
Source of 2020 Supplemented Water	N/A						
Beneficial Use Type	Level of Treatment	2020	2025	2030	2035	2040	2045
Golf course irrigation	Secondary, disinfected-23	52	0	0	0	0	0
Total (AF):		52	0	0	0	0	0
NOTES: N/A = not applicable							

Table 6-5 provides a summary of the 2015 UWMP Recycled Water Use Projections compared to the 2020 actual use.

Table 6-5 Retail: 2015 UWMP Recycled Water Use Projection Compared to 2020 Actual		
<input type="checkbox"/>	Recycled water was not used in 2015 nor projected for use in 2020. The supplier will not complete the table below.	
Use Type	2015 Projection for 2020	2020 Actual Use
Golf course spray field	50	52
Total (AF):	50	52

6.2.5.5 Actions to Encourage and Optimize Future Recycled Water Use

It should be noted that the District is currently designing a new sewer lift station (at the Blacklake WRF) and sewer force main that will convey raw wastewater from the Blacklake development to the District’s Town collection system. The existing Blacklake WRF will be decommissioned and land disposal will no longer be utilized. The District does not plan to expand recycled water use within its service area, as noted in Table 6-6.

Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
<input checked="" type="checkbox"/>	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
N/A	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
N/A	N/A	N/A	N/A
Total			N/A
NOTES: N/A = not applicable			

6.2.6 Desalinated Water Opportunities

The District has completed construction of the NSWP to receive water from the City of Santa Maria. The District is not currently pursuing desalinated water, but did review this opportunity as part of the 2007 Water Master Plan.

6.2.7 Water Exchanges and Transfers

The District led the design and construction effort for the NSWP to bring wholesale water from the City of Santa Maria to the Nipomo Mesa as described in Section 6.1. Participating agencies of the NSWP include Golden State Water Company (GSWC) and Woodlands Mutual Water Company (WMWC). GSWC and WMWC have committed to purchase 833 AFY, but are not currently receiving water directly from the NSWP. The District is currently in design of three interconnections to deliver supplemental water to these purveyors. GSWC and WMWC demands/allocations of NSWP are included in the future demand and supply projections shown in **Tables 4-2** and **6-9** respectively.

In addition, the District currently has two emergency intertie connections with GSWC and WMWC through the existing distribution system.

6.2.8 Future Water Projects

As described in Section 6.1, the District has a wholesale water supply agreement with the City of Santa Maria to receive water from the City through the NSWP pipeline and associated facilities. The Wholesale Agreement dictates a minimum water delivery to the District of 2,500 AFY by fiscal year 2025-26 with a maximum allowable delivery of 6,200 AFY. It should be noted that the existing Santa Maria River crossing, pump station and portion of transmission pipeline were designed to deliver 6,200 AFY. However, the license agreement between Santa Barbara County and the District would need to be amended to allow the District full use of the NSWP’s designed capacity (6,200 AFY) in addition to pump replacements and additional system pipelines. **Table 6-7** identifies the additional water supply deliveries and planned implementation years to reach the full 6,200 AFY allocation from the NSWP.

Table 6-7 Retail: Expected Future Water Supply Projects or Programs						
<input type="checkbox"/>	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.					
<input type="checkbox"/>	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.					
Page 6-2	Provide page location of narrative in the UWMP					
Name of Future Projects or Programs	Joint Project with other agencies?		Description (if needed)	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Agency (AFY)
NSWP	Yes	City of Santa Maria		2025	Average Year	1,500
NSWP	Yes	City of Santa Maria		As needed	Average Year	500
NSWP	Yes	City of Santa Maria		As needed	Average Year	3,200

6.2.9 Summary of Existing and Planned Sources of Water

6.2.9.1 Description of Supplies

The District’s existing water supply sources include local groundwater and imported surface water. Based on historical production information provided by the District, management of the Santa Maria Valley Groundwater Basin through

the NMMA, ongoing water resources planning efforts, and existing infrastructure in place for the NSWP it was assumed that the District’s water supplies are considered reliable and 100% available during normal, single and multiple drought conditions.

6.2.9.2 Quantification of Supplies

Table 6-8 provides an overview of the actual source and volume of water for the year 2020 to serve the District customer base.

Table 6-8 Retail: Water Supplies — Actual		
Water Supply	2020	
	Actual Volume	Water Quality
Groundwater	1,007	Drinking Water
Purchased or Imported Water	1,041	Drinking Water
Total (AF)	2,048	

Table 6-9 provides an overview of the projected groundwater and imported water supplies available to serve future demands within the District service area.

Table 6-9 Retail: Water Supplies — Projected						
Water Supply	Description	Projected Water Supply				
		2025	2030	2035	2040	2045
		Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume
Groundwater	Santa Maria River Valley Groundwater Basin	2,533	2,533	2,533	2,533	2,533
Purchased or Imported Water	NSWP (District allocation)	2,167	2,167	2,167	2,167	2,167
Purchased or Imported Water	NSWP (WMWC and GSWC allocation)	833	833	833	833	833
Subtotal (AF)		5,533	5,533	5,533	5,533	5,533
Purchased or Imported Water*	NSWP (Future Supply Project)	3,200	3,200	3,200	3,200	3,200
Total (AF)		8,733	8,733	8,733	8,733	8,733

NOTES: *Additional 3,200 AFY NSWP delivery is currently limited by Santa Barbara County license agreement and required water system improvements to accept the full delivery of imported water.

As described in Section 6.2.1, the District will be required to take 2,500 AFY of supplemental water from the City to meet contractual obligations as part of the Wholesale Agreement. There is an additional 500 AFY of supplemental water available through the NSWP that is being utilized by the District to serve future demands on an as needed basis. As stated in Section 6.2.2, the District is assuming a maximum groundwater pumping limit of 2,533 AFY from the Santa Maria Groundwater Basin. However, that pumping limit may be reduced based on the annual water shortage conditions identified by NMMA in order for the District to reach its voluntary groundwater reduction goal. It should be noted the additional 3,200 AF of supplemental water is contingent on the completion of additional system improvements to deliver water to the existing service area and amending the license agreement with Santa Barbara County.

6.2.10 Special Conditions

The District does not have any special conditions that may affect future water supplies and does not anticipate any change.

6.2.10.1 Climate Change Effects

With respect to climate change, the District has not conducted an official climate change vulnerability or risk assessment for the existing water service area. However, climate change considerations for the District’s groundwater supply are incorporated into the Nipomo Mesa Management Area Annual Reports and Chapter 7 of the 13th Annual Report has been included in Appendix A.

6.2.10.2 Regulatory Conditions and Project Development

This District does not foresee any emerging regulatory conditions that would negatively impact water supplies. Planned future projects are discussed in Section 6.2.8 and 6.2.9.

6.2.10.3 Other Locally Applicable Criteria

The District does not foresee any other locally applicable criteria that may affect characterization and availability of identified water supply. However, as mentioned in the NMMA 13th Annual Report, the Santa Maria Groundwater Basin is adjudicated and coordination with the NMMA Technical Group will continue with respect to groundwater management.

6.3 Submittal Tables

All required submittal tables for the District’s water supply characterization are included throughout this chapter.

6.4 Energy Intensity

The District’s water supply facilities include four active groundwater production wells, and the Joshua Road Pump Station. Electrical usage data was provided by the District for each facility in operation. There are three reporting options based on available data which include the following:

- Option 1: Energy Intensity – Water Supply Process Approach by the individual Water Management Processes
- Option 2: Energy Intensity – Total Utility Approach using the sum of all Water Management Processes and total energy for the system
- Option 3: Energy Intensity – Multiple Water Delivery Products by breaking down percentages for retail potable, retail non-potable, agricultural, etc.

Table 6-10 summarizes the District’s supply facilities energy intensity using the total utility approach.

Table 6-10: Recommended Energy Intensity - Total Utility Approach				
Enter Start Date for Period	1/1/2020	Urban Water Supplier Operational Control		
End Date	12/31/2020	Sum of all Water Processes	Non-Consequential Hydropower	
		Total Utility	Hydropower	Net Utility
Volume of Water Entering Process (AF)		2,098		
Energy Consumed (kWh)		1,435,973		
Energy Intensity (kWh/AF)		684		

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CHAPTER 7 WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

New Requirements for 2020 Update

Per the Water Code, the following new requirements are necessary for this chapter of the UWMP 2020 update.

- The new UWMP requirements is manifest in the application of new criteria to the Water Use Analysis in Chapter 4, the Water Supply Analysis in Chapter 6, and the resulting water service reliability assessment in this chapter—including the requirement for a five-consecutive dry years analysis compared to the 2015 UWMPs, which included only a three-year analysis.
- A new Drought Risk Assessment (DRA) is now also required and it must be prepared as a component of the 2020 UWMP. The DRA requires a methodical assessment of water supplies and water uses under an assumed drought period that last five consecutive years. The newly required WSCP is described in Chapter 8.

7.1 Introduction

Assessing water service reliability is the fundamental purpose for an urban water supplier to prepare and update their UWMP. Water service reliability reflects the Supplier's ability to meet the water needs of its customers with water supplies under varying conditions. The District's UWMP considers the reliability of meeting customer water use by analyzing plausible hydrological variability, regulatory variability, climate conditions, and other factors that could affect the District's water supply and its customers' water uses. This chapter synthesizes the details imbedded in the other chapters (including 4, 6, 8, and 9) and it provides a rational basis for future decision-making related to supply management, demand management, and project development. In addition, this chapter includes a new requirement for a Drought Risk Assessment (DRA) that enables the District to evaluate its risk under a severe drought period lasting for the next five consecutive years.

7.2 Water Service Reliability Assessment

As described in Chapter 6, the District's water supply portfolio consists of groundwater from the Santa Maria Valley Groundwater Basin with a maximum pumping limit of 2,533 AFY and imported water from the NSWP with a maximum current delivery of 3,000 AFY.

To identify potential water supply reliability concerns, the District completed a preliminary climate change vulnerability screening analysis (including impacts from extreme heat, water quality, sea level rise, flooding, and wildfire) for its supplies as shown in **Table 7-0**.

Table 7-0: Climate Change Vulnerability Screening		
Preliminary Assessment	Groundwater	Imported Water
	Level of Risk	Level of Risk
I. Water Supply and Demand		
Are the water supply diversions sensitive to climate change?	3	2
Is the water supply source affected by urban or agricultural water demand that might be climate sensitive?	2	2
Is groundwater a major supply source?	5	3
Does the water supply source rely on or could it be affected by snowmelt?	Not applicable	3
Does the water supply source come from or could it be affected by coastal aquifers? Has saltwater intrusion been a problem in the past?	2	Not applicable
Does the water supply source rely on or could it be affected by changes in stored water supplies?	2	2
II. Extreme Heat		
Could extreme heat impact operations of the water supply project or diversions?	Not applicable	Not applicable
Does the supply source rely on equipment or infrastructure that could be impacted by extreme or prolonged heat?	Not applicable	Not applicable
III. Water Quality		
Could water quality issues, such as low dissolved oxygen, algal blooms, disinfectant byproducts affect the water supply source?	Not applicable	Not applicable
Could reduction in assimilative capacity of a receiving water body affect the water supply source?	Not applicable	1
Could the water supply source be affected by water quality shifts during rainfall/runoff events?	2	1
IV. Sea Level Rise		
Is any of the water supply source infrastructure located in area that could be exposed to rising tides?	Not applicable	Not applicable
Could coastal erosion affect the water supply source?	Not applicable	Not applicable
Is the water supply source dependent on coastal structures, such as levees or breakwaters, for protection from flooding?	Not applicable	Not applicable
V. Flooding		
Is the water supply or any of its associated infrastructure located within the 200-year floodplain? Does the water supply source rely on flood protection infrastructure such as levees or dams?	Not applicable	Not applicable
VI. Wildfire		
Is the water supply source located in an area that is expected to experience an increase in wildfire activity or severity? Would a wildfire result in damage to the water supply source infrastructure or interruption of its ability to perform as designed? Could the water supply source be affected by an increase in wildfire activity or severity in an upstream watershed or other adjacent area?	Not applicable	1
NOTES: 1. SMVGWB = Santa Maria River Valley Groundwater Basin 2. NSWP = Nipomo Supplemental Water Project 3. Level of Risk: 1 - low, 3-medium, 5-high		

Based on redundancy within the Joshua Road Pump Station, multiple wells sites throughout the system, and groundwater management practices under the NMMA, the District’s water supply sources are considered 100% reliable and available during normal, single and multiple dry year conditions.

The water service reliability assessment summarizes the District’s expected water service reliability for a normal year, single dry year, and five consecutive dry years projections for 2025, 2030, 2035, and at least through 2040.

7.2.1 Service Reliability - Constraints on Water Sources

The District’s water supply portfolio consists of groundwater from the Santa Maria Valley Groundwater Basin with a maximum current pumping limit of 2,533 AFY. However, as described in Section 6.2.2.2, the NMMA TG determines when conditions of "Potentially Severe Water Shortage Conditions" or "Severe Water Shortage Conditions" have been reached within the Santa Maria Valley Groundwater Basin. Currently the basin is within the Severe Water Shortage Conditions per the NMMA TG. This is the sixth consecutive year of Severe Water Shortage Conditions, which signifies a Stage IV NMMA Water Shortage Response. Per the NMMA drought condition level, the current self-imposed groundwater production limit is 1,267 AFY. Depending on the drought level defined by NMMA, the District’s groundwater pumping limitation could range from 2,533 AFY to 1,013 AFY.

With respect to water quality, the District’s Consumer Confidence Report (2020) in Appendix I describes existing water quality. As shown the District’s water supply meets all United States Environmental Protection Agency (US EPA) and SWRCB water quality standards.

7.2.2 Service Reliability - Year Type Characterization

To determine typical average (normal), single dry year, and five consecutive dry years within the service area historical rainfall data was reviewed from the precipitation gauge station Nipomo East #728. The results of the historical rainfall data review are presented in **Figure 7-1. Table 7-1** identifies the basis of water year data as required by the UWMP and identifies the volume of the District’s water supply that was “produced” to serve demands during historical normal, single, and multiple dry year conditions.

Table 7-1 Retail: Basis of Water Year Data			
Year Type	Base Year¹	Available Supplies if Year Type Repeats	
		<input checked="" type="checkbox"/>	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP
		<input type="checkbox"/>	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available (AF)	% of Average Supply
Average Year	2011	2,488	100
Single-Dry Year	2013	2,434	98
Multiple-Dry Years 1st Year	2012	2,340	94
Multiple-Dry Years 2nd Year	2013	2,434	98
Multiple-Dry Years 3rd Year	2014	2,303	93
Multiple-Dry Years 4th Year	2015	1,810	73
Multiple-Dry Years 5th Year	2016	1,690	68

NOTES: Base year represents the typical average year, single dry year, and five consecutive dry years within the service area based on rainfall data from 2006 to 2020.

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Based on variations in groundwater pumping limitations since the Final Judgment of the Santa Maria Valley Groundwater Basin and increased deliveries of imported water from the NSW, the “Volume Available” in **Table 7-1** are not representative of current and/or future supply availability for the District. The values presented in **Table 7-1** summarizes the actual water supply produced during historical normal, single, and multiple-dry year conditions to serve customer demands. Because of the District’s forward thinking, regional water resource planning efforts, and groundwater management they have developed a robust water supply portfolio for serving existing and future customer demands. In addition, as seen in calendar years 2015 – 2016, the District’s existing water shortage policies and demand management measures (DMMs) were effective in implementing consumer conservation efforts to reduce overall system demand during state-wide drought conditions.

7.2.3 Water Service Reliability

7.2.3.1 Water Service Reliability – Normal Year Supply

Table 7-2 provides a summary of the District’s projected supply and water demands through 2045. The future demand projections are based on future population projections as described in Section 3.4.1. For normal year conditions it was assumed that future supply projections are based on the reasonably available groundwater and imported water volumes as described in Section 6.2.9 and that NMMA would declare a Stage 1 drought level with no voluntary groundwater reduction goals.

Table 7-2 Retail: Normal Year Supply and Demand Comparison					
	2025	2030	2035	2040	2045
Groundwater Supply	2,533	2,533	2,533	2,533	2,533
Imported Water Supply	3,000	3,000	3,000	3,000	3,000
Total	5,533	5,533	5,533	5,533	5,533
District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
Annexations Under Review	176	352	352	352	352
Sales to Other Agencies	833	833	833	833	833
Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	2,406	2,162	2,095	2,028	1,960

Based on the analysis of the District’s projected demands and water supply, there is sufficient resources to serve future demands during normal year conditions.

7.2.3.2 Water Service Reliability – Single Dry Year

For a single dry year it was assumed that NMMA would declare a Stage 2 drought level requiring a voluntary groundwater reduction goal of 20% resulting in 2,027 AFY of groundwater availability. **Table 7-3** provides a summary of the District’s projected supply and demand through 2045 for a single dry year.

Table 7-3 Retail: Single Dry Year Supply and Demand Comparison					
	2025	2030	2035	2040	2045
Groundwater Supply	2,027	2,027	2,027	2,027	2,027
Imported Water Supply	3,000	3,000	3,000	3,000	3,000
Total	5,027	5,027	5,027	5,027	5,027
District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
Annexations Under Review	176	352	352	352	352
Sales to Other Agencies	833	833	833	833	833
Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	1,900	1,656	1,589	1,522	1,454

Based on the analysis of the District’s projected demands and water supply, there is sufficient resources to serve future demands during a single dry year.

7.2.3.3 Water Service Reliability – Five Consecutive Dry Year Supply and Demand Comparison

For five consecutive dry years, it was assumed that NMMA would declare a Stage 2 drought level for the first year and increase the voluntary groundwater reduction goals in subsequent years up to 60% (1,013 AFY from groundwater).

Table 7-4 provides a summary of the District’s projected supply and demand through 2045 for multiple dry years.

Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2025	2030	2035	2040	2045
First year (NMMA Stage 2)	Groundwater Supply	2,027	2,027	2,027	2,027	2,027
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	5,027	5,027	5,027	5,027	5,027
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,900	1,656	1,589	1,522	1,454
Second year (NMMA Stage 3)	Groundwater Supply	1,733	1,733	1,733	1,733	1,733
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,733	4,733	4,733	4,733	4,733
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,606	1,362	1,295	1,228	1,160
Third year (NMMA Stage 4)	Groundwater Supply	1,267	1,267	1,267	1,267	1,267
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,267	4,267	4,267	4,267	4,267
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,140	896	829	762	694
Fourth year (NMMA Stage 5)	Groundwater Supply	1,013	1,013	1,013	1,013	1,013
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,013	4,013	4,013	4,013	4,013
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	886	642	575	508	440
Fifth year (NMMA Stage 5)	Groundwater Supply	1,013	1,013	1,013	1,013	1,013
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,013	4,013	4,013	4,013	4,013
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	886	642	575	508	440

Based on the analysis of the District’s projected demands and water supply, there is sufficient resources to serve future demands during multiple dry years.

7.2.4 Description of Management Tools and Options

The District coordinates closely with the City of Santa Maria, GSWC, GSWCCR, and WMWC. The District has participated in the following regional water resource planning efforts:

- Nipomo Mesa Management Area (NMMA) within the Santa Maria River Valley Groundwater Basin
- Nipomo Supplemental Water Project (NSWP)
- San Luis Obispo County Integrated Regional Water Management (IRWM) Plan
- San Luis Obispo Regional Water Management Group (RWMG)

7.3 Drought Risk Assessment

7.3.1 Data, Methods, and Basis for Water Shortage Condition

The following information was used to support the District’s DRA to identify water production and consumption to its customers and determine restrictions to supply source:

- Annual AWWA Water Loss Audit Worksheets
- Nipomo Mesa Management Area Annual Reports
- Historical rainfall data from the precipitation gauge station Nipomo East #728

7.3.2 DRA Individual Water Source Reliability

As identified in Section 7.2.2, the District’s supplies have exceeded demands, even in dry years. The NMMA Water Shortage Response Stages have been effective in decreasing demands. On this basis, the District’s supply is presented as 100% reliable for single and multiple dry year periods.

7.3.3 Total Water Supply and Use Comparison

Sustainable management of the District’s groundwater resources and imported supplies will allow the District to serve existing and future water demands during normal, single-dry, and multiple-dry years. Per NMMA, the Santa Maria Valley Groundwater Basin is in its’ sixth consecutive year of Severe Water Shortage Conditions, which signifies a Stage 4 NMMA Water Shortage Response. To complete the five-year drought risk assessment, it was assumed that the District would have a voluntary groundwater reduction goal of 1,267 AFY (50%), reflecting a Stage IV NMMA Water Shortage Response. Per the wholesale water agreement delivery schedule for the NSWP, it was assumed that the District would have access to a minimum supplemental water delivery of 1,000 AFY from 2021 to 2024 and 2,500 AFY starting in July 2025. However, if needed the District can increase deliveries over 1,000 AFY (for years 2021 to 2024) if required to serve future demands. **Table 7-5** provides the five-year drought risk assessment for the District from 2021 to 2025.

Table 7-5: Five Year Drought Risk Assessment Tables to address Water Code Section 10635(b)	
2021	Total
Gross Water Use	2,062
Supply Total (Groundwater)	1,267
Supply Total (Imported)	1,000
Surplus/Shortfall w/o WSCP Action	205
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0
2022	Total
Gross Water Use	2,076
Supply Total (Groundwater)	1,267
Supply Total (Imported)	1,000
Surplus/Shortfall w/o WSCP Action	191
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0
2023	Total
Gross Water Use	2,090
Supply Total (Groundwater)	1,267
Supply Total (Imported)	1,000
Surplus/Shortfall w/o WSCP Action	177
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0
2024	Total
Gross Water Use	2,104
Supply Total (Groundwater)	1,267
Supply Total (Imported)	1,000
Surplus/Shortfall w/o WSCP Action	163
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0
2025	Total
Gross Water Use (NCSO)	2,118
Gross Water Use (Annexations Under Review)	176
Gross Water Use (WMWC and GSWC)	833
Supply Total (Groundwater)	1,267
Supply Total (Imported)	2,500
Surplus/Shortfall w/o WSCP Action	640
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0

CHAPTER 8 WATER SHORTAGE CONTINGENCY PLAN

New Requirements

Per the Water Code, the following new requirements are necessary for this chapter of the UWMP 2020 update.

- Key attributes of its water supply reliability analysis conducted pursuant to Water Code Section 10635. [Water Code Section 10632(a)(1)]
- Six standard water shortage levels corresponding to progressive ranges of up to 10-, 20-, 30-, 40-, and 50-percent shortages and greater than 50-percent shortage. [Water Code Section 10632 (a)(3)(A)]
- Locally appropriate “shortage response actions” for each shortage level, with a corresponding estimate of the extent the action will address the gap between supplies and demands. [Water Code Section 10632 (a)(4)]
- Procedures for conducting an annual water supply and demand assessment with prescribed elements. Under Water Code Section 10632.1, urban water Suppliers are required to submit, by July 1 of each year, beginning in the year following adoption of the 2020 UWMP, an annual water shortage assessment report to the California Department of Water Resources (DWR). [Water Code Section 10632 (a)(2)]
- Communication protocols and procedures to inform customers, the public, and government entities of any current or predicted water shortages and associated response actions. [Water Code Section 10632 (a)(5)]
- Monitoring and reporting procedures to assure appropriate data is collected to monitor customer compliance and to respond to any state reporting requirements. [Water Code Section 10632(a)(9)]
- A reevaluation and improvement process to assess the functionality of its WSCP and to make appropriate adjustments as may be warranted. [Water Code Section 10632(a)(10)]

8.1 Water Supply Reliability Analysis

As described in Chapter 7 of this UWMP, the District’s water supply has been determined to be reliable. More detail about this section can be found in the District’s WSCP in Appendix J.

8.2 Annual Water Supply and Demand Assessment Procedures

In accordance with CWC 10632, the District will conduct an annual water supply and demand assessment, or annual assessment by July 1st of each year. The District will draft and prepare a written report that discusses the results of the annual water supply and demand assessment. Descriptions of the methodology, key data inputs, and a timeline for the annual assessment can be found in the WSCP in Appendix J.

8.2.1 Decision- Making Process

The written decision-making process can be found in the WSCP.

8.2.2 Data and Methodologies

The data and methodologies can be found in the WSCP.

8.3 Six Standard Water Shortage Levels

This WSCP identifies water conservation measures and progressive restrictions on water use to enable the District to implement water management measures in a fair and orderly manner for the benefit of the public in accordance with CWC §10632(a)(3). This WSCP establishes six (6) stages of drought response actions that could be voluntarily implemented by the District in times of shortage, with increasing restrictions on water use in response to decreasing

supplies. This WSCP includes both voluntary and mandatory water use reductions depending on the causes, severity, and anticipated duration of the water supply shortage. Water use reduction stages may be triggered by contamination in one water source, combination of sources, or during times that a shortage is declared by the NMMA, District, State, or Federal government. Because shortages overlap stages, triggers automatically implement the more restrictive stage. Specific criteria for triggering the District’s water use reduction stages are shown in **Table 8-1** below.

Table 8-1: Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Shortage Response Actions
1	Up to 10%	Always in place with voluntary measures and outreach.
2	Up to 20%	Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 20% reduction in groundwater production.
3	Up to 30%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 30% reduction in groundwater production.
4	Up to 40%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 30% reduction in groundwater production.
5	Up to 50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion with goal of voluntary 50% reduction in groundwater production.
6	>50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion with goal of voluntary 60% reduction in groundwater production.

Figure 8-1 provides a comparison that shows the District’s water shortage levels to those mandated by statute.

Figure 8-1: Comparison for the District’s 2015 Shortage Levels and the 2020 WSCP Mandated Shortage Levels

Stages from 2015 UWMP			Crosswalk	2020 WSCP Mandated Shortage Levels			
Stage	Percent Supply Reduction	Water Supply Condition		Stage	Percent Supply Reduction	Water Supply Condition	Mandatory compliance with water savings measures
1	0%	Always in place		1	0% to 10%	Normal	Voluntary, always in place
2	20%	Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	 	2	10% to 20%	Slightly Restricted	Mandatory compliance
3	30%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	 	3	20% to 30%	Moderately Restricted	Mandatory compliance
4	50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion		4	30% to 40%	Restricted	Mandatory compliance
5	60%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion.		5	40% to 50%	Severely Restricted	Mandatory compliance
				6	50% and above	Extremely Restricted	Mandatory compliance

8.4 Shortage Response Actions

8.4.1 Demand Reduction

Table 8-2 summarizes the restrictions and prohibitions on end uses during each stage of water shortage response implemented by the District in accordance with CWC §10632(a)(4)(B). The shortage response actions are aligned to the six water shortage levels with the goal of reducing the gap between supply and demand by the required amount per level.

Table 8-2 Demand Reduction Actions			
Stage	Demand Reduction Actions	Estimated Extent of Reducing the Water Shortage Gap	Penalty, Charge, or Other Enforcement?
1	Other - Education for water conservation methods.	Low	No
1	Other - Public outreach for voluntary reduction in water use by 15%	Low	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	High	Yes
1	Landscape - Limit landscape irrigation to specific times	High	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Medium	Yes
1	Water Features - Restrict water use for decorative water features, such as fountains	High	Yes
1	Landscape- Check all irrigation systems periodically	Low	Yes
2	All Stage 1 reduction actions	Medium	Yes
2	Water Features- Cover swimming pools and spas when not in use	Low	Yes
2	Other - Prohibit use of potable water for washing hard surfaces	Low	Yes
3	All Stage 1 and 2 reduction actions	High	Yes
3	Landscape - Limit landscape irrigation to specific days	High	Yes
3	Other- Prohibit use of hoses without automatic shut-off devices	High	Yes
3	Landscape - Other landscape restriction or prohibition	High	Yes
3	Other – Prohibit use of potable water for construction and dust control	Low	Yes
3	Other - Turn off all automated irrigation systems	High	Yes
3	Water Features – Prohibit water use for decorative water features, such as fountains	High	Yes
4	All Stage 1,2 and 3 reduction actions	Medium	Yes
4	Landscape - Other landscape restriction or prohibition	High	Yes
5	All Stage 1,2,3 and 4 reduction actions	Medium	Yes
5	Landscape- Other landscape restriction or prohibition	High	Yes
6	All Stage 1,2,3,4 and 5 reduction actions	Medium	Yes

A complete description of operational and mandatory restrictions issued by the District can be found in the WSCP.

8.4.2 Supply Augmentation

Table 8-3 summarizes the restrictions and prohibitions on end users during each stage of water shortage responses implemented by the District in accordance with CWC §10632(a)(4)(A).

Table 8-3: Supply Augmentation and Other Actions			
Stage	Supply Augmentation Methods and Other Actions by Water Supplier	Estimated Extent of Reducing the Water Shortage Gap	Penalty, Charge, or Other Enforcement?
All Stages	Expand Public Information Campaign	Medium	No
All Stages	Other - Demand Reduction Program	Medium	No
All Stages	Other - Use Prohibitions	Low	No
1 and 2	Other - Voluntary Water Use Reductions	Medium	No
3	Other - Flow Restriction	Medium	No
4	Other - Prohibit landscape irrigation	High	No
5 and 6	Other - Interrupt Irrigation Services	High	No

8.4.3 Operational Changes

In the event of an extreme water shortage, the District will implement some or all of the following operational changes in accordance with CWC §10632(a)(4)(C) and §10632.5(a):

- The District shall provide prompt notice to customer whenever the District obtains information that indicates a leak may exist within the end-user’s exclusive control. The customer must repair all leaks within twenty-four (24) hours of notification by the District.
- Restrict or prohibit the issuance of new water services.

8.4.4 Additional Mandatory Restrictions

The District’s customers shall comply to the mandatory water shortage response actions listed in **Table 8-2** associated with a level 3 or higher water shortage event in accordance with §10632(a)(4)(D).

8.4.5 Emergency Response Plan

A catastrophic event may result in a complete loss of District water supplies for a temporary period lasting from a day to a week or more. Examples of catastrophic events include earthquakes, widespread power outage, contamination, long-term drought, or loss of imported supplies. Through information included in billing inserts, and information on its website, the District encourages its customers to be prepared for emergencies and potential interruption of water supply system. The District has an Emergency Response Plan which provides guidance for emergency situations. In the event of a catastrophic emergency the District will immediately declare and enact level six (6) water shortage level and response actions, shown in **Table 8-3** until service is restored to pre-emergency conditions. More detail about this section can be found in the District’s WSCP in Appendix J.

8.4.6 Seismic Risk Assessment and Mitigation Plan

The District completed their American’s Water Infrastructure Act (AWIA) Risk and Assessment (RRA) in June 2021, which assessed seismic risk. In addition, the County of San Luis Obispo, in partnership with the District, developed a Multi-Jurisdictional Hazard Mitigation Plan (Hazard Plan), which evaluated seismic risk within District’s service area. A summary of these seismic risk assessments can be found in the WSCP.

8.4.7 Shortage Response Action Effectiveness

The District will monitor and evaluate the effectiveness of the shortage response actions. In the event that the shortage response actions are not effective, the District will have the power to amend the WSCP. A more detailed description of the District's plan to monitor effectiveness can be found in the WSCP.

8.5 Communication Protocols

The District will inform customers, the public, and the necessary local, regional, and state government entities in regard to any current or predicted water shortages based on the results of the Annual Water Supply and Demand Assessment or in the event of an emergency. The District will also notify all necessary entities of any shortage response actions mandated in response to the Annual Assessment. A detailed communication plan can be found in the WSCP.

8.6 Compliance and Enforcement

The District's enforcement policies can be found in the WSCP.

8.7 Legal Authorities

The District has the power to declare a water shortage. See the WSCP for the District's declaration of a water shortage.

8.8 Financial Consequences of WSCP

The District is currently able to meet expenses with a combination of rates and reserves. The District has sufficient reserves and rate stabilization funds to meet its current near-term obligations; however, rates may need to be adjusted in the future, in accordance with Proposition 218, to mitigate future revenue reduction as a result of the WSCP.

8.9 Monitoring and Reporting

Monitoring and reporting procedures can be found in the WSCP.

8.10 WSCP Refinement Procedures

Refinement procedures can be found in the WSCP.

8.11 Special Water Feature Distinction

A description of special water features can be found in the WSCP.

8.12 Plan Adoption, Submittal and Availability

The procedures that were used to adopt the WSCP are detailed in the WSCP.

CHAPTER 9 DEMAND MANAGEMENT MEASURES

New Requirements for 2020 Update

There are no new plan preparation requirements from the 2020 UWMP guidance.

9.1 Demand Management Measures for Wholesale Suppliers

The District is not a wholesale agency and is not required by DWR to complete Section 9.1.

9.2 Existing Demand Management Measures for Retail Suppliers

The UWMP Act requires a discussion of Demand Management Measures (DMMs), including a description of each of the DMMs currently being implemented/scheduled for implementation, the schedule of implementation for all DMMs, and the methods, if any, the District will use to evaluate the effectiveness of DMMs.

9.2.1 Water Waste Prevention Ordinances

Ordinance 2015-122, adopted on August 12, 2015, updated the District’s Water Shortage Response and Management Plan. A copy of the NCSD Code of Ordinances is available on the District’s website:

- <https://ncsd.ca.gov/resources/documents/district-codes/>

New development is required to comply with County imposed building and planning water efficiency standards.

9.2.2 Metering

The District is 100% metered and water usage is tracked by usage type and service size, which includes single family residential, multi-family residential, commercial/institutional, landscape irrigation, and other.

9.2.3 Conservation Pricing

Table 9-2 summarizes the District’s bimonthly fixed charges.

Table 9-2: NCSD Water Rate Structure	
Meter Size	Fixed Charge
5/8 thru 1-inch	\$53.70
1-1/2-inch	\$75.76
2-inch	\$106.42
3-inch	\$223.04
4-inch	\$312.99
6-inch	\$631.28
8-inch	\$995.04

9.2.4 Public Education and Outreach

The District implements many public outreach programs. Public outreach efforts are updated on the District’s conservation website (<http://ncsd.ca.gov/cm/Resources/Conservation.html>). The District provides multiple workshops, giveaway items, brochures, newsletters, and bill inserts to customers. Below is a list of the public outreach efforts implemented by the District:

- High efficiency washer rebate program

- Advertising
- Events and item giveaways
- Post cards, brochures mailed out to NCSO customers
- Door-hangers for water waste and other water-use issues
- Conservation website
- Water audit program
- Annual newsletter
- Toilet-retrofit-at-time-of-sale, administered by San Luis Obispo County Planning and Development (SLO-PD) (Title 8 Amendment) for Nipomo Mesa Water Conservation Area (NMWCA) (includes all of NCSO)

Some public outreach events that NCSO participates in include the Harvest Festival and Creek Day.

9.2.5 Programs to Assess and Manage Distribution System Real Loss

District staff visit and inspect all production and storage facilities weekly. All of the District's tanks, reservoirs, and pumps have alarms to indicate over-topping or loss of pressure. These alarms provide notification to District staff of any potential problems so adjustments can be made to limit system losses. The District has begun to install an automated distribution pipeline leak detection system that monitors the District' pipelines for leaks. The leak detection system consists of Permalog leak noise loggers that are deployed throughout the water distribution system. Data from the loggers is transmit through a licensed frequency wireless network to software that is monitored by Operations personnel.

The District produces and submits annual reports to DWR quantifying the amount of metered water deliveries and the total water in the system. These reports are one way to measure the effectiveness of the District's water loss control measures based on the comparison of production and deliveries. The District completes the standard water audit and balance using the AWWA Water Loss software to determine their current volume of apparent and real water loss and the cost impact of these losses on District operations, and plans to re-conduct the analysis at annual intervals.

The District provides leak detection information and assistance to its customers through providing educational tools and giveaways, such as dye tablets, to detect leaks. The District's database that tracks water use alerts utility billing staff when current water use at a given meter varies significantly from the historic use, which indicates a leak is likely. The District has also begun implementing Advanced Metering Infrastructure (AMI) with 15 minute interval reads. When a leak is detected, the District contacts the customer with the information needed to find leaks. Statistics of the number of customers assisted with leak detection and repair is tracked by utility billing staff.

9.2.6 Water Conservation Program Coordination and Staffing Support

Water conservation activities are performed by utility billing staff, public outreach staff, operations staff, and engineering staff. BMP report preparation is coordinated by engineering staff.

9.2.7 Other Demand Management Measures

Other demand management measures that NCSO has implemented include the following:

Water Survey Programs for Single- Family Residential and Multi-Family Residential Customers:

The District provides leak detection information and assistance to its customers through providing educational tools and giveaways, such as dye tablets, to detect leaks. The District's database that tracks water use alerts utility billing staff when current water use at a given meter varies significantly from the historic use, which indicates a leak is likely. When a leak is detected, the District contacts the customer with the information needed to find leaks. Statistics of the number of customers assisted with leak detection and repair is tracked by utility billing staff.

The County's Ordinance 3370 amends Title 19 of the County Code to require any applicant for a construction permit or remodel permit constituting a permit fee greater than \$20,000 to install plumbing fixtures with certain criteria designed for water conservation. New construction permits will only be given when an applicant has retrofitted the plumbing fixtures of five existing structures in the Nipomo Mesa Water Conservation Area. The District distributes and tracks aerators, hose nozzles, hose timers, moisture meters, and toilet tabs. The District plans to continue implementing this BMP through educational tools, giveaways and by supporting County Ordinance 3370.

Landscape Water Survey

The District provides giveaways, workshops, and educational tools to assist customers with their own landscape water surveys, thereby making customer landscapes more efficient. The District plans to continue implementing, giveaways, workshops, and educational tools.

High-Efficiency Clothes Washing Machine Financial Incentives Programs

The District provides a high efficiency washer rebate program through which it provides a rebate of \$75 on new high efficiency washers.

Water Sense Specification (Wss) Toilets

The County Code requires a toilet-retrofit-at-time-of-sale, administered by San Luis Obispo County Planning and Development (SLO-PD) (Title 8 Amendment) for Nipomo Mesa Water Conservation Area (NMWCA) (includes all of NCSO).

9.3 Reporting Information

9.3.1 Implementation Over the Past Five years

NCSO has implemented the required DMMs per CWC 10631 to achieve its water use targets pursuant to Section 10608.20 and described in section 5.

9.3.2 Implementation to Achieve Water Use Targets

NCSO has implemented the required DMM per CWC 10631 to achieve its water use targets pursuant to Section 10608.20. Baseline and target 2020 GPCD are described in section 5 of the UWMP. No additional DMMs are proposed to be implemented by NCSO.

9.4 Water Use Objectives (Future Requirements)

The Water Code requires suppliers to develop new water use objectives by 2023 that align with the supplier's conservation management actions. The District describes its water use objectives during water shortages in its WSCP and will further develop objectives by 2023.

CHAPTER 10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

New Requirements

- Since 2015, the public processes for completing the UWMP have not been revised. However, the Water Shortage Contingency Plan is a new component of the 2020 UWMP that can be amended separately from the UWMP (see Chapter 8)

10.1 Inclusion of all 2015 Data

This 2020 UWMP update includes water use and planning data for the entire 2020 calendar year.

10.2 Notice of Public Hearing

10.2.1 Notice to Cities and Counties

10.2.1.1 60 Day Notification

The District notified the agencies listed in **Table 10-1** at least sixty (60) days prior to the public hearing of the preparation of the 2020 Plan and invited them to participate in the development of the Plan. A copy of the notification letters sent to these agencies is provided in Appendix K.

10.2.1.2 Notice of Public Hearing

The Notice of the public hearing, held at the November 10, 2021 Board meeting at the District office, was sent to the City of Santa Maria and County of San Luis Obispo on September 10, 2021. A copy of the letters from the District to the City and County are included in Appendix K of this UWMP.

10.2.1.3 Submittal Tables

Table 10-1 summarizes the agencies which were provided notifications by the District.

City Name	60 Day Notice	Notice of Public Hearing
City of Santa Maria	☑	☑
County of San Luis Obispo County	☑	☑

10.2.2 Notice to the Public

The public hearing was noticed in the local newspaper as prescribed in Government Code 6066. This notice included time and place of hearing, as well as the location where the UWMP and WSCP is available for public inspection. A copy of the newspaper notice is included in Appendix L.

10.3 Public Hearing and Adoption

10.3.1 Public Hearing

Prior to adopting the 2020 UWMP and WSCP, the District held a public hearing on November 10, 2021 which included input from the community regarding the District’s draft 2020 UWMP and WSCP. As part of the public hearing, the District provided information on determination of its water use targets and action plan in case of severe water shortage conditions.

10.3.2 Adoption

The 2020 UWMP was adopted on December 8, 2021 during a regularly scheduled board meeting. A copy of the resulting adoption Resolution 2021-1608 and meeting minutes is included in Appendix M of this UWMP.

10.4 Plan Submittal

10.4.1 Submitting a UWMP and Water Shortage Contingency Plan to DWR

Within 30 days of adoption of the 2020 UWMP by the District Board, the District will submit the adopted 2020 UWMP to DWR, as required by CWC 10621 and 10644. The 2020 UWMP will be submitted through DWR’s “Water Use Efficiency (WUE) Data Online Submittal Tool” website.

DWR previously provided a checklist to determine if an Urban Water Management Plan has addressed the requirements of the California Water Code. The District has completed the DWR checklist by indicating where the required CWC elements can be found within the District’s 2020 UWMP (See Appendix N).

10.4.2 Electronic Data Submittal

Within 30 days of adoption of the 2020 Plan, the District will also submit all data tables associated with the 2020 Plan through DWR’s “Water Use Efficiency (WUE) Data Online Submittal Tool” website.

10.4.3 Submitting a UWMP to the California State Library

Within 30 days of adoption of the 2020 UWMP by the District Board, a copy (CD or hardcopy) of the 2020 Plan will be submitted to the State of California Library. A copy of the letter to the State Library will be maintained in the District’s file. The 2020 Plan will be mailed to the following address if sent by regular mail:

California State Library
 Government Publications Section
 P.O. Box 942837
 Sacramento, CA 94237-0001
 Attention: Coordinator, Urban Water Management Plans

The 2020 Plan will be delivered to the following address if sent by courier or overnight carrier:

California State Library
 Government Publications Section
 914 Capitol Mall
 Sacramento, CA 95814

10.4.4 Submitting a UWMP to Cities and Counties

Within 30 days of adoption of the plan by the District Board, a copy of the 2020 UWMP will be submitted to the County of San Luis Obispo Registrar / Records office and District’s office. A copy of the letter to the County of San Luis Obispo and the City of Santa Maria will be maintained in the District’s file.

10.5 Public Availability

Within 30 days of adoption of the 2020 UWMP by the District Board, the adopted plan will be available on the District’s website at www.ncsd.ca.gov and at the District’s office at 148 South Wilson Street, Nipomo between the hours of 8 AM and 4:30 PM Monday through Friday.

10.6 Notification to Public Utilities Commission

The section is not applicable to the District.

10.7 Amending an Adopted UWMP or Water Shortage Contingency Plan

10.7.1 Amending a UWMP

If the District amends the adopted 2020 UWMP, the amended UWMP will undergo adoption by the District's governing board. Within 30 days of adoption, the amended UWMP will then be submitted to DWR, the State of California Library, the County of San Luis Obispo / Records office, and the District's office.

10.7.2 Amending a Water Shortage Contingency Plan

If the District amends the adopted 2020 WSCP, the amended WSCP will undergo adoption by the District's governing board. Within 30 days of adoption, the amended WSCP will then be submitted to DWR, the State of California Library, the County of San Luis Obispo / Records office, and the District office.

**Appendix A- 13th Annual Nipomo Mesa Management Area Annual
Report**

Nipomo Mesa Management Area

13th Annual Report
Calendar Year 2020

Prepared by
NMMA Technical Group

Submitted April 2021

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Table of Contents

Table of Contents	i
List of Figures	iii
List of Tables	iv
Acronyms	v
Abbreviations	vi
Executive Summary	ES-1
ES-1. Background	ES-1
ES-2. Findings	ES-2
ES-3. Recommendations	ES-3
ES-3.1. Achievements from Previous NMMA Annual Report Recommendations	ES-3
ES-3.2. Technical Recommendations	ES-4
1. Introduction	1
1.1. Background	1
1.1.1. History of the Litigation Process	2
1.1.2. Development of Monitoring Program	2
1.1.3. Development of Water Shortage Conditions and Response Plan	3
1.1.4. Well Management Plan	3
1.1.5. Supplemental Water	3
1.1.6. Other Groundwater Management Activities	4
1.2. Reporting	5
1.2.1. Description of the Nipomo Mesa Management Area Technical Group	5
1.2.2. Coordination with NCMA and SMVMA	6
1.2.3. Distribution	6
2. Basin Description	9
2.1. Physical Setting	10
2.1.1. Area	10
2.1.2. General Land Use	10
2.2. Climate	10
2.3. Hydrogeology	11
2.3.1. Geology	11
2.3.2. Groundwater Flow Regime	14
3. Data Collection	23
3.1. Data Collected	23
3.1.1. Groundwater Elevations in Wells	24
3.1.2. Water Quality in Wells	24
3.1.3. Rainfall	25
3.1.4. Rainfall Variability	26
3.1.5. Streamflow	26
3.1.6. Surface Water Usage	27
3.1.7. Surface Water Quality	27
3.1.8. Land Use	27
3.1.9. Groundwater Production (Reported and Estimated)	29
3.1.10. Imported Water	31
3.1.11. Wastewater Discharge and Reuse	31
3.2. Database Management	32
3.3. Data and Estimation Uncertainties	32
4. Water Supply & Demand	42
4.1. Water Supply	42

4.1.1.	Groundwater Production.....	42
4.1.2.	Recycled Water	43
4.1.3.	Supplemental Water	43
4.1.4.	Surface Water Diversions.....	43
4.1.5.	Future Water Supply.....	43
4.2.	Water Demand	44
4.2.1.	Historical Demand.....	44
4.2.2.	Current Demand	44
4.2.3.	Potential Future Production (Demand).....	44
4.2.4.	Base Year Pooled Amount	44
5.	Hydrologic Inventory.....	45
5.1.	Rainfall and Percolation Past Root Zone	46
5.2.	Subsurface Flow	46
5.3.	Streamflow and Surface Runoff.....	46
5.4.	Groundwater Production.....	47
5.5.	Supplemental Water.....	47
5.6.	Wastewater.....	47
5.7.	Return Flow of Applied Water and Consumptive Use	47
5.8.	Change in Groundwater Storage	48
6.	Groundwater Conditions	50
6.1.	Groundwater Elevations	50
6.1.1.	Results from Key Wells.....	51
6.1.2.	Results from Coastal Monitoring Wells	51
6.1.3.	Groundwater Contours and Pumping Depressions.....	51
6.1.4.	Groundwater Gradients.....	52
6.2.	Groundwater Quality	52
6.2.1.	Results of Coastal Water Quality Monitoring	53
6.2.2.	Results of Inland Water Quality Monitoring.....	53
7.	Analyses of Water Conditions	75
7.1.	Stipulation Requirements.....	75
7.2.	Water Shortage Conditions	76
7.2.1.	Inland Criteria.....	76
7.2.2.	Coastal Criteria	76
7.2.3.	Status of Water Shortage Conditions.....	77
7.3.	Long-term Trends	79
7.3.1.	Climatological Trends	79
7.3.2.	Land Use Trends.....	79
7.3.3.	Stipulating Party Water Use Trends	80
7.3.4.	Trends in Basin Inflow and Outflow	80
8.	Other Considerations	84
8.1.	Institutional or Regulatory Challenges to Water Supply	84
9.	Recommendations.....	84
9.1.	Achievements from previous NMMA Annual Report Recommendations	84
9.2.	Technical Recommendations	84
	Reference	88
	Appendices.....	92
	Appendix A. Monitoring Program	
	Appendix B. Water Shortage Conditions and Response Plan	
	Appendix C. Well Management Plan	
	Appendix D. Data Acquisition Protocols for Groundwater Level Measurements for the NMMA	
	Appendix E. Additional Data	

List of Figures

Figure 1-1. Santa Maria Groundwater Basin and Management Areas	7
Figure 1-2. Wells identified in the NMMA Monitoring Program (NMMA, 2009)	8
Figure 1-3. NMMA Water Purveyor Boundaries	9
Figure 2-1. NMMA Geology and Faults and Cross Sections	18
Figure 2-2. NMMA Geologic Cross Section A-A'	19
Figure 2-3. NMMA Geologic Cross Section B-B'	20
Figure 2-4. NMMA Geologic Cross Section C-C'	21
Figure 2-5. NMMA Geologic Cross Section D-D'	22
Figure 2-6. Base of Dune Sand Deposits	23
Figure 3-1. 2020 Spring Shallow Aquifer Groundwater Elevations.....	33
Figure 3-2. 2020 Spring Deep Aquifer Groundwater Elevations	34
Figure 3-3. 2020 Fall Shallow Aquifer Groundwater Elevations	35
Figure 3-4. 2020 Fall Deep Aquifer Groundwater Elevations.....	36
Figure 3-5. 2020 Locations of Wells with Water Quality Data	37
Figure 3-6. Rainfall Station Location and Water Year 2020 Annual Rainfall.....	38
Figure 3-7. Cumulative Departure from the Mean for the following rain gauges:	39
Figure 3-8. Location of Stream Flow Sensors	40
Figure 3-9. 2020 Groundwater Use.....	41
Figure 3-10. Wastewater Treatment Facilities.....	42
Figure 4-1. Historical NMMA Groundwater Production.....	45
Figure 5-1. Schematic of the Hydrologic Inventory	49
Figure 5-2. NMMA Watershed Boundaries.....	50
Figure 6-1. Key Wells Hydrographs, South-East Portion of NMMA.....	56
Figure 6-2. Key Wells Hydrographs, North-West Portion of NMMA	57
Figure 6-3. Hydrograph for Coastal Monitoring Well Nest 11N/36W-12C	58
Figure 6-4. Hydrograph for Coastal Monitoring Well Nest 12N/36W-36L	59
Figure 6-5. 2020 Spring Shallow Aquifer Groundwater Contours	60
Figure 6-6. 2020 Spring Deep Aquifer Groundwater Contours.....	61
Figure 6-7. 2020 Fall Shallow Aquifer Groundwater Contours	62
Figure 6-8. 2020 Fall Deep Aquifer Groundwater Contours	63
Figure 6-9. Chloride in Coastal Wells 11N/36W-12C 1, 2, and 3	64
Figure 6-10. Electrical Conductivity in Coastal Wells 11N/36W-12C 1, 2, and 3	65
Figure 6-11. Chloride vs Chloride/Bicarbonate Ratio for Coastal Wells	66
Figure 6-12. Chloride vs Sodium/Chloride Ratio for Coastal Wells	67
Figure 6-13. Calcium vs Calcium/Magnesium Ratio for Coastal Wells.....	68
Figure 6-14. Calcium vs Calcium/(Bicarbonate + Sulfate) Ratio for Coastal Wells	69
Figure 6-15. Chloride vs Chloride/Boron Ratio for Coastal Wells.....	70
Figure 6-16. Major Ion Ratios for Coastal Well 12C1.....	71
Figure 6-17. Major Ion Ratio for Coastal Well 12C2	72
Figure 6-18. Major Ion Ratio for Coastal Well 12C3	73
Figure 6-19. Major Ion Ratio for Coastal Well 36L1	74
Figure 6-20. Major Ion Ratio for Coastal Well 36L2	75
Figure 7-1. Key Wells Index.....	81
Figure 7-2. Rainfall: Cumulative Departure from the Mean – Rainfall Gauge Mehlschau (38).	81
Figure 7-3. NMMA Land Use – 1959 to 2020	82
Figure 7-4. Historical Land Use in the NMMA.....	83

List of Tables

Table 1-1. NMMA Technical Group	6
Table 2-1. Climate in the Nipomo Mesa Area	11
Table 3-1: 2020 Water Quality Data from Coastal Wells.....	25
Table 3-2. Rainfall Gauges and 2020 Rainfall Totals.....	26
Table 3-3. Land Use Summary	28
Table 3-4. Calendar Year 2020 Groundwater Production for Monitoring Parties.....	29
Table 3-5. Calendar Year 2020 Groundwater Production for Golf Courses.....	29
Table 3-6. Calendar Year 2020 Estimated Groundwater Production for Agriculture.....	30
Table 3-7. Calendar Year 2020 Estimated Groundwater Production for Other Land Uses.....	30
Table 3-8. Calendar Year 2020 Measured and Estimated Groundwater Production (AFY)	31
Table 3-9. 2020 Wastewater Volumes.....	32
Table 6-1. 2020 State Water Resources Control Board GeoTracker Open Sites.....	55
Table 7-1. Criteria for Potentially Severe Water Shortage Conditions.....	77
Table 7-2. NMMA Land Use – 1959 to 2014 (acres).....	80
Table 7-3. Groundwater Production by Purveyor from 2008 to 2019	80

Acronyms

AF	-	acre-feet
AFY	-	acre-feet per year
ALERT	-	Automated Local Evaluation in Real Time
CY		Calendar Year
C.E.G.	-	Certified Engineering Geologist
C.H.G.	-	Certified Hydrogeologist
CCAMP	-	Central Coast Ambient Monitoring Program
CDF	-	California Department of Forestry (now Cal Fire)
CIMIS	-	California Irrigation Management Information System
CPUC	-	California Public Utilities Commission
CU	-	consumptive use
D	-	Day
DPH	-	California Department of Public Health
DWR	-	California Department of Water Resources
ES	-	Executive Summary
Ft	-	Feet
ft ²	-	square feet
ft msl	-	feet above mean sea level
Gpd	-	gallons per day
GSWC	-	Golden State Water Company
K	-	hydraulic conductivity
MCL	-	Maximum Contaminant Level
mg/L	-	milligrams per Liter
MOU	-	memorandum of understanding
Msl	-	mean sea level
NCSD	-	Nipomo Community Services District
NCMA		Northern Cities Management Area
NMMA	-	Nipomo Mesa Management Area
NSWP	-	Nipomo Supplemental Water Project
TG	-	Nipomo Mesa Management Area Technical Group
P.E.	-	Professional Engineer
P.G.	-	Professional Geologist
PG&E	-	Pacific Gas & Electric
PWD		Public Works Department
RF	-	return flow
RP	-	reference point
RWC	-	Rural Water Company (now Golden State Water Company)
SCWC	-	Southern California Water Company (now Golden State Water Company)
SLO	-	San Luis Obispo
SLO PWD	-	San Luis Obispo County Public Works Department
SMVMA		Santa Maria Valley Management Area
SWP	-	State Water Project
TDS	-	Total Dissolved Solids
U.S.	-	United States
WWTF	-	wastewater treatment facility
WY	-	Water Year
Yr	-	year

Abbreviations

Blacklake WWTF	-	Blacklake Reclamation Facility
Cypress Ridge WWTF	-	Cypress Ridge Sewer Company's Cypress Wastewater Treatment Facility
Judgment	-	Judgment After Trial dated January 25, 2008
Phase III	-	Santa Maria Groundwater Litigation Phase III
Program	-	Nipomo Mesa Management Area Monitoring Program
Santa Maria Groundwater Litigation	-	<i>Santa Maria Valley Water Conservation District vs. City of Santa Maria, et al.</i> Case No. 770214
Southland WWTF	-	Southland Wastewater Treatment Facility
Stipulation	-	Stipulated Judgment dated June 30, 2005
Temp	-	Temperature
Woodlands	-	Woodlands Mutual Water Company
Woodlands WWTF	-	Woodlands Mutual Water Company Wastewater Reclamation Facility

Executive Summary

This 13th Annual Report, covering calendar year 2020 for the Nipomo Mesa Management Area (NMMA), is prepared in accordance with the Stipulation and Judgment for the Santa Maria Groundwater Litigation (Lead Case No. 1-97-CV-770214). The Annual Report provides an assessment of hydrologic conditions for the NMMA based on an analysis of the data accruing each calendar year. Each Annual Report is submitted to the court annually in accordance with the Stipulation in the year following that which is assessed in the report. This Executive Summary contains three sections: ES-1 Background; ES-2 Findings; and ES-3 Recommendations.

ES-1. Background

The Court established three management areas overlying the Santa Maria Groundwater Basin (SMGB). The NMMA lies between the Northern Cities Management Area (NCMA) to the north and the Santa Maria Valley Management Area (SMVMA) to the south. The NMMA Technical Group (TG) is one of three management area committees formed to administer the relevant provisions of the Stipulation. Golden State Water Company, Nipomo Community Services District, Phillips 66, and Woodlands Mutual Water Company are responsible for appointing the members of the committee, and along with an agricultural overlying landowner, who is also a Stipulating Party, are responsible for the preparation of this Annual Report. The goal of each committee is to promote monitoring and management practices in their respective management areas so that present and future water demands are satisfied without causing long-term damage to the underlying groundwater resource.

The TG, charged with developing the technical bases for sustainable management of the surface and groundwater supplies, prepared this 13th Annual Report – Calendar Year 2020. The TG collected and compiled data and reports from numerous sources including the NMMA Monitoring Parties, the Counties of San Luis Obispo (SLO) and Santa Barbara, the California Departments of Forestry, Water Resources, and Public Health, the State Water Resources Control Board, the U. S. Geological Survey, and the Engineers for the NCMA and SMVMA. The TG previously developed, and continues to update, and maintain an electronic database to aid in the evaluation of the long-term sustainability of the NMMA portion of the SMGB. The TG reviewed these data and reports and concluded that the development of additional data and evaluations will be on-going to aid the understanding of the hydrogeologic conditions of the NMMA and to make comprehensive recommendations for the long-term management of the NMMA.

The TG evaluated the available compiled data to reach the findings presented in the following section of this Executive Summary. The TG recognizes that the data used in the evaluations are not equally reliable but represent what is currently available. In some cases, additional analysis will be required for an adequate characterization of the physical setting within the NMMA, which will allow development of an appropriately detailed model of the stratigraphy that defines the location and thickness of production aquifers and confining layers. Refinements in the understanding of the physical setting will improve upon estimates of groundwater in storage available for pumping to meet water demands. Such work is an important goal for the TG and mirrors the TG's desire to characterize groundwater storage in the NMMA. The TG has developed specific recommendations to address these issues for the next Annual Report.

ES-2. Findings

Presented in this section of the Executive Summary are brief descriptions of the findings by the TG for Calendar Year (CY) 2020. Presented in the body of this report are the details and bases for these findings.

1. Severe Water Shortage Conditions continue to exist in the NMMA in calendar year 2020 as indicated by the Key Wells Index of 11.7 ft msl (see Section 7.2 Water Shortage Conditions).
2. The Nipomo Community Services District (NCSD) completed Phase I of the Nipomo Supplemental Water Project (NSWP). Water deliveries began on July 2, 2015, and 1,041 AF of imported water were delivered through the NSWP in CY 2020 (see Section 3.1.10 Imported Water).
3. Consistent with Stage IV of the NMMA Water Shortage Response Stages, a total reduction of 2,155 AF (-38%) in purveyor production was accomplished in 2020 as compared to 2013 (see Section 7.3.3 Stipulating Party Water Use Trends).
4. There is no evidence of seawater intrusion based on coastal water quality (see Section 6.1.2 Results from Coastal Monitoring Wells).
5. Total rainfall for CY 2020 is approximately 60 percent of the long-term average. The total rainfall for Water Year (WY) 2020 (October 1, 2019 through September 30, 2020) is approximately 100 percent of the long-term average (see Section 3.1.3 Rainfall).
6. The period of analysis (1975-2020) used by the TG is roughly 8 percent “wetter” on average than the long-term record (1920-2020) indicating there is a slight bias toward overstating the amount of local water supply resulting from percolation of rainfall (see Section 5.1 Rainfall and Percolation Past Root Zone).
7. The total estimated 2020 calendar year groundwater production is 14,313 acre-feet (AF). The breakdown by user and type of use is shown in the following table (see Section 3.1.9 Groundwater Production).

Agriculture	7,176 AF
Urban/Industrial	7,137AF
Total Production	14,313 AF

8. No surface water is diverted for water supplies in the NMMA (see Section 3.1.7).
9. The total Waste Water Treatment Facility effluent discharged in the NMMA was 657 AF for CY 2020 (see Section 3.1.11 Wastewater Discharge and Reuse).
10. Contour maps prepared using Spring and Fall 2020 groundwater elevation data suggest regional groundwater flow is generally from east to west (toward the ocean). The contour maps also show a landward gradient from the coast in the deep aquifer, which is an indication that groundwater flow is from the coastal area toward inland areas resulting in an increased potential for seawater intrusion. There exists a persistent pumping depression in the central area of the NMMA (see Section 6.1.3 Groundwater Contours and Pumping Depressions).

11. The 2020 acreage for land use classification of Urban is 10,596 acres; of Agriculture is 2,988 acres; and, of Non Irrigated is 7,957 acres (see Section 3.1.8 Land Use).
12. In 2020, water samples from some wells in both the shallow and deep aquifers had nitrate concentrations greater than the drinking water standard and samples from one well contained 1,2,3-Trichloropropane (1,2,3-TCP) at concentrations at or above the notification level. Shallow groundwater monitoring and remediation occurs at a near-coastal refinery, including at the site of a former leaking pipe where cleanup for metals and hydrocarbon contaminants in the shallow aquifer is ongoing (see Section 6.2.2 Results of Inland Water Quality Monitoring).
13. There continues to be uncertainty in the contribution from flow in Los Berros and Nipomo Creeks to the NMMA groundwater supply and quality. Stream stage data that indicate when flow is occurring are recorded at three gaging stations on Los Berros Creek. However, no rating curves are available to convert the stage data to stream flow. No stream gage exists on Nipomo Creek (see Section 2.3 Hydrogeology and Section 3.1.5 Streamflow).
14. There is a lack of detailed understanding about confined and unconfined aquifer conditions in the NMMA, except near the coast and locally adjacent areas where the deep aquifers are known to be confined (see Sections 2.3.1 Geology and 2.3.2 Groundwater Flow Regime).
15. There is a lack of detailed understanding of the flow path of rainfall, applied water, and treated wastewater to specific aquifers underlying the NMMA (see Section 2.3 Hydrogeology).

ES-3. Recommendations

A list of recommendations was developed and published in each of the previous NMMA Annual Reports. The TG will address past and newly developed recommendations based on future budgets, feasibility, and priority. The recommendations are subdivided into two categories: (1) Achievements from earlier NMMA Annual Report recommendations accomplished in 2020, and (2) Technical Recommendations – to address the needs of the TG for data collection and compilation.

ES-3.1. Achievements from Previous NMMA Annual Report Recommendations

The TG worked to address several of the recommendations outlined in the previous Annual Reports. Achievements made during 2020 are as follows:

- As part of the continued operation of the NSWP, a total of 1,041 AF of water was delivered to the NMMA during the CY 2020.
- A water level transducer and data logger were installed at one of the Key Wells (11N35W22C02) in late 2020.
- The TG continued review of the NMMA Monitoring Program to identify additional wells or monitoring points to include, in an effort to better characterize conditions in the shallow aquifer and to fill geographic data gaps associated with shallow and deep aquifers. The TG also approached and coordinated with SLO County, which resumed semi-annual monitoring of groundwater levels at a previous Key Well (11N35W23L01).

- To support certain estimates of groundwater production, the TG updated the classification of land use in the NMMA, which was last categorized in 2014, based on 2020 conditions.
- The TG continued tracking, in part through regular communication with San Luis Obispo County, groundwater management activities in groundwater basins adjacent to the SMGB upgradient of the NCMA. These activities are being implemented within the Arroyo Grande subbasin under the umbrella of California’s Sustainable Groundwater Management Act.
- To better support evaluation of the potential for seawater intrusion, this report includes ion ratio time-series data for certain coastal wells and charts of ion ratio time-series data for other coastal wells.

ES-3.2. Technical Recommendations

The following technical recommendations are not organized in their order of priority, because the monitoring parties, considering their own particular funding constraints and authorities, will determine the implementation strategies and priorities.

- **Supplemental Water Supplies** – Reducing pumping is the most effective method to reduce the stress on the aquifers and to allow groundwater to recover; continued operation of the NSWP (see Section 1.1.5-Supplemental Water) is another viable method to achieve these goals. The TG recommends that this project continue to be implemented consistent with the Judgment and Stipulation.
- **Subsurface Flow Estimates** – Evaluate subsurface flow along the NMMA boundaries based on groundwater gradients and hydraulic conductivities in the shallow and deep aquifers.
- **Key Wells Monitoring** – Where possible, install data loggers in all Key Wells.
- **Key Wells Index 5-Year Review** – Evaluate and review the Key Wells Index by 2025.
- **Monitoring Points** – Replace the lost monitoring wells near Oso Flaco Lake. Select specific shallow dune sand aquifer wells for groundwater monitoring.
- **Well Reference Point Elevations** – Continue to improve the accuracy of the RP elevations using LIDAR and other survey data.
- **Groundwater Production** – Develop a method to collect groundwater production data from all stipulating parties. Continue to update the land use classification on an interval commensurate with significant changes in land use patterns and as is practical, with the intention that the interval is more frequent than DWR’s 10-year cycle of land use classification.
- **Agricultural Groundwater Production** – Continue to work with NMMA area farmers to measure groundwater production. Continue consultation with San Luis Obispo County Agriculture Department and other local experts in crop water use with specific updates to emerging crops and crop conversions.
- **Hydrogeologic Characteristics of NMMA** – Continue to review well screen intervals, lithology, groundwater level, and other relevant information. Improve the understanding of NMMA area

fault displacements and potential effects of faulting on the hydrostratigraphy and groundwater flow in the NMMA.

- **Stream Flow Estimates** – – Develop rating curve for Los Berros Creek, and install a new stream sensor on Nipomo Creek and develop a rating curve.
- **Groundwater Modeling** – Continue to engage with users of utilizing the regional groundwater model developed for Pismo Beach and the South SLO County Sanitation District, to assess efforts to revise and update the accuracy of the model.
- **SGMA** – Continue communication between the TG and SLO County with respect to the County’s groundwater management activity adjacent to the adjudicated portion of the SMGB. The TG will continue to report annual groundwater conditions to the DWR SGMA reporting site for adjudicated basins.

1. Introduction

The rights to extract water from the Santa Maria Groundwater Basin (SMGB) have been in litigation since the late 1990s. By stipulation and Court action, three separate management areas were established in 2008 as a result of such litigation: the Northern Cities Management Area (NCMA), the Nipomo Mesa Management Area (NMMA), and the Santa Maria Valley Management Area (SMVMA). The Court directed monitoring parties of each management area to form a group of technical experts to continue to study and evaluate the characteristics and conditions of each management area and to annually present their findings to the Court in the form of an Annual Report. The NMMA Technical Group (TG) is one of three management area committees formed to administer the relevant provisions of the Stipulation. Golden State Water Company (GSWC), Nipomo Community Services District (NCSD), Phillips 66 (P66), and Woodlands Mutual Water Company (Woodlands) are responsible for appointing members of the committee, together with an agricultural overlying landowner, who is also a Stipulating Party.

This 13th Annual Report – Calendar Year 2020 is a joint effort of the TG. The requirement contained in the Judgment for the production of an Annual Report is as follows:

“Within one hundred and twenty days after each Year, the Management Area Engineers will file an Annual Report with the Court. The Annual Report will summarize the results of the Monitoring Program, changes in groundwater supplies, and any threats to groundwater supplies. The Annual Report shall also include a tabulation of Management Area water use, including Imported Water availability and use, Return Flow entitlement and use, other Developed Water availability and use, and Groundwater use. Any Stipulating Party may object to the Monitoring Program, the reported results, or the Annual Report by motion.”

This Annual Report is organized into an executive summary, and nine sections which present: the general background of the litigation and some of the requirements imposed by the Court, a description of the basin, a summary of data collection, water supply and demand, hydrologic inventory, groundwater conditions, an analysis of water conditions, and a presentation of other considerations, recommendations, and references.

Five appendices are also included in the Annual Report: Appendix A – Monitoring Program, Appendix B – Water Shortage Conditions and Response Plan, Appendix C – Well Management Plan, Appendix D – Data Acquisition Protocols for Groundwater Level Measurements for the NMMA, and Appendix E – Additional Data. Twelve annual reports have previously been prepared, spanning calendar years 2008 to 2019 (NMMA, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, and 2020).

1.1. **Background**

Presented in this subsection is a brief history of the litigation process through 2008 and general discussions of activities that have been undertaken to date or are underway to manage the water resources of the NMMA.

1.1.1. History of the Litigation Process

The SMGB was the subject of litigation from 1997 to 2008. Collectively called the Santa Maria Groundwater Litigation (*Santa Maria Valley Water Conservation District vs. City of Santa Maria, et al.* Superior Court for the County of Santa Clara Case No. 770214), over 1,000 parties were involved with competing claims to pump groundwater from within the boundary of the SMGB (Figure 1-1).

The Santa Maria Valley Water Conservation District was originally concerned that banking of State Water Project (SWP) water in the groundwater basin by the City of Santa Maria would give the City of Santa Maria priority rights to the groundwater. The lawsuit was subsequently broadened to address groundwater management of the entire SMGB.

On June 30, 2005, the Stipulating Parties entered a Stipulated Judgment (“Stipulation”) in the case, which was approved by the Court on August 3, 2005. The Stipulation divides the SMGB into three separate management sub-areas: the NCMA, NMMA, and the SMVMA. The Stipulation contains specific provisions with regard to rights to use groundwater, development of groundwater monitoring programs, and development of plans and programs to respond to Potentially Severe and Severe Water Shortage Conditions.

The TG was formed pursuant to a requirement contained in the Stipulation. Sections IV D (All Management Areas) and Section VI (C) (NMMA) contained in the Stipulation were independently adopted by the Court in the Judgment After Trial (herein “Judgment”). The Judgment is dated January 25, 2008, and was entered and served on all parties on February 7, 2008. It is noted that pursuant to paragraph 5 of the Judgment, the TG retains the right to seek a Court Order requiring non-stipulating parties to monitor their well production, maintain records thereof, and make the data available to the Court or the Court’s designee. The compilation and evaluation of existing data, and the aggregation of additional data, are ongoing processes. Given its limited budget and resources, the TG has focused its efforts on the evaluation of readily accessible data. The TG does intend to slowly integrate into its assessment new data that may be collected from stipulating parties and other sources that were not previously compiled as part of the database existing in 2008. In November 2017 the Court’s current presiding judge was given a day-long ground- and aerial-based tour of the SMGB, which was planned in the months leading up to November 2017.

1.1.2. Development of Monitoring Program

In 2008, the TG developed and the Court approved, the NMMA Monitoring Program (“Monitoring Program”), attached as Appendix A, to ensure systematic collection of important information in the basin. This Monitoring Program includes information such as groundwater elevations, groundwater quality, and pumping amounts. The Monitoring Program also identifies a number of wells in the NMMA to be monitored (Figure 1-2) and discusses the methods of analysis of the data.

A large areal extent within the NMMA receives water service from the major water purveyors (Figure 1-3). The majority of the lands within the NMMA obtain water by means other than from a purveyor. A fraction of these property owners are Stipulating Parties. All of the larger purveyors are also Stipulating Parties. All Stipulating Parties are obligated to make available relevant information regarding groundwater elevations, water quality, and pumping data necessary to implement the NMMA Monitoring Program.

1.1.3. Water Shortage Conditions and Response Plan

Pursuant to the Stipulation, the TG developed a Water Shortage Conditions and Response Plan that is included as part of the Monitoring Program. The water shortage conditions are characterized by two different criteria – those for Potentially Severe Water Shortage Conditions and those for Severe Water Shortage Conditions. The response to these conditions includes voluntary and mandatory actions by the parties to the Stipulation. The Court approved the Water Shortage Conditions and Response Plan on April 22, 2009 (see Appendix B).

1.1.4. Well Management Plan

The Stipulation requires the preparation of a Well Management Plan (WMP) when Potentially Severe Water Shortage Conditions or Severe Water Shortage Conditions exist prior to the completion of a Supplemental Water project. The WMP provides for steps to be taken by the NCSO, GSWC (formerly named Southern California Water Company [SCWC]), and Woodlands, under these water shortage conditions. The WMP has no applicability to either P66 or Overlying Owners as defined in the Stipulation. The WMP was adopted by the TG in January 2010 and submitted to the Court in April 2010 with the 2009 Annual Report, and is attached as Appendix C to this report. On April 14, 2014, the NMMA Water Shortage Response Stages were endorsed by the TG and submitted to the Court with the 2013 Annual Report (see Appendix C).

1.1.5. Supplemental Water

To bring Supplemental Water to the NMMA, pursuant to the Stipulation:

“The NCSO agrees to purchase and transmit to the NMMA a minimum of 2,500 acre-feet of Nipomo Supplemental Water each Year. However, the NMMA Technical Group may require NCSO in any given Year to purchase and transmit to the NMMA an amount in excess of 2,500 acre-feet and up to the maximum amount of Nipomo Supplemental Water which the NCSO is entitled to receive under the MOU if the Technical Group concludes that such an amount is necessary to protect or sustain Groundwater supplies in the NMMA. The NMMA Technical Group also may periodically reduce the required amount of Nipomo Supplemental Water used in the NMMA so long as it finds that groundwater supplies in the NMMA are not endangered in any way or to any degree whatsoever by such a reduction.”

“Once the Nipomo Supplemental Water is capable of being delivered, those certain Stipulating Parties listed below shall purchase the following portions of the Nipomo Supplemental Water Yearly:

NCSO - 66.68%
Woodlands Mutual Water Company - 16.66%
SCWC - 8.33%
Rural Water Company - 8.33%”

The Judgment states: “The court approves the Stipulation, orders the Stipulating Parties only to comply with each and every term thereof, and incorporates the same herein as though set forth in full.” Thus, the terms of the Stipulation as herein stated must be complied with in accordance with the order of the Court.

NCSD completed the initial phase of the planned 3,000 AFY Nipomo Supplemental Water Project (NSWP) in 2015 and began delivering water onto the NMMA on July 2, 2015. With the initiation of NSWP deliveries, a minimum purchase schedule ‘time clock’ was triggered in accordance with the NCSD and City of Santa Maria Wholesale Agreement (NCSD and City of Santa Maria, 2013). Commencing no later than delivery year eleven (2026), NCSD is required to purchase from the City of Santa Maria (and import to the NMMA) a minimum of 2,500 AFY.

The initial phase of the NSWP included the construction of a two-mile long pipeline that traverses under the Santa Maria River, across the Santa Barbara/San Luis Obispo County boundary and interconnects the City of Santa Maria’s water system to NCSD’s. This interconnect provides the NMMA with its first and only means of importing water and links the NMMA via the City of Santa Maria and the State Water Project to Northern California. This pipe is capable of delivering 6,200 AFY. The License Agreement the County of Santa Barbara issued to facilitate the pipeline crossing the County’s flood control levee constrains the project to a maximum delivery of 3,000 AFY.

NCSD is planning additional phases of work to ramp up capacity well ahead of the minimum purchase schedule contained in the Wholesale Agreement.

1.1.6. Other Groundwater Management Activities

San Luis Obispo County Public Works Department (SLO PWD) performs, among other activities, services related to administration and operation of various water and wastewater wholesale and retail facilities, as well as long term master water planning. Consistent with these activities, SLO PDW is the lead agency for the 2019 San Luis Obispo County Integrated Regional Water Management (IRWM) Plan, which covers the SLO County region. The revised SLO County Final 2019 IRWM Plan was completed in August 2020.

The SLO County IRWM Region received \$1 million in Proposition 84 Round 2 Planning Grant funding in late 2012. This funding was set aside for updating the County’s 2007 IRWM Plan and for six planning studies, including characterization of the SMGB, to help to address key planning needs in the county. The County’s groundwater basin characterization activities, which are also known as the SMGB Characterization and Planning Activities Study, were intended to support development of a groundwater flow model and Salt and Nutrient Management Plan for the NCMA and NMMA portions of the SMGB (FUGRO, 2015).

As part of the County’s groundwater basin characterization activities, the TG previously provided the County’s groundwater basin characterization consultant with various data, including, but not limited to, lithologic (well) logs, geophysical logs, and pump efficiency and aquifer test results. And, NCSD and GSWC provided access in 2014 for aquifer testing of selected wells during execution of the groundwater basin characterization activities. The TG subsequently provided comments on draft versions of the SMGB Characterization and Planning Activities Study report, which was made available to the public and the TG as a final version in January 2016.

SLO County began developing a regional groundwater model in 2017. The active model domain covers the NCMA, NMMA, and a portion of the SMVMA north of the Santa Maria River. The model utilizes a significant amount of information presented in the SMGB Characterization and Planning Activities Study report among other sources. The TG provided model input data and a TG representative provided input via participation in frequent meetings. The TG also provided other feedback on the model development process in 2017 and 2018 by reviewing key documents and providing written comments to

the groundwater modeling team, and provided comments and concerns during the final model calibration phase in 2019. The model was completed in 2019 (Geoscience, 2019).

SLO PWD is also taking a leading role with respect to initiating the implementation of the state of California’s Sustainable Groundwater Management Act (SGMA) in applicable groundwater basins. SGMA, which was signed into law in September 2014 and enacted beginning January 1, 2015, established a new structure for managing California’s groundwater resources at a local level. SGMA requires the formation of locally-controlled groundwater sustainability agencies (GSAs) in certain groundwater basins. And, SGMA requires that GSAs develop and implement a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin or subbasin, to ensure that it is operated within its sustainable yield, without causing undesirable results.

In 2015, to comply with SGMA requirements, the SLO County and Flood Control District Board adopted a strategy which seeks to establish community focused GSAs based on cooperative interagency and stakeholder relationships. Although most of the Santa Maria Valley Groundwater Basin is exempt from the SGMA, there are non-adjudicated portions (i.e., “fringe areas”) that lie outside of the adjudicated portion of the basin that are subject to SGMA (GSI, 2018a and 2018b; SLO, 2019b). These fringe areas include an area of about 6,200 acres east of Nipomo Creek and the NMMA, known as the Nipomo Valley fringe area. Based on DWR’s decisions in February 2019 on the final 2019 basin boundary modification processes, three of the Santa Maria River Valley Basin fringe areas, including the Nipomo Valley, were removed from the basin. As a result, groundwater in the Nipomo Valley will not be subject to the SGMA process. The TG reviewed and provided comments to the public draft documents prepared by the SLO County for the basin boundary modification.

1.2. **Reporting**

The Annual Report is prepared and internally reviewed by the TG and is subsequently made available to the Court and public, as described below.

1.2.1. **Description of the Nipomo Mesa Management Area Technical Group**

The TG is composed of representatives of each of the Monitoring Parties: NCSD, GSWC, P66 (formerly named ConocoPhillips), Woodlands; and an agricultural user that is also a Stipulating Party. The agricultural overlying landowner representative is not responsible for funding a portion of the TG’s efforts.

In October 2015, GSWC acquired the Rural Water Company (RWC) drinking water system, not including the wastewater treatment and disposal facilities. Because GSWC began operating the former RWC drinking water system at that time, late in the calendar year, and to provide greater clarity, attribution to RWC was made throughout the 2015 Annual Report wherever possible. In the interest of simplification, references in subsequent annual reports to RWC have been removed and replaced with references to GSWC.

The TG is responsible for developing the Monitoring Program, implementing the Monitoring Program, and preparing the Annual Report. Unanimous approval on all material issued is obtained by way of a single vote per Monitoring Party. If the TG is unable to obtain unanimous approval, the matter may be taken to the Court for resolution.

The Monitoring Parties may hire individuals or consulting firms to assist in the preparation of the Monitoring Program and Annual Reports (the Judgment describes these individuals or consulting firms as

the “Management Area Engineer”). The Monitoring Parties’ representatives to the TG, as a group, function as the Management Area Engineer (Table 1-1) and attend monthly meetings where data collection and preparation of the Annual Report are the primary focus. The Monitoring Parties have the sole discretion to select, retain, and replace the Management Area Engineer.

Table 1-1. NMMA Technical Group

Monitoring Parties	Management Area Engineer Representatives
Agricultural Overlying Landowner	Jacqueline Frederick, J.D.
Golden State Water Company	Toby Moore, Ph.D., P.G., C.H.G.
	Robert Collar, P.G., C.H.G.
Nipomo Community Services District	Brad Newton, Ph.D., P.G.
Phillips 66	Steve Bachman, Ph.D., P.G.
	Norm Brown, Ph.D., P.G.
Woodlands	Rob Miller, P.E.
	Tim Cleath, P.G., C.H.G., C.E.G.
Note: Each Monitoring Party has a single vote in order to unanimously approve final work product.	

1.2.2. Coordination with Northern Cities and Santa Maria Valley Management Areas

The NMMA is bounded on the north by the NCMA and on the south by the SMVMA (Figure 1-1). The TG recognizes that collaborative technical efforts with the NCMA and SMVMA technical groups will be important to the appropriate management of the basin. Examples of collaborative efforts include:

- Sharing and evaluating technical data throughout the year, and during the preparation of Annual Reports,
- Opportunities for review and comment on technical work products,
- Sharing of protocols and standards for data collection and analysis, and
- Consideration of jointly-pursued projects and grant opportunities.

As the conditions of the existing basin underlying the NMMA are described in subsequent sections, periodic reference will be made to the Annual Reports produced by the two neighboring technical groups.

1.2.3. Distribution

The Annual Report for each calendar year (January 1 to December 31) is completed by April 30th of the following calendar year and submitted to the Court. Beginning in 2016, and in compliance with SGMA, the Annual Report, along with select information extracted from the Annual Report, has been published to the California Department of Water Resources’ website for adjudicated groundwater basins (DWR, 2019).

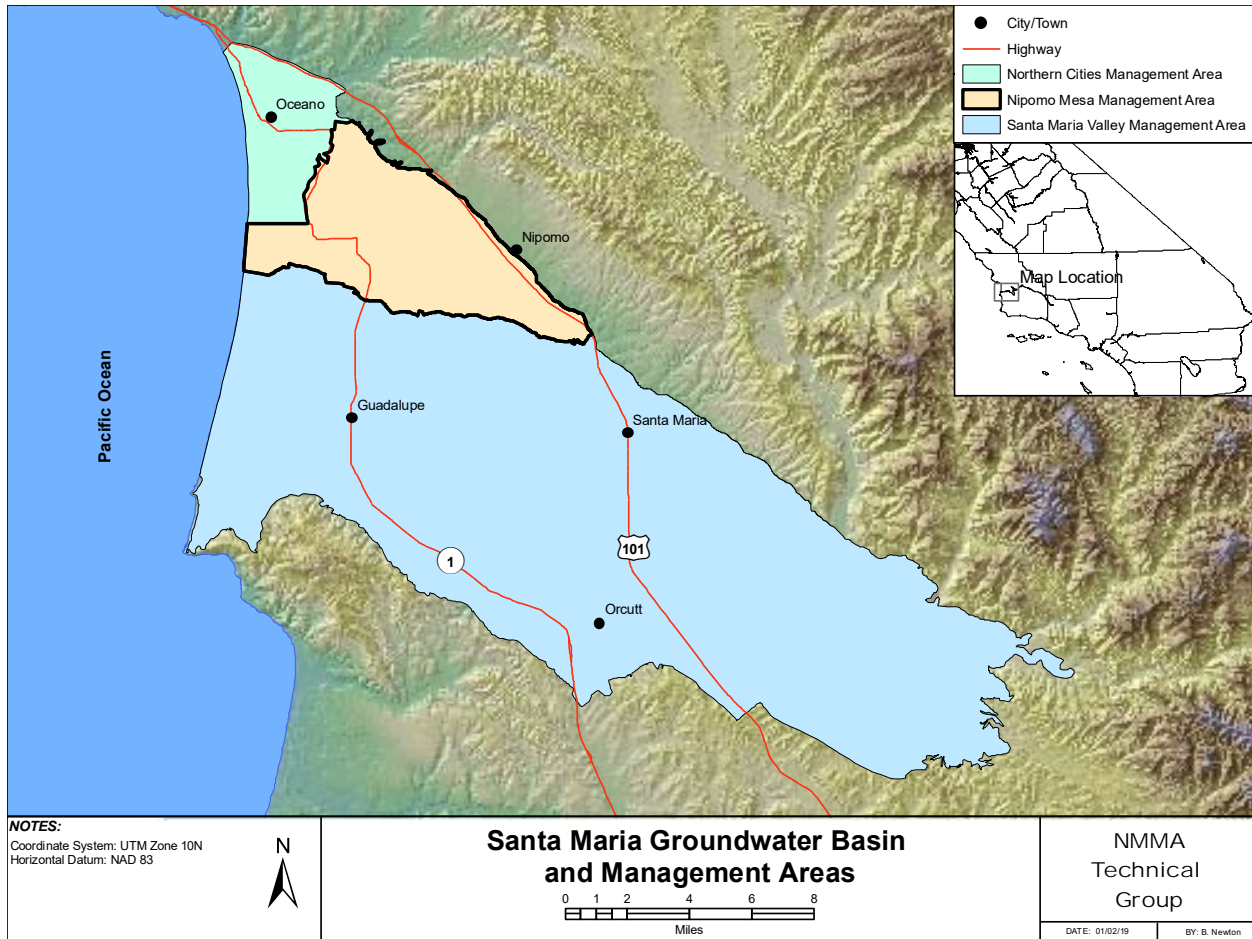


Figure 1-1. Santa Maria Groundwater Basin and Management Areas

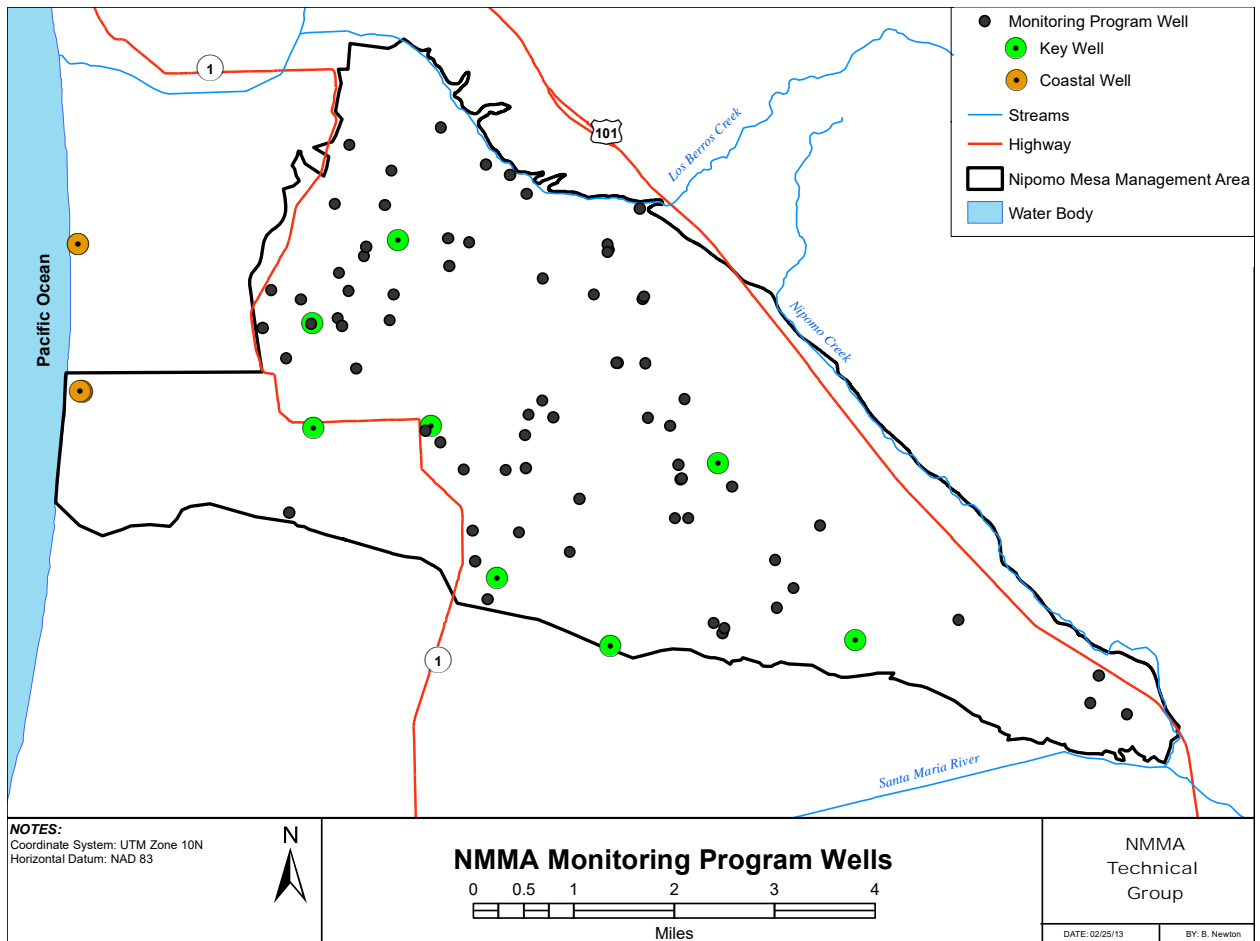


Figure 1-2. Wells identified in the NMMA Monitoring Program (NMMA, 2009)

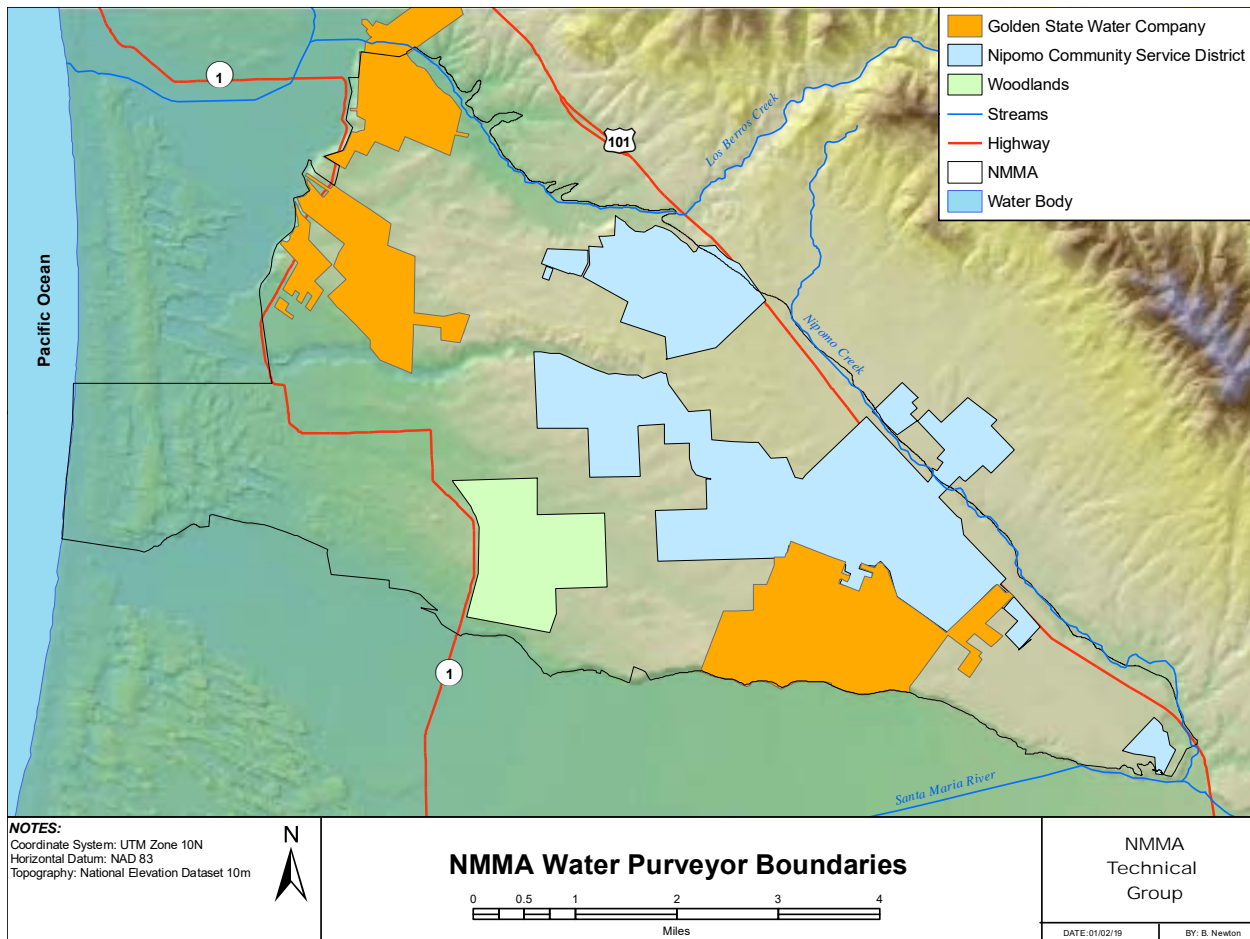


Figure 1-3. NMMA Water Purveyor Boundaries

2. Basin Description

The SMGB, covering a surface area of approximately 256 square miles, is bounded on the north by the San Luis and Santa Lucia mountain ranges, on the south by the Casmalia-Solomon Hills, on the east by the San Rafael Mountains, and on the west by the Pacific Ocean. The basin receives water from rainfall directly and runoff from several major watersheds drained by the Cuyama River, Sisquoc River, Arroyo Grande Creek, and Pismo Creek, as well as many minor tributary watersheds. Sediment eroded from these nearby mountains and deposited in the Santa Maria Valley formed beds of unconsolidated alluvium, averaging 1,000 feet in depth, with maximum depths up to 2,800 feet and comprise the principal production aquifers from which water is extracted to supply the regional demand. Three management areas were defined to recognize that the development and use of groundwater, State Water Project water, surface water storage, and treatment and distribution facilities have historically been financed and managed separately, yet they are all underlain by, or contribute to the supplies within, the same groundwater basin.

2.1. **Physical Setting**

The NMMA has physical characteristics which are distinct from the other two management areas. It is largely a mesa area that is north of the Santa Maria River, west of the San Luis Range and south of the Arroyo Grande Creek, with a lower lying coastal environment to the west. The mesa was formed when the Santa Maria River and Arroyo Grande Creek eroded the surrounding area. The current coastal environment developed subsequently, is composed of beach dunes and lakes, and is a recreational area with sensitive species habitat. Locally, hummocky topography on the mesa area reflects the older dune deposits. Black Lake Canyon is an erosional feature north-central in the NMMA and where the dune deposit thickness is exposed. Los Berros Creek valley is along the north side of the NMMA and the Nipomo Creek valley is along the east side of the NMMA.

2.1.1. **Area**

The NMMA covers approximately 33 square miles or 21,590 acres, which accounts for approximately 13 percent of the overall SMGB (164,000 acres). Approximately 13,500 acres on the NMMA, or 64 percent, is developed land requiring water pumped from the underlying aquifers to sustain the agricultural and urban development. In the 2018 Annual Report, the common boundary between the NMMA and the SMVMA was changed to follow parcels, in coordination with SMVMA Engineer.

2.1.2. **General Land Use**

Land uses include agricultural, urban (residential and commercial), and native or undeveloped areas. There are also three golf courses and one oil-processing facility. The crop types grown in the order of largest acreage were strawberries and cane berries, nursery, rotational vegetables (broccoli, lettuce, etc.) avocado and lemon, pasture, deciduous and grapes, and most recently cannabis. The most recent survey of crops was performed in 2020.

2.2. **Climate**

A Mediterranean-like climate persists throughout the area with cool moist winters and warm dry summers. During the summer months, the warm air inland rises and draws in the relatively cooler marine layer near the coastline keeping summer cooler and providing moisture for plant growth, while in the winter months the relatively warmer ocean temperature keeps the winter warmer. The average annual maximum temperature is 69 degrees Fahrenheit, and the average annual minimum temperature is 46 degrees Fahrenheit. Precipitation normally occurs as rainfall between November and April when cyclonic storms originating in the Pacific Ocean move onto the continent. The long-term (1958 to 2020) average annual rainfall reported at CDF Nipomo Rain Gauge #151.1 is 15.65 inches and is representative of the larger area of the NMMA. Rainfall variability exists across the NMMA and rainfall increases in the foothills and mountains due to the orographic (elevation) effect. The long-term average annual evapotranspiration from standard turf (a well-watered, actively growing, closely clipped grass that is completely shading the soil) is 46.3 inches, and is referred to as the reference evapotranspiration of Reference Zone 3 (Table 2-1).

Table 2-1. Climate in the Nipomo Mesa Area

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max Temp (Fahrenheit) ¹	63.3	64.3	64.8	66.9	68.3	70.6	72.8	73.2	74.4	73.5	69.2	64.3	68.8
Average Min Temp (Fahrenheit) ¹	39.0	40.9	42.0	43.5	46.8	50.1	53.1	53.6	52.2	48.1	42.6	38.7	45.9
Average Rainfall (inches) ²	3.27	3.18	2.81	1.08	0.27	0.04	0.02	0.03	0.18	0.71	1.52	2.52	15.65
Monthly Average Reference Evapotranspiration (inches) ³	1.86	2.24	3.72	4.80	5.27	5.70	5.58	5.27	4.20	3.41	2.40	1.86	46.3
Monthly Average Reference Evapotranspiration (inches) ⁴	2.13	2.87	2.96	4.41	5.7	5.02	5.09	4.56	3.16	2.98	2.37	2.09	43.34
Monthly Average Reference Evapotranspiration (inches) ⁵	3.81	3.65	3.90	4.38	4.90	4.57	4.49	4.26	3.80	3.73	3.60	3.51	48.60

Notes:

1. Data from Santa Maria Airport - Nearest long-term temperature record to the NMMA in the Western Regional Climate Center is from the Santa Maria Airport, station #47946. The average is from 1948 through 2016. Source: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7946>.
2. Data from CDF Nipomo Rain Gauge 151.1 (1959 to 2020).
3. Data from California Irrigation Management Information System (CIMIS) – Reference Zone 3 Source: http://www.cimis.water.ca.gov/App_Themes/images/etozonemap.jpg
4. Data from California Irrigation Management Information System (CIMIS) calculated from monthly evapotranspiration (ET_o) for the period of record at Station 202 Nipomo (June 2006 to December 2020), and the station is regularly over-sprayed by irrigation. Source: <http://www.cimis.water.ca.gov/cimis/data.jsp>
5. Data from California Irrigation Management Information System (CIMIS), calculated from monthly evapotranspiration (ET_o) for the period of record at Station 232 Santa Maria II (April 2011 to December 2020). Source: <http://www.cimis.water.ca.gov/cimis/data.jsp>

2.3. Hydrogeology

Groundwater management is founded upon the current understanding of the geology and the groundwater flow regime specific to the NMMA. Two recent investigations of the hydrogeology within the SMGB build on the historic understanding. The Geoscience Phase 1B hydrogeologic investigation led to the preparation of a conceptual hydrogeologic model across a study area that includes the NMMA (Geoscience, 2018). The City of Pismo Beach contracted with Ramboll Group to perform “SkyTEM” aerial resistivity survey of the non-urban areas of South County in 2020.

2.3.1. Geology

The NMMA overlies part of the northwest portion of the SMGB (Figure 1-1). The sedimentary deposits comprising the principal production aquifers of the groundwater basin underlying the NMMA include the Pliocene age Careaga Formation and the Plio-Pleistocene age Paso Robles Formation. These basin sedimentary formations are overlain by Quaternary age dune sands in the NMMA, and by the

Quaternary age alluvium in Los Berros Creek valley (in the northern perimeter of the NMMA) and in Nipomo Creek valley (on the east perimeter of the NMMA) which, when saturated, comprise shallow production aquifers locally. These sedimentary beds have been deposited within the Santa Maria Valley synclinal basin. The pre-Quaternary age sedimentary beds have been displaced by faults within and on the perimeter of the basin (Figure 2-1). Further information on these geologic formations and the geologic structure is available in the 2nd Annual Report – Calendar Year 2009 (NMMA, 2010). Cross sections developed by the TG characterize portions of the NMMA boundary, were prepared to advance the understanding of hydrogeology, and are plotted on the generalized geologic map (Figure 2-1).

Northwestern Boundary

The A-A' geologic cross section generally follows the northwestern boundary of the NMMA from Los Berros Creek and Nipomo Hill in the north to Black Lake Canyon and State Route 1 (Figure 2-2). The cross section was prepared based on well logs and geologic maps as a foundation for evaluating groundwater flow in this area. It was developed primarily using 19 wells distributed from north to south along, and located within roughly one half mile east (primarily) and west of the approximately 4-mile-long cross section. The wells and associated lithology were not included on the cross section at that time because they were considered confidential according to the California Water Code.

The cross section generally shows the land surface, relatively permeable aquifers tapped by many wells in the area that are underlain by relatively impermeable bedrock of the Franciscan Formation, and the Oceano fault. Younger Alluvium, Dune Sand and Older Dune Sand deposits (the Dune Sand and Older Dune Sand Formations are collectively referred to in this report as the “shallow dune sand aquifer”), Paso Robles Formation (clay and gravel beds), and underlying marine sands of the Careaga Formation contain aquifers. The base of the Older Dune Sand Formation slopes to the southwest from where it laps onto the Nipomo Hill bedrock at an elevation of more than 100 feet above sea level to an elevation of about 100 feet below sea level at the southern end of the cross section. The Paso Robles and Careaga Formation beds also slope to the southwest from Nipomo Hill toward Black Lake Canyon, where the base of these formations drops to an elevation of at least about 400 feet below sea level but is not well defined.

The relatively impermeable bedrock is comprised of the Cretaceous and Jurassic age Franciscan Complex rock and older sedimentary beds (early Pliocene age Sisquoc Formation). Very few wells produce groundwater from the bedrock in the NMMA. Franciscan Complex bedrock is exposed on the lower slope of Nipomo Hill at Los Berros Road and remains at relatively shallow depths, within a few hundred feet of the land surface, toward the south to Woodland Hills Road. Older sedimentary beds that thicken toward the coast, have low permeability and underlie the principal aquifers. These older sedimentary beds, though not as impermeable as the Franciscan Complex rock, contain poorer quality groundwater than the overlying Paso Robles and Careaga Formations comprising the principal production aquifers.

Southern Boundary

The B-B' geologic cross section generally follows the southern boundary of the NMMA and is based on available subsurface information from exploratory oil well logs, water well logs, published geology and hydrogeologic reports, and geophysical surveys (Figure 2-3). The aquifers depicted extend both to the south and north of the SMVMA - NMMA boundary and groundwater flow can be expected to occur across this boundary. Groundwater flow may be impeded by geologic features including near-vertical boundaries such as faults and near-horizontal aquitards that are illustrated on this cross section.

The stratigraphy in this area is similar to that described for the A-A' cross-section. Here however, the thickness of the deep aquifer is much greater, on the order of 500 feet in many places. The shallow dune sand aquifer, overlying the deep aquifer, increases in saturated thickness from approximately 50 feet on the east to 300 feet on the west.

Cross section B-B' shows the land surface, the relatively permeable aquifers utilized by many wells in the area, and the underlying, relatively impermeable, undifferentiated Tertiary sedimentary beds. Younger Alluvium, Older Dune Sand Formation, Paso Robles Formation (clay and gravel beds), and underlying marine sands of the Careaga Formation contain aquifers. The base of the Older Dune Sand slopes toward the coast, from where it laps onto the Franciscan bedrock east of the Wilmar Avenue fault near Highway 101 at an elevation of more than 100 feet above sea level to an elevation of about 100 feet below sea level at the western end of the cross section. The Paso Robles and Careaga Formation beds also slope toward the coast, where the base of these formations is at an elevation of at least about 800 feet below sea level. The Oceano, Santa Maria River, and Wilmar Avenue faults appear to displace the basin sediments with an apparent upward offset to the east.

Northern Boundary

Geologic cross-section C-C' generally follows the northern edge of the Nipomo Mesa, from Nipomo Hill at the west end to Summit Station at the east end, along the Los Berros Creek valley (Figure 2-4). The cross section was prepared based on well logs and geologic maps as a foundation for understanding basin characteristics and to evaluate groundwater flow from the Los Berros Creek alluvium into aquifers within the NMMA. The cross section shows the water-bearing formations above the underlying bedrock.

In addition to the alluvium, the water-bearing formations along cross-section C-C' include the Older Dune Sand Formation and clay and gravel beds of the Paso Robles Formation. The underlying Careaga Formation appears to be absent or very thin in this area. The base of the Dune Sand slopes to the southwest, orthogonal to cross-section C-C', from where it laps onto the Nipomo Hill bedrock at an elevation of more than 100 feet above sea level, to near El Campo Road at an elevation of about 50 feet above sea level. The base of the Paso Robles Formation from El Campo Road to Pomeroy Road is 50-100 feet below sea level and rises east from Pomeroy Road to an elevation of more than 150 feet above sea level.

The bedrock along cross-section C-C' is primarily the Cretaceous age Franciscan Assemblage rock, although drilling logs identify "blue clay" and "shale" that could be more recent low permeability consolidated sedimentary beds of the Sisquoc and possibly the Monterey Formations.

The TG's understanding of the subsurface conditions indicated by a review of geologic maps (Hall, 1974; DWR, 1970; and DWR, 2002) and well completion reports suggests that the base of the permeable sediments in the Nipomo Hill area is approximately 100 feet above sea level. This interpretation differs from the 2015 SMGB characterization study (FUGRO, 2015) which represents the base of the permeable sediments in this area to be much deeper (100 feet below sea level or deeper).

Eastern Boundary

Geologic cross-section D-D', close to the eastern boundary of the NMMA from the Santa Maria River valley to Los Berros Creek valley, illustrates the uplifted basin sediments resting on predominantly Franciscan Assemblage bedrock (Figure 2-5). Basin sediments along this cross-section include Older Dune Sands Formation, Paso Robles Formation, and a relatively thin section of the Careaga Formation. The base of the basin sediments is at an elevation of about 150 feet above sea level from Los Berros

Creek to where Highway 101 veers to the east off of the cross-section alignment. Southeast of this location, the base of the basin sediments deepens to an elevation of about 50 feet above sea level.

The potentially water-bearing formations along cross-section D-D' include the Older Dune Sand Formation, clay and gravel beds of the Paso Robles Formation, and a thin (20-50 feet thick) marine sand unit of the Careaga Formation. The Dune Sands deposits are typically unsaturated and the Paso Robles Formation terrestrial sedimentary beds are only partially unsaturated and tend to be fine grained. The Careaga sands are saturated.

Differentiation of Older Dune Sand Formation from Paso Robles Formation

The geologic map (Figure 2-1) shows that Dune Sand and Older Dune Sand Formation extend over the entire mesa area, except for the Los Berros Creek valley and a small area in Black Lake Canyon. The Dune Sand Formation includes active sand dunes whereas the Older Dune Sand Formation is comprised of typically very fine to medium grained sands with some interbedded older soil horizons and inter-dune silts and clays. The elevation of the contact between Older Dune Sand Formation and the Paso Robles Formation was determined in each well where possible (Figure 2-6).

The geologic cross sections in the Santa Maria Groundwater Basin Characterization and Planning Activities Study illustrate that the Older Dune Sand Formation deepen toward the southwest. Beneath the Older Dune Sand Formation, these cross sections also show that there are clayey sediments that separate shallow dune sand aquifer from the deeper Paso Robles Formation aquifers in most areas (Fugro, 2015). The area of significant saturated shallow dune sand aquifer thickness (typically greater than 50 feet), where wells can produce more than a few gallons per minute, is in the southwest portion of the NMMA.

Faulting

The Oceano fault (U.S. Geological Survey and California Geological Survey, 2006) trends northwest-southeast as it crosses the NMMA boundary near Woodland Hills Road and Kip Lane. Vertical offset of the Paso Robles and Careaga Formations and the Older Dune Sand Formation along the northwestern boundary of the NMMA is approximately 150 feet (Figure 2-2). A seismic (geophysical) survey line transecting the NMMA suggests that the Oceano fault displaced Older Dune Sand Formation (PG&E, 2014), but the nature of offset of the Paso Robles Formation and the Older Dune Sand Formation along the southern boundary of the NMMA, if any, is not known (Figure 2-3). Vertical offset of the Tertiary - Quaternary contact is estimated to be 250-415 feet and an even greater offset is observed at the top of the Franciscan Assemblage (Hanson et al, 1994). The PG&E fault maps for the Offshore Geologic Mapping Study show the offshore Oceano fault as comprised of two splays near the coastline, which extend onshore through the NMMA: the Oceano fault and the Santa Maria River fault. Offset along the Oceano fault has relatively down-dropped aquifers on the southwest side of the structure. The Santa Maria River fault strand is shown to split off of the Oceano fault about ½ mile east of the coast and diverges north from the Oceano fault as it crosses the NMMA (PG&E, 2014).

Offshore, a boundary or change to the groundwater basin may be closer to shore than previously understood. Formerly, the basin limit was considered to be the Hosgri fault, which is about 10 miles offshore. However, the PG&E study recognizes the Shoreline fault, about four miles west of the coastline, as an active fault with significant displacement of basin sediments (PG&E, 2014).

2.3.2. Groundwater Flow Regime

Groundwater flows within the NMMA from recharge sources toward areas of groundwater discharge. Groundwater flow is controlled by:

-
- hydraulic head (e.g., recharge and pumping),
 - impediments to flow (e.g., aquitard),
 - preferential flow paths (e.g., buried gravel channel deposits), and
 - geology (e.g., geologic facies, contacts, or tilted beds).

Groundwater elevation hydrographs show measured groundwater elevations over time within the specific aquifers tapped by a well and are site-specific for specific times. Groundwater elevation measurements within an aquifer are mapped and interpreted to develop groundwater contours (see Section 6.1.3 Groundwater Contours and Pumping Depressions). Groundwater contour maps provide an interpreted understanding of the hydraulic head conditions within specific aquifer zones.

The following paragraphs present our current understanding of the groundwater flow regime. This understanding includes groundwater flow along the boundaries of the NMMA and groundwater flow within the NMMA.

Groundwater Flow at the NMMA Boundary

The NMMA area encompasses only part of the SMGB. Groundwater flow between adjacent portions of the basin can be expected to occur, but less subsurface flow is likely to occur along bedrock basin edges than between areas where there is continuity of the aquifers.

The eastern boundary of the NMMA is approximately coincident with Nipomo Creek in Nipomo Valley (Figure 2-5). Groundwater recharge from the creek may occur through the shallow alluvial deposits but minimal subsurface inflow into the NMMA area occurs from the bedrock underlying the creek.

The northern boundary of the NMMA is coincident with the northern edge of the Los Berros Creek valley alluvium – Paso Robles Formation boundary within Los Berros Creek valley (Figure 2-4). The alluvium receives recharge from Los Berros Creek. Formations north of the Los Berros Creek valley include sedimentary deposits and underlying Franciscan Complex, where groundwater flow from these formations to the NMMA is likely negligible.

The northwest boundary of the NMMA is at the base of the mesa along the Cienega Valley of Arroyo Grande Creek. Groundwater flow across this boundary can occur, and may be affected by the Oceano and Santa Maria River faults. There is no appreciable flow from the bedrock outcrop at Nipomo Hill. A cross section along the north edge of the mesa was developed to aid in characterization of the subsurface geology (Figure 2-2). Flow from the shallow dune sand aquifer recharges the dune lakes west of this boundary. Hydrogeologic parameters and groundwater level contour maps are the basis for evaluation of the amount of groundwater flow that occurs across this interface between the NMMA and the NCMA (see Section 5.2 Subsurface Flow).

The western boundary of the NMMA is a combination of the east-west R3 administrative line (San Luis Obispo County land use zoning) from the Cienega Valley to the coast and south along the coastline. Groundwater flow has historically occurred from land to the ocean across this boundary. This boundary is particularly important because a reversal of flow across this boundary may result in seawater intrusion.

Along the coastal portion of the NMMA, there is a potential for seawater intrusion to occur. The risk of seawater intrusion into NMMA water supply aquifers is a function of the groundwater elevation, the depth of the aquifers, the structural geology and stratigraphy, and the location of a seawater-fresh groundwater interface. It is not known if the aquifers are exposed on the seafloor along the coastal

portion of the NMMA (PG&E, 2014). The nearest known aquifer exposure on the seafloor occurs to the north of the NMMA area. A further risk of seawater intrusion to NMMA water supply could exist along vertical migration pathways in a near coastal zone or lateral intrusion from the adjacent management areas. Seawater intrusion is minimized where offshore gradients exist, and could occur most rapidly if the onshore aquifers are pumped in excess of fresh water replenishment.

The southern boundary of the NMMA is at the base of the mesa along the Santa Maria River Valley. Groundwater flow across this boundary can occur and may be impeded by the Oceano fault. A cross section along this boundary has been developed to aid in characterization of the subsurface geology. Hydrogeologic parameters, if available, may then be used, along with groundwater level contour maps, to estimate the amount of flow that occurs at this interface between the NMMA and the SMVMA.

Groundwater from the shallow dune sand aquifer has been observed to discharge into the streams that follow the base of the mesa on the northwest, southeast and southwest, including: an irrigation drainage ditch in the Cienega Valley west of Halcyon Road, Nipomo Creek downstream of Nipomo, the base of the mesa from Nipomo Creek to Division Road, and Little Oso Flaco Creek west of Highway 1 (Althouse and Meade, 2012). Groundwater discharges as springs from the shallow dune sand aquifer, into drainages north of the Summit Station Road area, and along the southern slope of Nipomo Creek Valley.

Groundwater flow within the NMMA

Groundwater flow within the NMMA is influenced by geologic features, and recharge and discharge points. Laterally discontinuous aquitards within the NMMA restrict vertical groundwater flow particularly between the shallow and deep aquifers. Recharge sources include major point sources (Los Berros Creek, stormwater runoff basins, and wastewater percolation ponds) and distributed recharge sources (septic systems, percolation of rainfall, and irrigation return flows). Discharge locations include pumping wells, areas of springs and seeps, and phreatophyte consumption.

Previous geological studies identify multiple faults that transect the NMMA (Figure 2-1). The faults and the offset of beds could impede flow within basin sedimentary deposits. Recent investigations further explore the possibility that these faults could act as leaky barriers to groundwater flow (Fugro, 2015; Geoscience, 2018).

Aquitards that influence vertical migration of groundwater between aquifers can have varying thicknesses and hydraulic conductivities as demonstrated in the geologic cross-sections (Figure 2-2, Figure 2-3, Figure 2-4, Figure 2-5). A significant aquitard exists in some areas underneath the base of the Older Dune Sand formation that confines groundwater in underlying aquifers. Locally groundwater may be perched above the aquitard. Some leakage is likely to occur where the aquitard hydraulic conductivity increases and thickness decreases. The extent and thickness of the aquitards have been defined in some places based on well logs and correlations or inferred based on groundwater levels. Aquitard extent and variations in permeability are interpreted for the regional groundwater flow model, which includes the NMMA (Fugro, 2015; Geoscience, 2018).

Shallow aquifer groundwater elevation reflect unconfined conditions. As described previously, where shallow aquifer groundwater reaches the ground surface, groundwater discharges to springs and creeks. This drainage is observed within and adjacent to the NMMA, in Black Lake Canyon, Little Oso Flaco Creek, and in the nearby coastal dune lakes. The standing water in these surface water features reflects the groundwater elevation in the shallow aquifer. The water levels in these surface water features have been intermittently monitored and can be used to represent the shallow aquifer groundwater elevation if recent measurements are available. Perched groundwater occurs locally where fine-grained

lenses occur within the shallow aquifer. Perching layers and relatively high groundwater elevation have been observed in the southeastern portion of the NMMA and in the northern portion of the NMMA, north of Halcyon Road.

Groundwater flow from the Los Berros Creek alluvium toward the NMMA can occur where the alluvium overlies or is in contact with the shallow and deep aquifers along the southern edge of the Los Berros Valley. Hydrogeologic parameters can then be used, along with groundwater levels, to estimate the amount of groundwater flow that occurs at Los Berros Valley alluvium and NMMA basin sediments interface. The TG is evaluating the alluvial valley aquifer and seasonal conditions.

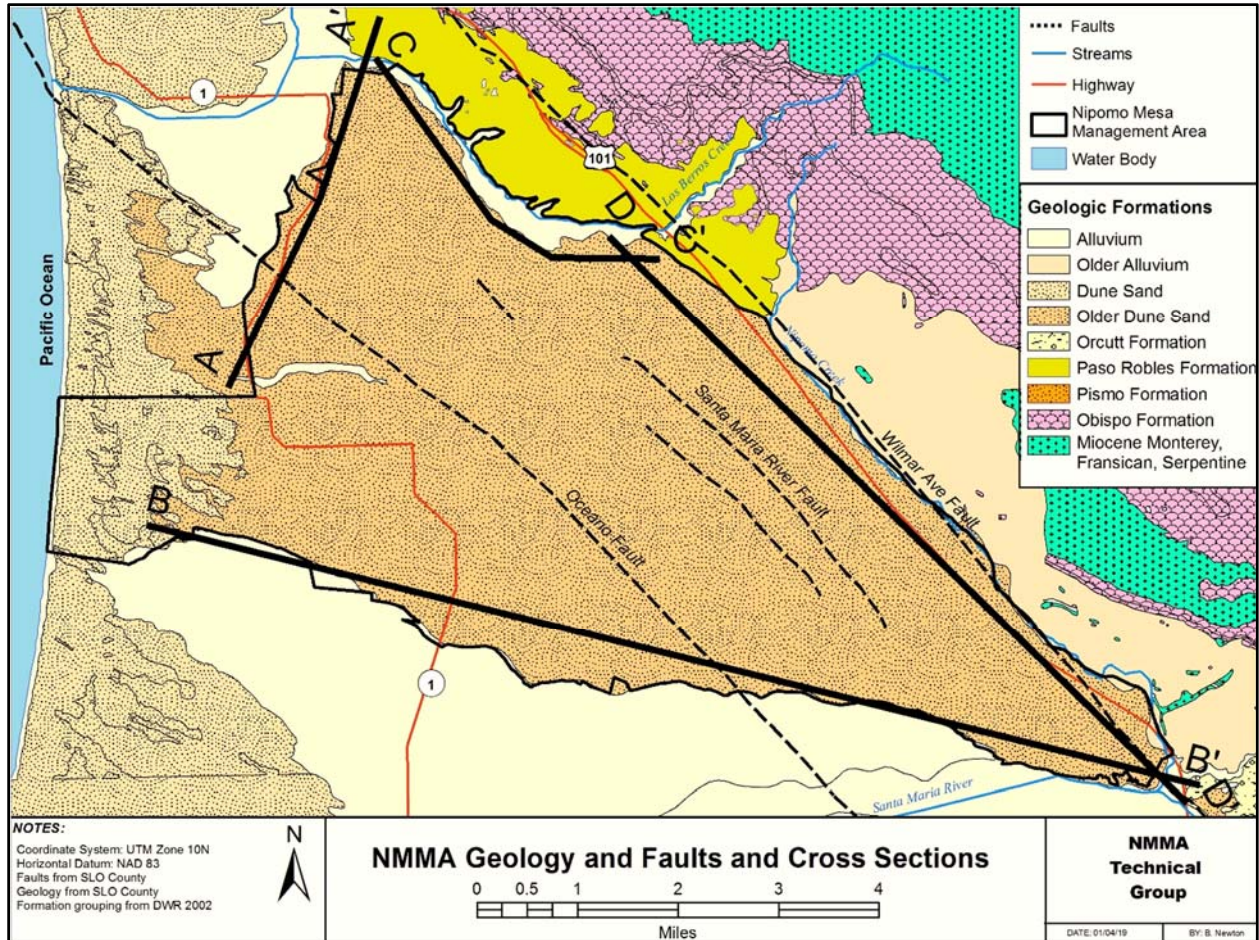


Figure 2-1. NMMA Geology and Faults and Cross Sections

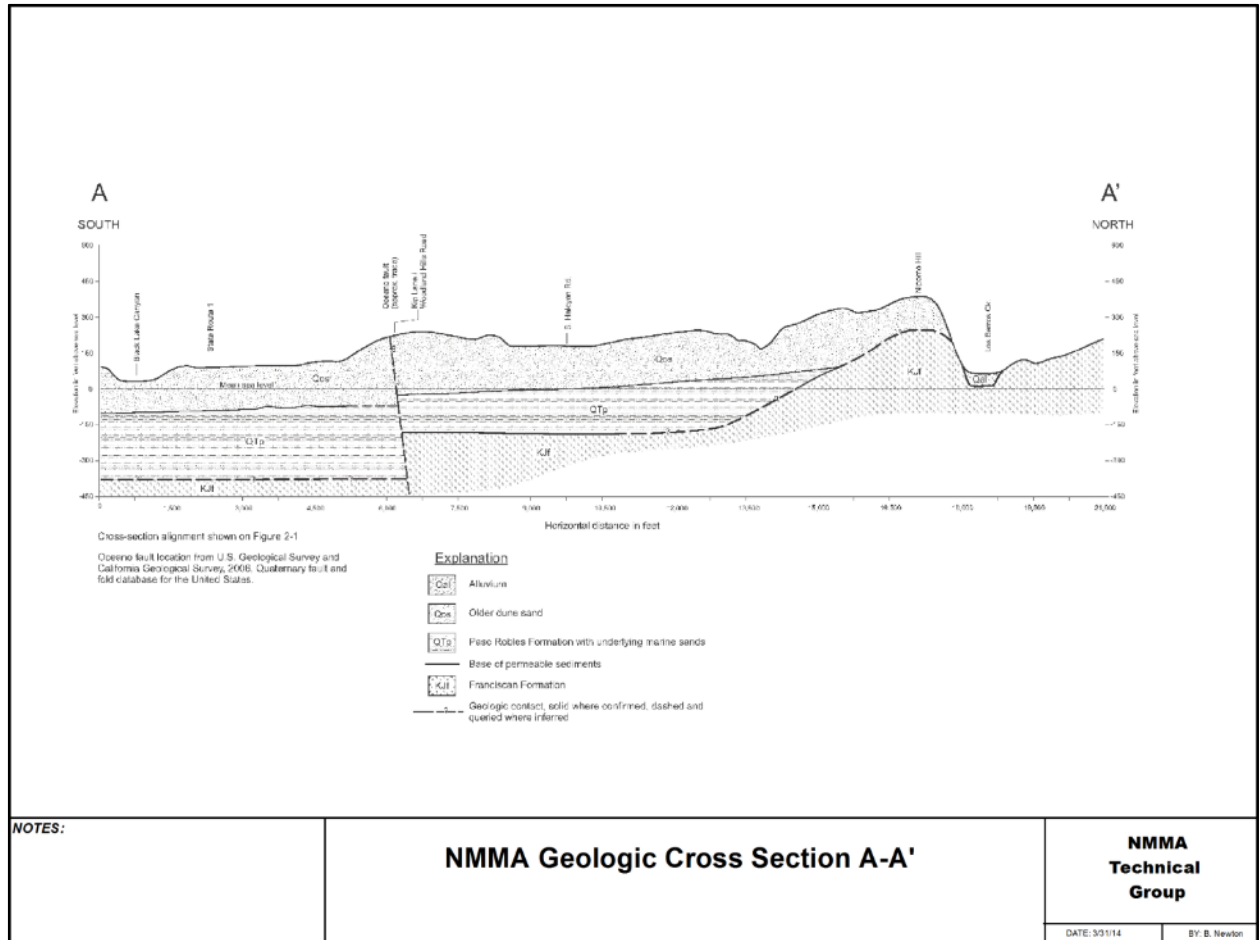
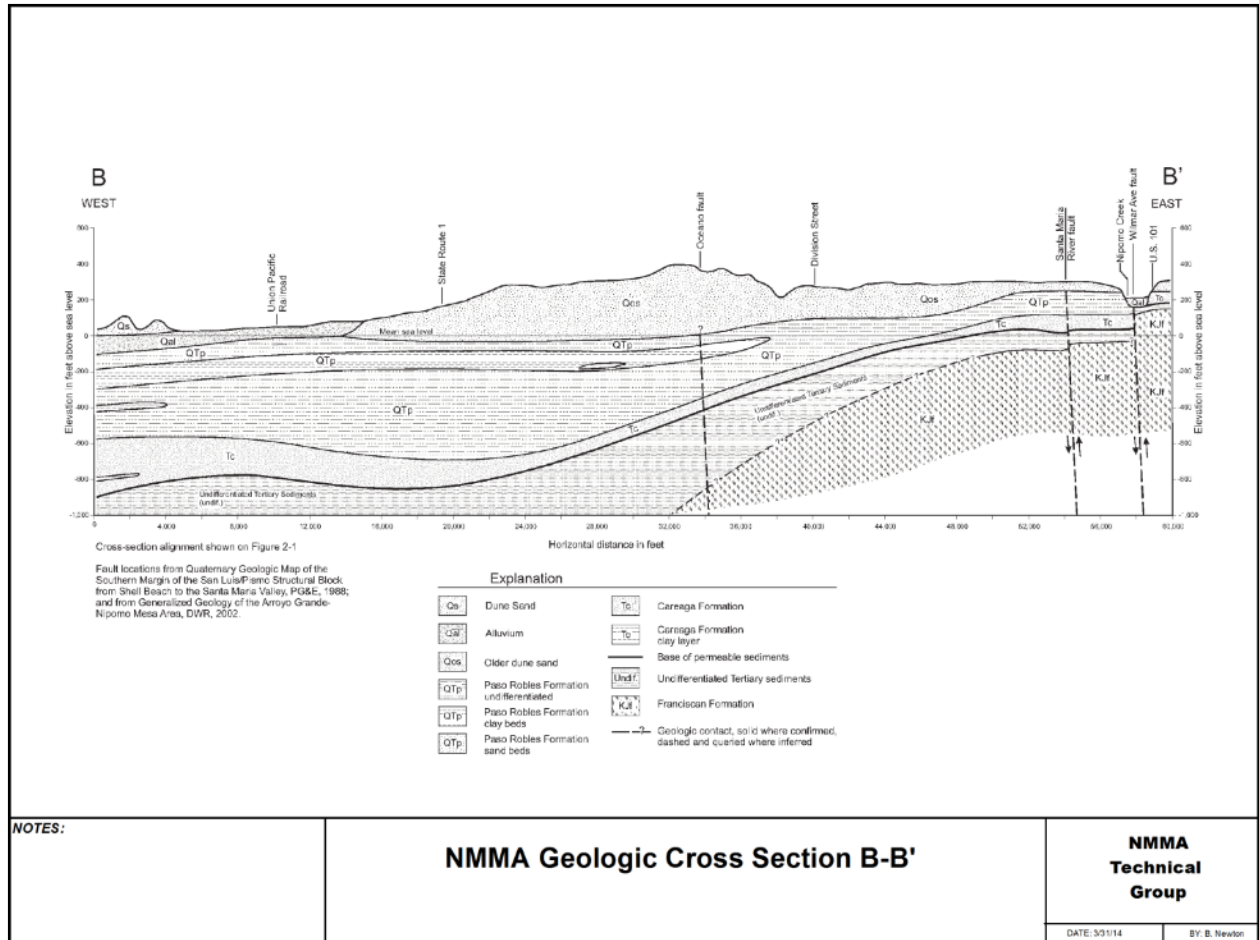


Figure 2-2. NMMA Geologic Cross Section A-A'



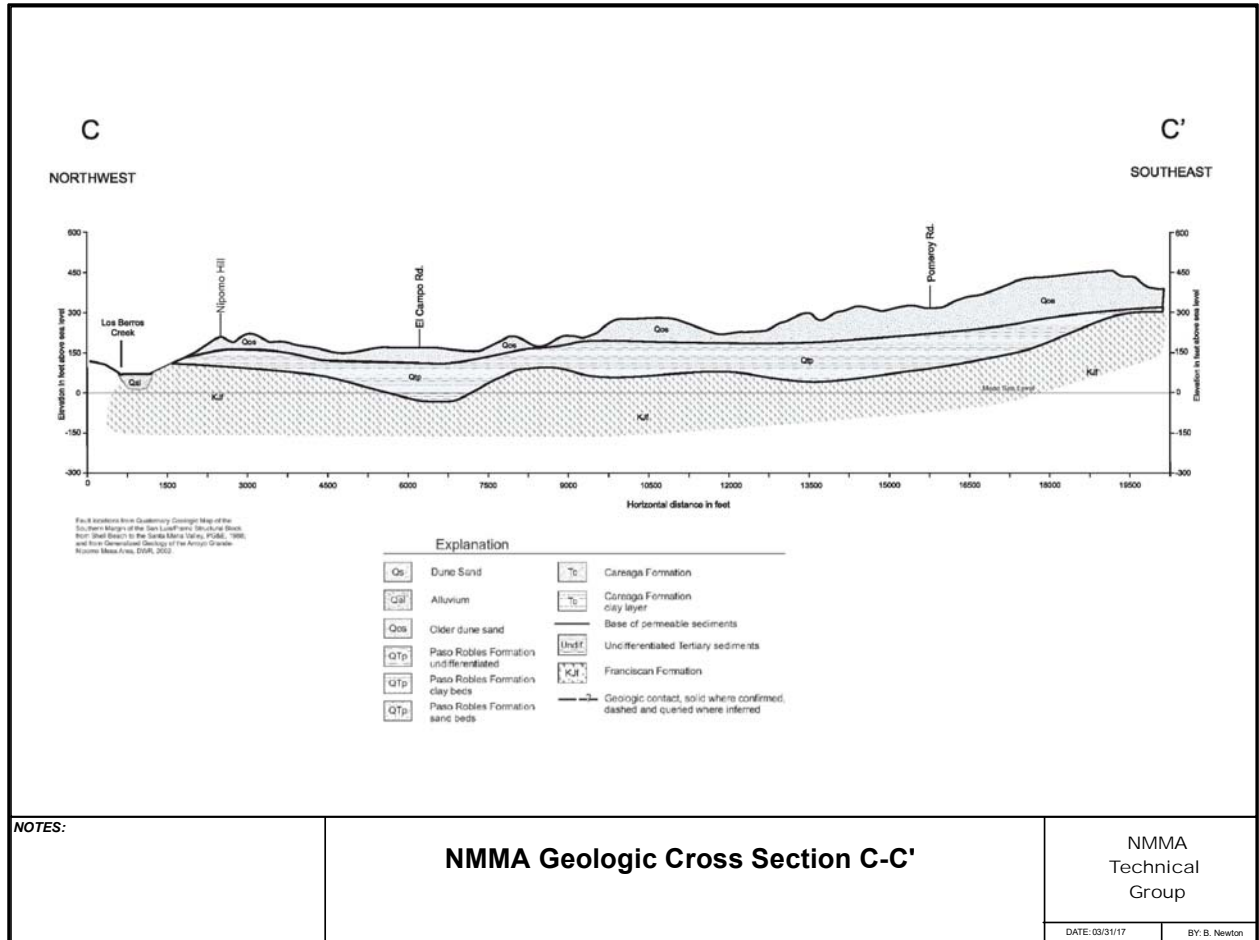
NOTES:

NMMA Geologic Cross Section B-B'

NMMA Technical Group

DATE: 5/31/14 BY: B. Newton

Figure 2-3. NMMA Geologic Cross Section B-B'



NOTES:

NMMA Geologic Cross Section C-C'

NMMA
 Technical
 Group
 DATE: 03/31/17 BY: B. Newton

Figure 2-4. NMMA Geologic Cross Section C-C'

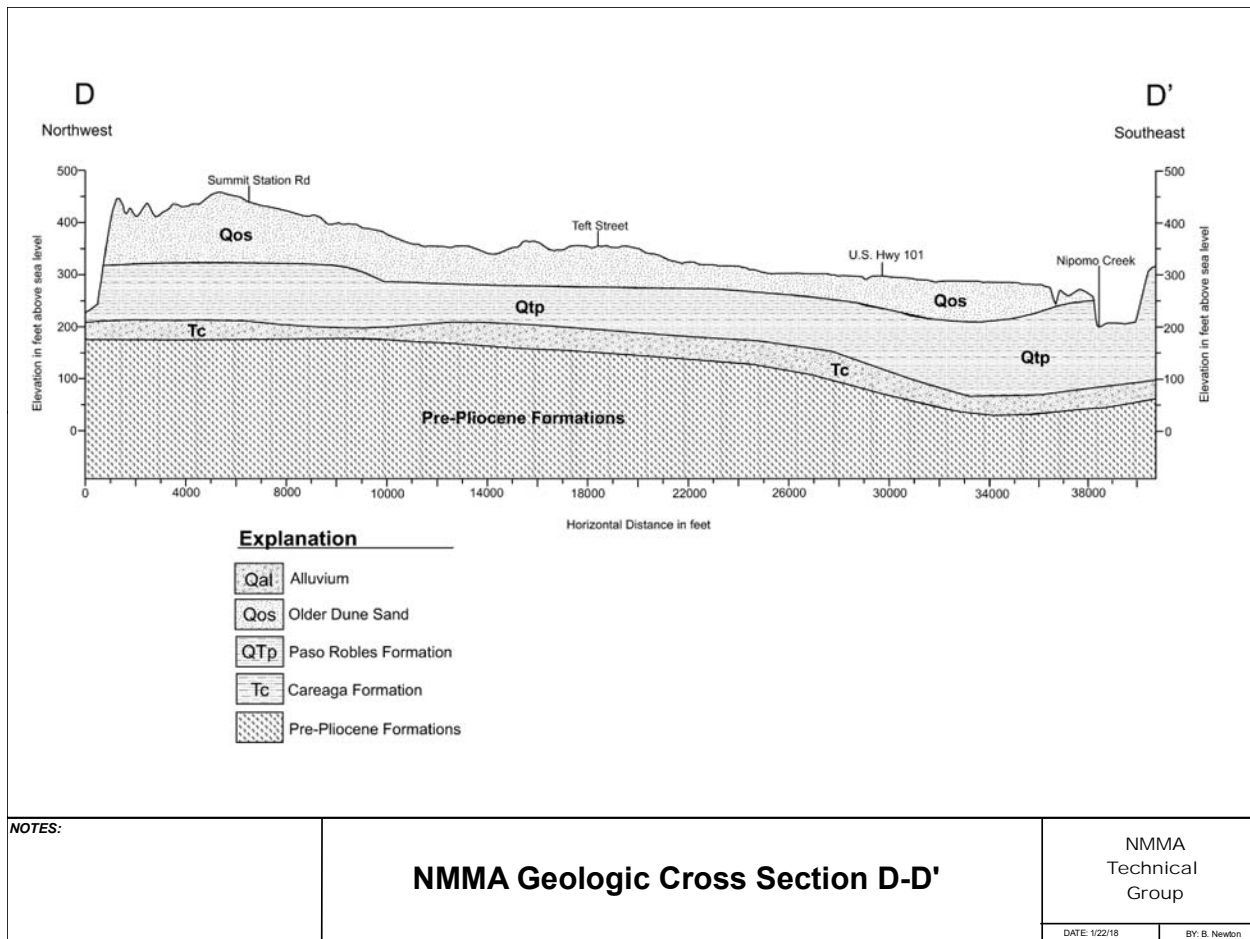


Figure 2-5. NMMA Geologic Cross Section D-D'

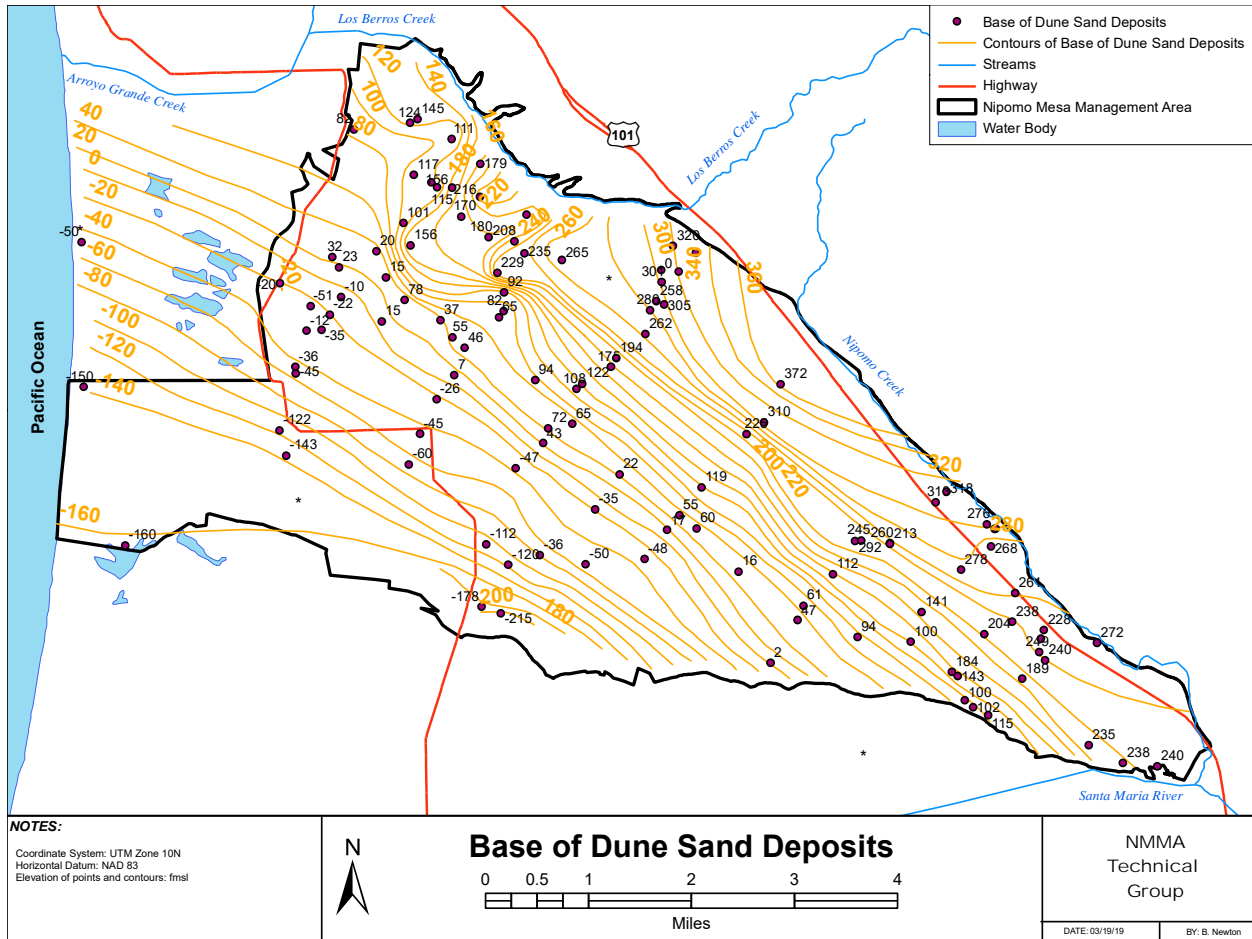


Figure 2-6. Base of Dune Sand Deposits

3. Data Collection

The TG is monitoring and analyzing water conditions in the NMMA in accordance with the requirements of the Stipulation and Judgment. The Stipulating Parties are required to provide monitoring and other production data at no charge, to the extent that such data are readily available. The TG has developed protocols concerning measuring devices in order to obtain consistency with the Monitoring Programs of other Management Areas. Discussions of these subjects are presented in the following subsections of this 13th Annual Report – Calendar Year 2020.

3.1. Data Collected

The data presented in this section of the Annual Report were measured during the calendar year (CY) 2020 and are the subject of this Annual Report. Groundwater elevations, water quality, rainfall, surface water, land use, groundwater production and wastewater discharge data were compiled and are presented in the following sections.

3.1.1. Groundwater Elevations in Wells

Groundwater elevation is determined by measuring the depth to water in a well from a reference point at the top of the well casing. The reference point and depth to water data are collected from each agency and input into a TG database that includes groundwater elevation determinations. The date, depth to water, measuring agency, pumping condition, and additional comments are recorded. When the database is updated with new data, an entry is posted in the database log describing the changes that have been made to the database. The groundwater elevation measurements are subjected to Quality Assurance Quality Control procedures adopted by the TG in part by reviewing historical hydrographs to determine if the measurements are within the historical range for the given well.

The accuracy of the groundwater elevations depends on measurement protocols, the reference point and local drawdown effects at that well. The TG surveyed the elevation for all the reference points at each Key Well in February of 2009. Additional elevation surveys for all monitoring program wells are scheduled for the continued improvement of groundwater elevations accuracy. Furthermore, protocol standards were developed by the TG regarding the length of time for well shut down before a groundwater elevation measurement is taken, and a notation of whether nearby wells are known to be concurrently pumping.

The management area engineers have compared construction, location, reference point elevation, and depth to water measurements for wells near their common boundary as an ongoing practice since the first annual report. In 2017, engineers from the TG and NCMA Monitoring Parties conducted a focused study to compare construction, location, reference point elevation, and depth to water measurements for wells near the boundary between the management areas to identify any inconsistencies. These differences within the management area engineers' databases were reconciled, and these conditions are reviewed each year. This process improves consistency between groundwater elevation contours across and close to the boundary shared by the NMMA and NCMA.

Depth-to-water measurements were collected in both shallow aquifers and deep aquifers in April and October of 2020 by the County of San Luis Obispo, NCSD, P66, Woodlands, GSWC; and, the Santa Maria Valley Water Conservation District collected depth-to-water measurements in CY 2020 (Figure 3-1, Figure 3-2, Figure 3-3, Figure 3-4).

3.1.2. Water Quality in Wells

Water quality of the NMMA during 2020 is summarized from a wide range of data sources, including:

- California State Water Resources Control Board Division of Water Quality records of water supply system groundwater sources and environmental monitoring sites (GeoTracker GAMA database),
- State Water Resources Control Board site assessments, remediation project reports, and related materials (GeoTracker database),
- NPDES Permit Monitoring and Reporting data, and
- Other NMMA groundwater monitoring data.

Data reported in this Annual Report are derived from samples obtained using standard professional sampling protocols and analyzed at certified laboratories. The TG maintains these data in a digital database. In the NMMA, historical data from approximately 200 wells can be used to map groundwater quality conditions. In some cases, water quality records consist of only one or two sampling

events from a well, and only a few water quality parameters, such as total dissolved solids or chloride. In other cases, such as wells within potable water systems or for environmental testing, regular groundwater quality testing for a wide range of constituents is conducted.

Groundwater quality in wells near the ocean is of considerable importance because this is the most likely area where intrusion of seawater would first be detected. The coastal nested wells, 11N36W12C01, 12C02, and 12C03, are monitored under agreement with SLO PWD and allow quarterly water quality sampling of general mineral and physical water quality constituents, subject to access constraints for the protection of endangered species (Table 3-1). In addition to monitoring this coastal site for water quality, the TG has assessed the cost of updating coastal monitoring near the former nested wells 11N36W13K02 through 13K06 adjacent to Oso Flaco Lake and recommends replacement of these wells.

Table 3-1. 2020 Water Quality Data from Coastal Wells

Coastal Well	Date	Cl (mmoles/L)	HCO3 (mmoles/L)	Na (mmoles/L)	Ca (mmoles/L)	Mg (mmoles/L)	SO4 (mmoles/L)	B (mmoles/L)
11N36W12C01S	1/22/2020	1.32	3.8	3.13	2.99	1.73	3.95	0.018
	4/28/2020	1.24	3.8	3.52	3.74	2.18	4.37	0.019
	10/21/2020	1.38	3.8	3.74	3.24	1.89	3.95	0.020
11N36W12C02S	1/22/2020	1.46	3.8	3.39	3.49	2.10	5.10	0.019
	4/28/2020	1.46	3.8	3.17	3.24	1.93	5.20	0.019
	10/21/2020	1.35	3.8	3.61	3.74	2.22	4.79	0.018
11N36W12C03S	1/22/2020	2.68	5.1	3.78	2.24	1.52	2.39	0.026
	4/28/2020	not sampled	not sampled	not sampled	not sampled	not sampled	not sampled	not sampled
	10/21/2020	2.62	4.9	4.26	2.49	1.69	2.39	0.025
Seawater		544.9	2.38	467.5	10.4	53.3	28.1	0.41

Water quality data are collected from a variety of wells such as environmental monitoring wells that are screened in the unconfined shallow aquifers, and purveyor water supply wells of which many are completed in deep aquifers. Monitoring of shallow groundwater is conducted at a near-coastal industrial facility, in the vicinity of wastewater treatment facility discharges, and in NMMA areas where a shallow aquifer is separately utilized, and from wells that provide agricultural irrigation supply. In 2020, water quality data results were available from 65 water supply wells in addition to 16 monitoring wells and 17 environmental monitoring wells (Figure 3-5).

3.1.3. Rainfall

There are seven active rainfall gauges available to estimate the NMMA rainfall (Figure 3-6). Four gauges are part of the ALERT Storm Watch System: Nipomo East (728), Nipomo South (730), Los Berros (4620), and Oceano (795). One gauge is a California Irrigation Management Information System (CIMIS), CIMIS Nipomo (202). The other two gauges are active volunteer gauges and include Mehlschau (38), and Nipomo CDF (151.1). The data are collected by the SLO PWD and CIMIS. The TG obtains these data from CIMIS and SLO PWD at the beginning of the calendar year for the rainfall data from the preceding year. SLO PWD staff collects volunteer gauge data once each year in the month of July for the previous year, July through June. In CY 2020, the TG directly collected the remainder of the Nipomo CDF (151.1) data for July through December from the San Luis Obispo County Fire Department. Rainfall data are compiled on a water year and calendar year basis. A water year (WY) typically begins October 1st and ends September 30st of the following year, and the year referenced is that of September (i.e., WY 2003 is defined as October 1, 2002, through September 30, 2003). For the volunteer gauges, data collected from July 2020 to December 2020 are unavailable until July 2021, when County staff collects and compiles the rainfall data.

The WY 2020 rainfall total is 88 percent of the long-term average (Table 3-2, see Note 2). Reference evapotranspiration for WY 2020 is 48.63 inches, which is the same as WY 2019. Rainfall measurements made during CY 2020 range from 8.19 to 10.19 inches, and are approximately 60 percent of the average long-term annual rainfall.

Table 3-2. Rainfall Gauges and 2020 Rainfall Totals

Name	Period of Record	Period of Record Mean	Water Year 2020 ¹	WY Percent of Mean ²	Calendar Year 2020	CY Percent of Mean ²
Nipomo East (728)	2005-2020	15.39	13.93	88%	9.32	60%
Nipomo South (730)	2005-2020	13.29	11.73	74%	8.19	52%
Oceano (795)	2005-2020	12.37	14.14	89%	10.04	64%
Los Berros (4620)	2014-2020	16.32	13.66	86%	9.49	61%
CIMIS Nipomo (202)	2006-2012	13.74	ND	ND	ND	ND
Nipomo CDF (151.1)	1958-2020	15.83	15.85	100%	10.19	65%
Mehlschau (38) ³	1920-2020	16.58	14.81 ³	94%	8.18 ³	52%

Notes:

ND - Data reported is indicative of irrigation overspray with daily reported amounts ranging from 0.01 to 0.03 from spring into summer or data is not available.

1. Water Year is defined as Oct. 1 of previous year through Sept. 30 of the current year.

2. Percent of Normal, calculated using the period of record annual mean for gauge #151.1.

3. Volunteer gauge is collected in July of the year and therefore is missing the remaining months (July through December) of that year.

3.1.4. Rainfall Variability

Quantifying the temporal and spatial variability is critical where rainfall is a large portion of the water supply. Spatial variability in the volume of rainfall across the NMMA is apparent when comparing the WY 2020 rainfall totals from these gauges. The WY 2020 total rainfall ranged from 11.73 inches (Nipomo South #730) to 15.85 inches (Nipomo CDF #151.1). Temporal variability is also an important consideration, particularly between storms. Two storms with the same total rainfall can have a vastly different impacts to water supply, for instance, if one storm occurred over a week and the other occurred over a day.

Climatic trends and interannual variability also impact the water supply to the NMMA. The cumulative departure from the mean was prepared for two rain gauge stations, Mehlschau #38 and Nipomo CDF #151.1, over the period from WY 1975 to WY 2020 (Figure 3-7). Periods of wetter than average and drier than average conditions are coincident at both gauges. The most pronounced dry period occurred from 1983 to 1994, followed by a wetter than average period from 1994 to 1998. From 1998 to present, there have been several years of alternating wet and dry conditions. WY 2014 was the driest year since WY 1975, with six of the last eight years well below normal.

3.1.5. Streamflow

Currently, there are some records of streamflow near the NMMA boundary. There are three streamflow gauge on Los Berros Creek: the Los Berros #757 streamflow sensor is located 0.8 miles downstream from Adobe Creek and 3.7 miles north of Nipomo on Los Berros Road, the Valley Road

#731 streamflow sensor is located on at the Valley Road bridge over Los Berros Creek, and the Los Berros Creek #4660 streamflow sensor is located at Quailwood Lane bridge downstream of State Route 101. The stage data at the Los Berros gauges are compiled by SLO PWD. Nipomo Creek streamflow is not currently gauged. Cachuma Resource Conservation District and San Luis Resource Conservation District maintain the Oso Flaco #312OFC20 streamflow sensor located between the Oso Flaco Lakes on Oso Flaco Creek. Flow was observed during April and May 2020 at Los Berros Creek #4660 streamflow sensor, near the upstream edge of the NMMA. No flow was recorded at the Valley Road #731 streamflow sensor during 2020, a short distance downstream of the boundary of the NMMA (Figure 3-8).

3.1.6. Surface Water Usage

There are no known diversions of surface water within the NMMA.

3.1.7. Surface Water Quality

There are no surface water quality data presented in this annual report.

3.1.8. Land Use

Land use data historically have been collected for the NMMA by the DWR at approximately ten year intervals from 1959 to 1996. DWR periodically performs land use surveys of the Southern Central Coast area (which includes the NMMA). DWR has not updated the land use for the South Central Coast area (which includes the NMMA) since 1996.

The 2007 NMMA land use was classified by applying the DWR methodology to a June 2007 one-foot resolution aerial photograph. Land use was classified into four main categories based on the methodology used by DWR in 1996; agriculture, urban, golf course and native vegetation (undeveloped lands). Agricultural lands for 2009 were further subdivided using the San Luis Obispo County Agriculture Commissioner survey of the 2009 crop types and acreage for San Luis Obispo County. The major crops grown on in the NMMA are strawberries and cane berries, nursery plants, vegetable rotational, and avocados.

Urban lands were classified following the DWR methodology with additional sub categories based on San Luis Obispo County land use categories from land use zoning maps. The categories for urban include (1) Commercial-Industrial; (2) Commercial-office, (3) Residential Multi-family; (4) Residential-Single Family; (5) Residential-Suburban; (6) Residential-Rural; (7) Recreational grass; (8) Vacant. Golf courses were classified separately from Agricultural or Urban Lands.

Native vegetation lands were classified following the 1996 DWR methodology. In the DWR methodology, all undeveloped land was classified as native vegetation and includes groves of non-native eucalyptus and fields of non-native grasses. The lands classified as native vegetation were further broken down into two categories: grasses; and trees and shrubs; to better estimate deep percolation of rainfall required for the hydrologic inventory (see Section 5 Hydrologic Inventory).

The land use acreage was surveyed and updated in 2013 by performing aerial imagery analysis, observations made by NMMA TG engineer representatives, and assessing San Luis Obispo County pesticide purchase records. The update indicates that an increase in agriculture usage occurred from 2009 to 2013. The largest increase occurred in areas of the NMMA planted with strawberries and cane berries. The second largest increase in agriculture usage occurred in areas planted with vegetable rotational. In addition to agriculture, golf course acreage increased. In 2015, agricultural land use was updated to track

the emerging cane berry crop and expanding strawberry acreage. In 2016, the golf course area irrigated was updated (Table 3-3). Some of the greenhouses and agricultural lands have been converted to grow cannabis. The square footage of greenhouse cannabis grows and the water use impacts of this conversion have yet to be determined. The 2016 SLO County Ordinance requires that all cannabis cultivation operations provide a detailed water management plan and that any water use shall be offset from a prior use at a 1:1 ratio and that under severe water decline shall be offset at least at a 2:1 ratio as documented in a County approved Water Conservation Program. The water use of these operations is to be reported to the County. In 2020, the agriculture and golf course land use acreages were surveyed and updated by performing aerial imagery analysis. This update includes a correction in golf course area, and modest increases in acreage for grape and deciduous, vegetable rotational, and berries while there was a commensurate decrease in recreational grass, pasture, and non-irrigated farmland.

The land use acreage for Urban is 10,596 acres; for Agriculture is 2,988 acres; and for Non Irrigated is 7,957 acres. Sub-categorical land use acreage is also defined and will subsequently be utilized to compute the groundwater production and consumptive use of water for each subcategory (Table 3-3).

Table 3-3. Land Use Summary

Land Use Category	Year of Data	Acreage
Urban		
Commercial – Industrial	2007	472
Commercial – Office	2007	118
Golf Course	2020	611
Residential Multi-family	2007	24
Residential Single Family	2007	821
Residential Suburban	2007	3,597
Residential Rural	2012	4,829
Recreational Grass	2020	124
Urban Total	2020	10,596
Agriculture		
Grape and Deciduous	2020	135
Pasture	2020	17
Vegetable Rotational	2020	425
Avocado and Lemon	2020	340
Berries	2020	1,621
Nursery	2020	366
Non-irrigated Farmland	2020	84
Agriculture Total	2020	2,988
Non Irrigated		
Native Vegetation	2018	7,232
Urban Vacant	2007	716
Water Surface	2007	9
Non Irrigated Total	2018	7,957
Total Land Use		21,541

3.1.9. Groundwater Production (Reported and Estimated)

The groundwater production data presented in this section of the Annual Report were collected for CY 2020. Where groundwater production records were unavailable, the groundwater production was estimated for CY 2020 (Figure 3-9).

Reported Groundwater Production

Individual landowners, public water purveyors, and industry all rely on groundwater pumping from the aquifers underlying the NMMA. Data were requested by the TG from the public water purveyors and individual pumpers and incorporated in this CY 2020 Annual Report. Stipulating Parties to the Judgment are required to provide monitoring and other production data at no charge, to the extent that such data have been generated and are readily available.

Monitoring Parties provided production records that report a total of 4,066 acre feet (AF) of groundwater produced from the principal production aquifers in CY 2020 (Table 3-4).

Table 3-4. Calendar Year 2020 Groundwater Production for Monitoring Parties

Monitoring Parties	Production (AFY)
NCSD	1,008
GSWC	1,332
Woodlands (less Golf Course, Vineyard, Landscape, and Construction)	626
P66	1,100
Total	4,066

Groundwater produced for golf course irrigation in CY 2020 was 1,392 AF. An estimated value of 36.5 inches of golf course irrigation was calculated based on the soil water balance model. The total amount of water applied to golf courses is the combination of groundwater and treated wastewater that is used for irrigation. Monarch Dunes reports a blending ratio of five parts groundwater to one part reclaimed wastewater for irrigation on 238 acres of golf course. Total estimated irrigation on Monarch Dunes is 449 AF in CY 2020, of which 217 AF is shallow aquifer groundwater production and 92 AF is reclaimed wastewater. The Woodlands provides sufficient reclaimed wastewater to meet the golf course irrigation blending ratio (see Section 3.1.11 Wastewater Discharge and Reuse). The Cypress Ridge golf covers 191 acres with a total estimated 571 AF of golf course irrigation in CY 2020, of which 552 AF is groundwater production and 19 AF is reclaimed wastewater. The Blacklake golf course covers 182 acres, with a total estimated amount of golf course irrigation of 544 AF in CY 2020, of which 502 AF is groundwater production and 42 AF is reclaimed wastewater.

Table 3-5. Calendar Year 2020 Groundwater Production for Golf Courses

Golf Course	Production (AFY)
Monarch Dunes	357
Cypress Ridge	533
Blacklake	502
Total	1,392

Estimated Production

The CY 2020 estimated groundwater production for irrigating agricultural crops in the NMMA is 7,176 AF, computed by a soil water balance model on a daily time-step by multiplying the crop area and the crop specific water demand met by either soil moisture, rainfall, or groundwater production, thus developing the unit production for CY 2020 (Table 3-6). Drip irrigation is the dominant mechanism for watering crops, and therefore, an irrigation efficiency parameter is deemed not necessary to estimate groundwater production for agriculture in the NMMA. Furthermore, daily time steps are critically important in this climate when relatively warm dry windy conditions persist during winter months and are only interrupted by storms that occur over a few days. The crop specific water demand was re-evaluated in conjunction with the 2015 Land Use update (see Section 3.1.8 Land Use). The change in crop coefficients used for this estimate is presented in an appendix to this Annual Report (see Appendix E). Berry crops continue to account for the largest portion (64% in 2020) of the total annual agricultural groundwater production (Table 3-6).

Table 3-6. Calendar Year 2020 Estimated Groundwater Production for Agriculture

Crop Type	2020 Area (Acres)	2020 Unit Production (AF/acre)	2020 Production (AFY)
Grape and Deciduous	135	0.8	111
Pasture	17	3.1	52
Vegetable Rotational	425	2.3	972
Avocado and Lemon	340	2.5	839
Berries	1,621	2.8	4,594
Nursery	366	1.6	608
Non-irrigated Farmland	84	0.0	0
Total	2,988		7,176

Groundwater production for urban use was estimated for other land uses including rural landowners not served by a purveyor. The estimated production for the other land uses is 1,679 AF for CY 2020 (Table 3-7).

Table 3-7. Calendar Year 2020 Estimated Groundwater Production for Other Land Uses

Land Use Type	Water Use Area (acres)	Unit Production (AF/acre)	Production (AFY)
451RS Zoned Parcels ¹	172	3.4	696
616 RR Zoned Parcels ¹	243	3.4	983
Total	886		1,679
<i>Note:</i>			
1. Unit production values from NCSD 2007, Water and Sewer Master Plan Update scaled to measured drought conservation by purveyors.			

Combining the estimates of groundwater production for Stipulating Parties (Table 3-4), for golf courses (Table 3-5), for agriculture (Table 3-6), and for other land uses (Table 3-7) results in an estimated total groundwater production of 14,313 AF for CY 2020 (Table 3-8).

Table 3-8. Calendar Year 2020 Measured and Estimated Groundwater Production (AFY)

Measured	
NCS D	1,008
GSWC	1,332
Woodlands	626
P66	1,100
Golf Course	1,392
Subtotal	5,458
Estimated	
Other Land Uses	1,679
Agriculture	7,176
Total NMMA Production	14,313

3.1.10. Imported Water

Nipomo Supplemental Water Project (NSWP) water is currently the only source of imported water delivered onto the NMMA. NSWP began delivering water to the NMMA on July 2, 2015 and continued to deliver water through December 31, 2020. A total of 1,041 AF of NSWP water was delivered during the CY 2020.

3.1.11. Wastewater Discharge and Reuse

Six wastewater treatment facilities (WWTF) discharge treated effluent within the NMMA. Four of the WWTFs are the Southland Wastewater Works (Southland WWTF), the Blacklake Reclamation Facility (Blacklake WWTF), Cypress Ridge Wastewater Treatment Facility (Cypress Ridge WWTF), and the Woodlands Mutual Water Company Wastewater Reclamation Facility (Woodlands WWTF) (Figure 3-10). The GSWC iron and manganese removal treatment facilities at La Serena and Osage groundwater production wells discharge treatment filter backwash to percolation ponds. The total wastewater discharge in the NMMA was 657 AF for CY 2020 (Table 3-9).

Table 3-9. 2020 Wastewater Volumes

WWTF	Influent (AFY)	Effluent (AFY)	Re-use
Southland	554	482 ⁽¹⁾	Infiltration
Blacklake	51	42 ⁽¹⁾	Irrigation
Cypress Ridge	53	31	Irrigation and Infiltration ⁽³⁾
Woodlands	Not Reported	92	Irrigation
La Serena	Not Applicable	9 ⁽²⁾	Infiltration
Osage	Not Applicable	1 ⁽²⁾	Infiltration
Total		657	

Notes:

1. Effluent was estimated as the sum of Influent - Evaporation from Aeration Ponds - 10% of Influent to account for biosolid removal. For the Nipomo Mesa calendar year 2020, the annual evapotranspiration measured at CIMIS 232 gage is 48.36 inches and the rainfall measured at Gauge 151.1 gage is 10.19 inches (CIMIS, 2020 and SLO DPW, 2020). This results in a net evaporation from a pond of 38.17 inches in calendar year 2020.
2. GSWC's La Serena and Osage iron and manganese removal facilities treat water from GSWC's La Serena #1 and Osage #1 wells. Filter backwash water is discharged to percolation ponds, where it infiltrates into the groundwater basin and a negligible amount is lost to evaporation.
3. The amount of wastewater discharged from the WWTF includes process losses of 3% relative to the influent wastewater stream. Re-used effluent includes 19 AFY withdrawn from lined golf course ponds for irrigation, after evaporative losses from 6.3 acres of ponds, and 12 AFY discharged to an unlined infiltration basin, after minor evaporative losses (see footnote 1 for evaporation rate).

3.2. **Database Management**

The database of monitoring data is an entirely digital database and is maintained as a confidential document. The database is broken into seven tables or datasets: groundwater elevation, groundwater production, wastewater treatment, stream flow, groundwater quality, climate, and land use.

NCSD's technical representative is currently designated as the database steward and is responsible for maintaining and updating the digital files and for distributing any updated files to other members of the TG. A "change log" is maintained for each database. The date and nature of the change, along with any special features, considerations or implications for linked or related data are recorded in the change log. The Stipulation and Judgment require that absent a Court order or written consent, the confidentiality of well data from individual owners and operators is to be preserved.

3.3. **Data and Estimation Uncertainties**

Uncertainties exist in data, and therefore uncertainties exist in derivatives of data, including interpretations and estimations made from direct measurements. Uncertainties arise from errors in measurements, missing measurements, and inaccurate methodologies and generalizing assumptions. For example, rainfall is measured at a few locations across the NMMA. However, it is well known that the spatial and temporal variability in rainfall deposition in a storm is much greater than that which the density of rainfall gauges can represent. Ground surface elevation across the NMMA is known to be in

error at places and may be reported incorrectly by amounts as large as 20 feet. This affects the accuracy of groundwater elevations and contours. There exists missing data from both groundwater elevations and rainfall records. Estimations are made to fill in these data gaps with the understanding that the accuracy of these estimates is reduced. Derivatives from these data therefore contain inaccuracies. Additionally, precision issues arise when interpretations are made from data, in that individuals make decisions during the process of interpreting data that are subjective and therefore not documentable. For example, aerial image classification is a subjective process as is the preparation of groundwater elevation contours. Estimations are made for parameters, such as crop coefficients, that are not measurable or very difficult to measure. The methodologies used to make estimates represent a simplified numerical representation of the environment and are based on assumptions defining these simplifications. Quantifying the uncertainty in data or data derivatives is a rigorous and ongoing process.

The measured groundwater production values are reliable and are considered precise to the tens place for NCSD, GSWC, and Woodlands, and the hundreds place for P66. The estimated production values are less reliable and precise for the rural residence groundwater production. The unit production factors used to estimate the rural residence groundwater production were developed for the NCSD Water and Sewer Master Plan. For the estimated agricultural production, there are no measured data available in the NMMA to verify the precision or reliability of the agricultural production.

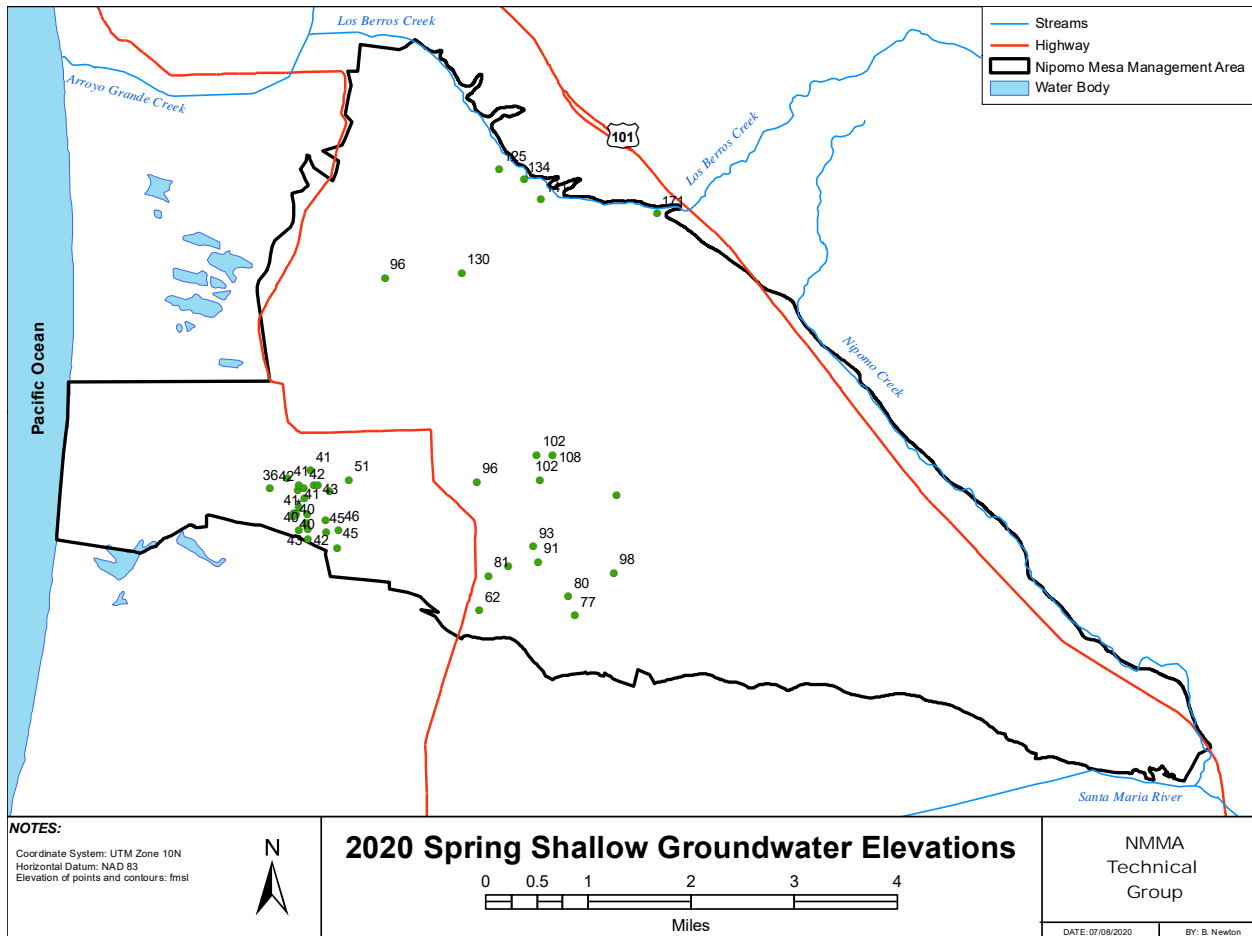


Figure 3-1. 2020 Spring Shallow Aquifer Groundwater Elevations

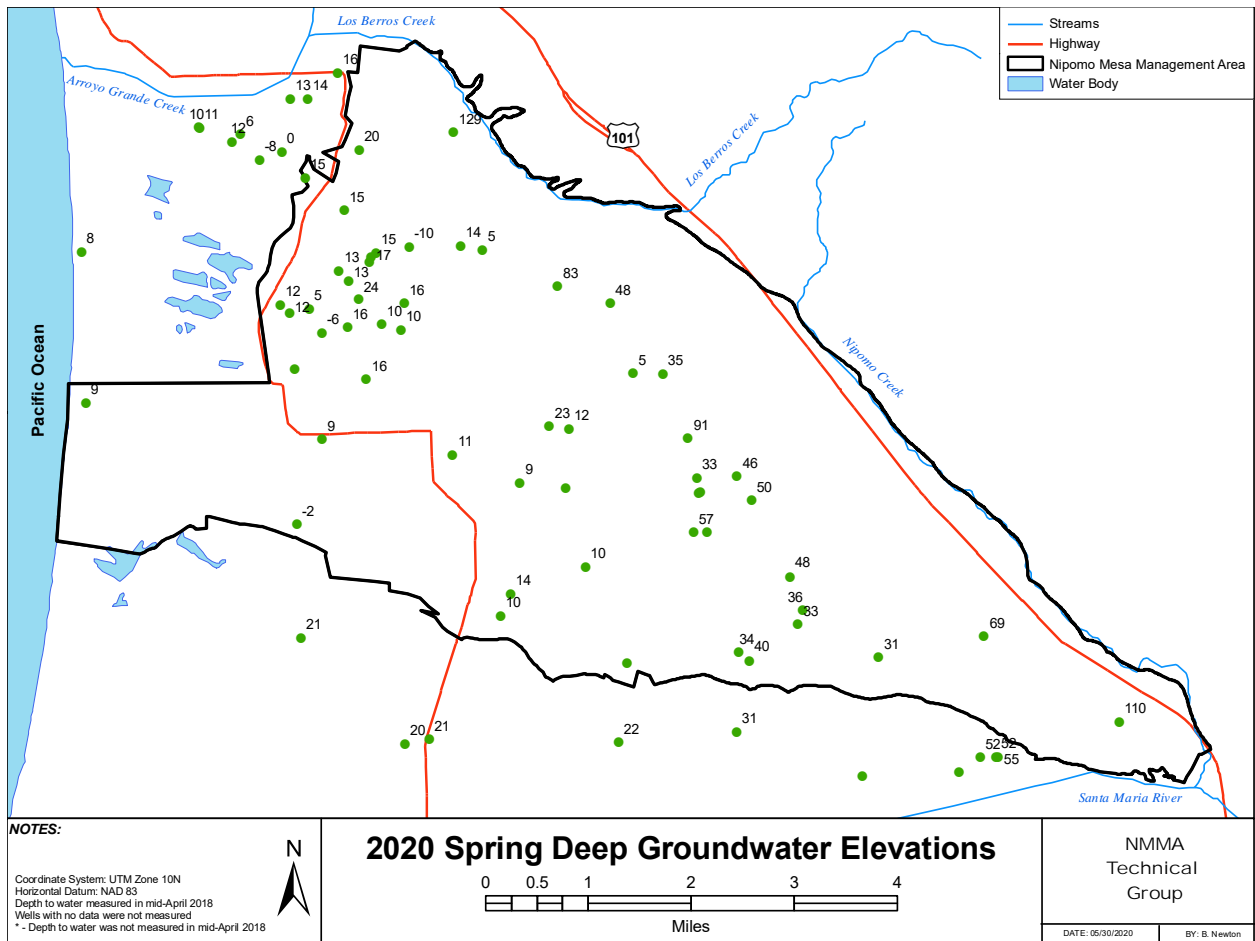


Figure 3-2. 2020 Spring Deep Aquifer Groundwater Elevations

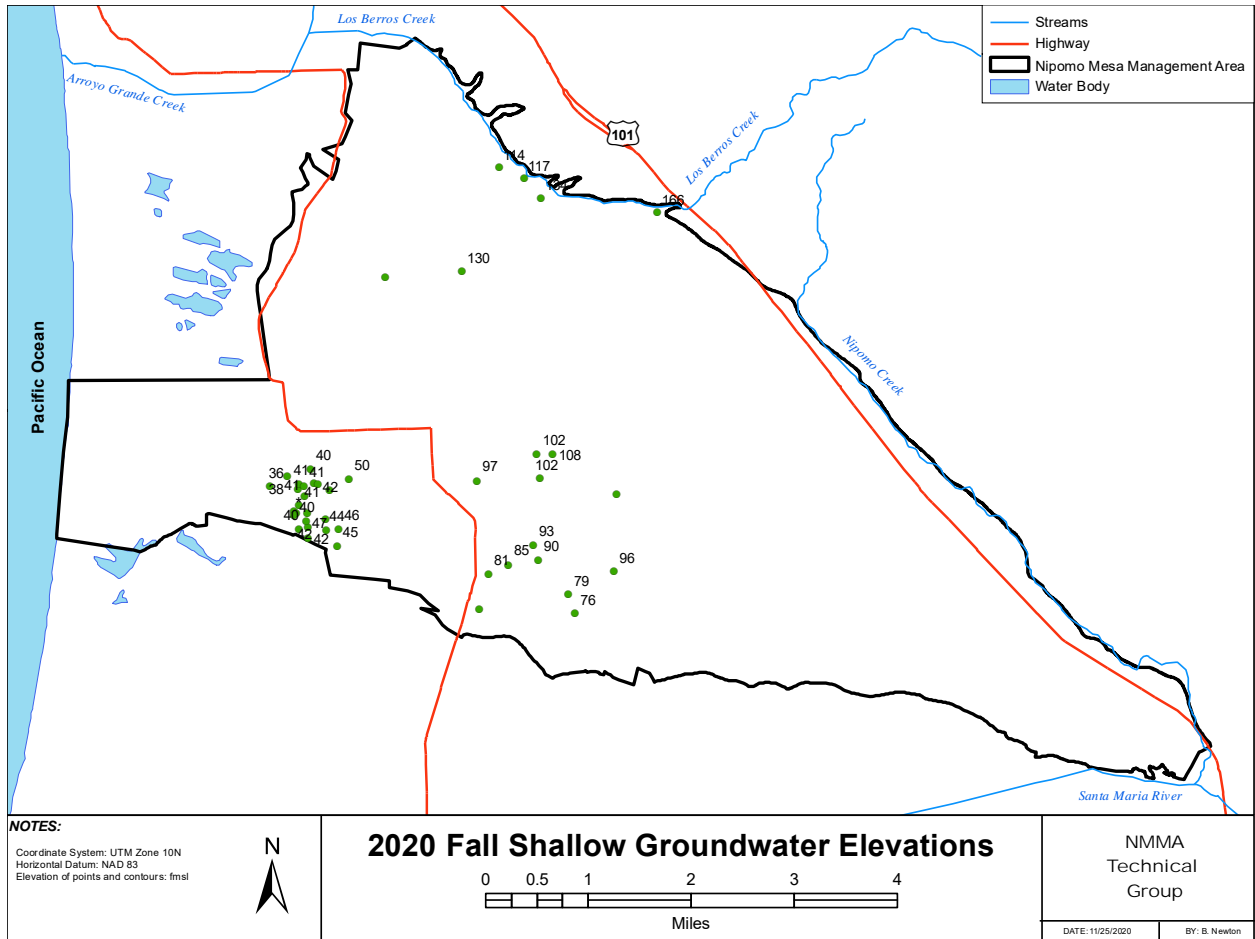


Figure 3-3. 2020 Fall Shallow Aquifer Groundwater Elevations

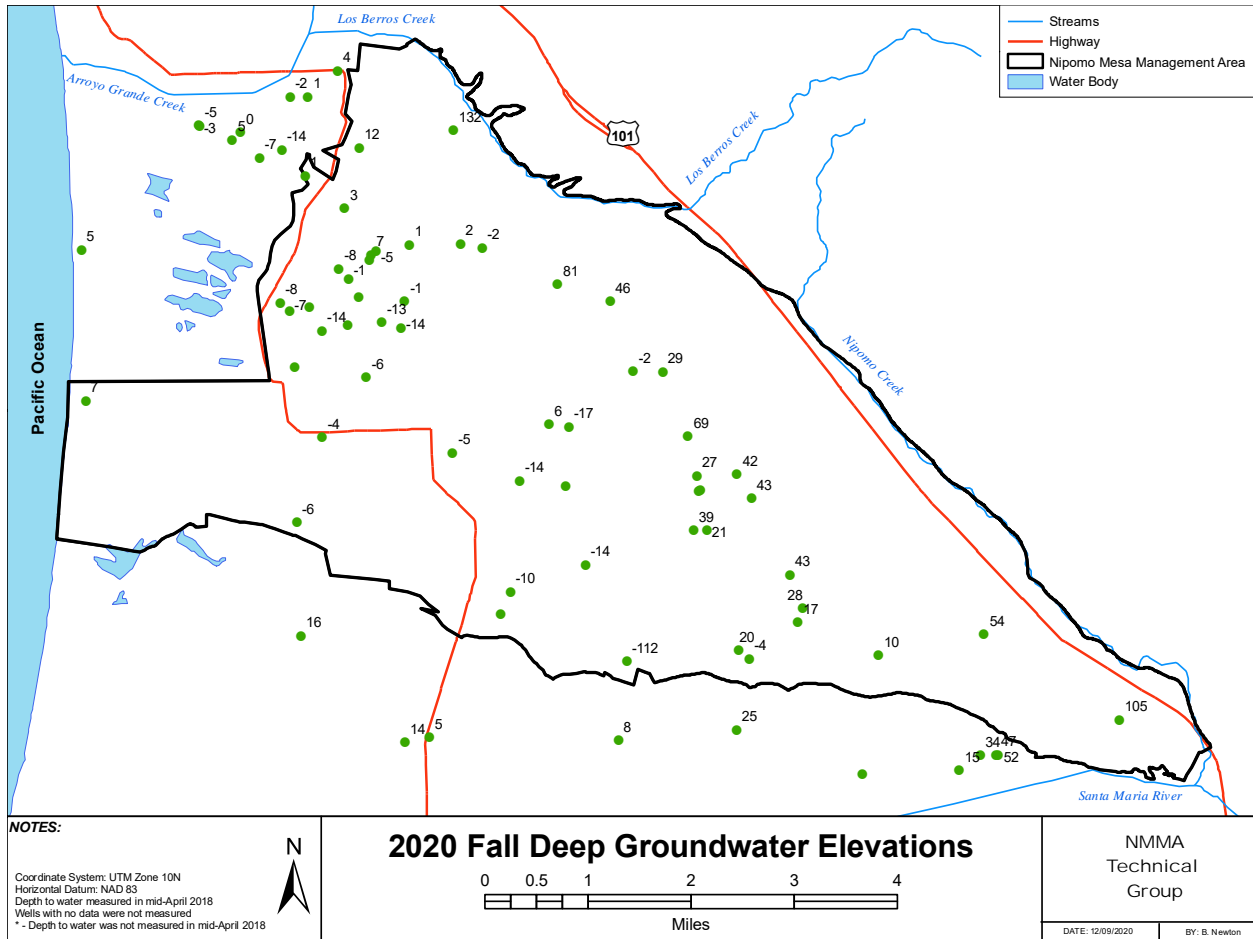


Figure 3-4. 2020 Fall Deep Aquifer Groundwater Elevations

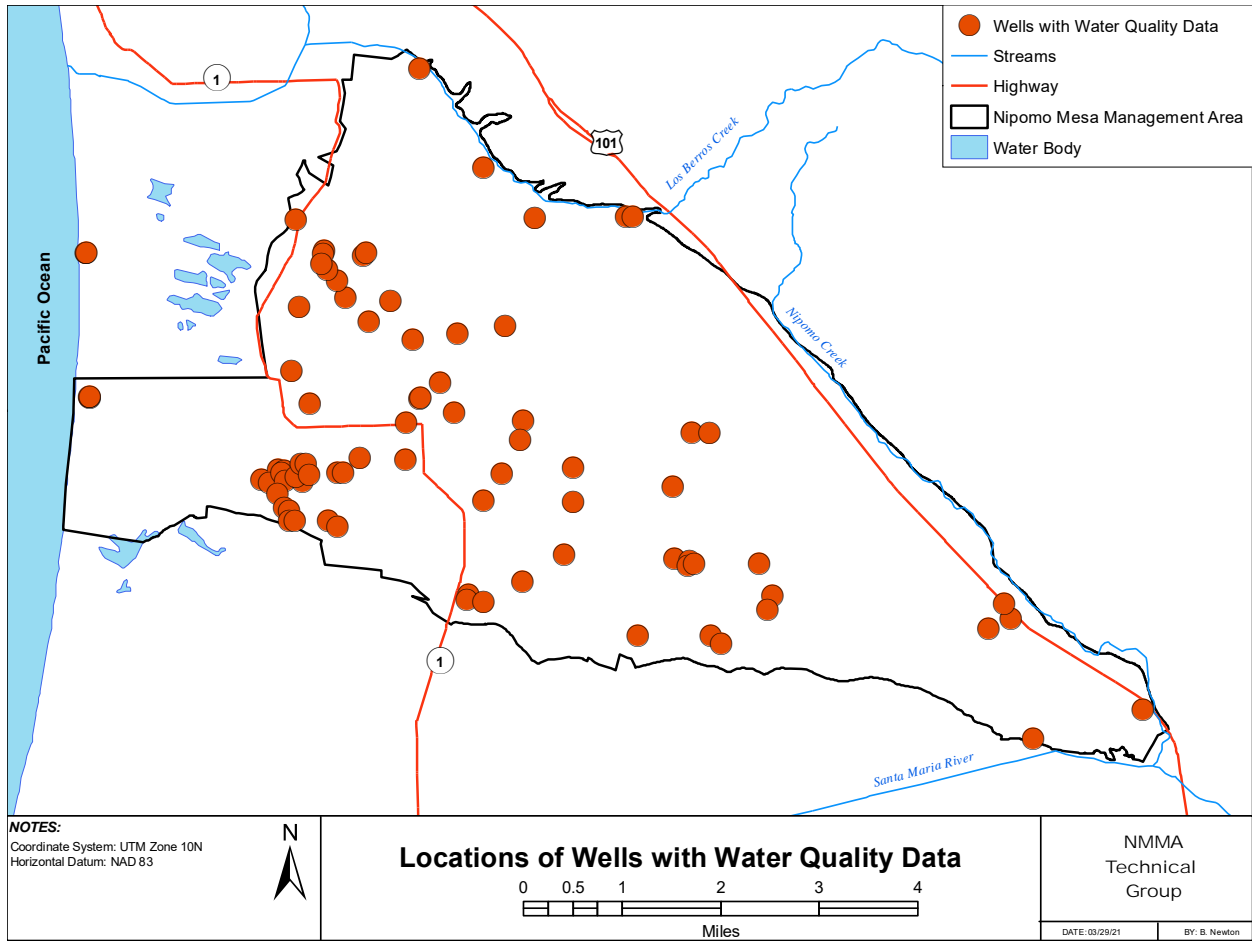


Figure 3-5. 2020 Locations of Wells with Water Quality Data

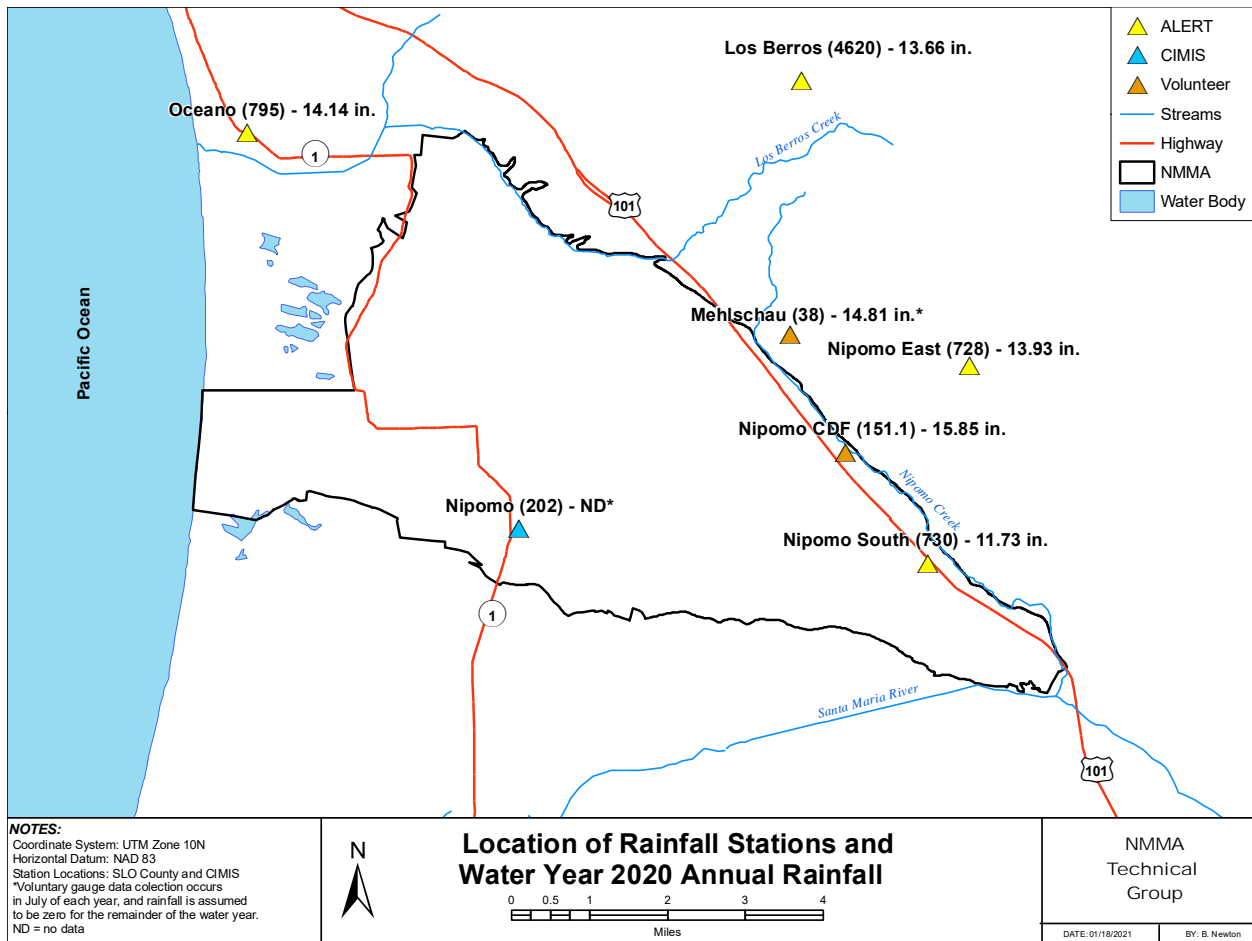


Figure 3-6. Rainfall Station Location and Water Year 2020 Annual Rainfall

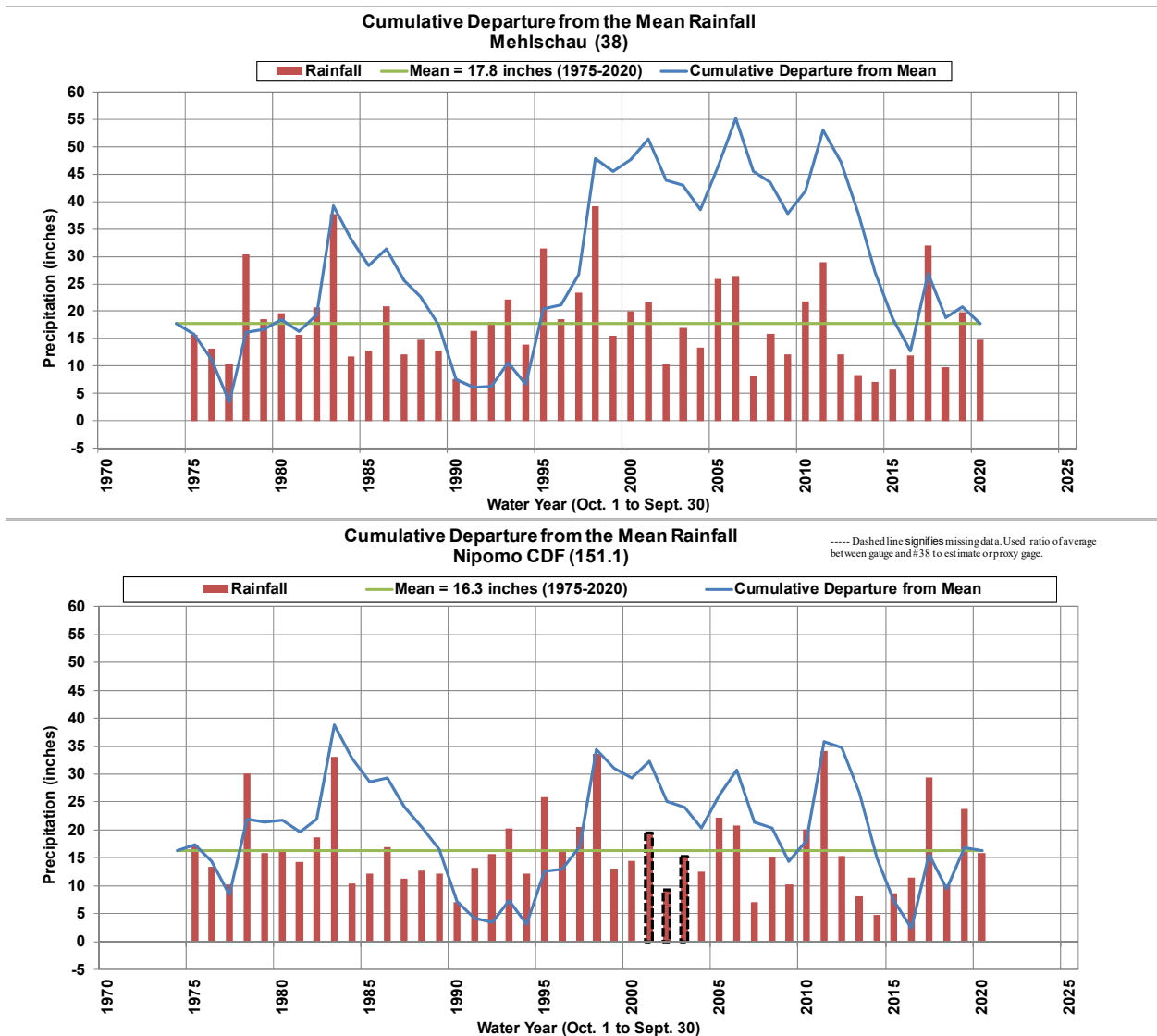


Figure 3-7. Cumulative Departure from the Mean for the following rain gauges: Mehlschau (38) and Nipomo CDF (151.1)

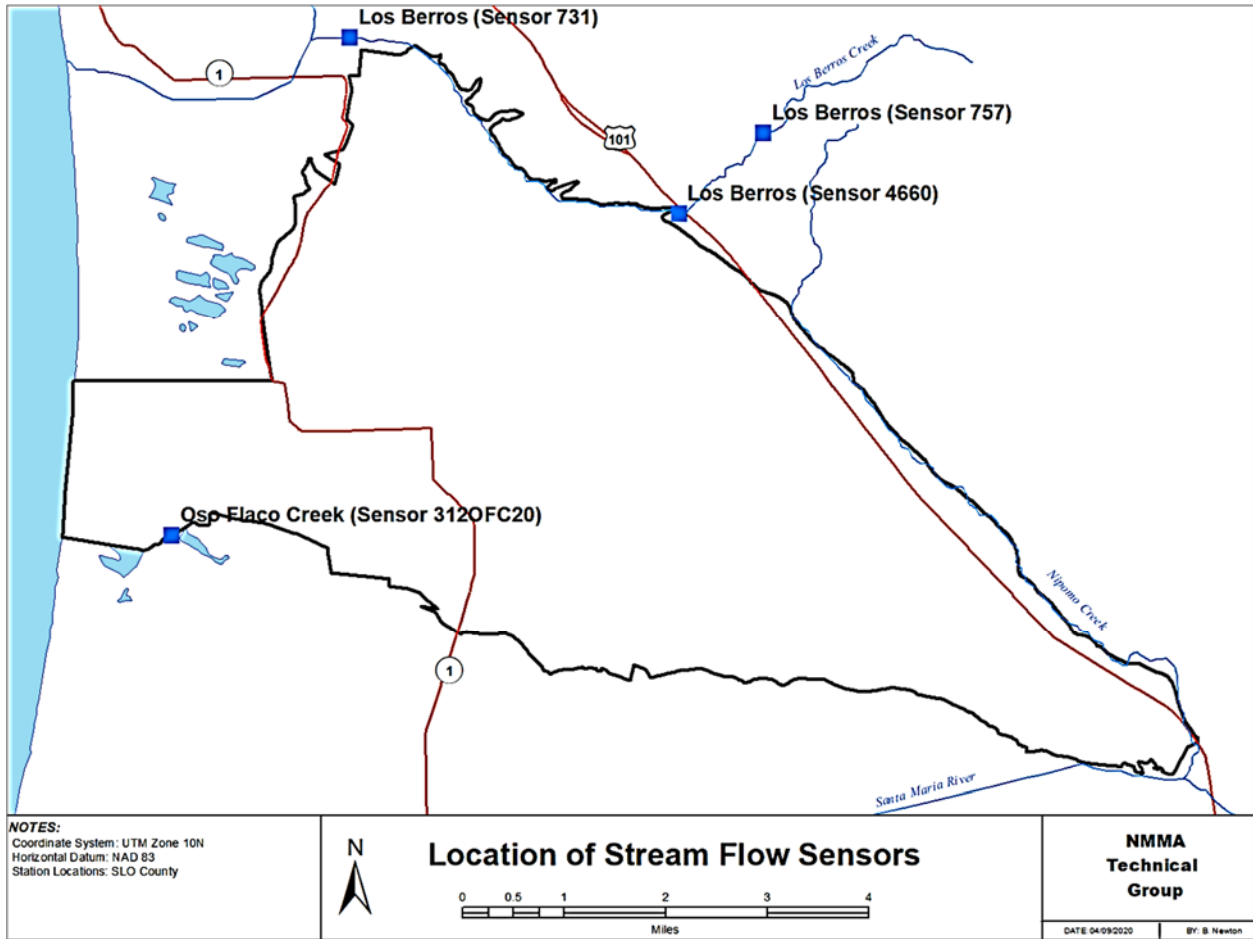


Figure 3-8. Location of Stream Flow Sensors

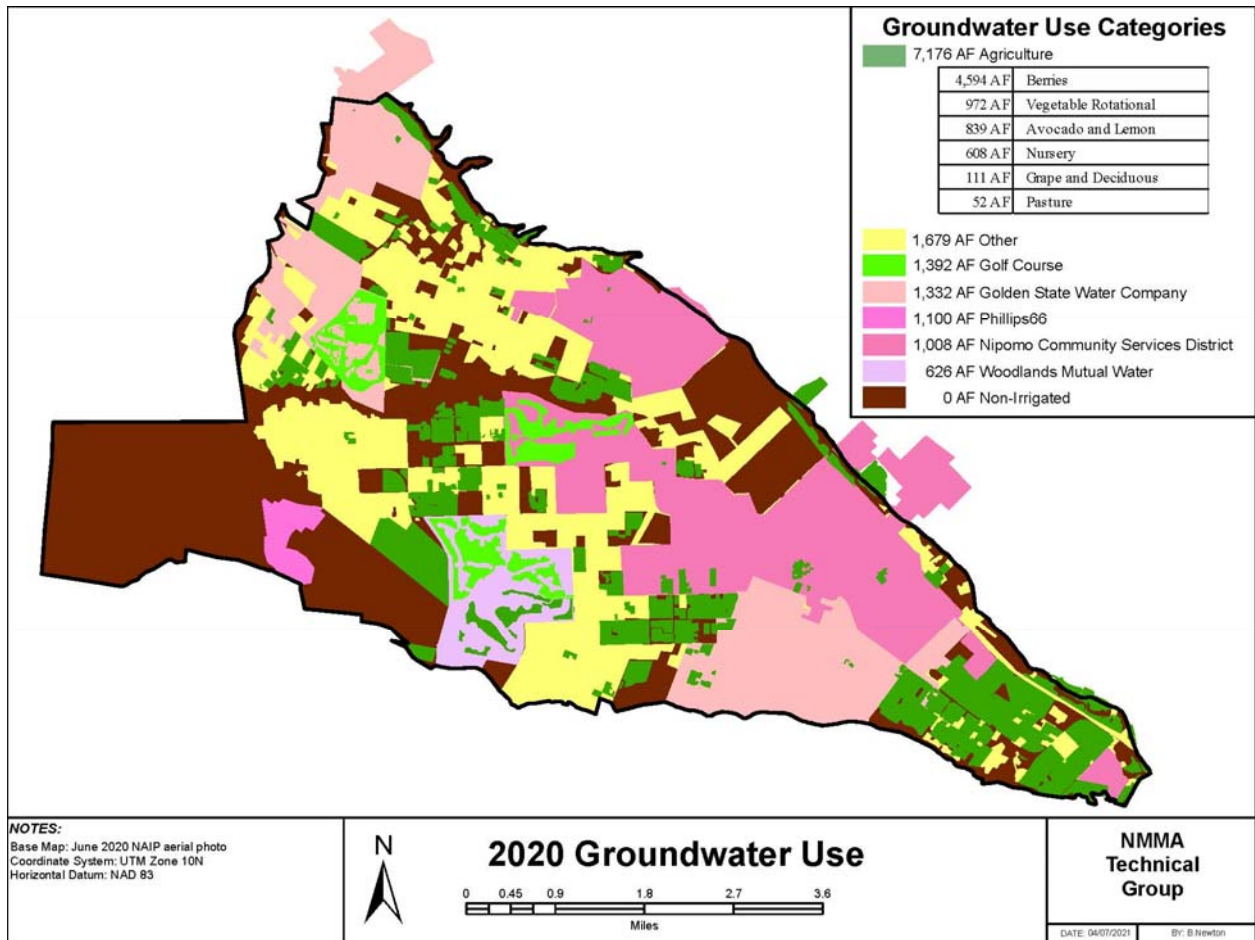


Figure 3-9. 2020 Groundwater Use

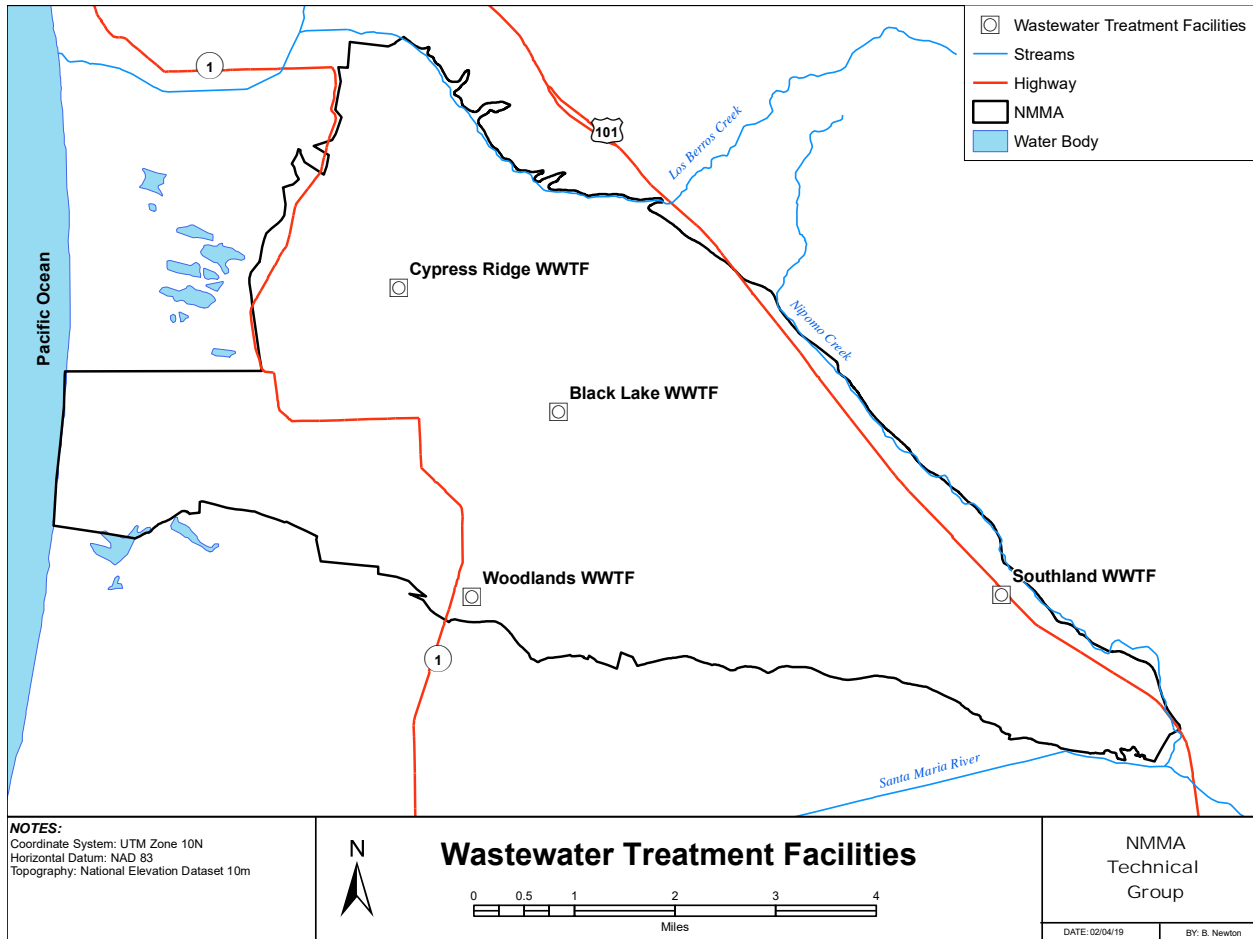


Figure 3-10. Wastewater Treatment Facilities

4. Water Supply & Demand

Presented in this section are discussions of the various components of current and projected estimates of water supplies and demands for the NMMA.

4.1. Water Supply

The water supplies supporting activities within the NMMA are met primarily from groundwater production with a minor amount of recycled water. No surface water diversions exist. Supplemental Water, as defined by the Stipulation, has been developed and Phase I deliveries began on July 2, 2015. A brief description of the groundwater production, recycled water, Supplemental Water, and surface water diversion is presented in the following sections.

4.1.1. Groundwater Production

Groundwater pumping was not differentiated between various strata, shallow or deep aquifers in previous annual reports. The specifics of shallow and deep aquifer production are better known by the

TG for purveyor wells which, at least through 2016, produce primarily from the deep aquifers, but this information is not available for many more private wells in the NMMA.

Shallow Aquifers

Domestic production by rural landowners was estimated to be about 1,679 AFY (Table 3-7). The majority of this production may be from shallow aquifers. A portion of the estimated 1,392 AF of golf course pumping may be from shallow aquifers (Table 3-5). A portion of the estimated 7,176 AF of agricultural pumping may also be from shallow aquifers (Table 3-6). The Woodlands shallow aquifer irrigation wells produced an estimated 217 AF for vineyard irrigation, buffer landscape, and construction in CY 2020 (Table 3-4).

Deep Aquifers

Production from wells used for public drinking water and industrial water is predominantly pumped from the deep aquifers (primarily the Paso Robles Formation), although some limited amount of production may also occur from shallow aquifers. This pumping is estimated to be about 4,066 AF (Table 3-4). In addition, a portion of the estimated 1,392 AF of golf course pumping by Cypress Ridge and Blacklake Golf Courses may also be from the deep aquifers (Table 3-5). Also, a portion of the estimated 7,176 AF of agricultural pumping may also be from the deep aquifers (Table 3-6).

4.1.2. Recycled Water

Wastewater effluent from the golf course developments at Blacklake Village, Cypress Ridge, and Woodlands is recycled and utilized for golf course irrigation. The amount of recycled water used in CY 2020 for irrigation at Blacklake Village, Cypress Ridge and Woodlands are 42 AF, 31 AF, and 92 AF, respectively (see Section 3.1.9 Groundwater Production (Reported and Estimated) and Table 3-9).

4.1.3. Supplemental Water

Nipomo Supplemental Water Project delivered 1,041 AF of water to the NMMA in CY 2020 (see Section 3.1.10 Imported Water).

4.1.4. Surface Water Diversions

There are no known surface water diversions within the NMMA.

4.1.5. Future Water Supply

The Stipulation (VI.E.5.) states all new urban uses shall provide a source of supplemental water to offset the water demand associated with the development. Currently, the only source of supplemental water dedicated to new urban uses is the 500 AFY of capacity NCSW added to the NSW. Woodlands level of participation in the NSW is considered their projected build out demand.

NCSW has committed to holding approval of new (since the date of the Judgment) water connections to the 500 AFY of capacity unless and until the District defines and acquires additional sources of supplemental water.

In September 2015, the County of San Luis Obispo adopted Ordinance 3307 which allows new urban development within the NMMA without imposing a requirement that the development project offset its water demand with a source of supplemental water. Instead, Ordinance 3307 requires the

project proponent to offset the estimated new water demand of the project through some form of demand offset approved by the County (e.g., plumbing retrofit or participation in a County approved conservation program). By not requiring a source of supplemental water to offset project demand, this new County development approval process allows new groundwater uses for new development projects potentially inconsistent with the provisions in the Stipulation applicable to the NMMA water purveyors. The development approval process applied through Ordinance 3307 is concerning as it may allow for increased groundwater production within the NMMA, contrary to the groundwater management efforts of the NMMA water purveyors and TG.

4.2. **Water Demand**

The water demands in the NMMA include urban (residential, commercial, industrial), golf course, and agricultural demands. The TG used a variety of methods to estimate the water demands of the respective categories (see Section 3.1.9 Groundwater Production).

4.2.1. **Historical Demand**

The historical data from 1975 to 2008 were compiled from available information. The TG has continued the historical data compilation with information from Annual Reports for 2008 to present. The historical demand estimated for urban (including golf course and industrial) and agricultural land uses has been steadily increasing since 1975, with urban accounting for the largest increase in total volume and percentage (Figure 4-1).

4.2.2. **Current Demand**

The estimated demand is 14,313 AF for CY 2020, based on annual groundwater production records provided by the water purveyors on the Nipomo Mesa, estimated groundwater production by land use area, and recycled water use (see Section 3.1.9 Groundwater Production (Reported and Estimated) and Section 3.1.11 Wastewater Discharge and Reuse). This amount of demand represents a decrease from the previous year due to above average rainfall, correspondingly reduced irrigation, and an increase in imported water through the NSWP.

4.2.3. **Potential Future Production (Demand)**

The projected future demand for NCS D is an increase from 2,293 AFY in CY 2010 to 3,400 AFY in 2030 (NCS D, 2011 see Table 21 and 23). The P66 refinery expects future production to be similar to recent years' production amounts of approximately 1,100 AFY. The projected water demand for Woodlands at build-out, according to the Woodlands Specific Plan Environmental Impact Report, is 1,600 AFY (SLO, 1998). The projected water demand for GSWC at full build-out of the current Nipomo system service area is estimated to potentially increase to approximately 1,940 AFY in 2030 (GSWC, 2008). Currently, no estimates of potential future production for agriculture or GSWC's Cypress Ridge system service area have been developed.

4.2.4. **Base Year Pooled Amount**

The Stipulation (VI.D.2.b.i) requires the determination of the highest pooled amount of groundwater production previously collectively used in a year by Overlying Owners other than Woodlands and P66. The quantification of the highest pooled amount pursuant to this subsection shall be determined at the time the mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is reached. The TG developed a technically responsible and consistent method to

determine the pooled amount and any individual's contribution to the pooled amount. That method is as follows: identify those parcels that are included in the Stipulation and Judgment dated January 25, 2008 and that are located within the NMMA boundary and are not located within the service areas of the NCSD, GSWC, Woodlands, and P66. For each of such parcels, the highest pooled amount of groundwater production will be ascertained in any given year that yields the highest volume of production. This quantity for each parcel shall be determined either by the parcel owner's records of metered wells or, if the wells are unmetered, by an estimate of the production based upon other records that may be available, such as utility records. In the absence of utility records or any other reliable resource, this quantity shall be estimated based upon established industry data consistent with the sum of Agricultural demand and Rural Housing demand as presented in the Annual Report. The Stipulation (VI.A.5) conditions the enforcement of a reduction in their current use of Groundwater to no more than 110% of that highest pooled amount, upon the full implementation of the Nipomo Supplemental Water Project, including the Yearly use of at least 2,500 acre-feet of Nipomo Supplemental Water (subject to the provisions of Paragraph VI(A)(2)) within the NMMA. The method of reducing pooled production to 110% is to be prescribed by the TG and approved by the Court.

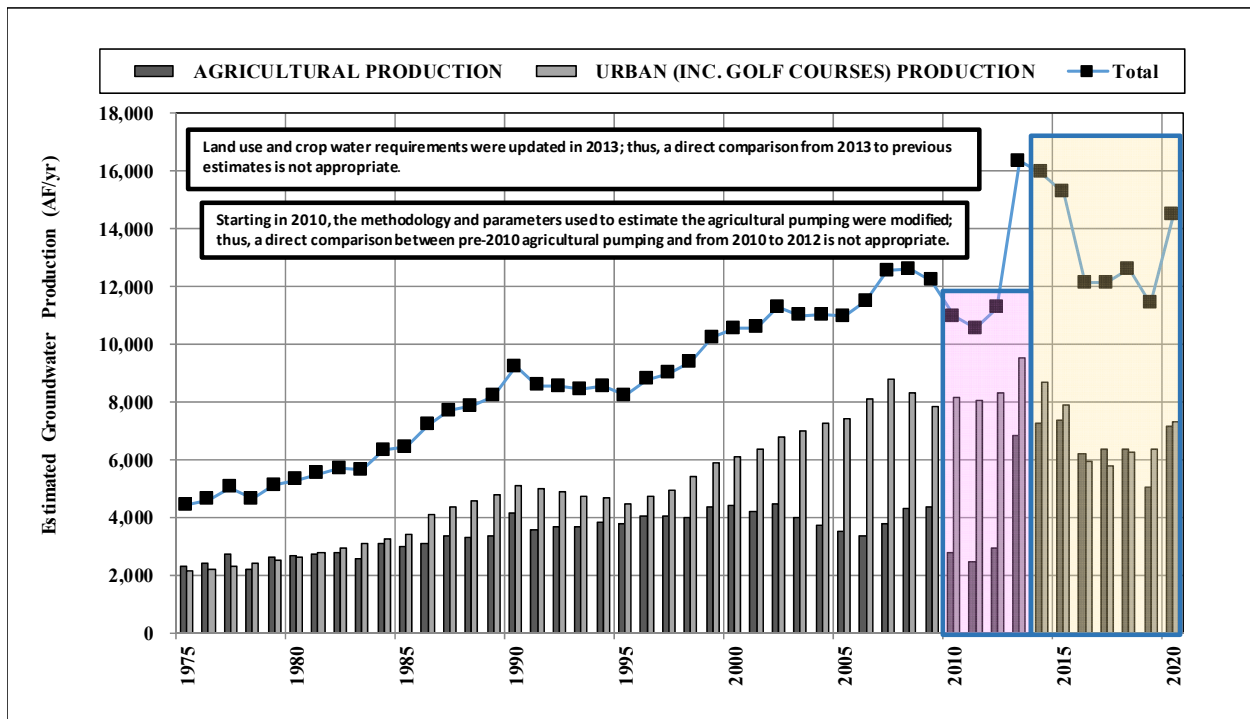


Figure 4-1. Historical NMMA Groundwater Production

5. Hydrologic Inventory

The hydrologic inventory accounts for the volumes of water that flow in to and out of the aquifers in the NMMA resulting in the change in storage. A conceptual schematic depicts the inflows and outflows to the aquifers underlying the NMMA (Figure 5-1). The hydrologic inventory can be formalized in the following equation:

$$\text{Change in Storage } (\Delta S) = \text{Inflow} - \text{Outflow}.$$

The components of the 2020 hydrologic inventory are presented and discussed in the following sections. The primary sources of inflow are groundwater (i.e., subsurface flow across the boundaries of the NMMA) inflow, rainfall, wastewater, and return flow. The primary outflows are groundwater production and groundwater outflow. Supplemental Water is also discussed as a potential future source of inflow.

5.1. **Rainfall and Percolation Past Root Zone**

Rainfall measurements made during CY 2020 range from 8.19 to 10.19 inches. The CY 2020 rainfall is 60 percent of the average long-term annual rainfall (Table 3-2, see Note 2). Rainfall on the NMMA infiltrates the soil surface and is either stored in the soil profile until it is evaporated or transpired by overlying vegetation, or percolates downward into shallow or deep aquifers. Rainfall on hardscape surfaces flows to local depressions where infiltration occurs. Locally rainfall may generate runoff from the NMMA to places adjacent to the NMMA boundary; however, the amount of runoff out of the NMMA is negligible. The TG estimates that the portion of rainfall that percolates past the root zone was 3,002 AF in CY 2020 (see Appendices E).

5.2. **Subsurface Flow**

Subsurface flow is the volume of water that flows into and out of the NMMA groundwater system. Typical methods used to estimate subsurface flow include Darcy's equation (using hydraulic conductivity, groundwater gradient, and aquifer thickness) or flow equations that are part of a regional groundwater model. In the NMMA, the three areas with the most potential for subsurface flow are at the northwestern boundary with the NCMA, the southern boundary with the SMVMA, and the seaward edge of the basin. Contours of groundwater elevations within the deep aquifer in this report (see Section 6.1.4 Groundwater Gradients) suggest that there is both flow in to and out of the boundaries of the NMMA with other management areas and along the coast. Groundwater elevation contours for the shallow dune sand aquifer suggest that there is a component of flow to the SMVMA.

The nature and extent of the confining layer(s) beneath the NMMA and the extent to which faults in the NMMA may act as impediments to subsurface flow are not well understood. The TG has not yet quantified the subsurface flows for CY 2020. However, the TG has developed hydrogeologic cross-sections along the NMMA boundary (see Section 2.3.1 Geology) sufficient to make estimates of subsurface flow (see Section 9 Recommendations).

5.3. **Streamflow and Surface Runoff**

Streamflow and surface runoff are the volumes of water that flow into and out of the NMMA through surface water channels or as overland flow. Streamflow includes water within the Los Berros Creek, Nipomo Creek, Oso Flaco Creek, and Black Lake Creek (Figure 5-2). Surface runoff occurs during major rainfall events and could occur in locations where local conditions near the NMMA boundary are sufficient to promote overland flow out of the area, and where shallow subsurface flow contributes to streamflow that is conveyed out of the NMMA, or to coastal dune lakes where it evaporates. This may occur in the following areas (Figure 5-2):

- Los Berros Creek streamflow into and out of the NMMA,
- Nipomo Creek streamflow into and out of NMMA,
- Black Lake Canyon streamflow out of the NMMA,
- Oso Flaco Creek streamflow into and out of NMMA,

-
- Surface runoff from steep bluffs adjacent to Arroyo Grande Valley, and
 - Surface runoff from steep bluffs adjacent to Santa Maria River Valley.

The volume of streamflow which enters and leaves the NMMA is only partially understood. The TG continues to analyze where it might be appropriate for SLO County to install temporary or permanent stream sensor sites to determine the volume of water that percolates beneath streams in the NMMA (see Section 3.1.5 Streamflow).

5.4. Groundwater Production

The groundwater production component of the Hydrologic Inventory is calculated using metered production records where available and estimated from land use data where measurements are unavailable. The CY 2020 groundwater production is approximately 14,313 AF (Table 3-8).

5.5. Supplemental Water

Supplemental Water is the volume of water produced outside the NMMA and delivered to the NMMA through the NSWP. Supplemental water was delivered to the NMMA in CY 2020. The total amount of Supplemental Water delivered during the CY 2020 was 1,041 AF.

5.6. Wastewater

Wastewater discharges include wastewater effluent discharged by the six wastewater treatment facilities located within the NMMA, and ocean discharge of treated wastewater from the P66 industrial facility. In addition, discharges are estimated for septic tanks where centralized sewer service is not provided. The WWTFs include the Southland WWTF, the Blacklake WWTF, the Cypress Ridge WWTF, the Woodlands WWTF, and La Serena and Osage (GSWC). The Southland WWTF discharges treated wastewater into infiltration basins (see Section 3.1.11 Wastewater Discharge and Reuse). A portion of the water percolates and returns to the groundwater system and the remaining portion evaporates. The estimated percolation from Southland WWTF is 482 AF. GSWC delivered 741 AF of groundwater to their Nipomo system customers, where a small number of customers are connected to the Southland WWTF. The amount of groundwater produced that was delivered to customers connected to the Southland WWTF was 112 AF in CY 2020. The remaining GSWC Nipomo system customers discharged an estimated 277 AF of wastewater to septic systems. GSWC's La Serena and Osage iron and manganese removal treatment facilities treat water from GSWC's La Serena and Osage wells. Filter backwash water is discharged to percolation ponds, where water infiltrates into the basin. La Serena discharged 9 AF and Osage discharged 1 AF. The total WWTF effluent to infiltration basins in the NMMA was 504 AF (Table 3-9). The treated effluent from Blacklake WWTF (42 AF), Cypress Ridge WWTF (31 AF), and Woodlands WWTF (92 AF) is used to irrigate golf course landscaping. The estimated amount of wastewater discharge from indoor use by rural residences is 183 AF. The wastewater discharged in septic systems percolates downward and may recharge the shallow aquifers, the deep aquifers, or become shallow subsurface flow outside the NMMA.

5.7. Return Flow of Applied Water and Consumptive Use

Return flow is defined as the amount of recharge to the aquifers resulting from applied water that percolates past the root zone to recharge the aquifer(s). This functional definition differs somewhat from that used in the Stipulation to apportion the right to use water that was imported to the basin. However,

the physical process of recharge by return flow of applied water is the same regardless of where the water originated.

The TG currently assumes that, all groundwater produced for outdoor use is attributable to sustaining plant life and replenishing soil profile storage, and that only rainfall generates percolation. Rural residences produced 203 AF of groundwater for indoor use in CY 2020. The estimated amount of return flow in CY 2020 from indoor use by rural residences is 183 AF, which is 90 percent of the 203 AF estimated indoor water use of rural residents plus the 250 AF of estimated return flow from indoor water use of GSWC's Nipomo system. There is no return flow from P66's groundwater production. The estimated total return flow from applied water, which includes 433 AF from indoor use and 504 AF from infiltration at WWTPs, is 937 AF in CY 2020.

The estimated consumptive use of water in the NMMA, computed by subtracting the total return flow (937 AF) from the groundwater production (14,313 AF), is 13,376 AF in CY 2020.

5.8. ***Change in Groundwater Storage***

The change in groundwater storage from the hydrologic inventory reflects the difference between inflow and outflow for a period of time. Typically, this change in storage is compared to a change in storage computed from groundwater contours, cross-checking the results of each. Storage changes from groundwater contours are typically calculated by measuring change in groundwater elevation and multiplying that change by a storage factor (i.e., the specific yield of aquifer sediments), and the aquifer area. The TG's current understanding of conditions within the NMMA precludes calculating change in groundwater storage from groundwater contours at this time for the management area.

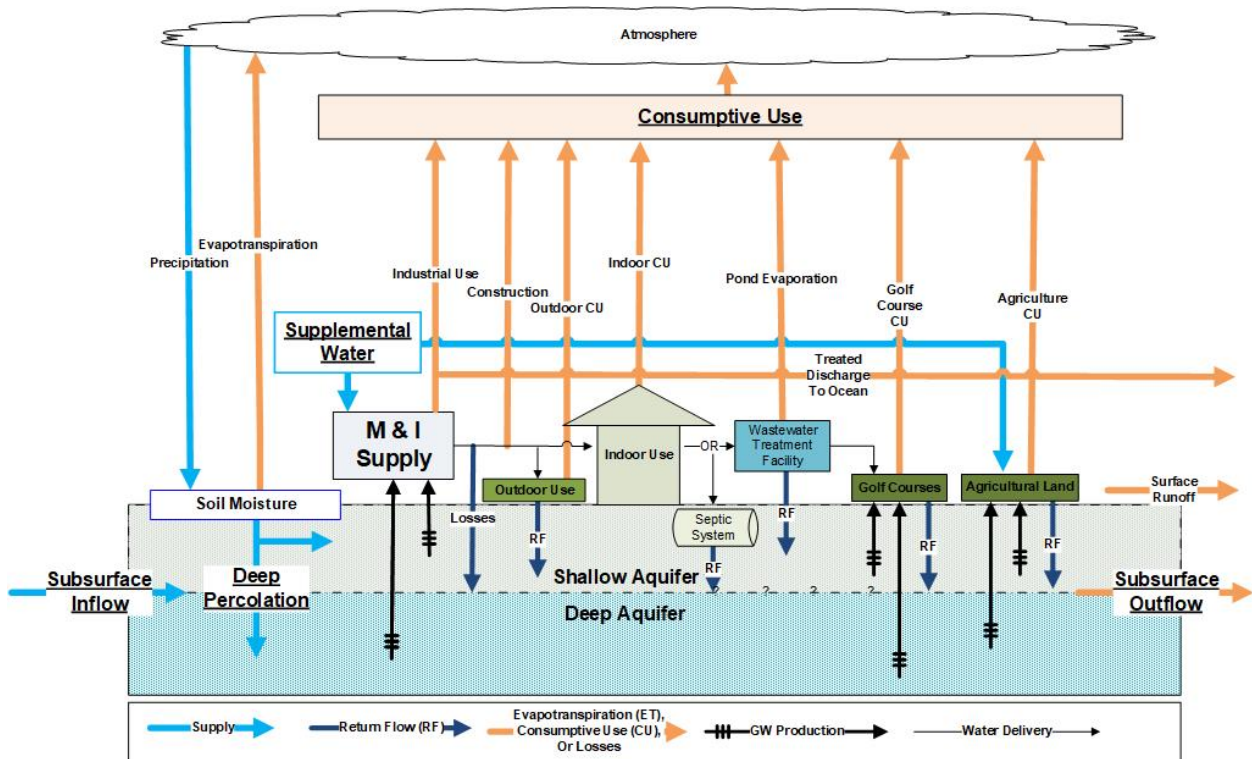


Figure 5-1. Schematic of the Hydrologic Inventory

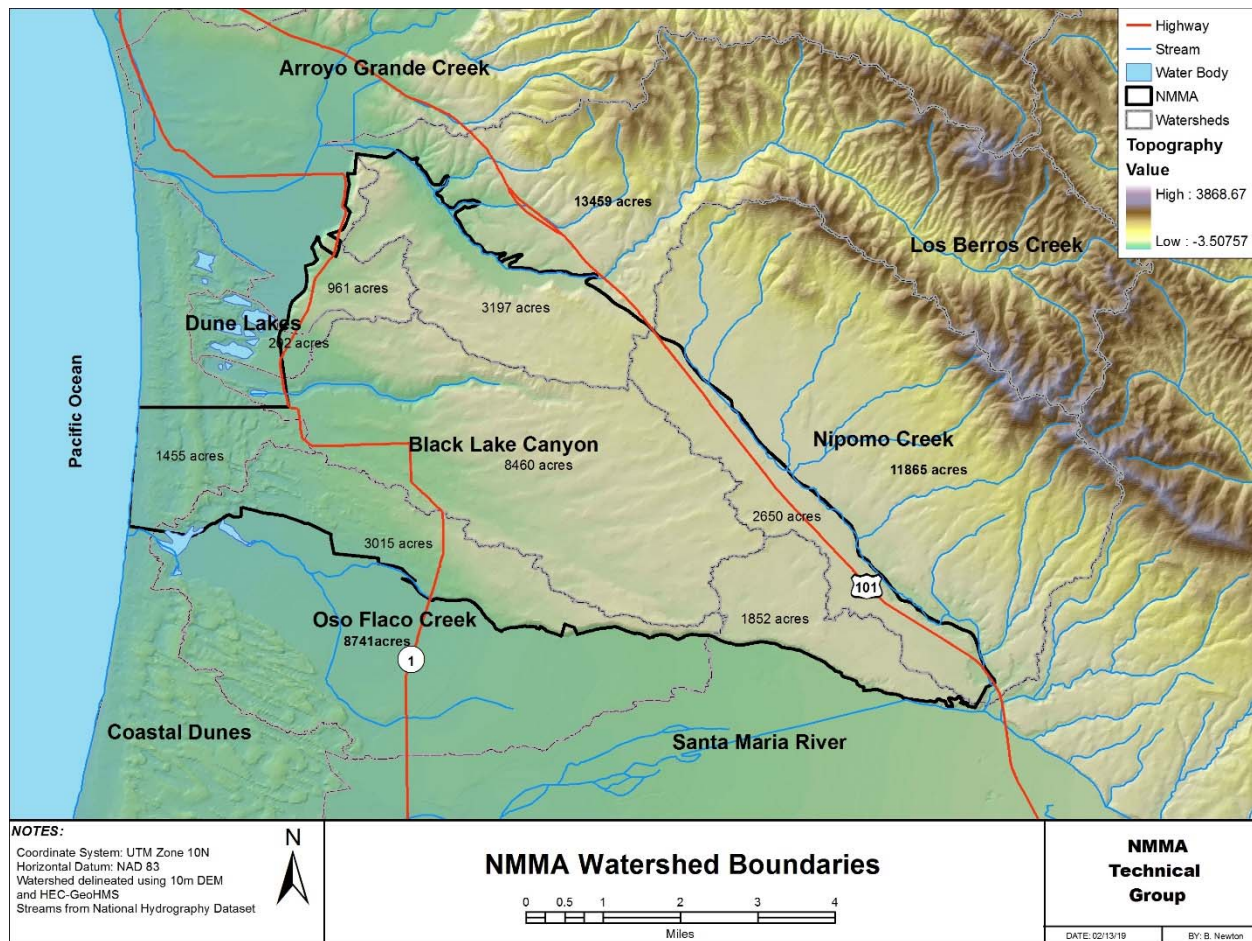


Figure 5-2. NMMA Watershed Boundaries

6. Groundwater Conditions

Groundwater conditions are primarily characterized by measurements of groundwater elevations and groundwater quality, and interpretations such as groundwater elevation contours, groundwater gradients, and historical trends in groundwater elevations and water quality.

6.1. Groundwater Elevations

Groundwater elevations are analyzed using several methods. Hydrographs (graphs of groundwater elevation through time) for wells within and adjacent to the NMMA were updated through CY 2020. Hydrographs were constructed for a number of wells, including the wells used to calculate the Key Wells Index and both sets of coastal monitoring wells. The key wells are combined to produce the Key Wells Index which represents groundwater levels beneath the NMMA as a whole (see Appendix B and Section 7.2.1). In coastal monitoring wells, groundwater elevations were graphed for each well completion within a nested site to compare to sea level. Finally, the aggregate of groundwater elevation measurements was used to construct groundwater contour maps for the Spring and Fall of 2020.

6.1.1. Results from Key Wells

Individual hydrographs were prepared for the key wells (Figure 6-1, Figure 6-2). These eight wells are used to calculate the Key Wells Index. Following a below normal precipitation year in 2020, groundwater elevations decreased from 2019 elevations in most key wells.

6.1.2. Results from Coastal Monitoring Wells

The elevation of groundwater in the coastal monitoring wells is very important because it is required to determine whether there is an onshore or offshore gradient to the ocean. Groundwater elevations in the nested coastal wells 12C and 36L were very similar in 2020 as compared to 2019 for coastal well 12C, and somewhat lower for coastal well 36L (Figure 6-3, Figure 6-4).

6.1.3. Groundwater Contours and Pumping Depressions

Groundwater elevation data representing water levels were plotted on separate maps for Spring and Fall of 2020 and contoured by hand. Groundwater elevation contours were constructed for both Spring and Fall of 2020 so that seasonal high and low groundwater elevation conditions could be analyzed (Figure 6-5, Figure 6-6, Figure 6-7, Figure 6-8).

There is limited information from publicly accessible wells that are screened in the shallow aquifers in the northern portion of the NMMA. Therefore, in that area, water levels from shallow wells are provided but were not contoured. Surface water elevations of the dune lakes within and immediately adjacent to the NMMA, that may be in hydraulic connection with shallow aquifers (dune sands and alluvial deposits), could also be useful in contouring of the shallow aquifer groundwater elevation. There is no formal monitoring of the dune lake water levels at this time and therefore were not used in the contouring of the shallow dune sand aquifer groundwater level. The base of the dune sand deposits rises in elevation toward the east within the NMMA (Figure 2-6). As the sloping base of the dune sands deposits approaches the relatively flat groundwater table, the saturated thickness decreases accordingly such that local areas of dune sand deposits are unsaturated. Therefore, shallow aquifer groundwater elevations from wells screened in the dune sand deposits have not been contoured in the northern and eastern NMMA, between the Wilmar Avenue fault and the northwestern projection of the Santa Maria River fault zone trend (Figure 2-1).

Spring 2020 shallow aquifer groundwater elevations in the southwestern portion of the NMMA reflect groundwater flow to the west. Groundwater elevations for select wells illustrate that spring to fall water level fluctuations are typically less than a few feet and there is a relatively stable long-term trend since 2008. Recharge to this shallow aquifer from surface is reflected in slowly rising water levels in some monitoring wells, although there is little difference in groundwater elevation in the shallow aquifer between 2019 and 2020.

Spring 2020 deep aquifer groundwater elevations are generally unchanged compared with Spring 2019, with areas of both higher and lower groundwater elevations. Fall 2020 deep aquifer groundwater elevations are generally lower compared with Fall 2019. The pumping depression within the inland portion of the NMMA continues to be expressed in both Spring and Fall 2020 deep aquifer groundwater elevation contours (Figure 6-6, Figure 6-8).

Deep aquifer groundwater contours along the eastern portion of the NMMA are sub-parallel to the eastern NMMA boundary indicating flow southwest into the NMMA. Recharge from rainfall and seepage from adjacent older sediments along and to the east of the NMMA boundary may be contributing

to the southwest flow in the NMMA. Additionally, the Los Berros Creek bed is comprised of shallow alluvium and is in places in contact with the Paso Robles formation. This suggests the Los Berros Creek may be a source of local recharge along the northern boundary of the NMMA.

6.1.4. Groundwater Gradients

Groundwater gradient direction and magnitude can be calculated directly from the groundwater elevation contour maps; however, numerical computations are not presented here because local structural and stratigraphic controls on the NMMA groundwater flow regime are not sufficiently understood. The discussion of gradients is separated into coastal groundwater gradients that could affect potential seawater intrusion and gradients to and from adjacent management areas.

Coastal Gradients

Shallow dune sand aquifer groundwater contours in both Spring and Fall 2020 show a seaward gradient in the western NMMA. Deep aquifer groundwater contours in Spring 2020 show a landward gradient in the northwestern portion of the NMMA. There is only a small difference in deep aquifer groundwater elevations parallel to the coastline between the coastal plain of the NCMA, the coastal portion of the NMMA, and the pumping depression in the central portion of the NMMA. In Fall 2020, there continues to be a deep aquifer groundwater gradient that is landward from the coast, toward a broad area of the inland pumping depression which is below sea level.

The deep aquifer groundwater divide that historically separated the coastal area from inland areas was a transient feature formed because of the inland pumping depression. Although deep aquifer groundwater elevations at the southern coastal monitoring wells are above those defined for water shortage conditions, having such a landward gradient from coastal to inland increases the potential for seawater intrusion. This condition is not prudent for the long-term and will continue to be monitored carefully.

Gradients between Adjacent Management Areas

The shallow aquifer groundwater gradient along the southern boundary of the NMMA indicates flow to the southwest toward the boundary with the SMVMA and toward the ocean (Figure 6-5, Figure 6-7). The deep aquifer groundwater elevation contours between the NMMA and the NCMA indicate that the gradient between the management areas remains relatively flat in both Spring and Fall 2020. The deep aquifer groundwater gradient along the southern boundary of the NMMA indicates flow in to and out of the NMMA boundary with the SMVMA (Figure 6-6, Figure 6-8).

6.2. Groundwater Quality

Water quality is a concern for all groundwater producers, although the specific concerns vary by water use. Water quality is somewhat different in different portions of the NMMA because:

- the source of recharge varies for different portions of the aquifer system,
- groundwater can develop different mineral signatures from the rock it flows through, and
- percolation of surface water can mobilize constituents of concern and carry these into the aquifers.

Water quality conditions in the NMMA during CY 2020 exhibit much of the same variability as observed in prior years. The following sections describe coastal water quality and inland water quality conditions.

6.2.1. Results of Coastal Groundwater Quality Monitoring

There is no evidence of seawater intrusion based on coastal groundwater quality. Quarterly coastal groundwater quality monitoring within the NMMA boundary is currently conducted at the nested wells site 11N36W12C01, 12C02, and 12C03, but the TG is also aware of published data for coastal groundwater quality conditions in the NCMA, at nested wells site 12N36W36L01 and 36L02. Limited historical groundwater quality data are also available for other coastal monitoring wells south of the NMMA near Oso Flaco, and from other coastal monitoring sites north of the 36L well. Chloride concentrations in the coastal wells are less than 100 mg/L, and do not show evidence of significant change over time (Figure 6-9). Coastal water quality monitoring at 11N36W12C01, 12C02, and 12C03 in 2020 also shows consistent results with respect to other common water quality characteristics such as total dissolved solids and electrical conductivity (Figure 6-10). Values for these constituents confirm relatively high dissolved ion content in groundwater, but at historically consistent values that are mostly within limits for existing uses.

Starting in 2018, the TG expanded the suite of ions analyzed that can be indicators of seawater intrusion. A series of charts display historical concentrations of major ions in groundwater from the coastal monitoring wells (Figure 6-11 through Figure 6-20). Two types of charts are included: major ion ratios compared to typical seawater (Figures 6-11 through 6-15), and time series of major ions (Figure 6-16 through 6-20). The purpose of presenting these data is to help document any significant changes in NMMA coastal groundwater chemistry. Major ion concentrations as well as ratios of different ions can be used to help determine if salinization of an aquifer is occurring and, if so, whether the source is seawater, sediments, or other factors.

There are no trends or changes in recent years that would suggest the onset of any contamination by a saline water source or seawater. Together with the historical chloride and electrical conductivity data, ion ratios of groundwater sampled in the coastal monitoring wells show that there are currently no ionic indicators of seawater intrusion.

6.2.2. Results of Inland Groundwater Quality Monitoring

In general, water quality of groundwater from NMMA wells is suitable for its existing uses and meets US EPA requirements for those intended uses. Exceptions include locally contaminated shallow groundwater where surface discharges or leaching have produced elevated concentrations of water quality constituents of concern. Examples include an ongoing remediation effort at a coastal refinery (in the unused shallow aquifer only), areas of nitrate contamination and a water supply well which has 1,2,3-Trichloropropane (1,2,3-TCP) concentrations slightly higher than the notification level of 5 ng/L. In most cases, these contaminants exist locally and are being monitored and managed with the oversight of local and regional regulatory agencies.

Groundwater from inland wells has a wide range of groundwater quality composition and can be variable, both between wells with similar groundwater elevations drawing water from the same aquifer, and over time within a single well. Chloride and total dissolved solids concentrations in samples from inland deep aquifer groundwater wells have been relatively constant over time, while groundwater in some shallow dune sand aquifer wells exhibits elevated nitrate concentrations or increasing salinity. During 2020, 65 water supply wells in addition to 16 monitoring wells and 17 environmental monitoring wells were sampled at least once for water quality; many were sampled multiple times during the year for many water quality constituents. The water quality components evaluated vary by well and sampling periods depending on the purpose of sampling and on regulatory requirements.

Approximately ten water supply wells that produce at least in part or primarily from the deep groundwater aquifer are known to have water quality with nitrate concentrations at, or in excess of primary drinking water maximum contaminant levels, or with iron and manganese concentrations in excess of secondary drinking water maximum contaminant levels. Iron and manganese water quality concerns are historically limited to a few wells in the southern NMMA.

Nitrate concentrations of at least half the MCL are documented for more than two dozen water supply wells, up to one and half times the MCL, and are located throughout the inland portions of the NMMA. Such groundwater must be treated or blended before it can be used in potable water systems. In the shallow aquifer, groundwater is observed to have nitrate concentrations up to ten times the MCL in local sampling, though none of these wells is used for water supply.

No other water quality constituents are currently known to restrict local use of groundwater supplies for domestic or irrigation purposes.

Nitrate: Elevated nitrate concentrations in groundwater generally result from anthropogenic causes. Nitrate is mainly a potable water concern (as compared to a concern for irrigation water).

Of the 65 water supply production wells sampled in CY 2020, water samples from three wells had nitrate concentrations in excess of the nitrate drinking water standard maximum contaminants level (MCL) at least once. Water samples from another production well screened in the principal producing aquifers have long-term elevated iron and manganese concentrations greater than the secondary MCL and require treatment or blending prior to use.

Chloride: A primary concern for both drinking water and irrigation use is high chloride concentrations. Depending upon the crop, chloride concentrations well below the secondary MCL of 500 mg/L can cause leaf burn, plant stunting, and plant death. Elevated chloride concentrations can occur in groundwater, especially in shallow or unconfined aquifers, from the recharge of return flows and tidal.

In CY 2020, chloride concentrations measured in coastal monitoring wells and in deep aquifer water supply wells were below 100 mg/L, with little change from previous years. Chloride concentrations up to 170 mg/L were observed in groundwater from shallow monitoring wells near industrial and wastewater facilities, well below the secondary MCL of 250 mg/L.

Total Dissolved Solids (TDS): In CY 2020, concentrations of TDS were mostly at or below 1,000 mg/L, the California recommended secondary standard, and are largely unchanged from previous years. Groundwater from one water supply well in the deep aquifer had TDS concentrations as high as 1,100 mg/L. Elsewhere within the NMMA, TDS concentrations for the deep aquifer in CY 2020 varied considerably, from 200 to 690 mg/L. In the shallow aquifer, TDS concentrations in CY 2020 ranged between 140 and 1,230 mg/L.

Hydrocarbons and Trace Metals. Two local sites of known or potential soil and shallow groundwater contamination are described by environment assessments or ongoing monitoring activity within the NMMA. The open sites are regulated by the RWQCB and are subject to corresponding monitoring, assessment or other action (Table 6-1).

Table 6-1. 2020 State Water Resources Control Board GeoTracker Open Sites

Site Name	Address	Status	Notes
Conoco Phillips Line 300	Tefft St at Carrillo St	Open; Site Assessment	Petroleum hydrocarbon impacts to soil and shallow groundwater adjacent to two petroleum pipelines (P66 & Unocal). No cleanup actions required as of 2020.
Phillips 66 Refinery, Santa Maria Facility	2555 Willow Rd	Open; Site Assessment and Interim Remedial Action	Metals, petroleum hydrocarbon and related organic contaminants in vicinity of former coke pile and slops line. LNAPL recovery from soils and shallow aquifer ongoing.

Source: <http://geotracker.waterboards.ca.gov>

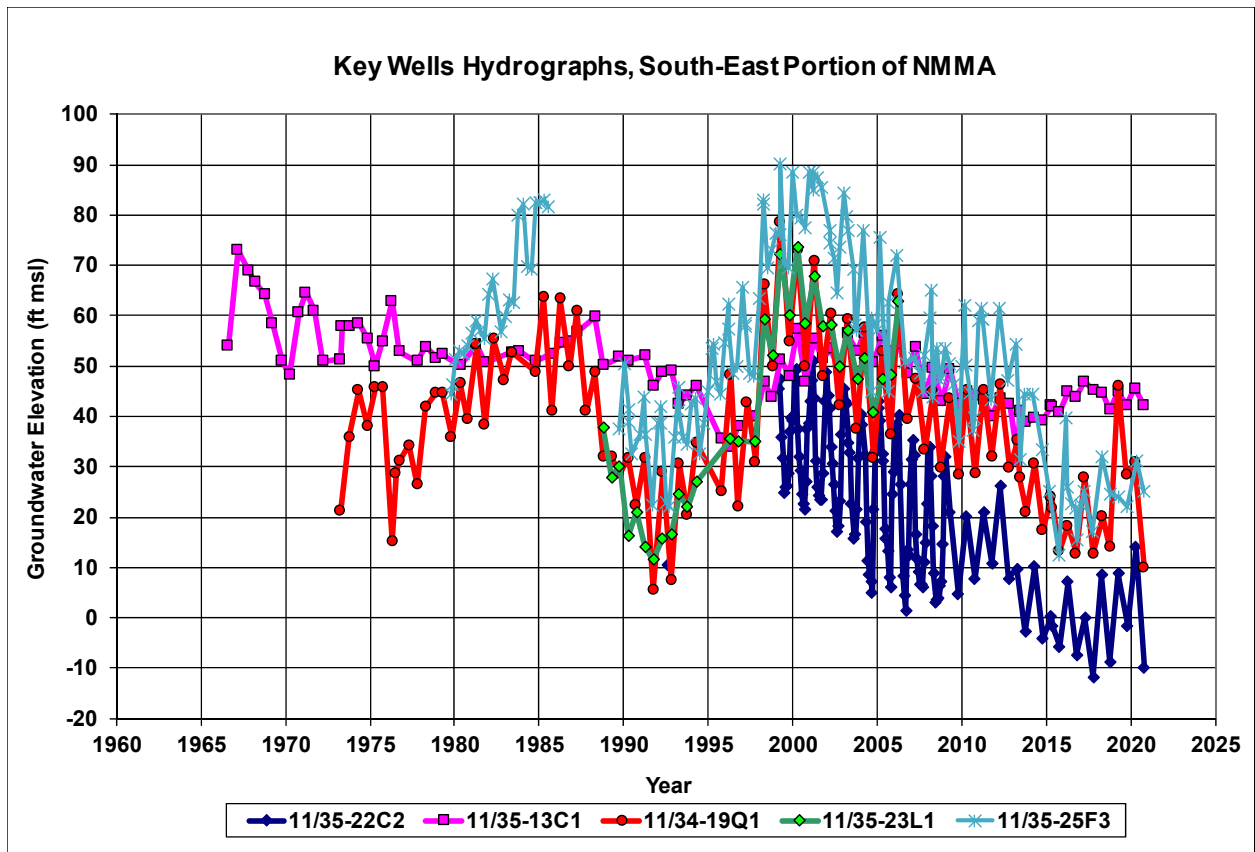


Figure 6-1. Key Wells Hydrographs, South-East Portion of NMMA

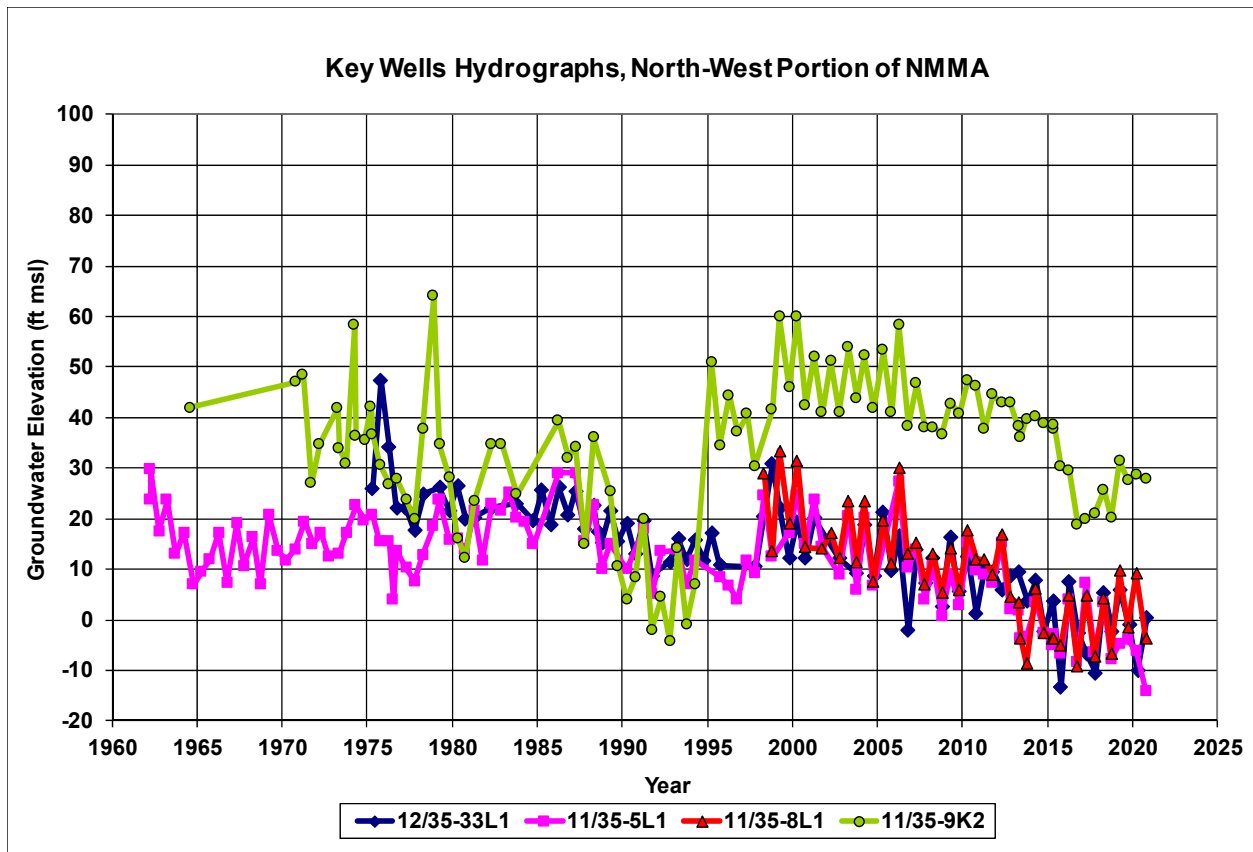


Figure 6-2. Key Wells Hydrographs, North-West Portion of NMMA

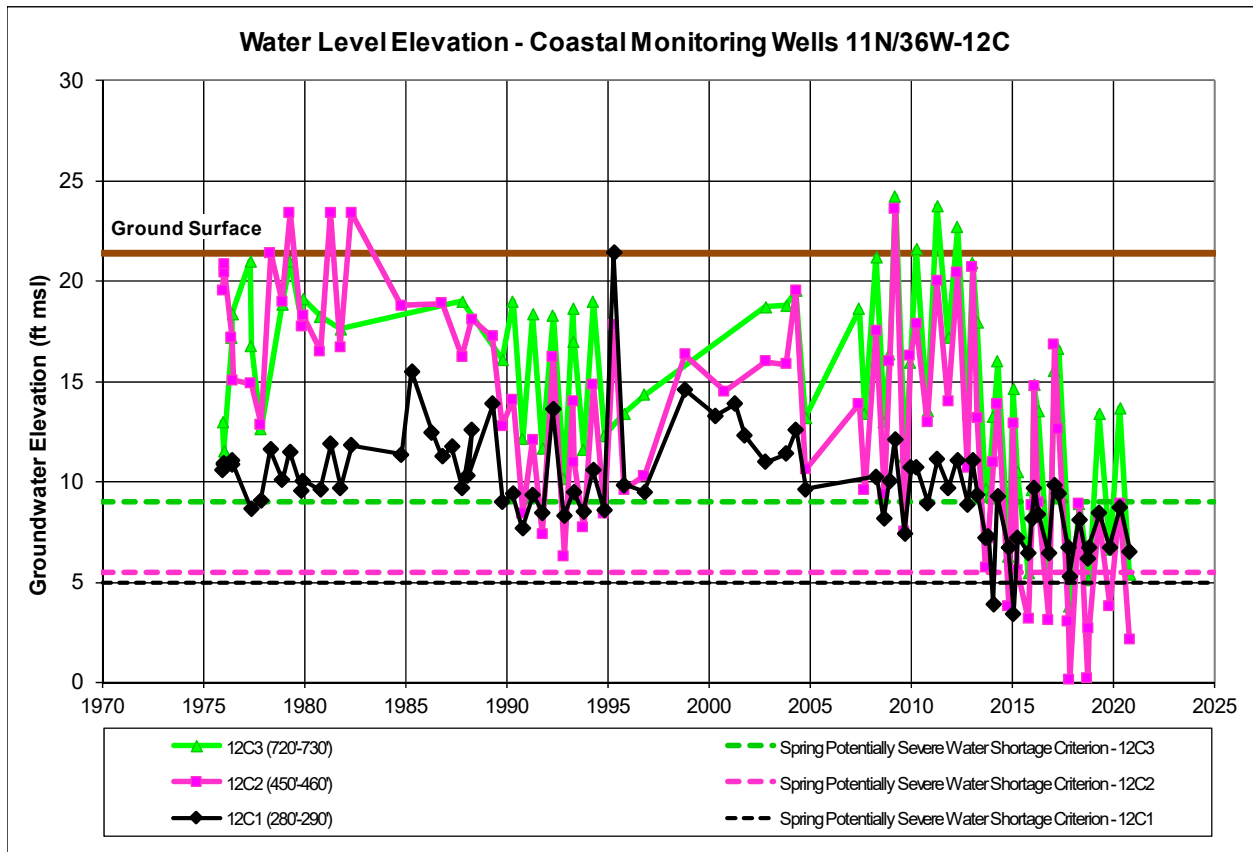


Figure 6-3. Hydrograph for Coastal Monitoring Well Nest 11N/36W-12C Note: Water levels measured under artesian flow prior to 2008 were observed without measuring the hydraulic head and recorded as a default value of 2 feet above the casing.

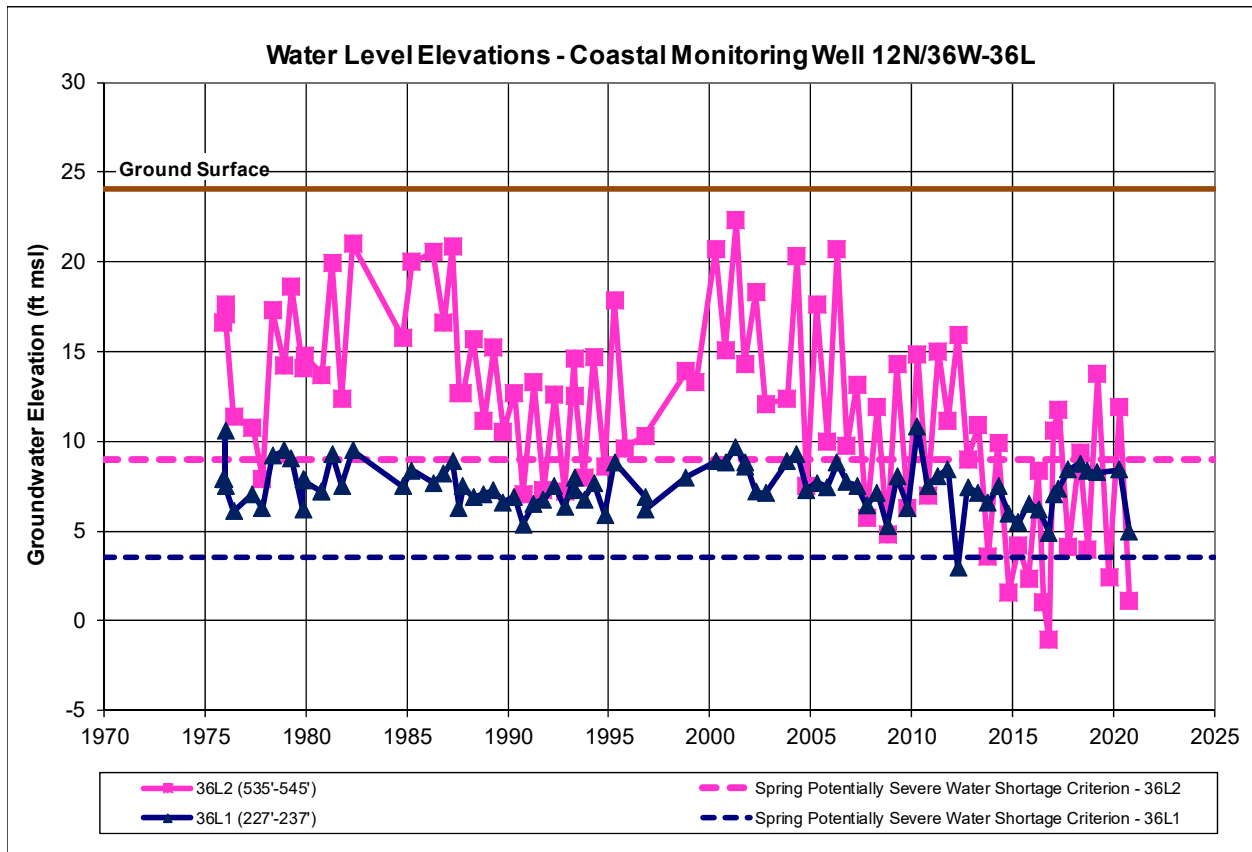


Figure 6-4. Hydrograph for Coastal Monitoring Well Nest 12N/36W-36L

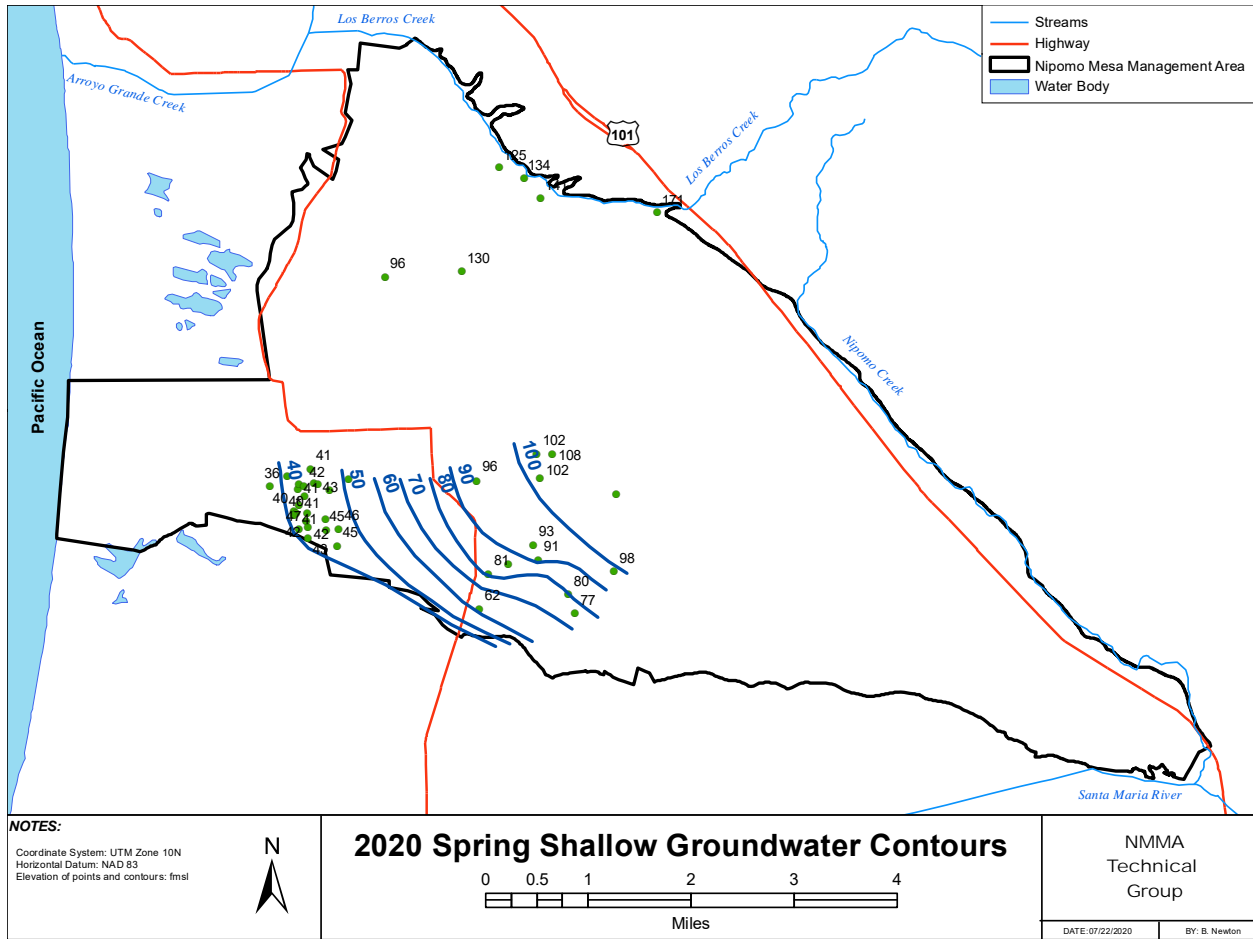


Figure 6-5. 2020 Spring Shallow Aquifer Groundwater Contours

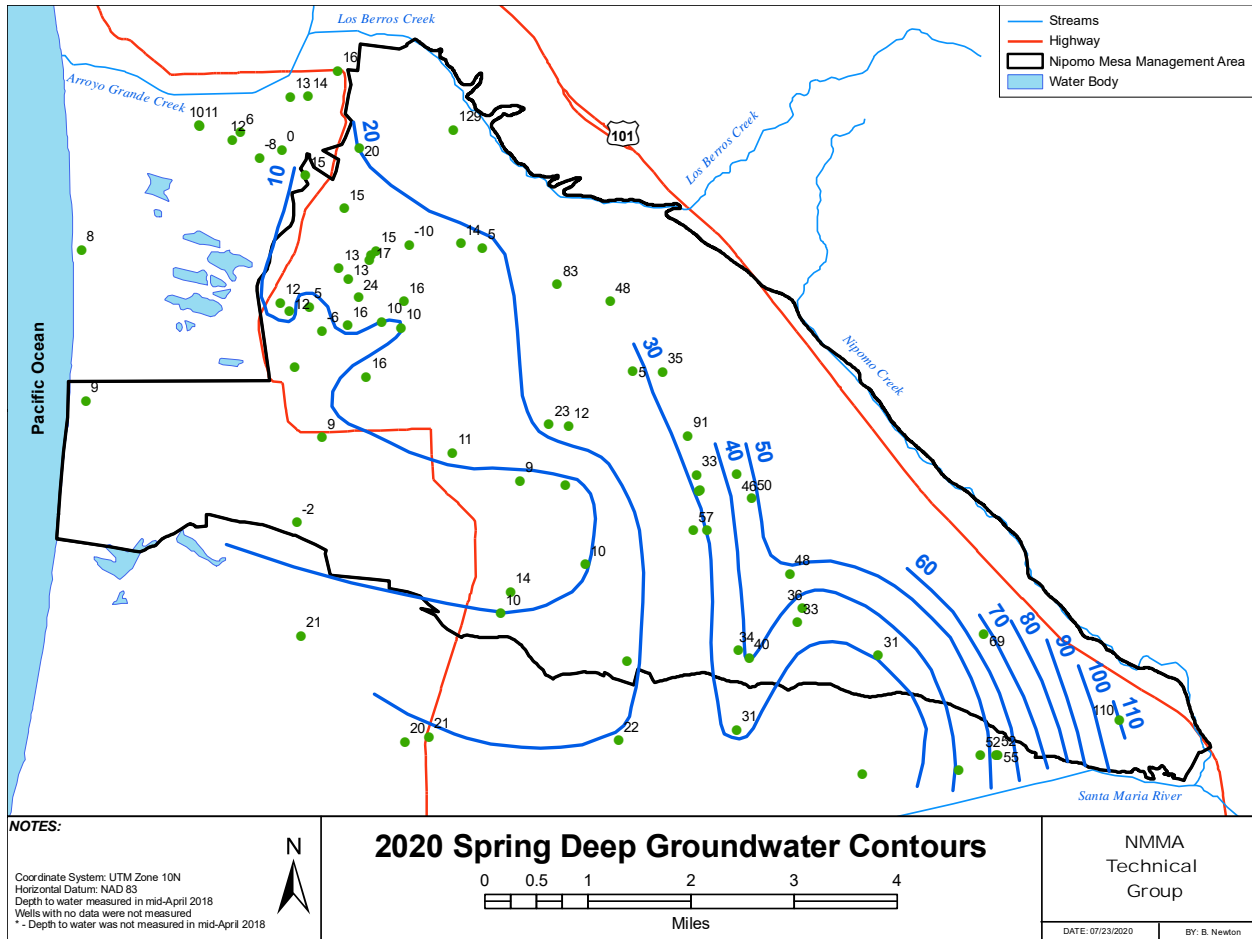


Figure 6-6. 2020 Spring Deep Aquifer Groundwater Contours

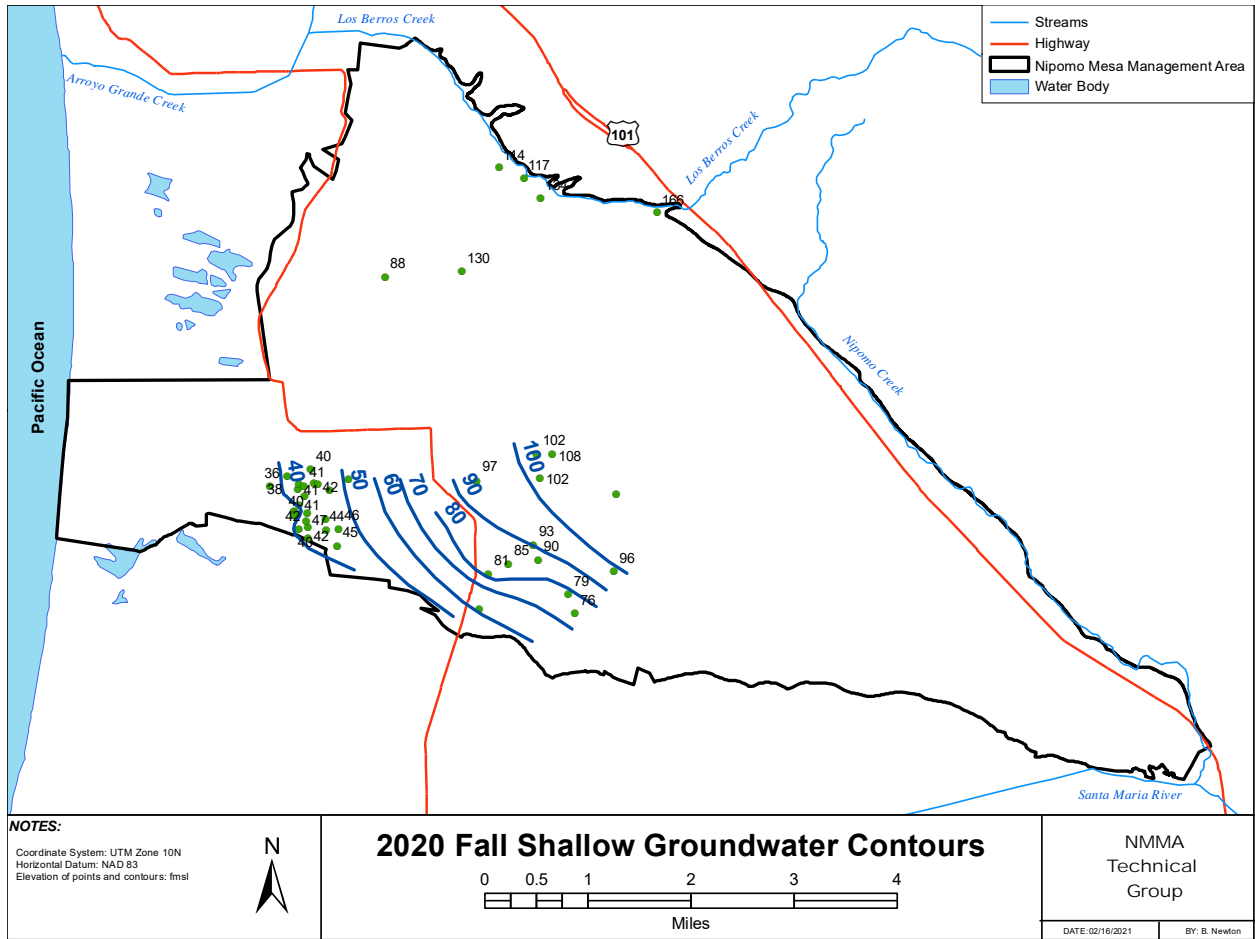


Figure 6-7. 2020 Fall Shallow Aquifer Groundwater Contours

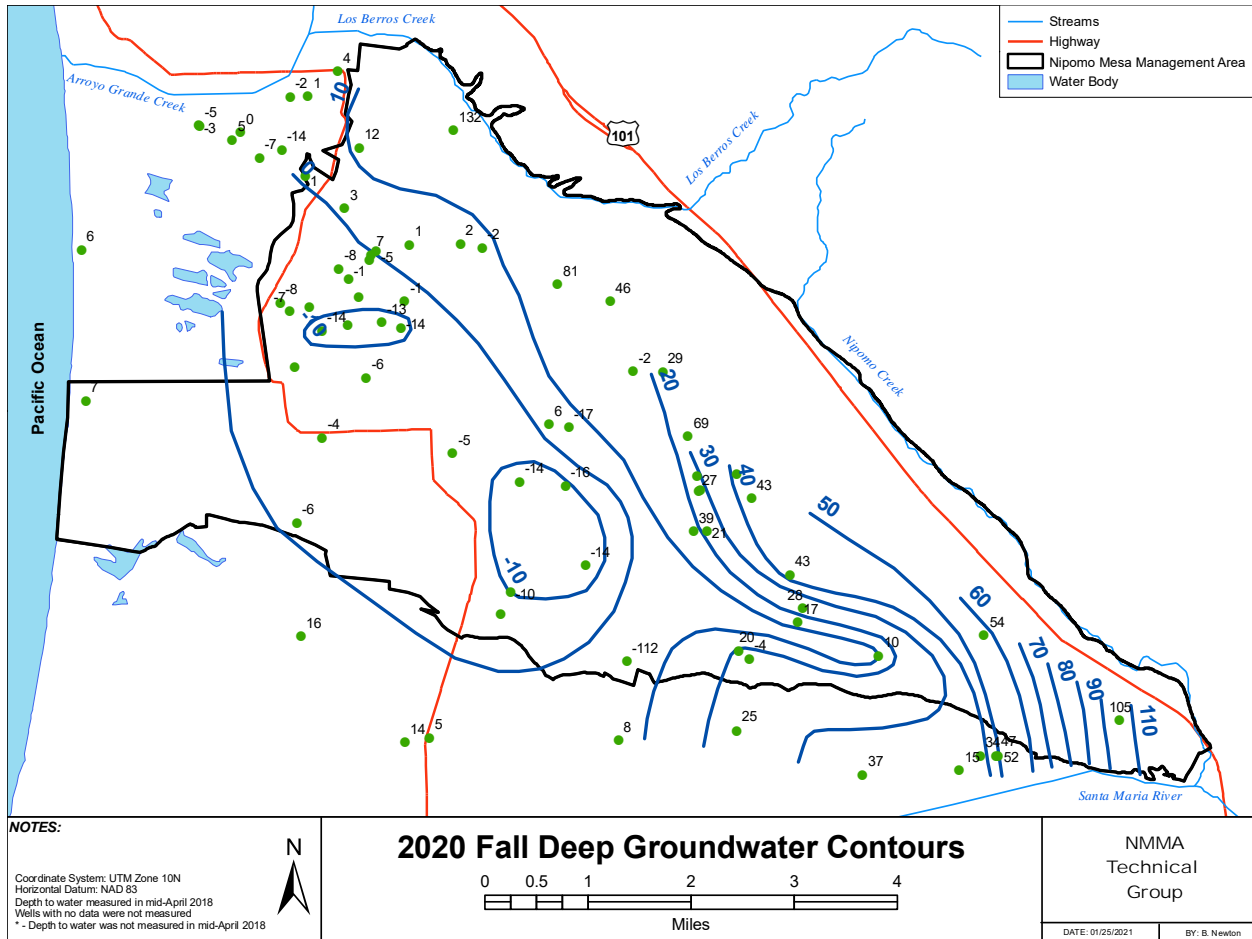


Figure 6-8. 2020 Fall Deep Aquifer Groundwater Contours

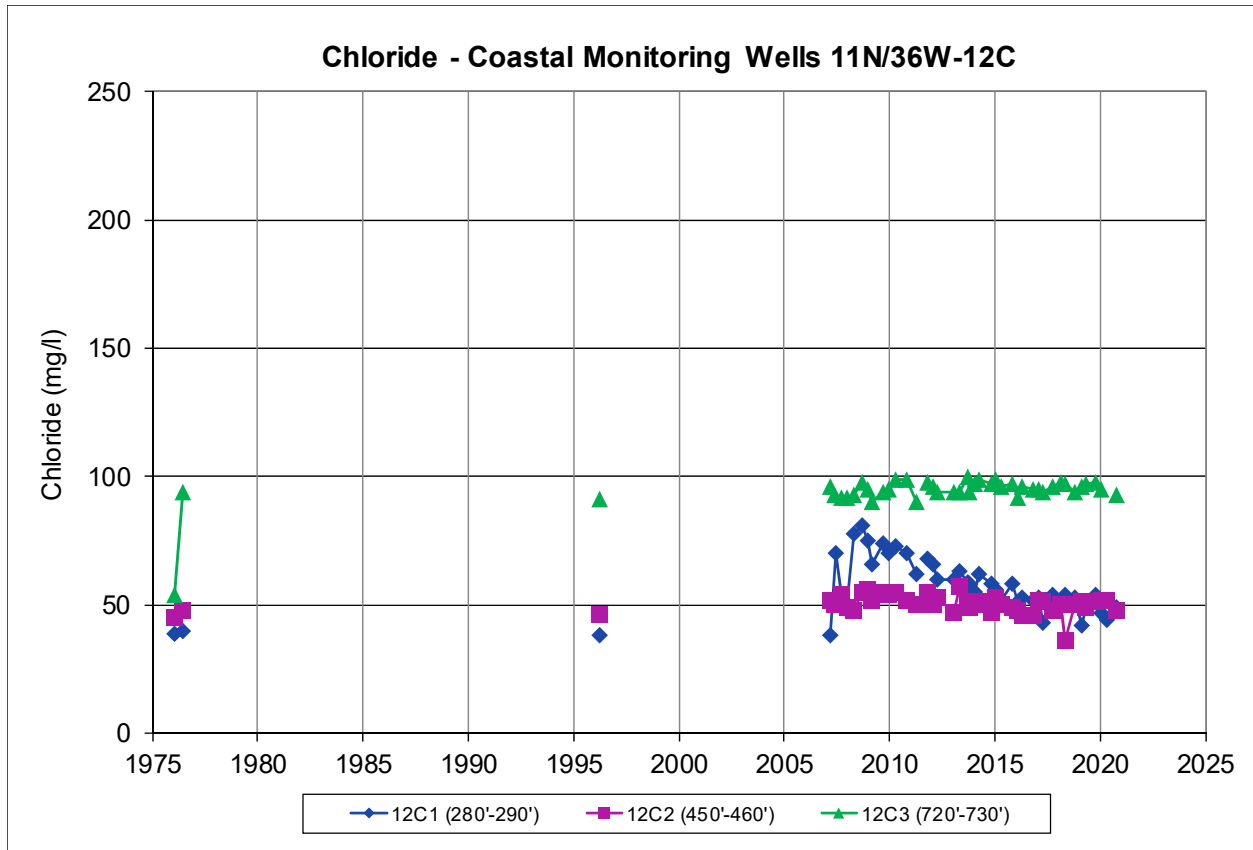


Figure 6-9. Chloride in Coastal Wells 11N/36W-12C 1, 2, and 3

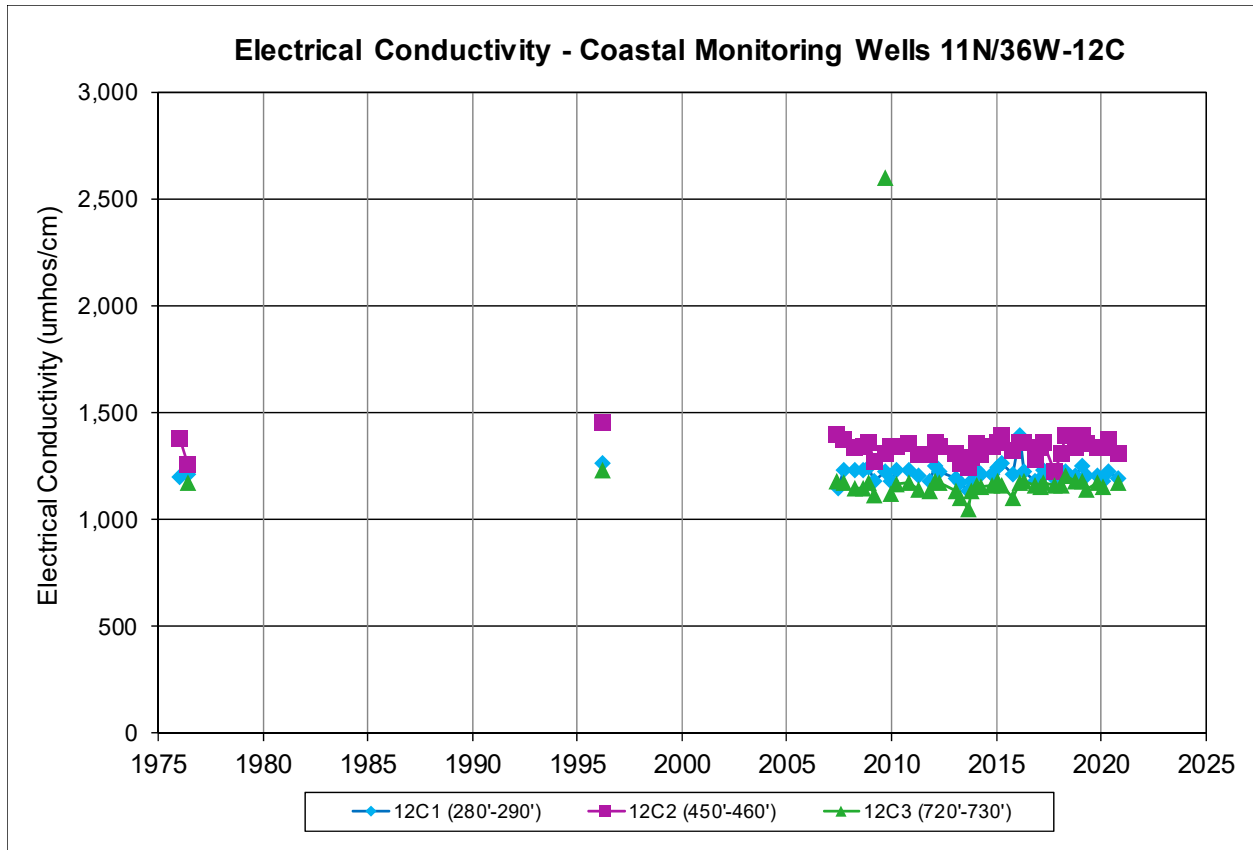


Figure 6-10. Electrical Conductivity in Coastal Wells 11N/36W-12C 1, 2, and 3

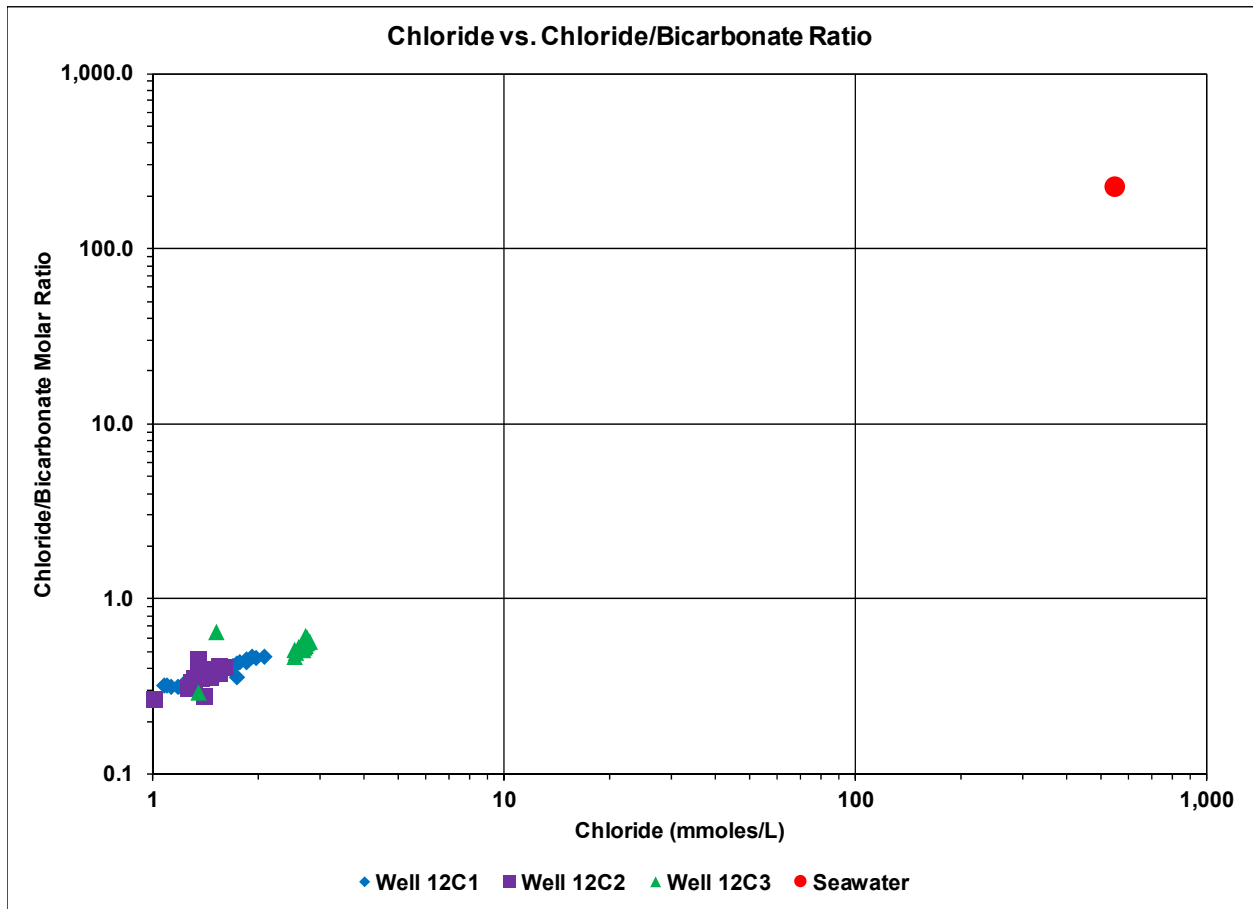


Figure 6-11. Chloride vs Chloride/Bicarbonate Ratio for Coastal Wells

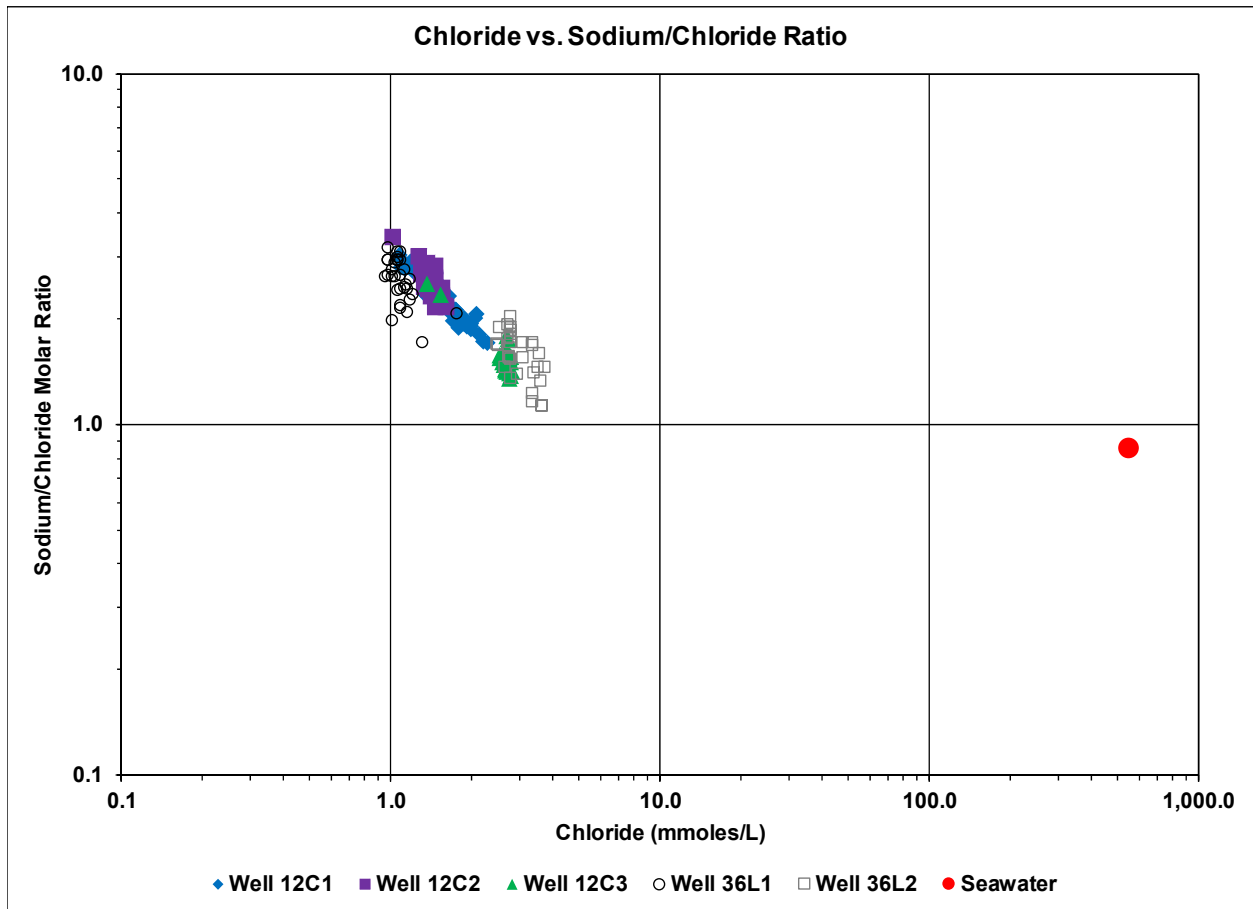


Figure 6-12. Chloride vs Sodium/Chloride Ratio for Coastal Wells

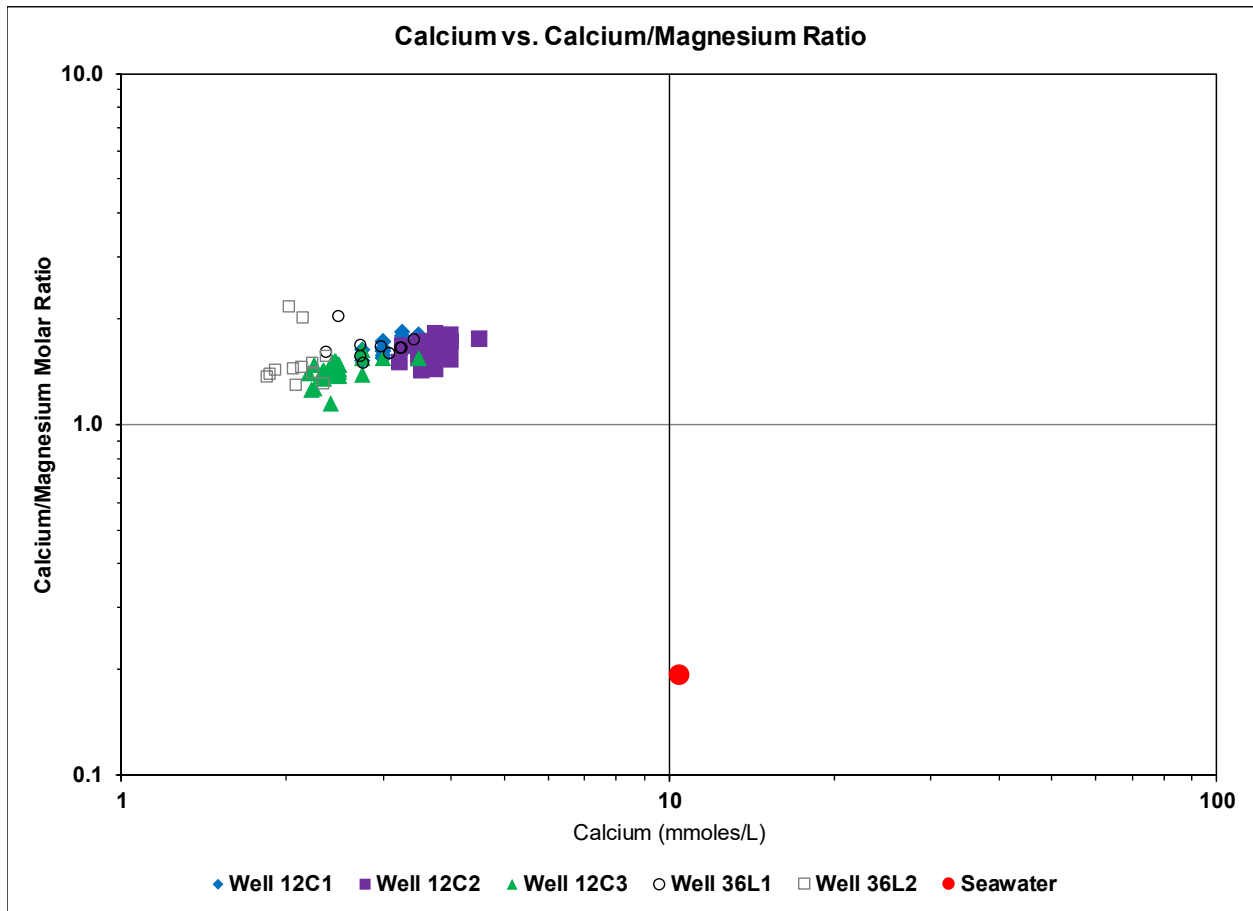


Figure 6-13. Calcium vs Calcium/Magnesium Ratio for Coastal Wells

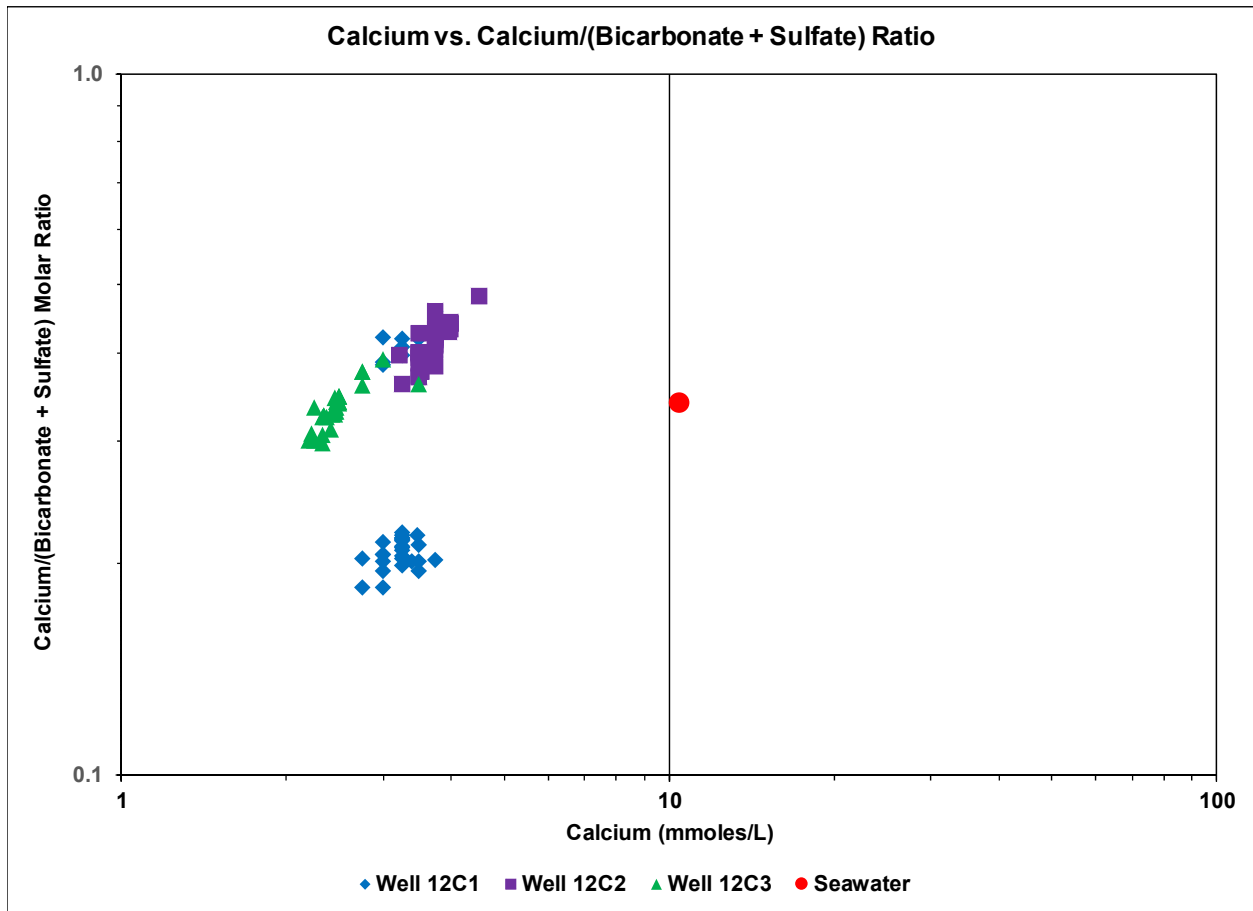


Figure 6-14. Calcium vs Calcium/(Bicarbonate + Sulfate) Ratio for Coastal Wells

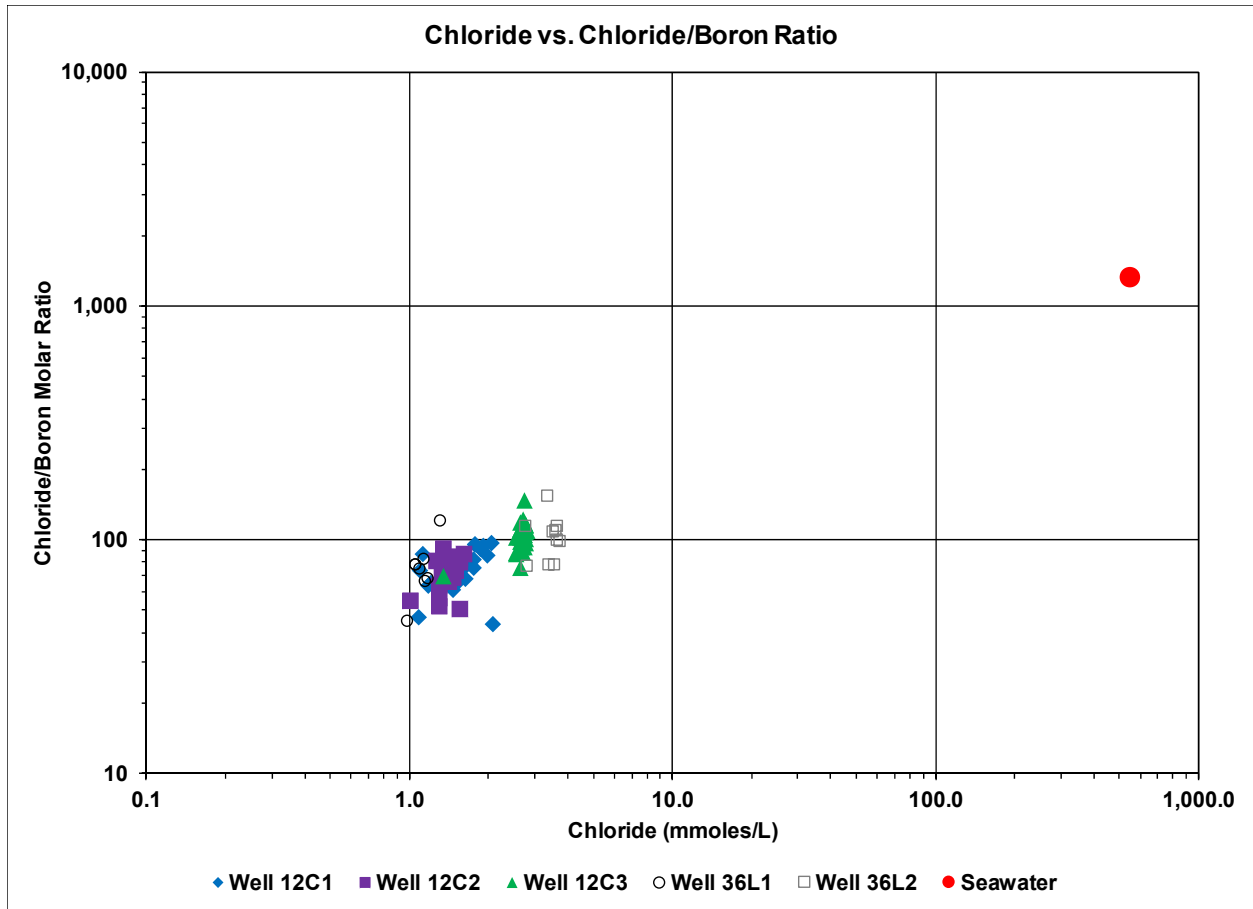


Figure 6-15. Chloride vs Chloride/Boron Ratio for Coastal Wells

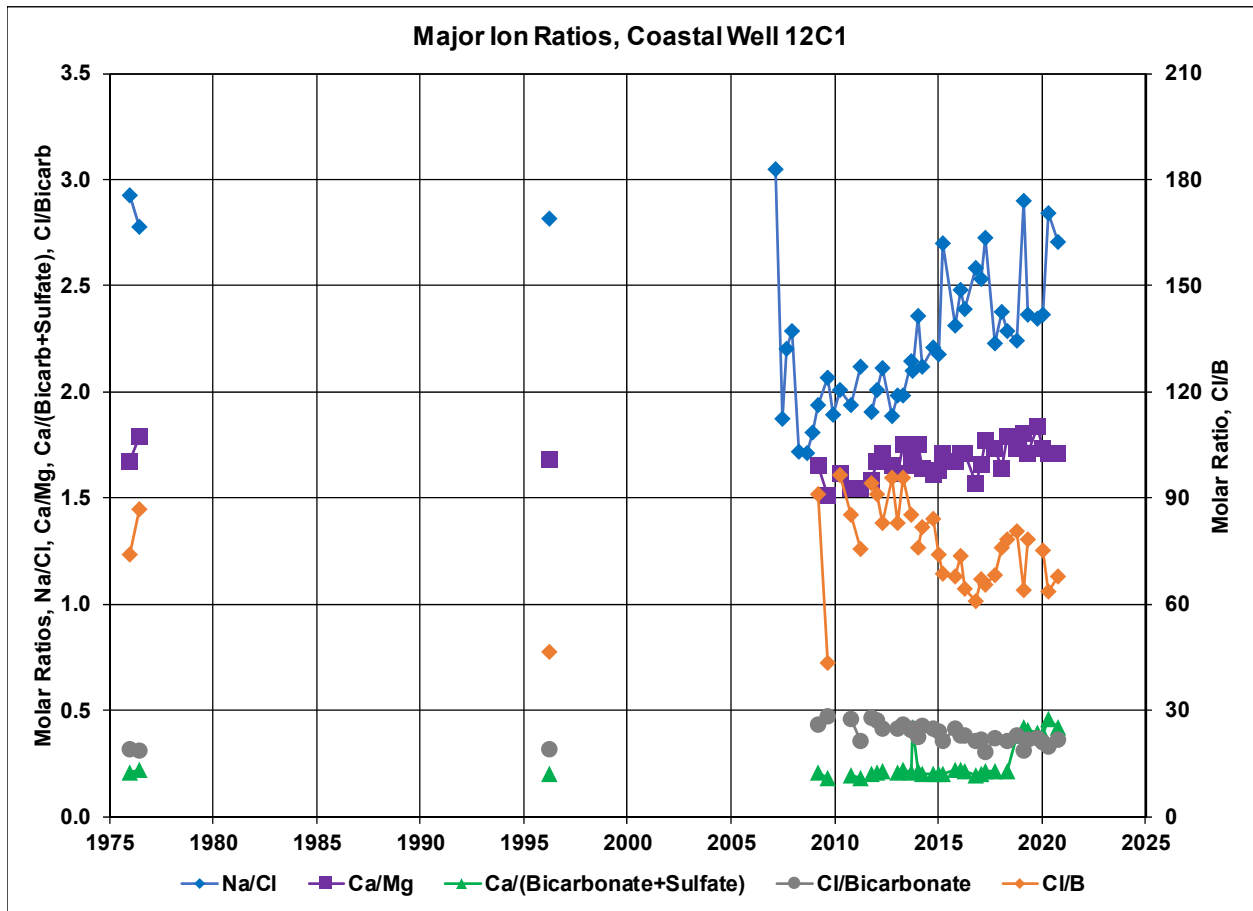


Figure 6-16. Major Ion Ratios for Coastal Well 12C1

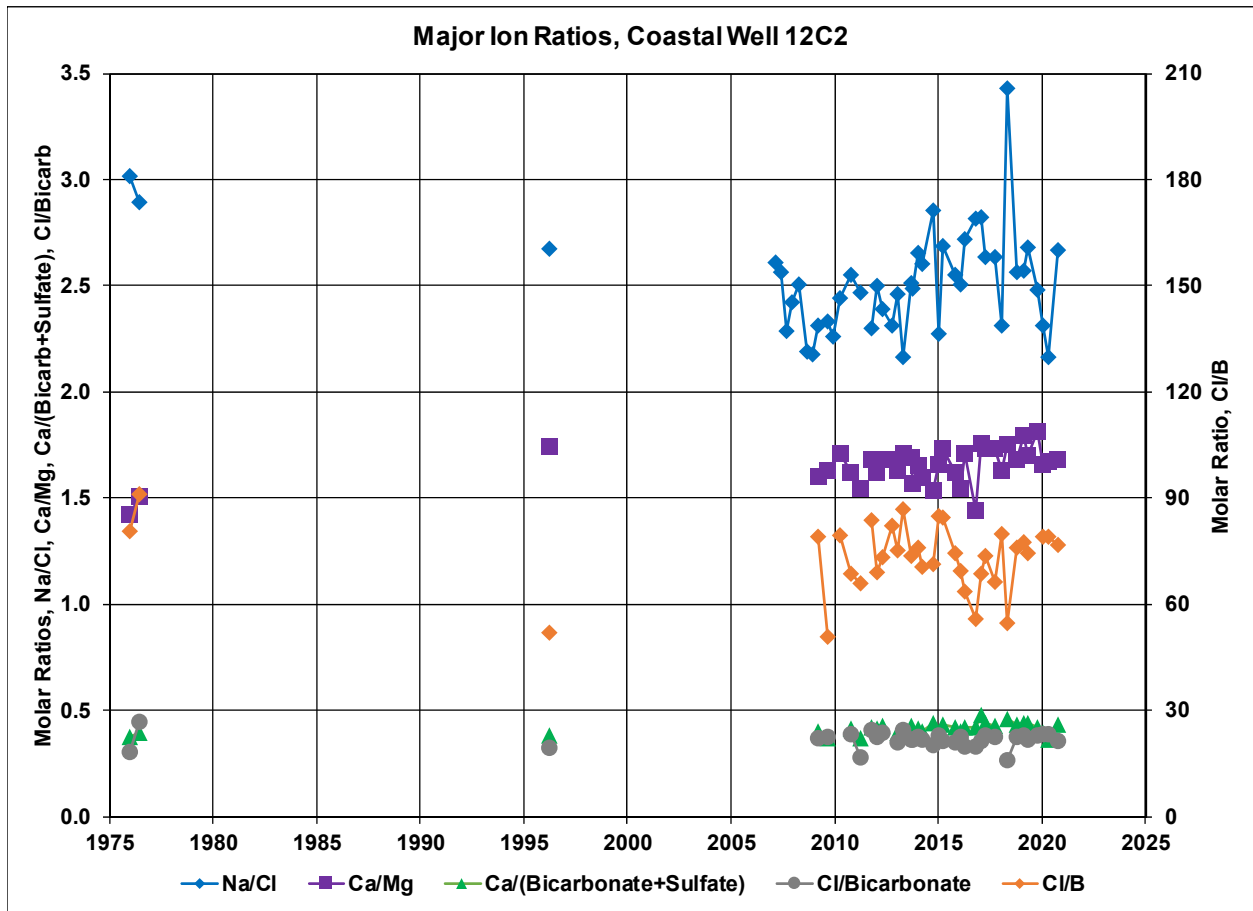


Figure 6-17. Major Ion Ratio for Coastal Well 12C2

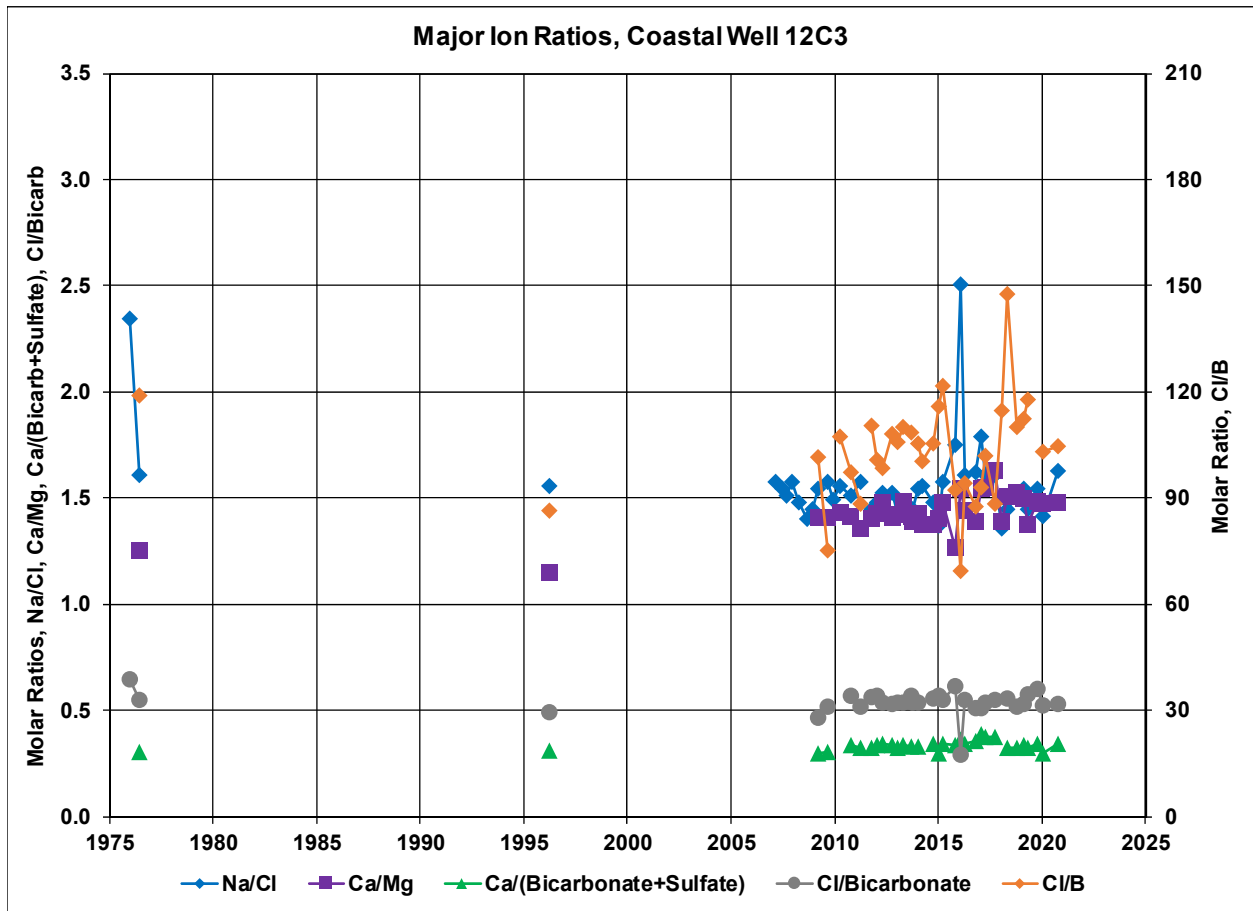


Figure 6-18. Major Ion Ratio for Coastal Well 12C3

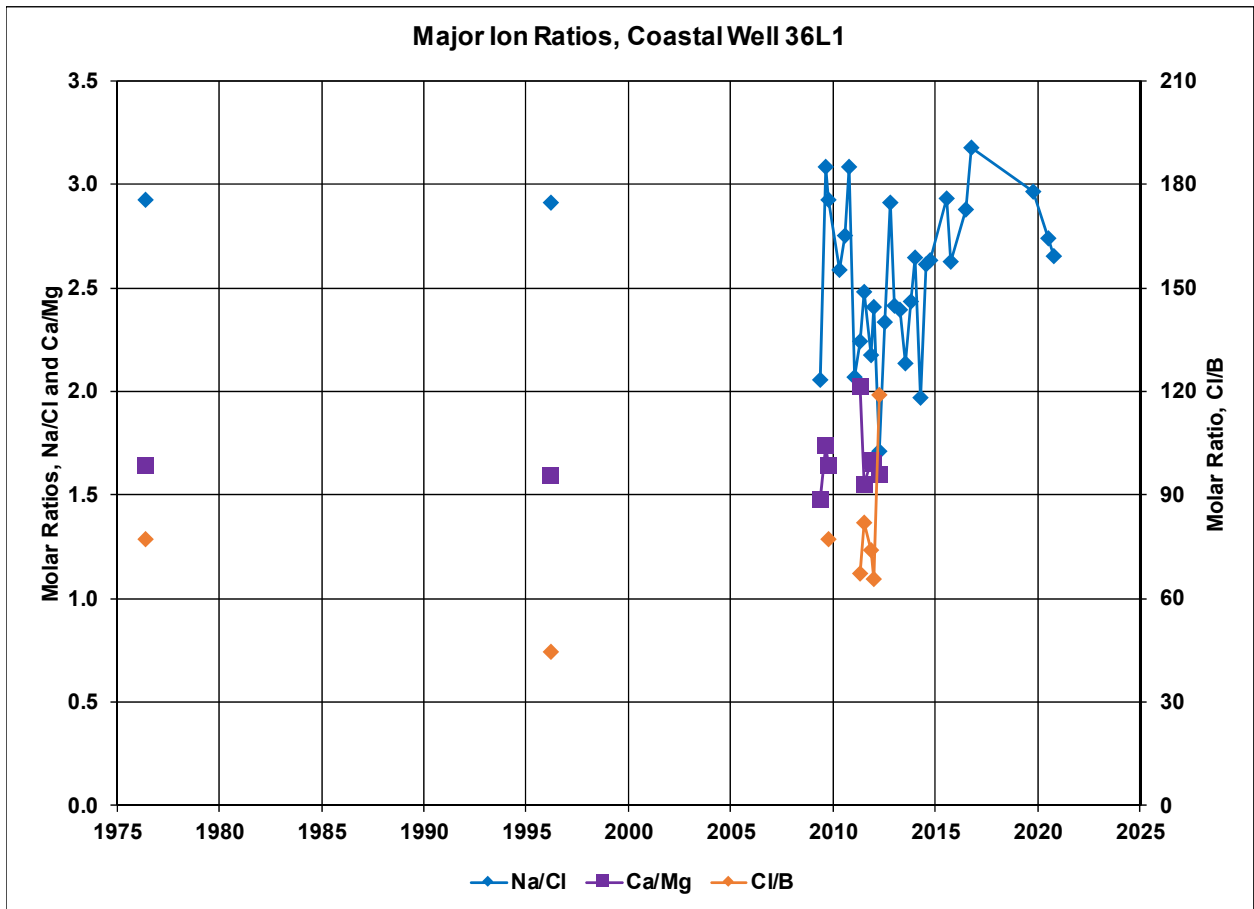


Figure 6-19. Major Ion Ratio for Coastal Well 36L1

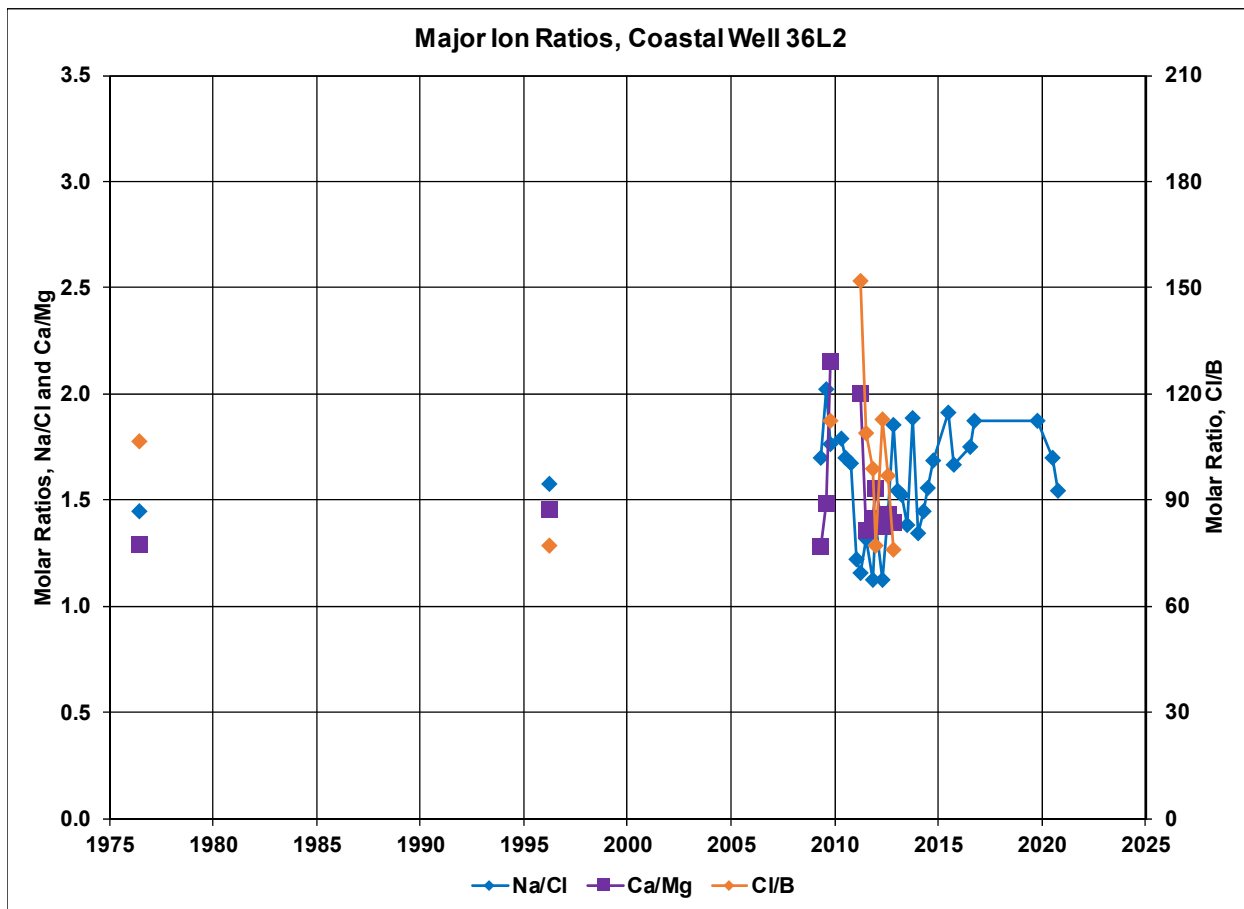


Figure 6-20. Major Ion Ratio for Coastal Well 36L2

7. Analyses of Water Conditions

Stipulation requirements, water shortage conditions, and long-term trends are presented in the following sections.

7.1. Stipulation Requirements

The Stipulation requires the determination of the water shortage condition as part of the Annual Report. Water shortage conditions are characterized by criteria designed to reflect that groundwater levels beneath the NMMA as a whole are at a point at which a response would be triggered to avoid further declines in groundwater levels (Potentially Severe), and to declare that the lowest historical groundwater levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached (Severe).

Potentially Severe Water Shortage Conditions

The Stipulation, page 25, defines Potentially Severe Water Conditions as follows:

Caution trigger point (Potentially Severe Water Shortage Conditions)

(a) Characteristics. The NMMA Technical Group shall develop criteria for declaring the existence of Potentially Severe Water Shortage Conditions. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation. Such criteria shall be designed to reflect that water levels beneath the NMMA as a whole are at a point at which voluntary conservation measures, augmentation of supply, or other steps may be desirable or necessary to avoid further declines in water levels.

Severe Water Shortage Conditions

The Stipulation, page 25, defines Severe Water Conditions as follows:

Mandatory action trigger point (Severe Water Shortage Conditions)

(a) Characteristics. The NMMA Technical Group shall develop the criteria for declaring that the lowest historic water levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation.

7.2. Water Shortage Conditions

7.2.1. Inland Criteria

The inland criteria for water shortage conditions is the Key Wells Index. The 2020 Key Wells Index was 11.7 ft msl, indicating Severe Water Shortage Conditions (Figure 7-1).

Key Wells Index

The Key Wells Index indicates trends in groundwater elevations within inland areas of the NMMA, and is intended to reflect whether there is a general balance between inflows and outflows in the NMMA. There was a decrease in the Key Wells Index in 2020, which continues to meet the criteria for Severe Water Shortage Conditions (Figure 7-1). Groundwater elevations in several of the wells that make up the Key Wells Index have generally declined since about 2000 (see Section 6.1.1 Results from Key Wells).

7.2.2. Coastal Criteria

Coastal groundwater elevations and water quality were better than Potentially Severe Water Shortage Conditions for all criteria in Spring 2019 (Table 7-1).

Table 7-1. Criteria for Potentially Severe Water Shortage Conditions

Well	Perforations Elevations (ft msl)	Aquifer	Spring 2020 Elevations (ft msl)	Elevation Criteria (ft msl)	2020 Highest Chloride (mg/L)	Chloride Concentration Criteria (mg/L)
11N/36W-12C1	-261 to -271	Paso Robles	8.73	5.0	49	250
11N/36W-12C2	-431 to -441	Pismo	8.91	5.5	52	250
11N/36W-12C3	-701 to -711	Pismo	13.67	9.0	95	250
12N/36W-36L1	-200 to -210	Paso Robles	8.42	3.5	40	250
12N/36W-36L2	-508 to -518	Pismo	11.88	9.0	100	250

7.2.3. Status of Water Shortage Conditions

The Key Wells Index remains below the Severe Water Shortage Conditions in 2020. Exiting the Severe Water Shortage Conditions requires two consecutive years where the Key Wells Index is above the level of Severe Water Shortage Conditions.

The responses discussed in the Stipulation are set forth as follows:

VI(D)(2b) Responses [Severe Water Shortage Conditions]. As a first response, subparagraphs (i) through (iii) shall be imposed concurrently upon order of the Court. The Court may also order the Stipulating Parties to implement all or some portion of the additional responses provided in subparagraph below.

(i) For Overlying Owners other than Woodlands Mutual Water Company and ConocoPhillips (now Phillips 66), a reduction in the use of Groundwater to no more than 110% of the highest pooled amount previously collectively used by those Stipulating Parties in a Year, prorated for any partial Year in which implementation shall occur, unless one or more of those Stipulating Parties agrees to forego production for consideration received. Such forbearance shall cause an equivalent reduction in the pooled allowance. The base Year from which the calculation of any reduction is to be made may include any prior single Year up to the Year in which the Nipomo Supplemental Water is transmitted. The method of reducing pooled production to 110% is to be prescribed by the NMMA Technical Group and approved by the Court. The quantification of the pooled amount pursuant to this subsection shall be determined at the time the mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is reached. The NMMA Technical Group shall determine a technically responsible and consistent method to determine the pooled amount and any individual's contribution to the pooled amount. If the NMMA Technical Group cannot agree upon a technically responsible and consistent method to determine the pooled amount, the matter may be determined by the Court pursuant to a noticed motion.

(ii) ConocoPhillips (now Phillips 66) shall reduce its Yearly Groundwater use to no more than 110% of the highest amount it previously used in a single Year, unless it agrees in writing to use less Groundwater for consideration received. The base Year from which the calculation of any reduction is to be made may include any prior single Year up to the Year in which the Nipomo Supplemental Water is transmitted. ConocoPhillips (now Phillips 66) shall have discretion in determining how reduction of its Groundwater use is achieved.

(iii) NCS D, RWC, SCWC, and Woodlands (if applicable as provided in Paragraph VI(B)(3) above) shall implement those mandatory conservation measures prescribed by the NMMA Technical Group and approved by the Court.

(iv) If the Court finds that Management Area conditions have deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further mandatory limitations on Groundwater use by NCS D, SCWC, RWC and the Woodlands. Mandatory measures designed to reduce water consumption, such as water reductions, water restrictions and rate increases for the purveyors, shall be considered.

(v) During Severe Water Shortage Conditions, the Stipulating Parties may make agreements for temporary transfer of rights to pump Native Groundwater voluntary following, or the implementation of extraordinary conservation measures. Transfer Native Groundwater must benefit the Management Area and be approved by the Court.

Nipomo Mesa groundwater management options to address water shortage conditions include responses required under the Stipulation as well as other possible groundwater management actions to address a range of resource concerns associated with the current Severe Water Shortage Condition. TG concerns directly relating to groundwater conditions include:

- Depressed groundwater elevations, both as measured by the Key Wells Index and in specific portions of the management area;
- An onshore gradient for a large area of the coastal and central portions of the NMMA.

Potential actions to address the above concerns include a range of projects and activities already in place, in progress, or contemplated for future consideration. Many of these possibilities have been reviewed previously in water supply evaluations (SAIC, 2006; Kennedy-Jenks, 2001; Bookman-Edmonston, 1994).

Existing actions in the NMMA reviewed by the TG include

- Consistent with Stage IV of the NMMA Water Shortage Response Stages, a total reduction of 2,155 AF (-38%) in purveyor production was accomplished in 2020 as compared to 2013.
- Continued progress in 2020 on the NSWP (see Section 1.1.5 Supplemental Water).

Potential actions to be reviewed by the TG include

- Increased development of reclaimed water for certain NMMA water supply needs in lieu of pumping from the deep aquifers.

Different management options have different potential capacity to reduce demand or increase supply, and each has its own technical considerations. By way of example, and assuming regulatory agency approval and the establishment of an appropriate cost benefit that meets the requirements of California's Proposition 218 or the California Public Utilities Commission (CPUC), wastewater effluent that is not already reclaimed may be discharged in locations where wastewater effluent would have a beneficial effect on the deep aquifers and in areas closer to the coast.

Areas of special concern with regard to Severe Water Shortage Conditions have special significance if they experience beneficial results from projects to manage groundwater demands and overall supply. For example, the coastal portion of the NMMA has a component of landward

groundwater flow in the deep aquifers and is potentially threatened by seawater intrusion. Actions that maintain a healthy seaward component of flow, protect the basin from potential seawater intrusion. Similarly, the pumping depression in the central portion of the NMMA has long-standing groundwater levels below sea level and is a pronounced feature of the principal production aquifers in the NMMA (Figure 6-6, Figure 6-8). Allowing water levels to rebound in this area would also help to reestablish and maintain protective groundwater gradients.

7.3. **Long-term Trends**

Long-term trends in climate, land use, and water use are presented in the following sections.

7.3.1. **Climatological Trends**

Climatological trends have been identified through the use of cumulative departure from mean analyses. A cumulative departure from the mean represents the accumulation, since the beginning of the period of record, of the differences (departures) in annual total rainfall volume from the mean value for the period of record. Each year's departure is added to or subtracted from the previous year's cumulative total, depending on whether that year's departure was above or below the mean annual rainfall depth. When the slope of the cumulative departure from the mean is negative (i.e., downward), the sequence of years is drier than the mean, and conversely when the slope of the cumulative departure from the mean is positive (i.e., upward), the sequence of years is wetter than the mean. The cumulative departures from the mean were computed for the rainfall station Mehlschau (38), which has the longest rainfall record for the NMMA (Figure 7-2).

Historical rainfall records for the Nipomo Mesa begin in 1920. There are three significant long-term dry periods in the record, from 1921 to 1934, from 1944 to 1951, and from 1984 to 1991. Long-term dry periods have occurred in the last 90 years that are longer in duration than the 1987 to 1992 drought (Figure 7-2). Between each large dry period, three wet periods have occurred. These wet periods are from 1935 to 1943, from 1977 to 1983, and from 1994 to 2001.

The period of analyses (1975-2020) used by the TG is roughly 8 percent "wetter" on average than the long-term record (1920-2020) indicating a slight bias toward overestimating the amount of local water supply resulting from percolation of rainfall. WY 2007, WY 2008, and WY 2009 had less than average rainfall. WY 2007 was approximately 45 percent to 50 percent of average rainfall, WY 2008 was approximately 94 percent to 97 percent of average rain fall, and WY 2009 was approximately 67 percent to 73 percent of average rain fall. During WY 2010 (20.1 inches) and WY 2011 (34.1 inches), rainfall was approximately 130 percent and 180 percent of average conditions (Table 3-2). Annual rainfall was below average during WY 2012 to WY 2016, above average in WY 2017, and below average in 2018. Rainfall was just below average during WY 2012 (15.4 inches), approximately 50 percent of average in WY 2013 (8.1 inches), 30 percent of average rainfall in WY 2014 (4.7 inches), approximately 50 percent of average in WY 2015 (8.1 inches), approximately 66 percent of average in WY 2016 (10.1 inches), approximately 175 percent of the average in WY 2017, approximately 58 percent of the average in WY 2018, and approximately 150 percent of the average in WY 2019. Based on the rainfall totals, 2020 is the seventh year with below average rainfall out of the past nine years.

7.3.2. **Land Use Trends**

The DWR periodically has performed land use surveys of the South Central Coast of California, which includes the NMMA: in 1958, 1969, 1977, 1985, and 1996. A land use survey for only the NMMA was performed by the TG in 2007 based on 2007 aerial photography (see Section 3.1.8 Land

Use). The most recent survey occurred in 2013 by performing aerial imagery analysis, reviewing observations made by NMMA TG engineer representatives, and assessing San Luis Obispo County pesticide purchase reports. Based on these surveys, land use in the NMMA has changed dramatically over the past half-century (Table 7-2, Figure 7-3, and Figure 7-4). Urban development has replaced native vegetation over the past 20 years, changing by a factor of two. Total agriculture acreage has approximately doubled from 1959 (see Section 3.1.8 Land Use).

Table 7-2. NMMA Land Use – 1959 to 2020 (acres)

	1959	1968	1977	1985	1996	2007	2013	2014	2020
Agricultural	1,600	2,000	2,000	2,200	2,000	2,600	2,970	2,970	2,988
Urban	300	700	2,200	3,300	5,800	10,200	10,460	10,670	10,596
Native	19,200	18,400	16,900	15,600	13,300	8,300	7,670	7,460	7,957
Total	21,100	21,100	21,100	21,100	21,100	21,100	21,100	21,100	21,541

7.3.3. Stipulating Party Water Use Trends

Consistent with Stage IV of the NMMA Water Shortage Response Stages, a total reduction of 2,155 AF (-38%) in production was accomplished in 2020 as compared to 2013. NCSD reduced groundwater production in 2020 by 62%, GSWC increased groundwater production by 14%, and Woodlands increased groundwater production by 11%, as compared to 2013 (Table 7-3).

Table 7-3. Groundwater Production by Purveyor from 2008 to 2020

Groundwater Production (AFY)													
Purveyors	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
NCSD	2,700	2,560	2,370	2,488	2,472	2,646	2,224	1,626	1,087	999	1,003	901	1,008
GSWC	1,380	1,290	1,060	1,043	1,103	1,169	940	786	1,340	1,292	1,316	1,193	1,332
Woodlands	540	810	850	864	857	1,016	856	871	1,029	1,088	1,366	1,066	1,131
RWC	900	880	720	728	763	795	688	651	*	*	*	*	*
Total	5,520	5,540	5,000	5,123	5,195	5,626	4,708	3,934	3,456	3,379	3,684	3,160	3,471

* - As of 2016, Production is included in GSWC

7.3.4. Trends in Basin Inflow and Outflow

The estimated groundwater production is 14,313 AF for CY 2020, which is about two and a half times the groundwater production in 1975 (Figure 4-1), confirming a trend of increased groundwater production over the last 44 years, although there was a downward trend since 2013 due to conservation by urban users in the face of prolonged drought. The estimated consumptive use of water for urban, agricultural and golf course, and industrial use for CY 2020 is 13,376 AF (Section 5.7).

Contours of groundwater elevations suggest that there is likely some inflow of groundwater from the SMVMA, a flat gradient between NCMA and NMMA, and likely landward groundwater flow from the coastal zone.

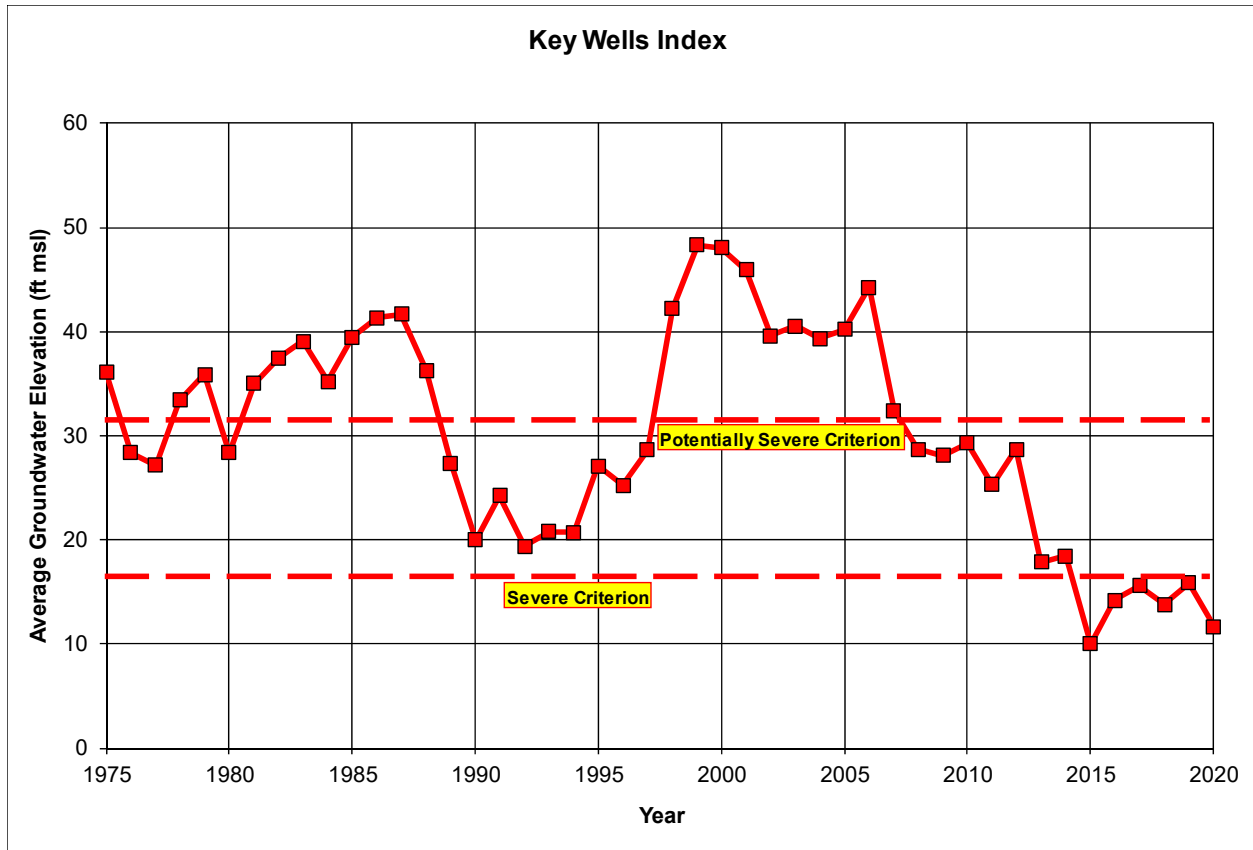


Figure 7-1. Key Wells Index The upper dashed line is the criterion for Potentially Severe Water Shortage Conditions and the lower dashed line is the criterion for Severe Water Shortage Conditions.

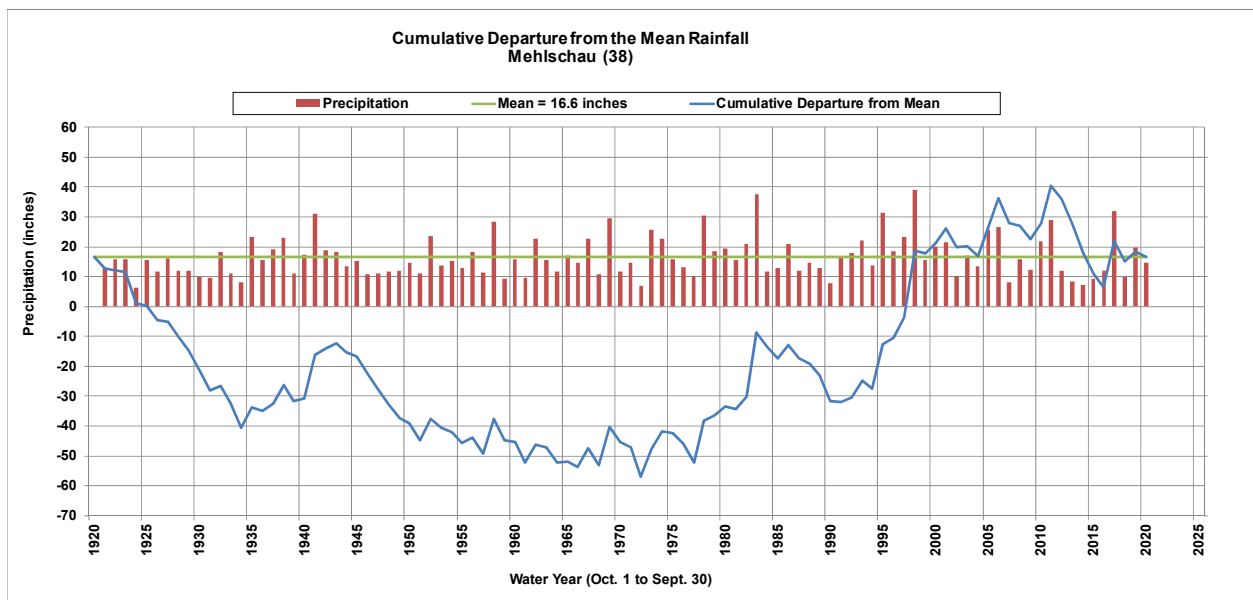


Figure 7-2. Rainfall: Cumulative Departure from the Mean – Rainfall Gauge Mehlschau (38).

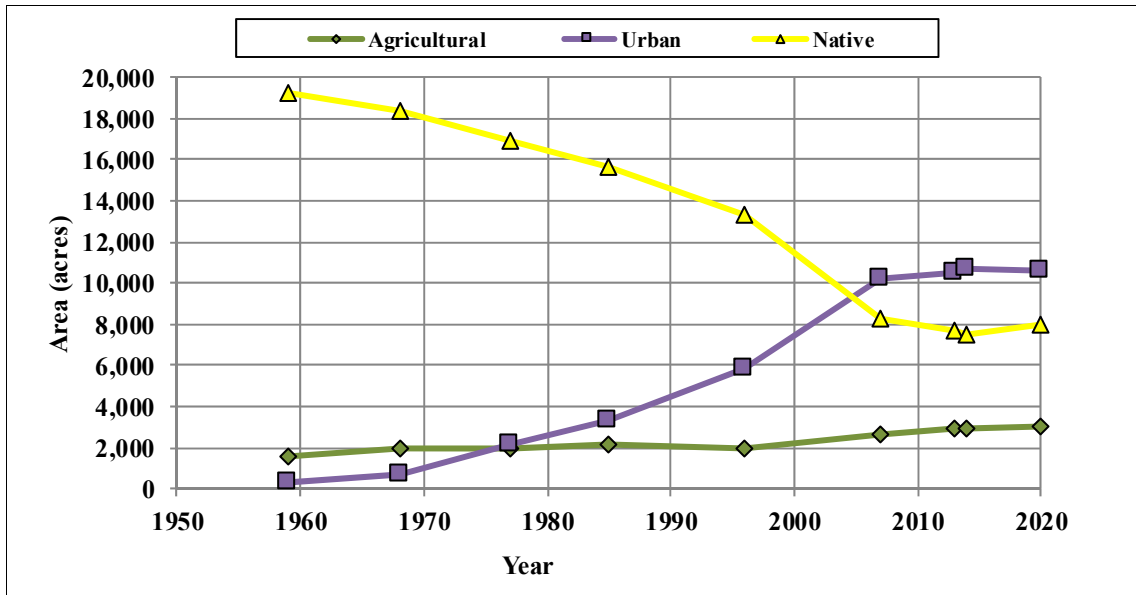


Figure 7-3. NMMA Land Use – 1959 to 2020

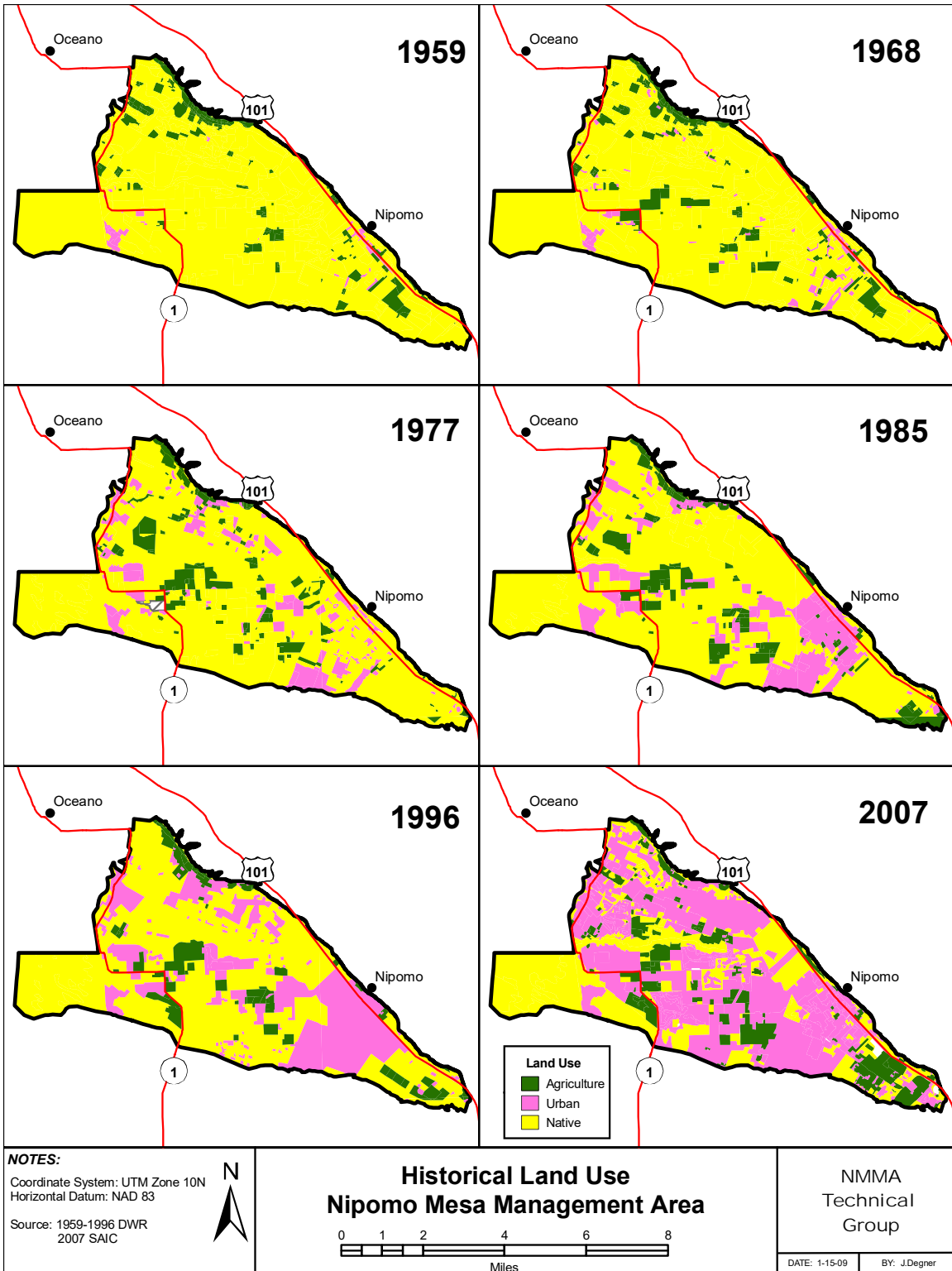


Figure 7-4. Historical Land Use in the NMMA

8. Other Considerations

8.1. *Institutional or Regulatory Challenges to Water Supply*

Several types of entities and individual landowners extract water from aquifers underlying the NMMA to meet water demands and no single entity is responsible for the delivery and management of available water supplies. Each entity must act in accordance with the powers and authorities granted under California law.

The powers and authorities for Woodlands and NCS D are set forth in the California Water Code. The CPUC regulates GSWC. This diversity of the public water purveyors' powers and the locations of their respective service areas (Figure 1-1) must be taken into account in attempting to develop consistent water management strategies that can be coupled with enforceable measures to ensure timely compliance with recommendations made by the TG, or mandatory Court orders. This is particularly true when there are legal requirements relating to the timing of instigating changes in water rates, implementation of mandatory water conservation practices, or forcing a change in pumping patterns, which may require one entity to deliver water to a location outside its service area.

A cooperative effort among the purveyors and other parties is the only expedient means to meet these institutional and regulatory challenges relating to the water supply and overall management of the NMMA. The purveyors developed a WMP in CY 2010 which outlines steps to take in "potentially severe water shortage conditions," as well as in "severe water shortage conditions" (see Appendix B). The WMP identifies a list of recommended water use restrictions to limit prohibited, nonessential and unauthorized water uses. For each condition, the WMP also identifies both voluntary and mandatory actions such as conservation goals, shifts in pumping patterns, and potential additional use and pumping restrictions.

9. Recommendations

A list of recommendations was developed and published in each of the previous NMMA Annual Reports. The TG will address past and newly developed recommendations, based on future budgets, feasibility, and priority. The recommendations are subdivided into two categories: (1) Achievements from earlier NMMA Annual Report recommendations accomplished in 2020, and (2) Technical Recommendations – to address the needs of the TG for data collection and compilation.

9.1. *Achievements from Previous NMMA Annual Report Recommendations*

The TG worked to address several of the recommendations outlined in the previous Annual Reports. Achievements made during 2020 are as follows:

- As part of the continued operation of the NSWP, a total of 1,041 AF of water was delivered to the NMMA during the CY 2020.
- A water level transducer and data logger were installed at one of the Key Wells (11N35W22C02) in late 2020.

-
- The TG continued review of the NMMA Monitoring Program to identify additional wells or monitoring points to include, in an effort to better characterize conditions in the shallow aquifer and to fill geographic data gaps associated with shallow and deep aquifers. The TG also approached and coordinated with SLO County, which resumed semi-annual monitoring of groundwater levels at a previous Key Well (11N35W23L01).
 - To support certain estimates of groundwater production, the TG updated the classification of land use in the NMMA, which was last categorized in 2014, based on 2020 conditions.
 - The TG continued tracking, in part through regular communication with San Luis Obispo County, groundwater management activities in groundwater basins adjacent to the SMGB upgradient of the NCMA. These activities are being implemented within the Arroyo Grande subbasin under the umbrella of California’s Sustainable Groundwater Management Act.
 - To better support evaluation of the potential for seawater intrusion, this report includes ion ratio time-series data for certain coastal wells and charts of ion ratio time-series data for other coastal wells.

9.2. **Technical Recommendations**

The following technical recommendations are not organized in order of priority, because the monitoring parties, considering their own particular funding constraints and authorities, will determine the implementation strategies and priorities.

- **Supplemental Water Supplies** – Reducing pumping is the most effective method to reduce the stress on the aquifers and to allow groundwater to recover; continued operation of the NSWP (see Section 1.1.5-Supplemental Water) is another viable method to achieve these goals. The TG recommends that this project continue to be implemented consistent with the Judgment and Stipulation.
- **Subsurface Flow Estimates** – Evaluate subsurface flow along the NMMA boundaries based on groundwater gradients and hydraulic conductivities in the shallow and deep aquifers.
- **Key Wells Monitoring** – Where possible, install data loggers in all Key Wells.
- **Key Wells Index 5-Year Review** – Evaluate and review the Key Wells Index by 2025.
- **Monitoring Points** – Replace the lost monitoring wells near Oso Flaco Lake. Select specific shallow dune sand aquifer wells for groundwater monitoring.
- **Well Reference Point Elevations** – Continue to improve the accuracy of the RP elevations using LIDAR data and other survey data.
- **Groundwater Production** – Develop a method to collect groundwater production data from all stipulating parties. Continue to update the land use classification on an interval commensurate with significant changes in land use patterns and as is practical, with the intention that the interval is more frequent than DWR’s 10-year cycle of land use classification.

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- **Agricultural Groundwater Production** – Continue to work with NMMA area farmers to measure groundwater production. Continue consultation with San Luis Obispo County Agriculture Department and other local experts in crop water use with specific updates to emerging crops and crop conversions.
 - **Hydrogeologic Characteristics of NMMA** –Continue to review well screen intervals, lithology, groundwater level, and other relevant information. Improve the understanding of NMMA area fault displacements and potential effects of faulting on the hydrostratigraphy and groundwater flow in the NMMA.
 - **Stream Flow Estimates** – Develop rating curves for Los Berros Creek, and install a new stream sensor on Nipomo Creek and develop a rating curve.
 - **Groundwater Modeling** – Continue to engage with users utilizing the regional groundwater model developed for Pismo Beach and the South SLO County Sanitation District to assess efforts to revise and update the accuracy of the model.
 - **SGMA** – Continue communication between the TG and SLO County with respect to the County’s groundwater management activity adjacent to the adjudicated portion of the SMGB. The TG will continue to report annual groundwater conditions to the DWR SGMA reporting site for adjudicated basins.

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Appendices

Appendix A: Monitoring Program

Nipomo Mesa Monitoring Program

Prepared by

Nipomo Mesa Management Area Technical Group

August 2008

Table of Contents

1	INTRODUCTION	3
1.1	Background	3
1.2	Judgment	3
1.3	Technical Group.....	5
1.4	Objectives Of Monitoring Program	6
1.5	Reporting Requirements	6
2	MONITORING PARAMETERS	7
2.1	Groundwater Elevations.....	7
2.2	Groundwater Quality	8
2.3	Precipitation	9
2.4	Streamflow	9
2.5	Surface Water Quality and Usage.....	9
2.6	Land and Water Uses Impacting NMMA Water Balance	10
2.7	Groundwater Pumping (Measured).....	10
2.8	Groundwater Pumping (Estimated)	10
2.9	Wastewater Discharge and Reuse.....	11
3	DATA ANALYSIS & WATER SHORTAGE TRIGGERS	11
3.1	Data Analysis	11
3.2	Water Shortage Triggers.....	12
	APPENDIX – MONITORING POINTS	13

1 INTRODUCTION

1.1 Background

This Monitoring Program is a joint effort of the Nipomo Mesa Management Area (“NMMA”) Technical Group (“Technical Group”). The Technical Group was formed pursuant to a requirement contained in the 2005 Stipulation (“Stipulation”) for the Santa Maria Basin Adjudication. Sections IV D (All Management Areas) and Section VI (C) (Nipomo Mesa Management Area) contained in the Stipulation were independently adopted by the Court in the Judgment After Trial¹ (herein “Judgment”). The Monitoring Program is a key component of the portions of the Judgment that involve the NMMA and forms the basis for subsequent analyses of the basin to be included in Annual Reports for the NMMA.

This Monitoring Program includes a discussion of the various parameters to be monitored within the NMMA, and a discussion of data analysis methods and water shortage triggers. The Monitoring Program provides a permanent foundation for the type of information to be regularly monitored and collected. However, the Technical Group is expected periodically to evaluate and update the Monitoring Program to ensure it provides comprehensive information sufficient to assess the integrity of water resources within the NMMA. For example, the Technical Group may change or expand monitoring points or types of data to be collected and otherwise periodically amend the Monitoring Program. Material amendments will be submitted for court approval.

1.2 Judgment

As a component of the physical solution for the Santa Maria groundwater basin, the Judgment requires the development and implementation of comprehensive monitoring and reporting in each of three Management Areas in the basin – Northern Cities Management Area, Nipomo Mesa Management Area, and Santa Maria Valley Management Area (Figure 1). For each of these Management Areas the Judgment specifies:

“A Monitoring Program shall be established in each of the three Management Areas to collect and analyze data regarding water supply and demand conditions. Data collection and monitoring shall be sufficient to determine land and water uses in the Basin, sources of supply to meet those uses, groundwater conditions including groundwater levels and quality, the amount and dispositions of Developed Water supplies, and the amount and disposition of any sources of water supply in the Basin.

¹ The Judgment is dated January 25, 2008 and was entered and served on all parties on February 7, 2008. This Monitoring Program is to be submitted for court approval on or before August 6, 2008.

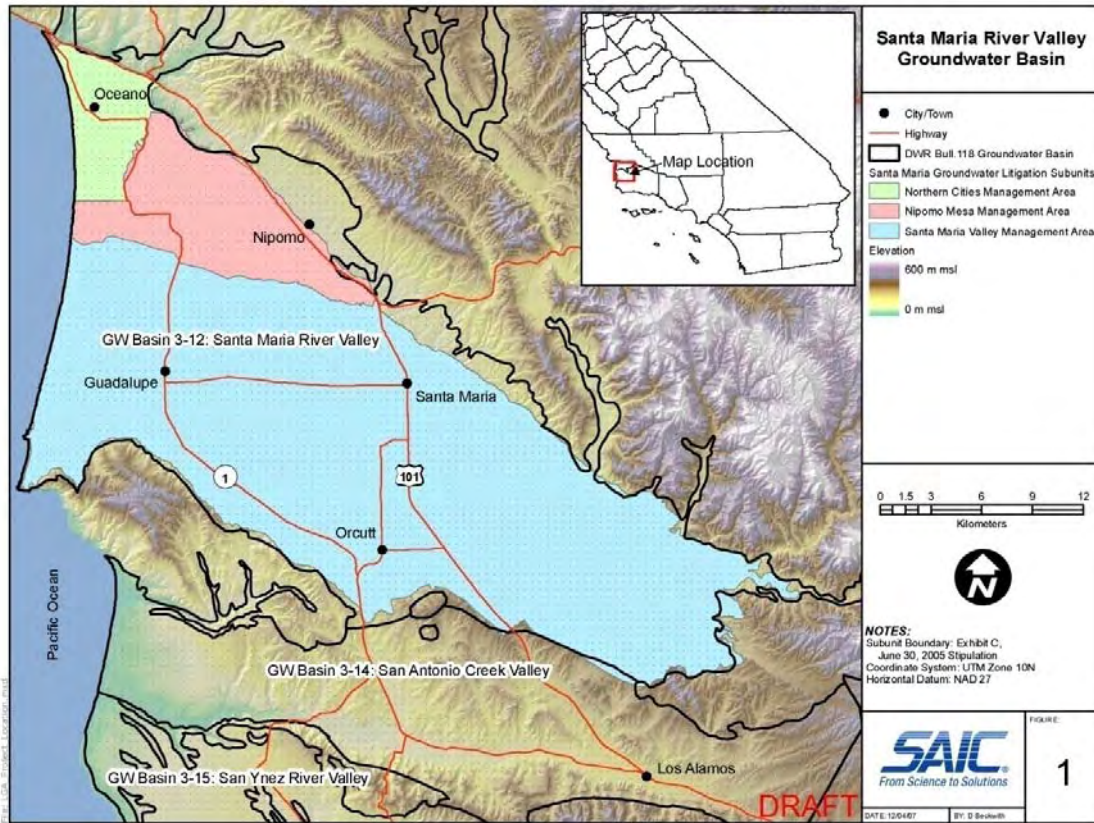


Figure 1. Santa Maria groundwater basin location map.

Within one hundred and eighty days after entry of judgment, representatives of the Monitoring Parties from each Management Area will present to the Court for its approval their proposed Monitoring Program.”

The Judgment also requires the NMMA and the Santa Maria Valley management area technical committees to submit for court approval the criteria that trigger responses to "potentially severe and severe shortage conditions" that are specified in the Judgment.

An additional requirement of the Judgment is an Annual Report:

“Within one hundred and twenty days after each Year, the Management Area Engineers will file an Annual Report with the Court. The Annual Report will summarize the results of the Monitoring Program, changes in groundwater supplies, and any threats to Groundwater supplies. The Annual Report shall also include a tabulation of Management Area water use, including Imported Water availability and use, Return Flow entitlement and use, other Developed Water availability and use, and Groundwater use. Any Stipulating Party may object to the Monitoring Program, the reported results, or the Annual Report by motion.”

Each Management Area Monitoring Plan will provide the basis for the preparation of the annual reports and the data to support the evaluations for the potentially severe and severe water shortage conditions relevant to the NMMA and the Santa Maria Valley management area.

1.3 Technical Group

The NMMA Technical Group is designated as the Monitoring Party for the NMMA.

Membership

The NMMA Technical Group is designated in the Judgment as including representatives appointed by Nipomo Community Services District, Southern California Water Company (now known as Golden State Water Company), ConocoPhillips, Woodlands Mutual Water Company, and an agricultural overlying owner who is also a Party to the Stipulation. The service areas of purveyors in the Technical Group are indicated in Figure 2.

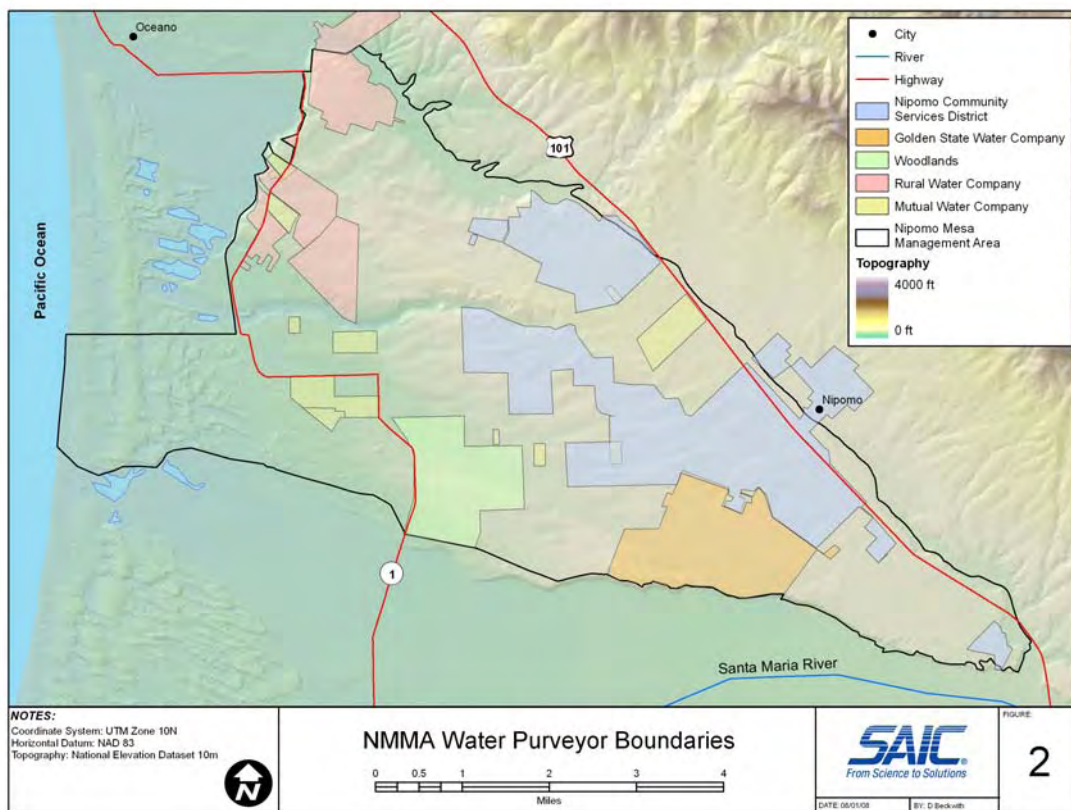


Figure 2. Water purveyors within the NMMA.

Role

The Technical Group is responsible for preparing the Monitoring Program, conducting the Monitoring Program, and preparing the Annual Reports. The Technical Group may hire individuals or consulting firms to assist in the preparation of the Monitoring Program and Annual Reports (the Judgment describes these individuals or consulting firms as the “Management Area Engineer”). The Technical Group has the sole discretion to select, retain, and replace the Management Area Engineer.

To assist the Technical Group in monitoring and analyzing water conditions in the NMMA, Stipulating Parties are required to provide monitoring and other production data at no charge, to the extent that such data have been generated and are readily available. The Technical Group is required to adopt rules and regulations concerning measuring devices that are consistent with the Monitoring Programs of other Management Areas when feasible.

If the Technical Group is unable to agree on any aspect of the Monitoring Program, the matter may be taken to the Court for resolution.

Cost Sharing

The Technical Group functions are to be funded by contribution levels negotiated by Nipomo Community Services District, Golden State Water Company, Rural Water Company, ConocoPhillips, and Woodlands Mutual Water Company. In-lieu contributions through engineering services may be provided, subject to agreement by those parties. The budget of the Technical Group shall not exceed \$75,000 per year without prior approval of the Court.

1.4 Objectives Of Monitoring Program

The objectives of the Monitoring Program are to establish appropriate data collection criteria and analytical techniques to be used within the NMMA so that groundwater conditions, changes in groundwater supplies, threats to groundwater supplies, water use, and sources of water can be documented and reported on an annual basis. In addition, data developed through the Monitoring Program will be relied upon to provide the criteria for potentially severe and severe water shortage conditions.

1.5 Reporting Requirements

The Monitoring Program shall be presented for Court approval consistent with the Judgment. The Annual Report shall be submitted to the Court by April 30 of each year (April 29 on leap years).

2 MONITORING PARAMETERS

To satisfy the objectives of the Monitoring Program (section 1.4), data need to be collected from a variety of sources. The data to be collected include:

- Groundwater elevations measured in wells
- Water quality measured in wells
- Precipitation
- Streamflow
- Surface water usage
- Surface water quality
- Land use to the extent differential uses impact the NMMA water budget
- Groundwater pumping (measured)
- Groundwater pumping (estimated)
- Wastewater discharge and reuse amounts and locations

2.1 Groundwater Elevations

The San Luis Obispo County Department of Public Works, the U.S. Geological Survey, the California Department of Water Resources, and some groundwater users within the NMMA periodically gather groundwater elevation data on a large number of wells within the NMMA. Various members of the NMMA Technical Group already maintain these data in digital databases.

Current monitoring of groundwater elevations is conducted primarily by the County of San Luis Obispo, and additionally by Nipomo Community Services District, ConocoPhillips, Woodlands, Golden State Water Company, and Rural Water Company. The Monitoring Program will include compilation of groundwater elevations for a large number (93 initially) of groundwater wells located throughout the NMMA. Typically, groundwater elevations are measured during the fall and spring of each year. The initial list of the wells to be included in the Monitoring Program are shown in the Appendix.

The extensive current monitoring of groundwater elevations within the NMMA is sufficient to provide initial information on groundwater trends. However, there are four additional issues that the Technical Group will consider for further monitoring or analysis over the first years of implementation of the Monitoring Program:

- Additional existing coastal nested monitoring wells will be considered for inclusion in the groundwater elevation monitoring program. These include the 13K2-K6 nested site near Oso Flaco Lake (currently not being monitored) and the 36L1-L2 nested site in the coastal dunes west of Black Lake Canyon (outside the NMMA, currently monitored for groundwater elevations by SLO County).
- The wells used in the Monitoring Program will be investigated as necessary to ensure that the aquifer penetrated by the wells is verified.
- Additional wells may be added as necessary to the Monitoring Program in a phased approach to fill in data gaps recognized during preparation of the Annual Reports.
- The Technical Group may recommend that additional dedicated monitoring well(s) need to be installed at critical locations where no other information is available.

2.2 Groundwater Quality

As an element of compliance with their drinking water reporting responsibilities, public water purveyors within the NMMA have historically gathered and reported groundwater quality data (filed with the California Department of Public Health). In addition, the U.S. Geological Survey, the California Department of Water Resources, and SLO County have also gathered some water quality data within the NMMA. Members of the NMMA Technical Group maintain these data in digital databases.

Of considerable importance is groundwater quality in wells near the ocean, the most likely site where any intrusion of seawater would first be detected. Because there was no current monitoring of groundwater quality in any of the coastal nested monitoring wells, the Monitoring Program will include the following:

- Coastal nested monitoring well site 11N/36W-12C (west of the ConocoPhillips refinery) is now monitored under agreement with SLO County and provides quarterly water quality sampling. Samples are collected for chloride, sulfate, and sodium lab analyses and pH, EC, and temperature are measured in the field.

Regular sampling and analyses of groundwater quality is an important component of the Monitoring Program, because of the potential threat of seawater intrusion at the coastline and potential water quality changes caused by pumping stress in other portions of the NMMA and the basin as a whole. Water quality does not change as rapidly as groundwater elevations, so quality monitoring does not have to be as frequent. With the addition of the coastal nested monitoring data, current water quality monitoring appears to be adequate. However, four aspects of the Monitoring Program will be further evaluated to ensure the ongoing adequacy of the Monitoring Program:

- The Technical Group will arrange to receive water quality monitoring results from purveyors within the NMMA, either directly from the purveyors or annually from the Department of Public Health.
- Coastal nested monitoring well site 12C will be evaluated to determine whether current quarterly sampling can be reduced in frequency (or field testing substituted for laboratory analysis), thus allowing funding for water quality monitoring of additional nested site 13K2-K6 near Oso Flaco Lake (not sampled for three decades) and the 36L1-L2 nested site in the coastal dunes west of Black Lake Canyon (last sampled 12 years ago).
- Each well used for monitoring of groundwater elevations will be tested once for general minerals (if such testing is not already conducted) as budgeting allows. This testing will help further define particular aquifer characteristics.
- A water quality monitoring contingency plan will be developed in the event that there are indications of seawater intrusion in coastal monitoring wells. This contingency plan will consider triggers for increased sampling, both in frequency and in added analytes (e.g., iodide, strontium, boron, oxygen/hydrogen isotopes).

2.3 Precipitation

There is a wide choice of existing precipitation stations that can be used to estimate rainfall within the NMMA. Two gauges are part of the ALERT Storm Watch System, Nipomo East (728) and Nipomo South (730). Other gauges include Simas (201.1), Black Lake (222), Runels Ranch (42.1), Oceano Wastewater Plant (194), Nipomo Mesa (152.1), Peny Ranch (175.1), Mehlschau (38), NCS D Shop (223), Nipomo CDF (151.1), and CIMIS Nipomo #202 Station. As part of the analysis for the Annual Reports, data from an appropriate subset of these gauges will be used to estimate precipitation each year.

2.4 Streamflow

Streamflow can be important both as an input and an output of the water balance for an area. Currently, streamflow within the NMMA is partially gauged. The Los Berros Creek gauge (Sensor 757) is located 0.8 miles downstream from Adobe Creek and 3.7 miles north of Nipomo on Los Berros Road. This station is located approximately where Los Berros Creek conveys water out of the NMMA.

Nipomo Creek is not currently being monitored and is observed to convey water out of the NMMA during some of the year. The Technical Group will consider whether monitoring of Nipomo Creek or any other surface water monitoring is necessary or appropriate.

2.5 Surface Water Quality and Usage

There has been limited surface water monitoring of the dune lake complex and in Black Lake Canyon by the San Luis Obispo Land Conservancy and others. The

Technical Group will evaluate whether this monitoring is sufficient and will obtain this and any additional related data as necessary and appropriate.

It is not known whether there are surface water diversions within the NMMA. The Technical Group will investigate this issue and determine whether additional monitoring is necessary and appropriate.

2.6 Land and Water Uses Impacting NMMA Water Balance

Land uses within the NMMA include agricultural, residential/commercial, and undeveloped areas. Land use surveys can be useful both in developing an overall water balance assessment and as an aide to estimate water use when such use is not directly measured. The most common method of conducting a land use survey is to obtain current digital aerial photography, classify the land uses, and create GIS mapping of the various land use classifications. In some cases, field checking is also required to confirm information obtained from aerial photography.

Where necessary, water use may be established based on the various types of land use within the NMMA. Information may be obtained from both published data (including San Luis Obispo County WPA-6) and any information compiled from existing stations installed in and around the NMMA that monitor climate data (CIMIS). This is described in greater detail in Section 2.8.

2.7 Groundwater Pumping (Measured)

Individual landowners, public water purveyors, and industry all rely on groundwater pumping from the NMMA. To the extent users measure their volume of use, these data will be reported to the Technical Group on an annual basis. Stipulating Parties to the Judgment are required to provide monitoring and other production data at no charge, to the extent that such data have been generated and are readily available.

Pursuant to paragraph 5 of the Judgment, the Technical Group retains the right to seek a Court Order requiring non-stipulating parties to monitor their well production, maintain records thereof, and make the data available to the Court or the Court's designee.

2.8 Groundwater Pumping (Estimated)

Some groundwater users do not measure the volume of their groundwater production, and thus, this increment of groundwater pumping will have to be estimated each year. There are several methods of estimating groundwater pumping when totalizing meters are not installed. For cooperating pumpers, electrical records for pumping can be used, with the most accuracy obtained when the wells are tested regularly for pump efficiency.

Another method of estimating agricultural pumping is through self-reporting or surveys of crop type and irrigated acreage. For agriculture, water use can then be

estimated using calculations that include crop water demand, effective precipitation, evapotranspiration, irrigation efficiency, and leaching requirements. An active California Irrigation Management Information System (CIMIS) station is located in the southern portion of the Woodlands within the NMMA and provides a useful reference for Nipomo Mesa evapotranspiration. A second active station is located adjacent to the Sisquoc River, above Tepusquet Creek.

For municipal or mixed rural lands, estimates will be based on acreage and development type. In some urban lands, a “unit water use” can be derived from average water consumption recorded from comparable or historical conditions.

To develop a complete picture of groundwater withdrawals for Nipomo Mesa, the Technical Group will develop methods for estimating unmetered groundwater pumping that will likely include some combination of those discussed above.

2.9 Wastewater Discharge and Reuse

Four wastewater treatment facilities discharge treated effluent within the NMMA and include the following: NCS D’s Southland Wastewater Treatment Facility in the eastern portion of Nipomo Mesa, NCS D’s wastewater treatment plant at Blacklake Village, Cypress Ridge’s wastewater treatment facility, and the Woodland’s wastewater treatment facilities. The Monitoring Program will include an annual compilation of wastewater treatment plant discharges, any reuse of the treated water (quantities and locations), and available water quality parameters.

3 DATA ANALYSIS & WATER SHORTAGE TRIGGERS

The primary purpose of the Monitoring Program is to detect changes in groundwater conditions that indicate current and future water supply problems within the NMMA. Although the determination of methods of data analysis and subsequent triggers that can indicate negative water supply conditions are not elements of the Monitoring Program, initial assessment of these issues are the responsibility of the Technical Group. A short discussion of potential methodologies follows.

3.1 Data Analysis

The focus of data analysis is to help detect and predict whether any conditions exist that could harm the aquifer, either by excessive drawdown or by degrading water quality. In evaluating the Monitoring Program data, the Technical Group will establish methodologies to use monitoring data to define the “health” of the basin. Among the methodologies that the Technical Group will evaluate in developing potentially severe and severe water shortage triggers are:

- **Coastal monitoring wells** – trends in water quality and groundwater elevations. Establish criteria to recognize both the potential for seawater intrusion and evidence of actual seawater intrusion.
- **Coastal groundwater gradient** – the direction and magnitude of groundwater flow either towards the ocean or in a landward direction. Establish criteria to recognize conditions that could cause seawater intrusion.
- **NMMA-wide groundwater elevation contouring** – establish groundwater flow directions, detect areas of increased drawdown, determine how pumping patterns are affecting the basin and the effects of any changes in the location of pumping that may serve to mitigate negative impacts.
- **Key wells** – indicator wells in key areas that track changes in groundwater elevations and water quality. Establish criteria to determine whether monitored changes could potentially be harmful to the aquifers.
- **Groundwater in storage** – calculation of changes of groundwater in storage and consideration of changes of groundwater storage over time can be used to analyze trends in the basin hydrologic balance.

3.2 Water Shortage Triggers

The Stipulation requires that water level and water quality criteria are to be established that will trigger responses to potential water shortages (the potentially severe and severe water shortage conditions). The Technical Group will rely on the Monitoring Program data and protocol in establishing the proposed criteria for these triggers. The triggers points will be presented for court approval, as required in the Stipulation, prior to or concurrent with the filing of the first Annual Report in 2009. Annual Reports will include an assessment of basin conditions relative to the proposed trigger points.

APPENDIX – MONITORING POINTS

The monitoring points shown on Figure A-1 and in Table A-1 are the 93 initial wells that the NMMA Technical Group determined would provide information to evaluate the health of the Nipomo Mesa portion of the Santa Maria basin. Many of the wells indicated are currently being monitored (see Table A-1), with the remainder planned to be monitored prior to preparation of the first Annual Report.

As discussed in the main text of this Monitoring Program, wells will be added and/or dropped in subsequent years as the basin is evaluated annually. The addition and/or subtraction of monitoring wells will be based on data gaps, areas of special concern that require more monitoring, and data redundancy. Information from some of the wells listed in Table A-1 that are monitored by the County of San Luis Obispo may not be available because of privacy concerns – this issue will be addressed prior to preparation of the first Annual Report.

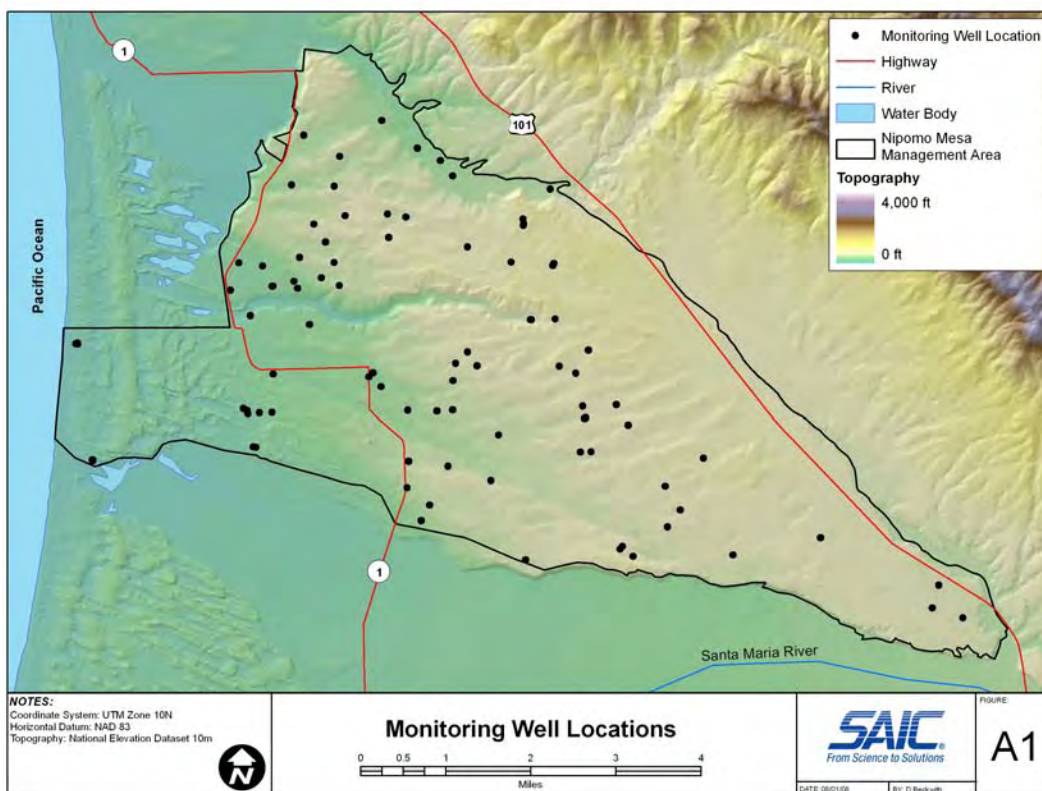


Figure A-1. Locations of monitoring points listed in Table A-1.

Appendix B: Water Shortage Conditions and Response Plan

FINAL 4/13/09

Nipomo Mesa Management Area
Water Shortage Conditions and Response Plan

Nipomo Mesa Management Area
Technical Group

April 2009

The Santa Maria basin was divided into three management areas as a result of the adjudication of the Santa Maria groundwater basin. The June 30, 2005 Stipulation (“Stipulation”), the terms of which are incorporated into the Court’s Judgment dated January 25, 2008 (“Judgment”), established the boundaries of the Nipomo Mesa Management Area (“NMMA”), and provided for a technical group (NMMA Technical Group) to oversee management of the NMMA. As part of the Stipulation, the Technical Group was tasked to develop a Monitoring Program that shall include the setting of well elevations and groundwater quality criteria that trigger the responses set forth in Paragraph VI(D) of the Stipulation.

The NMMA Technical Group prepared a Monitoring Program dated August 5, 2008 that was submitted to the Court in accordance with the Judgment. This Water Shortage Conditions and Response Plan is an addendum to the Monitoring Program and completes the Monitoring Program requirements as defined in the Stipulation.

This document is divided into three sections:

- I. Water Shortage Conditions Nipomo Mesa Management Area,
- II. Response Plan for Potentially Severe and Severe Water Shortage Conditions, and
- III. Discussion of Criteria for Potentially Severe and Severe Water Shortage Conditions.

I. Water Shortage Conditions Nipomo Mesa Management Area

Water shortage conditions are characterized by criteria designed to reflect that groundwater levels beneath the NMMA as a whole are at a point at which a response would be triggered to avoid further declines in groundwater levels (Potentially Severe), and to declare that the lowest historic groundwater levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached (Severe).

Groundwater levels beneath the NMMA as a whole impact the cost of pumping, the quality of groundwater pumped, and the overall flow of fresh water to the ocean that balances potential seawater intrusion. Lowering of groundwater levels below certain thresholds is to be curtailed by importing supplemental water, increasing conservation, and decreasing consumptive use of groundwater produced.

The NMMA Technical Group has developed criteria for declaring the existence of Potentially Severe and Severe Water Shortage Conditions. These criteria represent the conditions in both coastal and inland wells, and depend upon measurements of groundwater elevation and groundwater quality.

While this Response Plan relies on quantitative measurements of groundwater levels, the Technical Group acknowledges these measurements are subject to many variables so that

any given measurement may only be accurate within a percentage range; no given measurement is exact or precise. For example, water level measurements obtained from groundwater production wells may be influenced by a range of factors, including but not limited to temperature, the method, protocol, and equipment used to obtain the measurement, the condition of the well, the time allowed for water levels in a previously producing well to equilibrate, and any nearby wells that remain pumping while the measurements are taken. As well, the historic data used as the basis to set action levels for Severe and Potentially Severe Water Shortage Conditions may be influenced by these and other factors. Finally, while there is sufficient historical data to reliably set Severe and Potentially Severe Water Shortage Conditions criteria, as more data is gathered pursuant to the NMMA Monitoring Plan, the Technical Group expects its understanding of NMMA characteristics will become increasingly more sophisticated and accurate. As a result of these considerations, the Technical Group acknowledges and expects that it will recommend modifications to the Severe and Potentially Severe Water Shortage Conditions criteria as more data are obtained on a consistent basis and as the Technical Group's understanding of the NMMA characteristics improves over time.

Seawater intrusion is a condition that could permanently impair the use of the principal producing aquifer to meet water demands of the NMMA. For coastal areas, the criteria described here are set either to indicate conditions that, if allowed to persist, may lead to seawater intrusion or increasing chloride concentrations, or that actual seawater intrusion has occurred.

Monitoring Wells

As with the NMMA Monitoring Plan, primary data for this Water Shortage Conditions and Response Plan is derived from a select group of wells located within the NMMA. Identification of these wells and the selection criteria are as follows.

Coastal sentinel wells, installed by the Department of Water Resources in the 1960s, are monitored to characterize any condition for the advancement of seawater into the freshwater aquifer. Specifically, the groundwater elevation and concentration of indicator constituents are evaluated to determine the threat or presence of seawater intrusion to the fresh water aquifer. These coastal monitoring wells are as follows:

Coastal Well	Perforation Elevation (ft msl)	Aquifer
11N/36W-12C1	-261 to -271	Paso Robles
11N/36W-12C2	-431 to -441	Pismo
11N/36W-12C3	-701 to -711	Pismo
12N/36W-36L1	-200 to -210	Paso Robles
12N/36W-36L2	-508 to -518	Pismo

For inland areas, criteria for water shortage conditions are based on annual Spring groundwater elevation measurements made in key wells located inland from the coast (the “Key Wells Index”). The inland Key Wells are as follows:

Key Wells
11N/34W-19
11N/35W-5
11N/35W-8
11N/35W-9
11N/35W-13
11N/35W-22
11N/35W-23
12N/35W-33

Potentially Severe Water Shortage Conditions

The Stipulation, page 25, defines Potentially Severe Water Conditions as follows:

Caution trigger point (Potentially Severe Water Shortage Conditions)¹

(a) Characteristics. The NMMA Technical Group shall develop criteria for declaring the existence of Potentially Severe Water Shortage Conditions. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation. Such criteria shall be designed to reflect that water levels beneath the NMMA as a whole are at a point at

¹ The multiple citations to and partial restatements of the Stipulation are intended to provide context to this Water Shortage Conditions and Response Plan. However, neither the restatement of a portion of the Stipulation herein, nor the omission of a portion of a quotation from the Stipulation, is intended to override or alter the mutual obligations and requirements set forth in the Stipulation.

which voluntary conservation measures, augmentation of supply, or other steps may be desirable or necessary to avoid further declines in water levels.

Inland Areas: The NMMA Technical Group set the criteria for a Potentially Severe Water Shortage Condition to the elevation of groundwater as determined by the Key Wells Index. If the Spring groundwater elevations indicate that the Key Wells Index is less than 15 feet above the Severe Water Shortage criterion (equal to **31.5 ft msl**²), the Technical Group will notify the Monitoring Parties of the current data, and evaluate the probable causes of this low level as described below. If the Key Wells Index continues to be lower than **31.5 ft msl** in the following Spring, the Technical Group will report to the Court in the Annual Report that Potentially Severe Water Shortage Conditions are present and provide its recommendations regarding the appropriate response measures. During the period a Potentially Severe Water Shortage Condition persists, the NMMA Technical Group shall include in each Annual Report an assessment of the hydrologic conditions and any additional recommended response measures. A discussion of how the groundwater elevations criteria were determined is presented in discussion Section III. Potentially Severe Water Shortage Conditions will no longer be considered to exist when: 1) the Key Well Index is above the Potentially Severe criterion of 31.5 ft msl for two successive Spring measurements, or 2) the Key Well Index is 5 ft or higher above the Potentially Severe criterion (which calculates to 36.5 ft msl) in any Spring measurement. Alternatively, the NMMA Technical Group may determine that the Potentially Severe Water Shortage Condition no longer exists when the Key Well Index is above the Potentially Severe criterion of 31.5 ft msl and conditions warrant this conclusion.

The Key Well Index criteria for Potentially Severe Water Shortage Conditions may be modified in the future by the Technical Group as more data are developed on the accuracy of measured data and Key Well construction or condition.

Coastal Areas: The NMMA Technical Group set the coastal criteria for a Potentially Severe Water Shortage Condition using both groundwater surface elevation and groundwater quality measured in the coastal monitoring wells, as presented in the table below. The groundwater elevation criteria are discussed in Section III. The groundwater quality portion of the coastal criteria is set at **250 mg/L** chloride. There is no water quality criterion for the shallow alluvium. Potentially Severe Water Shortage Conditions are determined if either the Spring groundwater elevation drops below the criteria elevation, or chloride concentration exceeds the criteria concentration, in any of the coastal monitoring wells subject to the Response Plan data analysis and verification described below.

² The decimal point does not imply the accuracy of the historical low calculation.

The NMMA Technical Group will report to the Court in the Annual Report that Potentially Severe Water Shortage Conditions are present and provide its recommendations regarding the appropriate response measures. During the period a Potentially Severe Water Shortage Condition persists, the Technical Group shall include in each Annual Report an assessment of the hydrologic conditions and any additional recommended response measures.

When Spring groundwater elevations or groundwater quality subsequently improves so that the criteria threshold for two successive measurements are no longer exceeded, Potentially Severe Water Shortage Conditions will no longer be considered to exist. Alternatively, the Technical Group may determine that the Potentially Severe Water Shortage Condition no longer exists when the Spring groundwater elevation or groundwater quality criteria threshold are no longer exceeded in a single measurement and conditions warrant this conclusion.

The coastal threshold criteria for Potentially Severe Water Shortage Conditions may be modified in the future by the Technical Group as more data are developed on the accuracy and extent of the coastal data, including the potential for inclusion of additional coastal monitoring wells into the Monitoring Plan.

Criteria for Potentially Severe Water Shortage Conditions, Coastal Area				
Well	Perforation Elevation (ft msl)	Aquifer	Elevation Criteria (ft msl)	Chloride Concentration Criteria (mg/L)
11N/36W-12C1	-261 to -271	Paso Robles	5.0	250
11N/36W-12C2	-431 to -441	Pismo	5.5	250
11N/36W-12C3	-701 to -711	Pismo	9.0	250
12N/36W-36L1	-200 to -210	Paso Robles	3.5	250
12N/36W-36L2	-508 to -518	Pismo	9.0	250

Severe Water Shortage Conditions

The Stipulation, page 25, defines Potentially Severe Water Conditions as follows:

Mandatory action trigger point (Severe Water Shortage Conditions)

(a) Characteristics. The NMMA Technical Group shall develop the criteria for declaring that the lowest historic water levels beneath the NMMA as a whole

have been reached or that conditions constituting seawater intrusion have been reached. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation.

Inland Areas: A Severe Water Shortage Condition exists when the Key Wells Index is less than **16.5 feet msl**, using Spring groundwater elevation measurements. The Mandatory Response Plan will remain in effect until groundwater elevations as indicated by the Key Wells Index are 10 ft above the Severe criterion (which calculates to **26.5 feet msl**). Alternatively, the NMMA Technical Group may determine that the Severe Water Shortage Condition no longer exists when the Key Well Index is above the Severe criterion of 16.5 ft msl and conditions warrant this conclusion.

The criteria for Severe Water Shortage Conditions may be modified in the future by the Technical Group as more data are developed on the accuracy of measured data and Key Well construction or condition.

Coastal Areas: The NMMA Technical Group set the coastal criteria for Severe Water Shortage Condition to the occurrence of the chloride concentration in groundwater greater than the drinking water standard in any coastal monitoring well. Thus, the coastal criterion for a Severe Water Shortage Condition is the chloride concentration exceeding **500 mg/L** in any of the coastal monitoring wells. If the criterion is exceeded, an additional sample will be collected and analyzed from that well as soon as practicable to verify the result. The response triggered by the measurement will not be in effect until the laboratory analysis has been verified. If the chloride concentration subsequently improves above the criterion threshold for two successive Spring measurements, Severe Water Shortage Conditions will no longer be considered to exist. Alternatively, the Technical Group may determine that the Severe Water Shortage Condition no longer exists when groundwater quality criteria threshold are no longer exceeded in a single measurement and conditions warrant this conclusion.

The coastal threshold criteria for Severe Water Shortage Conditions may be modified in the future by the Technical Group as more data are developed on the accuracy and extent of the coastal data, including the potential for inclusion of additional coastal monitoring wells into the Monitoring Plan.

II. Response Plan for Potentially Severe and Severe Water Shortage Conditions (*"Response Plan"*)

Introduction

This Response Plan is triggered by criteria designed to reflect either Potentially Severe Water Shortage Conditions or Severe Water Shortage Conditions. Nothing in this Response Plan is intended to, nor shall operate so as to reduce, limit or change the rights, duties, and responsibilities of the parties to this Response Plan as those rights, duties, and responsibilities are stated in the Stipulation and the Judgment.

1. Potentially Severe Water Shortage Conditions

The responses required by the Stipulation are set forth as follows:

VI(D)(1b) Responses [Potentially Severe]. If the NMMA Technical Group determines that Potentially Severe Water Shortage Conditions have been reached, the Stipulating Parties shall coordinate their efforts to implement voluntary conservation measures, adopt programs to increase the supply of Nipomo Supplemental Water³ if available, use within the NMMA other sources of Developed Water or New Developed Water, or implement other measures to reduce Groundwater use.⁴

VI(A)(5). ...In the event that Potentially Severe Water Shortage Conditions or Severe Water Shortage Conditions are triggered as referenced in Paragraph VI(D) before Nipomo Supplemental Water is used in the NMMA, NCS D, [GSWC⁵], Woodlands and RWC agree to develop a well management plan that is acceptable to the NMMA Technical Group, and which may include such steps as imposing conservation measures, seeking sources of supplemental water to serve new customers, and declaring or obtaining approval to declare a moratorium on the granting of further intent to serve or will serve letters.⁶

³ A defined term in the parties' Stipulation. The following terms, when used in this Response Plan, are terms whose definitions are found in the Stipulation and that definition is specifically incorporated herein and adopted as the meaning of these terms: "Developed Water," "Groundwater," "Native Groundwater," "New Developed Water," "Nipomo Supplemental Water," "Nipomo Supplemental Water Project," "Stipulating Parties" and "Year."

⁴ Ibid at p.25.

⁵ Name changed from Southern California Water Company (SCWC) in 2005.

⁶ Ibid at p.22.

The Response Plan shall be implemented when the Potentially Severe Water Shortage Conditions occur within the NMMA. The Response Plan is a combination of technical studies to better determine the nature of the threat, water supply and demand actions to mitigate overall conditions in the NMMA, and compliance with the Stipulation and the Judgment. The Response Plan includes, where applicable, the following:

1. Coastal Groundwater Elevation and/or Groundwater Quality Conditions:
 - a. Verify that the measurement is not an anomaly by retesting at the site(s) of exceedence as soon as practicable and again in the following month.
 - b. Characterize the extent of either low groundwater elevation(s) or increased chloride concentration(s) near the coast, which might include adding and/or installing additional monitoring points.
 - c. Identify, to the extent practical, factors that contributed to the low groundwater elevations in coastal monitoring wells.
 - d. Investigate whether increased chloride concentration(s) indicate intrusion of seawater or other causes through chemistry/geochemistry studies.
2. Inland Groundwater Elevation Condition:
 - a. Verify that the measurement is not an anomaly by retesting at the site(s) of exceedence as soon as practicable and again in the following month.
 - b. Characterize the extent of the area where groundwater elevation(s) have decreased sufficiently to lower the Key Wells Index.
 - c. Identify factors that contributed to the low groundwater elevation(s) in coastal monitoring wells.
3. Implement sections VI(D)1(b) and VI(A)(5) of the Stipulation, as reproduced above.
4. When either the groundwater quality or groundwater elevation conditions are confirmed, the following provisions apply to the Response Plan for Potentially Severe Water Shortage Conditions:
 - a. ConocoPhillips shall have the right to the reasonable and beneficial use of Groundwater on the property it owns as of the date of the Stipulation located in the NMMA without limitation.⁷

⁷ Ibid at p. 23.

- b. Overlying Owners that are Stipulating Parties that own land located in the NMMA as of the date of the Stipulation shall have the right to the reasonable and beneficial use of Groundwater on their property within the NMMA without limitation.⁸
- c. Woodlands shall not be subject to restriction in its reasonable and beneficial use of Groundwater, provided it is concurrently using or has made arrangements for other NMMA parties to use within the NMMA, the Nipomo Supplemental Water allocated to Woodlands. Otherwise, Woodlands shall be subject to reductions equivalent to those imposed on NCSD, GSWC, and RWC.⁹

2. Severe Water Shortage Conditions

The responses required by the Stipulation are set forth following:

VI(D)(1b) Responses [Severe]. As a first response, subparagraphs (i) through (iii) shall be imposed concurrently upon order of the Court. The Court may also order the Stipulating Parties to implement all or some portion of the additional responses provided in subparagraph (iv) below.

(i) For Overlying Owners other than Woodlands Mutual Water Company and ConocoPhillips, a reduction in the use of Groundwater to no more than 110% of the highest pooled amount previously collectively used by those Stipulating Parties in a Year, prorated for any partial Year in which implementation shall occur, unless one or more of those Stipulating Parties agrees to forego production for consideration received. Such forbearance shall cause an equivalent reduction in the pooled allowance. The base Year from which the calculation of any reduction is to be made may include any prior single Year up to the Year in which the Nipomo Supplemental Water is transmitted. The method of reducing pooled production to 110% is to be prescribed by the NMMA Technical Group and approved by the Court. The quantification of the pooled amount pursuant to this subsection shall be determined at the time the mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is reached. The NMMA Technical Group shall determine a technically responsible and consistent method to determine the pooled amount and any individual's contribution to the pooled amount. If the NMMA Technical Group cannot agree upon a technically responsible and consistent method to determine the pooled amount, the matter may be determined by the Court pursuant to a noticed motion.

⁸ Ibid.

⁹ Ibid at p. 23.

(ii) *ConocoPhillips shall reduce its Yearly Groundwater use to no more than 110% of the highest amount it previously used in a single Year, unless it agrees in writing to use less Groundwater for consideration received. The base Year from which the calculation of any reduction is to be made may include any prior single Year up to the Year in which the Nipomo Supplemental Water is transmitted. ConocoPhillips shall have discretion in determining how reduction of its Groundwater use is achieved.*

(iii) *NCSD, RWC, SCWC, and Woodlands (if applicable as provided in Paragraph VI(B)(3) above) shall implement those mandatory conservation measures prescribed by the NMMA Technical Group and approved by the Court.*

(iv) *If the Court finds that Management Area conditions have deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further mandatory limitations on Groundwater use by NCSD, SCWC, RWC and the Woodlands. Mandatory measures designed to reduce water consumption, such as water reductions, water restrictions, and rate increases for the purveyors, shall be considered.*

(v) *During Severe Water Shortage Conditions, the Stipulating Parties may make agreements for temporary transfer of rights to pump Native Groundwater, voluntary fallowing, or the implementation of extraordinary conservation measures. Transfer of Native Groundwater must benefit the Management Area and be approved by the Court.¹⁰*

The following Response Plan for Severe Water Shortage Conditions is premised on the assumption that the Nipomo Supplemental Water Project within the NMMA is fully implemented and yet Severe Water Shortage Conditions exist.

If either the coastal or inland criteria occur for Severe Water Shortage Conditions within the NMMA, a Response Plan shall be implemented. The Response Plan is a combination of technical studies to better determine the nature of the threat, water supply and demand actions to mitigate overall conditions in the NMMA that triggered a Response Plan, and compliance with the terms of the Stipulation and the Judgment. It includes, where applicable, the following NMMA Technical Group actions:

1. Groundwater Quality Condition:
 - a. Verify data.

¹⁰ Ibid at pp. 25-27.

- b. Investigate whether increased chloride concentration(s) indicate intrusion of seawater or result from other causes through chemistry/geochemistry studies.
 - c. Characterize the extent of the increase in chloride concentration(s), which may include adding additional monitoring points and/or installing new monitoring points.
 - d. Given information from sections (a) and (b) above, identify the factors that may have caused the groundwater quality degradation.
2. Groundwater Elevation Condition:
 - a. Verify that the measurement is not an anomaly by retesting at the site(s) of exceedence as soon as practicable and again in the following month.
 - b. Characterize the extent of the area where groundwater elevation(s) have decreased sufficiently to lower the Key Wells Index.
 - c. Identify the factors that contributed to the low groundwater elevation(s) in key wells.
 3. As a first response, the NMMA Technical Group shall request the Court to order concurrently sections VI(D)(1b)(i) through (iii) of the Stipulation, as reproduced above.
 4. Prepare a semi-annual report on the trend in chloride concentration for the Court. If chloride concentration(s) continue to increase at the coastline, request the Court to implement section VI(D)(1b)(iv) of the Stipulation, as reproduced above.
 5. During Severe Water Shortage Conditions, the Stipulating Parties may make agreements for temporary transfer of groundwater pumping rights in accordance with section VI(D)(1b)(v) of the Stipulation, as reproduced above.

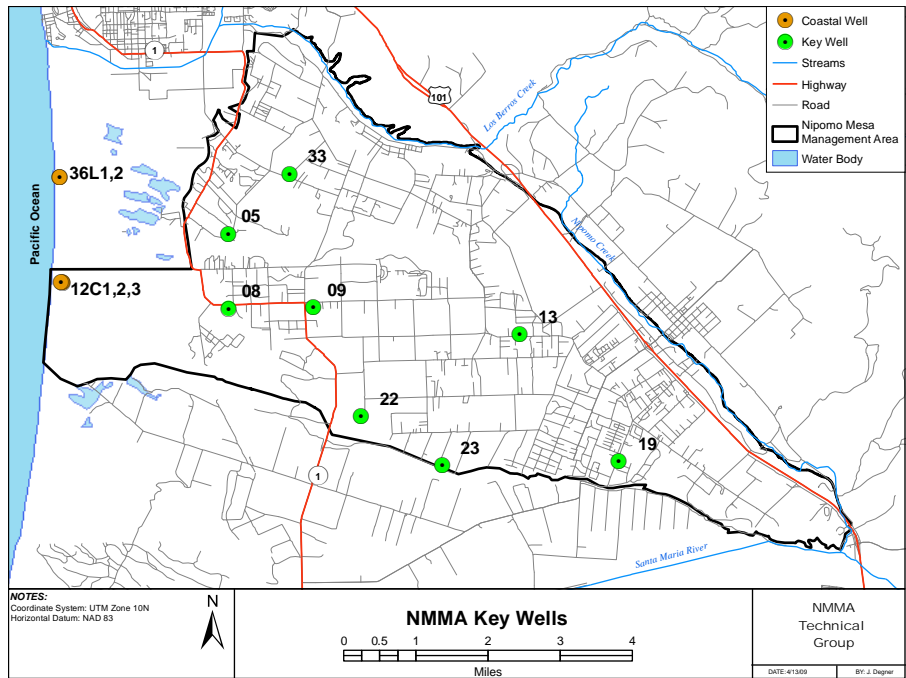
III. Discussion of Criteria for Potentially Severe and Severe Water Shortage Conditions

1. Water Shortage Conditions as a Whole

The Stipulation established that the Severe Water Shortage Conditions is characterized by the lowest historic groundwater levels beneath the NMMA as a whole. The NMMA Technical Group selected the data from eight inland key wells to represent the whole of the NMMA. These wells are listed in the following tabulation and are shown on the

figure entitled “NMMA Key Wells”. The average Spring groundwater elevation of these key wells is used to calculate the Key Wells Index (“Index”).

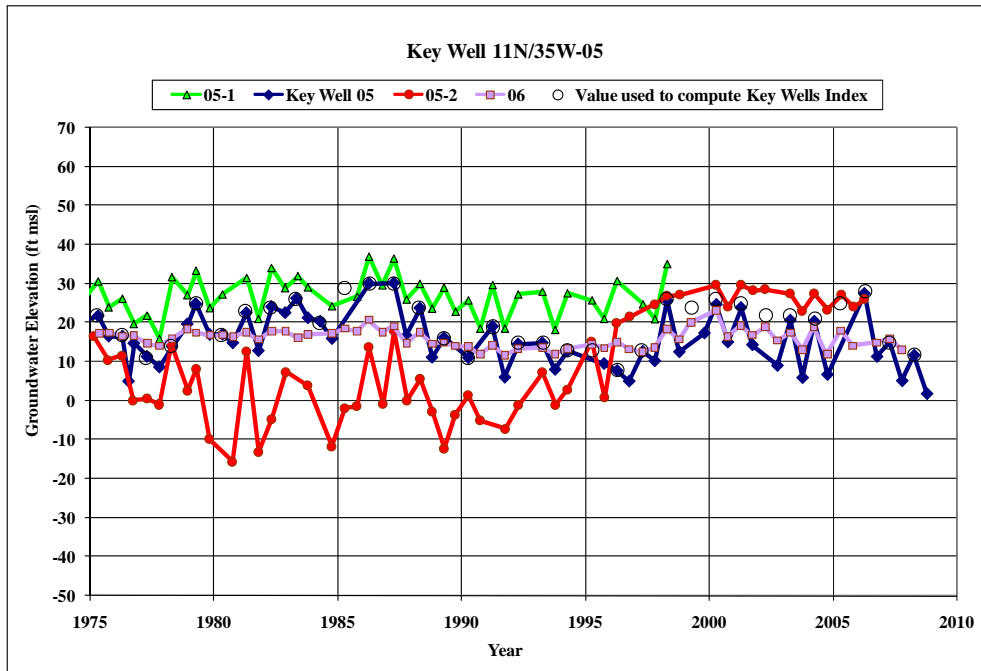
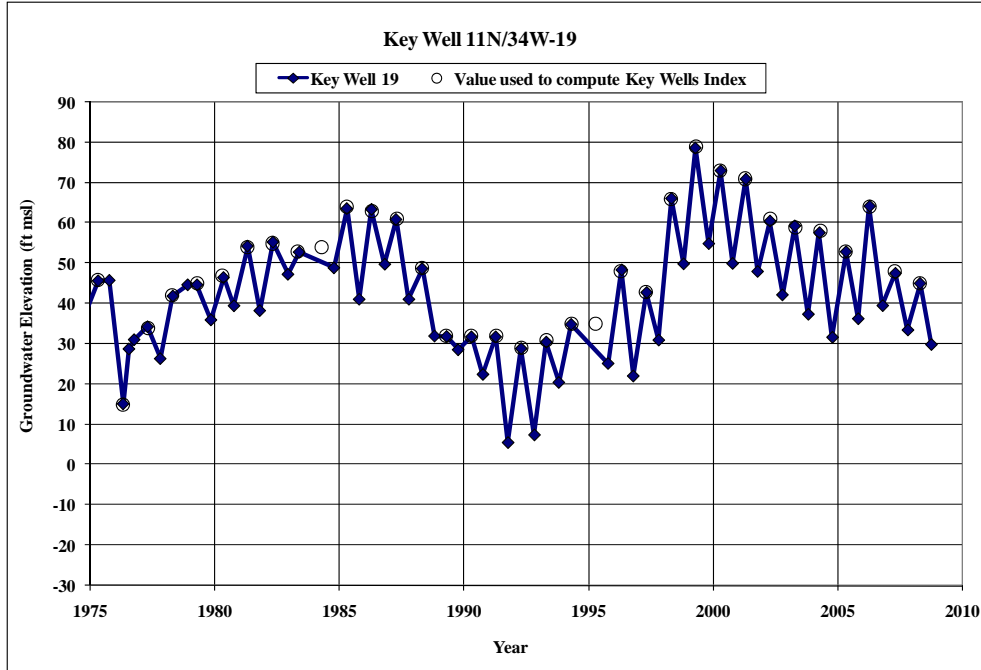
Key Wells For Inland Criterion
11N/34W-19
11N/35W-5
11N/35W-8
11N/35W-9
11N/35W-13
11N/35W-22
11N/35W-23
12N/35W-33

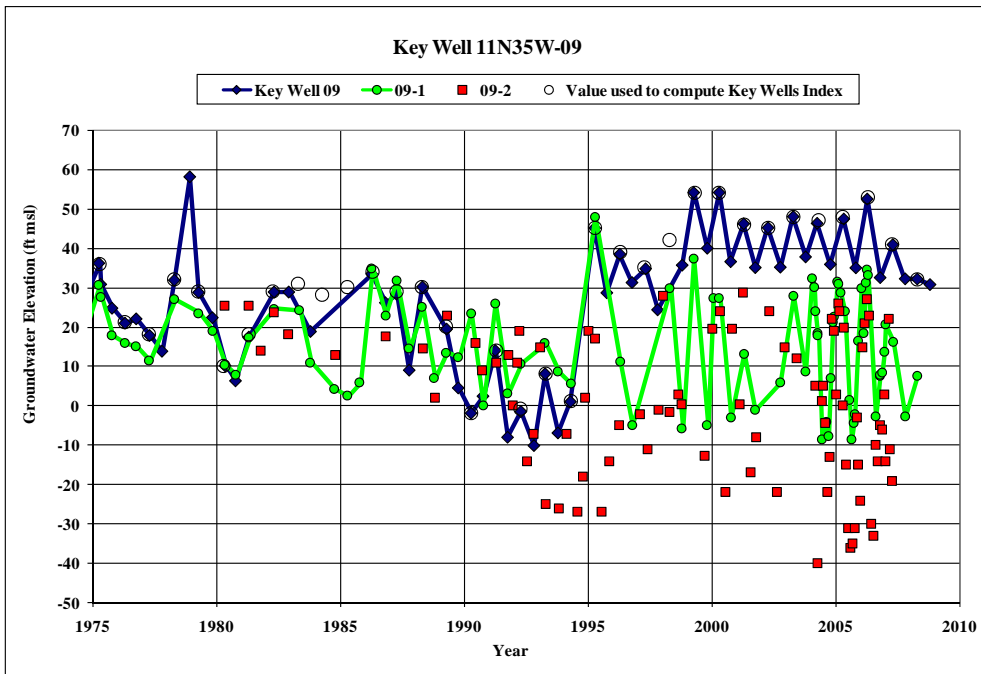
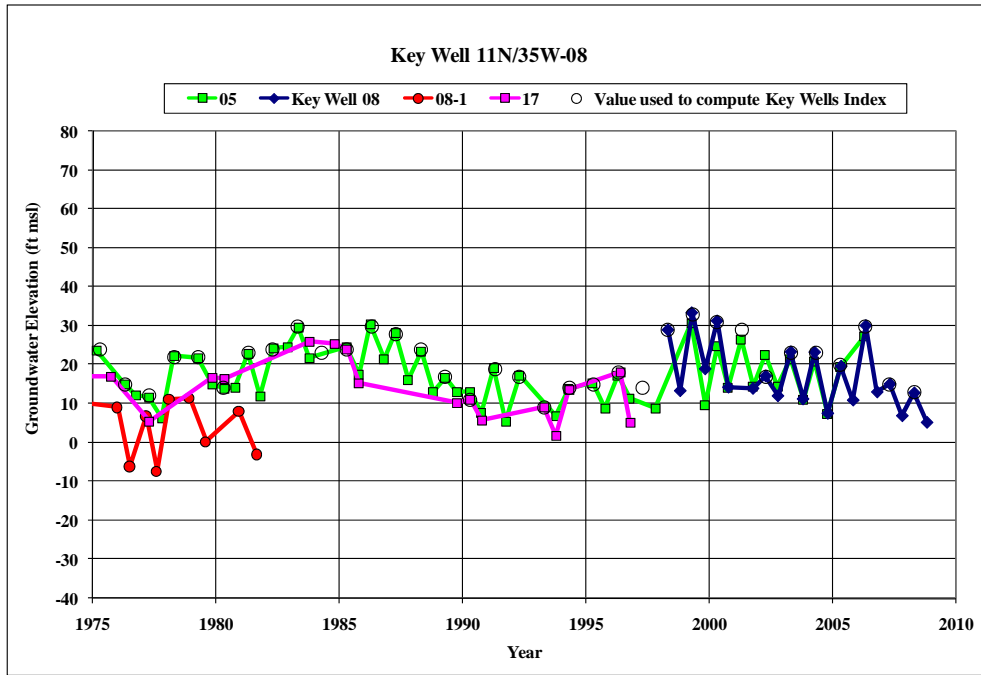


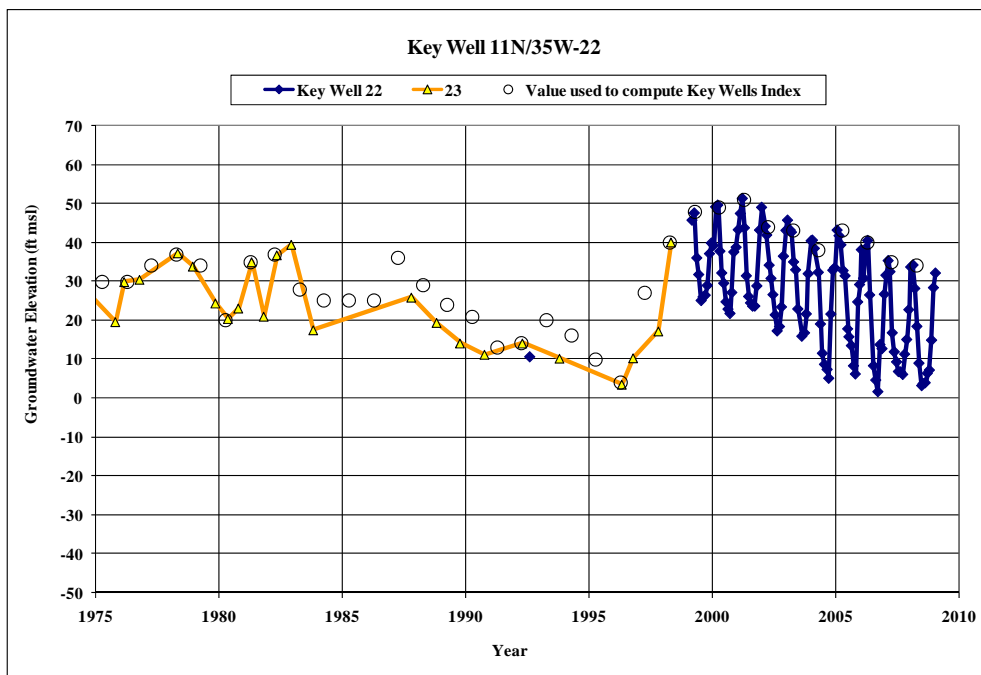
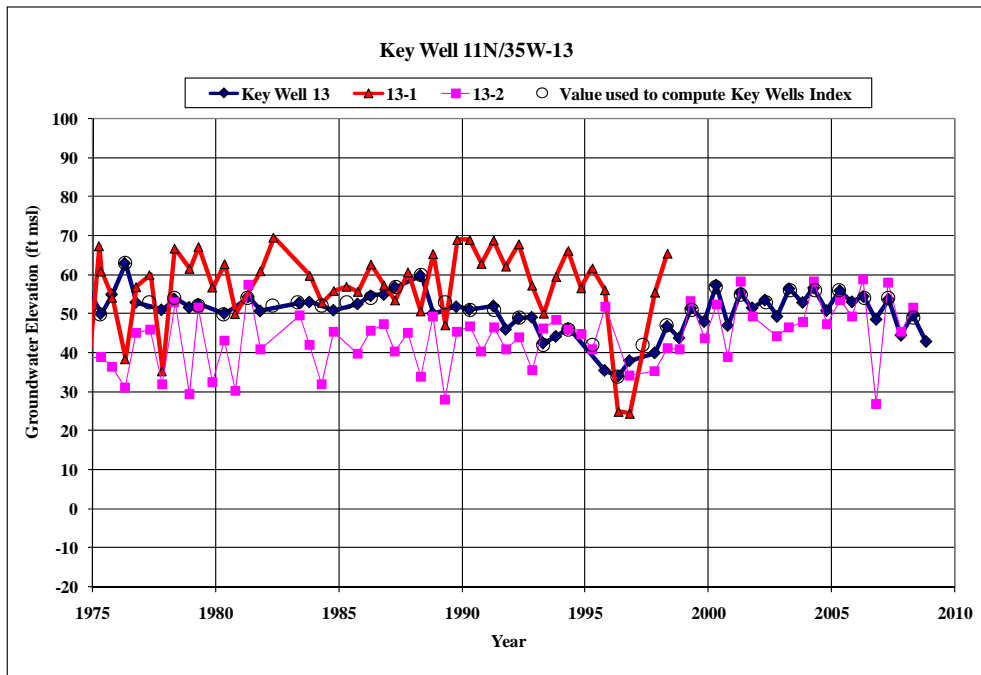
The Index was calculated annually using Spring groundwater elevation measurements from 1975 to 2008. The Key Wells were selected to represent various portions of the groundwater basin within the NMMA. The following charts display the hydrographs for each Key Well and surrounding wells. The open circles represent the actual Spring value for that year or a correlation of that value for each year that was used to compute the Index.

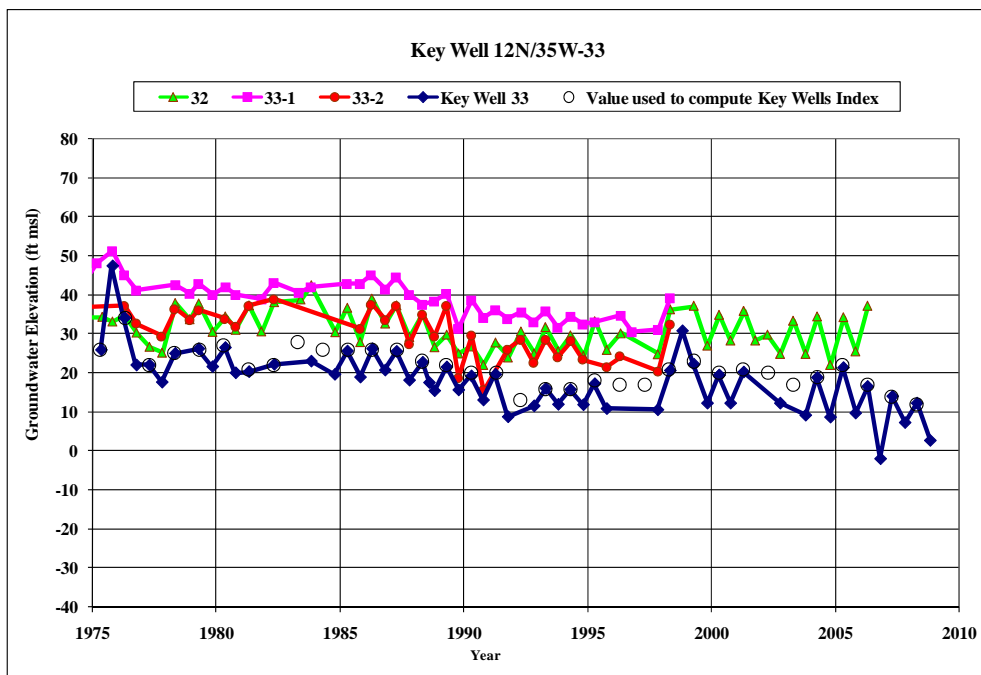
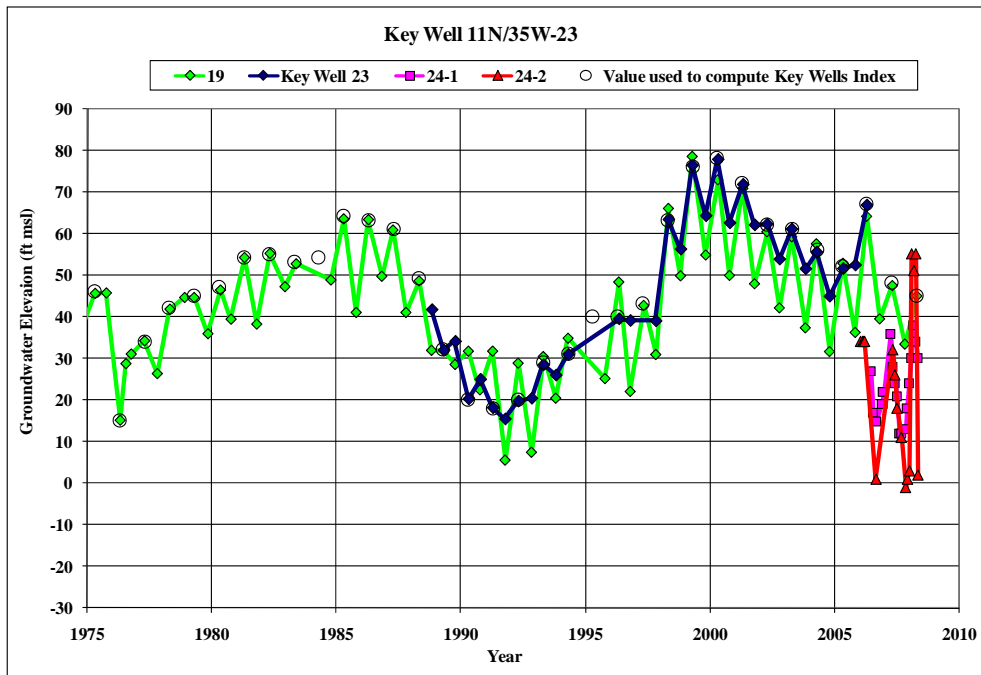
When there was no Spring groundwater elevation measurement for a particular year, the value was determined by either 1) interpolating between Spring measurements in adjacent years or 2) computing the Spring elevation by taking the Fall measurements in adjacent years and increasing the value by the typical increase in groundwater elevations

between Spring and Fall measurements in that well. If there is a significant data gap in the record for a particular well (e.g., 22 well below), a nearby well was used to fill the gap.









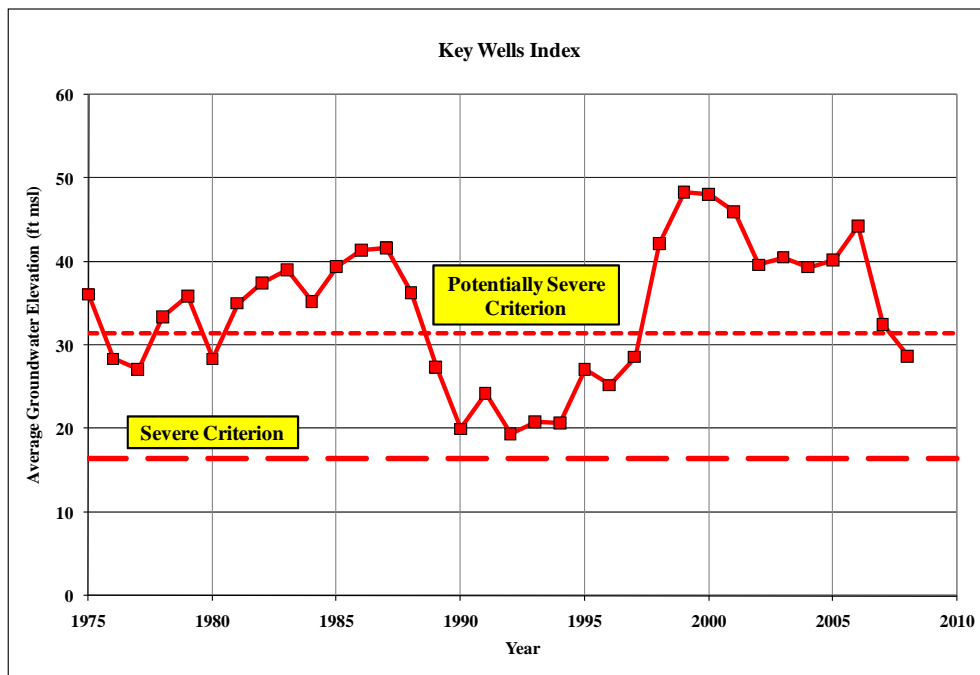
In selecting the eight key wells, the following criteria were applied so that the wells generally represent the NMMA as a whole:

- (1) The wells are geographically distributed.
- (2) No single well overly influences the Index.

The first criterion was met in the selection of the wells. To meet the second criterion, groundwater elevations from each well were normalized so that any well where elevations were on the average higher or lower than the other wells did not overly influence the overall Index. This normalization was accomplished by dividing each Spring groundwater elevation measurement by the sum of all the Spring groundwater elevation data for that well.

The Index was defined for each year as the average of the normalized Spring groundwater data from each well. The lowest value of the Index could be considered the “historical low” within the NMMA. The sensitivity of that “historical low” was tested by examining the effect of eliminating a well from the Key Wells Index. Eight separate calculations of the Index from 1975 to 2008 were made by excluding the data from one of the eight wells, and computing the average value for each year from the remaining wells’ normalized Spring groundwater data.

The criterion for a Potentially Severe Water Shortage Conditions should provide for enough time before the Severe criterion occurs to allow pumpers time to implement voluntary measures to mitigate a falling Key Wells Index. Based on the assumption that two years is adequate for this early warning, then the historical Index can be used to determine the potential rate of fall of the Index. The maximum drop in the historical Index over a two-year period was about 15 feet, during the last two years of the 1986-1991 drought. Thus, the criterion for Potentially Severe Water Shortage Conditions is set at 15 feet above the Severe Water Shortage Condition criterion, which calculates to **31.5 ft msl**. The Key Wells Index for all eight wells, which will be computed each year in the future, will be compared to the Potentially Severe and Severe criteria discussed above. The Index through 2008 is shown below.



Key Wells Index for the period 1975 to 2008. Upper dashed line is criterion for Potentially Severe Water Shortage Conditions and lower dashed line is criterion for Severe Conditions.

The Index generally tracks wet and dry climatic cycles, indicating the importance of natural recharge in the NMMA. Significant deviations from this climatic tracking could occur if supplemental water deliveries reduced pumping, if overlying land use changed the return flows to the aquifer, or if there was a large change in groundwater extractions in addition to those resulting from the introduction of the Supplemental Water.

A. Seawater Intrusion Criteria for Potentially Severe Water Shortage Conditions

The criteria for potentially severe conditions in coastal areas are either gradient conditions that could pull seawater into the principal aquifer, or threshold chloride concentrations detected in coastal monitoring wells. Whereas chloride is the principal indicator for the groundwater quality portion of this criteria, other groundwater quality constituents may be considered for future refinement of this criteria.

To avoid seawater contamination, groundwater elevations in the coastal monitoring wells must be sufficiently high to balance higher-density seawater (about 2.5 of extra head is required for every 100 ft of ocean depth of an offshore outcrop of the aquifer). Thus, if an aquifer is penetrated at 100 ft below sea level in a coastal well, it is assumed that groundwater elevations in that aquifer must be at least 2.5 ft above sea level to counteract the higher density of seawater. Although offshore outcrop areas are not currently defined, it is assumed that some hydraulic connection between the onshore aquifers and seawater at the sea floor is possible or even probable.

Historical groundwater elevation data from these coastal wells indicate that groundwater elevations have not always been higher than the theoretical elevations of fresh water to balance sea water, described in the preceding paragraph. It is not known to what extent (if any) that seawater has advanced toward the land during the periodic depression of groundwater elevation, nor has any groundwater quality data supported the indication that seawater has contaminated the fresh water aquifer at the coastal monitoring well locations. Thus, coastal groundwater elevation criteria must take into account the periodic depression of groundwater elevations. To accommodate these fluctuations and until further understanding is developed, the coastal criteria are presented in the table below, based on the lower of 1) historical low groundwater elevations in the coastal monitoring wells or 2) a calculation of 2.5 ft of elevation for every 100 ft of aquifer depth in the well. If the historical low elevation is used, the value is reduced by one foot and rounded to the nearest half-foot. Similarly, if a calculated value is the lower option, it is rounded to the nearest half-foot. The results of these criteria are indicated in the following table.

Criteria for Potentially Severe Water Shortage Conditions							
Well	Perforations Elevation (ft msl)	Aquifer	Historic Low (ft msl)	2.5' per 100' Depth (ft msl)	Elevation Criteria (ft msl)	Highest Chloride (mg/L)	Chloride Concentration Criteria (mg/L)
11N/36W-12C1	-261 to -271	Paso Robles	5.8	6.5	5.0	81	250
11N/36W-12C2	-431 to -441	Pismo	6.3	10.8	5.5	55	250
11N/36W-12C3	-701 to -711	Pismo	10.1	17.5	9.0	98	250
12N/36W-36L1	-200 to -210	Paso Robles	4.3	5.7	3.5	38	250
12N/36W-36L2	-508 to -518	Pismo	10.1	13.4	9.0	127	250

The groundwater quality portion of the criteria is set at 250 mg/L chloride. There is no groundwater quality criterion for the shallow alluvium. Although there is no assumption that seawater intrusion has occurred at this concentration, the cause of the rise in chloride concentration must be investigated and appropriate mitigation measures taken. Thus, Potentially Severe Water Shortage Conditions are established if either the groundwater elevation or groundwater quality criteria are met.

B. Seawater Intrusion Criteria for Severe Water Shortage Conditions

One criterion for Severe Water Shortage Conditions is the occurrence of conditions that result in chloride concentration(s) in groundwater greater than the drinking water standard in any of the coastal monitoring wells.

A principal threat for such occurrence is from seawater intrusion. The first evidence of seawater intrusion can occur very quickly or may involve a slower and more subtle change. Because the rate of change for chloride concentrations during seawater intrusion is difficult to predict for the NMMA, the criterion is set to the Maximum Contaminant Level for chloride in drinking water.

The Nipomo Mesa Technical Group set the coastal criterion for Severe Water Shortage Conditions at a chloride concentration at or above **500 mg/L** in any of the coastal monitoring wells. If the criterion is exceeded, an additional sample will be collected and analyzed from that well as soon as practically possible to verify the result. The Severe Water Shortage Condition will not be in effect until the laboratory analysis has been verified.

Appendix C: Well Management Plan

NMMA PURVEYOR
NMMA WELL MANAGEMENT PLAN¹

Adopted January 21, 2010

Stage 1: Potentially Severe Water Shortage Conditions

- Potentially Severe Water Shortage Conditions Triggered²;
- Voluntary measures urged by Water Purveyors (NCSD, GSWC, Woodlands, and RWC). See list of “Recommended Water Use Restrictions;”
- Voluntary evaluation of sources of new supplemental water;
- Voluntary purveyor conservation goal of 15% (Baseline to be suggested by the NMMA TG);
- Voluntary/Recommended public information program;
- Voluntary evaluation and implementation of shifting pumping to reduce GW depressions and/or protect the seaward gradient. This includes the analysis and establishment of a potential network of purveyor system interties to facilitate the exchange of water;

¹ This Well Management Plan is required by the terms of the Stipulation (page 22). The Well Management Plan provides for steps to be taken by the NCSD, GSWC, Woodlands and RWC under a factual scenario where Nipomo Supplemental Water (a defined term in the Stipulation) has not been “used” in the NMMA (page 22). The Well Management Plan, therefore, has no applicability to either ConocoPhillips or Overlying Owners as defined in the Stipulation (page 22).

² Water shortage conditions are characterized by criteria designed to reflect that groundwater levels beneath the NMMA as a whole are at a point at which a response would be triggered to avoid further declines in the groundwater levels (potentially severe), and to declare that the lowest historic groundwater levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached (severe). See current version of Water Shortage Conditions and Response Plan – appendix to Annual Report.

Adopted January 20, 2010

Stage 2: Severe Water Shortage Conditions

- Severe Water Shortage Conditions Triggered and Nipomo Supplemental Water has been used in the NMMA (see footnote 1)³;
- Overlying landowners other than Woodlands and ConocoPhillips shall reduce groundwater use to no more than 110% of the highest pooled base year prior to the transmittal of Nipomo supplemental water. The NMMA TG will determine a technically responsible and consistent method to determine the pooled amount and an individual's contribution (To be determined when trigger occurs). The method of reducing pooled production to 110% is to be prescribed by the TG and approved by the court. Landowners may consider using less water for consideration received;
- ConocoPhillips shall reduce its yearly groundwater use to no more than 110% of the highest amount it used in a single year prior to the transmittal of Nipomo supplemental water. ConocoPhillips may consider using less water for consideration received and has discretion to determine how its groundwater reduction is achieved;
- Water Purveyors (NCSD, GSWC, Woodlands, and RWC) shall implement mandatory conservation measures. Where possible, institute mandatory restrictions with penalties;
- The mandatory conservation goals will be determined by the NMMA TG when the Severe water shortage trigger is reached. Annually, should conditions worsen; the NMMA TG will re-evaluate the mandatory conservation goal;
- Measures may include water reductions, additional water restrictions, and rate increases. GSWC and RWC shall aggressively file and implement⁴ a schedule 14.1 mandatory rationing plan with the CPUC consistent with the mandatory goals;
- Penalties, rates, and methods of allocation under the rationing program shall be at the discretion of each entity and its regulating body;

³ [see comment at footnote #1] Water shortage conditions are characterized by criteria designed to reflect that groundwater levels beneath the NMMA as a whole are at a point at which a response would be triggered to avoid further declines in the groundwater levels (potentially severe), and to declare that the lowest historic groundwater levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached (severe). See current version of Water Shortage Conditions and Response Plan (appendix to Annual Report).

⁴ CPUC has the authority to set rates and allow mandatory conservation actions. As CPUC regulated entities, GSWC and RWC cannot implement such programs without CPUC approval.

Adopted January 20, 2010

- Aggressive voluntary public information program which includes discussions with high use water users such as school districts, parks, and golf courses to seek voluntary reductions in potable water irrigation;

Adopted January 20, 2010

List of Recommended Water Use Restrictions

The following provisions are examples of what may be considered prohibited, nonessential, and/or unauthorized water use:

- 1) Prohibit nonessential and unauthorized water use, including but not limited to:
 - a) Use of potable water for more than minimal landscaping, as defined in the landscaping regulated of the jurisdiction or as described in Article 10.8 of the California Government Code in connection with new construction;
 - b) Use through any meter when the company has notified the customer in writing to repair a broken or defective plumbing, sprinkler, watering or irrigation system and the customer has failed to effect such repairs within five business days;
 - c) Use of potable water which results in flooding or runoff in gutters or streets;
 - d) Individual private washing of cars with a hose except with the use of a positive action shut-off nozzle. Use of potable water for washing commercial aircraft, cars, buses, boats, trailers, or other commercial vehicles at any time, except at commercial or fleet vehicle or boat washing facilities operated at a fixed location where equipment using water is properly maintained to avoid wasteful use;
 - e) Use of potable water washing buildings, structures, , driveways, patios, parking lots, tennis courts, or other hard-surfaced areas, except in the cases where health and safety are at risk;
 - f) Use of potable water to irrigate turf, lawns, gardens, or ornamental landscaping by means other than drip irrigation, or hand watering without quick acting positive action shut-off nozzles, on a specific schedule, for example: 1) before 9:00 a.m. and after 5:00 p.m.; 2) every other day; or 3) selected days of the week;
 - g) Use of potable water for watering streets with trucks, except for initial wash-down for construction purposes (if street sweeping is not feasible), or to protect the health and safety of the public;
 - h) Use of potable water for construction purposes, such as consolidation of backfill, dust control, or other uses unless no other source of water or other method can be used.

Adopted January 20, 2010

- i) Use of potable water for construction purposes unless no other source of water or other method can be used;
- j) Use of potable water for street cleaning;
- k) Operation of commercial car washes without recycling at least 50% of the potable water used per cycle;
- l) Use of potable water for watering outside plants, lawn, landscape and turf areas during the hours of 9:00 am to 5:00 pm;
- m) Use of potable water for decorative fountains or the filling or topping off of decorative lakes or ponds. Exceptions are made for those decorative fountains, lakes, or ponds which utilize recycled water;
- n) Use of potable water for the filling or refilling of swimming pools.
- o) Service of water by any restaurant except upon the request of a patron; and
- p) Use of potable water to flush hydrants, except where required for public health or safety.

NMMA WATER SHORTAGE RESPONSE STAGES

Endorsed by NMMA Technical Group April 14, 2014

STAGE	GROUNDWATER SUPPLY CONDITION	RESPONSE - GENERAL DESCRIPTION*	DURATION of RESTRICTION
I	Always in place.	Voluntary measures and outreach to encourage best water management practices and conservation.	Always in place.
II	Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	Goal: voluntary 20% reduction in groundwater production – supported with aggressive public outreach and customer communications.	Until Potentially Severe Water Shortage Condition does not exist.
III	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	Goal: 30% reduction in groundwater production – supported with mandatory conservation restrictions.	Until Severe Water Shortage Conditions no longer exist pursuant to NMMA criteria.**
IV	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion.	Goal: 50% reduction in groundwater production – supported with mandatory conservation restrictions.	Until Severe Water Shortage Conditions no longer exist pursuant to NMMA criteria.
V	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion.	Goal: 60% reduction in groundwater production – supported with mandatory conservation restrictions.	Until Severe Water Shortage Conditions no longer exist pursuant to NMMA criteria.

* This is a general descriptor. Detailed response to meeting the applicable goal is the responsibility of each NMMA purveyor. The NMMA parties acknowledge that Golden State Water Company and Rural Water Company must obtain CPUC approval and hold public hearings before implementing any aspect of this water shortage response.

** The Technical Group may determine Severe Water Shortage Conditions no longer exists when groundwater quality criteria threshold are no longer exceeded in a single measurement.

General Notes

1. Potentially Severe and Severe Water Shortage Conditions, Key Well Index and Coastal Area Criteria are defined in the NMMA Water Shortage Conditions Response Plan, April 13, 2009.
2. Reductions goals are to be based on average usage, prior to the delivery of supplemental water, as follows:
 - a. For Woodlands Mutual Water Company – based on average same month production for a single year prior to declaration of Stage III.
 - b. For Nipomo CSD, Golden State Water Company and Rural Water Company – based on average same month production for the five years prior to declaration of Stage III. Individual purveyors may use other baselines in their respective responses if dictated by their respective regulatory bodies.
3. Each NMMA purveyor will implement programs to meet the reduction levels.
4. When drought Stage III or higher is in effect, Managers will meet monthly to report previous months production and coordinate efforts.
5. The Technical Group may revisit and revise this response plan should conditions change and after the full implementation of the Nipomo Supplemental Water deliveries.

**Appendix D: Data Acquisition Protocol for Groundwater
Level Measurement for the Nipomo Mesa Management Area**

Data Acquisition Protocol for Groundwater Level Measurement for the Nipomo Mesa Management Area

Introduction

The purpose of this memorandum is to establish a protocol for measuring and recording groundwater levels for Nipomo Mesa Management Area (NMMA) wells, and to describe various methods used for collecting meaningful groundwater data. Static groundwater levels obtained for the NMMA monitoring program are determined by measuring the distance to water in a non-pumping well from a measuring point that has been referenced to sea level. Subtracting the distance to water from the elevation of the measuring point determines groundwater surface elevations above or below sea level. This is represented by the following equation:

$$E_{GW} = E_{MP} - D$$

Where:

E_{GW}	=	Elevation of groundwater above mean sea level (feet)
E_{MP}	=	Elevation above sea level at measuring point (feet)
D	=	Depth to water (feet)

Groundwater elevation data can be used to construct groundwater contour maps, determine groundwater flow direction and hydraulic gradients, show locations of groundwater recharge, determine amount of water in storage, show changes in groundwater storage over time, and identify other aquifer characteristics. Miss-representation of aquifer conditions result from errors introduced during water level measurements, from a changed measuring point, during data recording, from equipment problems, or from using inappropriate measuring equipment or techniques for a particular well.

In an effort to minimize such errors and to standardize the collection of groundwater data, the U.S. Geological Survey (U.S.G.S.) has conducted extensive investigations into methods for measuring groundwater levels. In conjunction with several other federal agencies, the U.S.G.S. published the "National Handbook of Recommended Methods for Water-Data Acquisition" (1977); "Introduction to Field Methods for Hydrologic and Environmental Studies, (2001); and several Stand-alone Procedure Documents (GWPD, 1997). Excerpts from these publications relating to water-level measurements are attached. The following protocol for obtaining and reporting accurate data, including a discussion of potential errors associated with several measurement techniques, are based on these U.S.G.S. documents.

Well Information

To give the most meaningful value to the data obtained in the NMMA monitoring program, each well file should include as much information as is available. Table 1 below lists important well information to be maintained in a well file or in a field notebook. Additional information that should be available to the person collecting water-level data should include a description of access to the

property and the well, the presence and depth of cascading water, or downhole obstructions that could interfere with a sounding cable. San Luis Obispo County Department of Public Works maintains well cards on the wells in the County monitoring network.

**Table 1
Well File Information**

Well Completion Report	Hydrologic Information	Additional Information to be Recorded
Well name	Map showing basin boundaries and wells	Township, Range, and ¼ ¼ Section
Well Owner	Name of groundwater basin	Latitude and Longitude (Decimal degrees)
Drilling Company	Description of aquifer	Assessor's Parcel Number
Location map or sketch	Confined, unconfined, or mixed aquifers	Description of well head and sounding access
Total depth	Pumping test data	Measuring point & reference point elevations
Perforation interval	Hydrographs	Well use and pumping schedule if known
Casing diameter	Water quality data	Date monitoring began
Date of well completion		Land use

Types of Wells

The monitoring program is likely to include several types of wells with various means of access and pumping schedules. It is important to understand the characteristics of each well type and its downhole conditions to best determine monitoring schedules and appropriate measuring technique. Below is a brief summary of well types and their pumping characteristics. A more detailed description of these well types is included in the attached “National Handbook of Recommended Methods for Water-Data Acquisition”.

Existing Wells

These include abandoned wells, irrigation wells, public supply wells, and domestic wells. Existing wells provide convenient and inexpensive measuring sites; however, they should be carefully evaluated to show that they can provide accurate data under static conditions with reliable access.

Abandoned wells are often in poor condition and may have partially collapsed casing or accumulated sediments. Damaged casing may also result in cascading water. An undamaged well with the pump removed, however, can provide easy access and reliable water-level data.

Irrigation wells are generally pumped on a regular schedule, allowing static water-level measurements to be taken during known non-pumping periods. Seasonal changes in the pumping schedules should also be noted when planning monitoring events.

Public supply wells may be part of a monitoring program if sufficient information regarding their operations is available. Hydrographs showing periods of pumping and recovery should be obtained to determine the best time to measure static water levels.

Domestic wells are generally pumped frequently and for short durations, making it difficult to monitor during static conditions. Determining when the lowest domestic water use occurs during the day can facilitate monitoring schedules.

Observation Wells

These wells are designed for specific sites and depths in known hydrogeologic conditions to supply desired information. Typically, there is no permanent pump, making measurements relatively easy.

Piezometers

A piezometer is a small diameter observation well designed to measure the hydraulic head within a small zone. It should have a very short screen and filter pack interval so it can represent the hydraulic head at a single point within the aquifer.

Access to Supply Wells

Access into a well to obtain a water level measurement depends on pump types and wellhead construction. For turbine-pump wells, there is typically an opening between the pump column and the casing either through a port or between the base plate and the casing. The filter-pack fill tube should not be confused with a casing vent or sounding access pipe. In some wells, there is no access for a downhole measuring tape; however, the well may be equipped with an air-line measuring system.

Access to submersible wells is generally through a small diameter plug located in the plate on top of the casing. In wells where there is no sounding tube, caution should be used during water level measurements to minimize the chance of the sounding tape becoming entangled with the power cable. Additional information and wellhead diagrams regarding supply well access is found in the attached “National Handbook of Recommended Methods for Water-Data Acquisition”.

Measuring Points and Reference Points

Measuring point (MP) elevations are the basis for determining groundwater elevations relative to sea level. The MP is generally that point on the well head that is the most convenient place to measure the water level in a well. In selecting an MP, an additional consideration is the ease of surveying either by Global Positioning System (GPS) or by leveling.

The MP must be clearly defined, well marked, and easily located. If permissible, the point should be labeled with the letters MP and an arrow. A description, sketch, and photograph of the point should be included in the well file.

The Reference Point (RP) is a surveyed point established near the wellhead on a permanent object. It serves as a benchmark by which the MP can be checked or re-surveyed if the MP is changed. The RP should be marked, sketched, photographed, and described in the well file.

All MPs and RPs for the NMMA monitored wells should be surveyed using the same horizontal and vertical datum by a California licensed surveyor to the nearest tenth of one foot vertically, and the nearest one foot horizontally. The surveyor's report should be maintained in the project file.

In addition to the MP and RP survey, the elevation of the ground surface adjacent to the well should also be surveyed and recorded in the well file. Because the ground surface adjacent to a well is rarely uniform, the average surface level should be estimated. This average ground surface elevation is referred to in the U.S.G.S. Procedural Document (GWPD-1, 1997) as the Land Surface Datum (LSD).

Water-Level Data Collection

Prior to beginning the field work, the field technician should review each well file to determine which well owners require notification of the upcoming site visit, or which well pumps need to be turned off to allow for water level recovery. Because groundwater elevations are used to construct groundwater contour maps and to determine flow direction, all water level measurements should be collected within a 24-hour period or within as short a period as possible. Weather and groundwater conditions are least likely to change significantly during a short period for data collection. For an individual well, the same measuring method and the same sounder should be used during each sampling event where practical.

Prior to taking a measurement, the length of time since a pump has been operating should be determined. If possible, a domestic well should be allowed to recover at least one half hour prior to measuring, whereas an irrigation or public well should recover a minimum of eight hours prior to measuring. If the well is capped but not vented, remove the cap and wait several minutes before measurement to allow water levels to equilibrate to atmospheric pressure.

When there is doubt about whether water levels in a well are continuing to recover, repeated measurements should be made. Or, if an electric sounder is being used, it is possible to hold the sounder level at one point just above the known water level and wait for a signal that would indicate rising water. For each well, the general schedule of pump operation should be determined and noted.

When lowering a graduated steel tape (chalked tape) or electric tape in a well without a sounding tube in an equipped well, the tape should be played out slowly by hand to minimize the chance of the tape end becoming caught in a downhole obstruction. The tape should be held in such a way that any change in tension will be felt. When withdrawing a sounding tape, it should also be brought up slowly so that if an obstruction is encountered, tension can be relaxed so that the tape can be lowered again before attempting to withdraw it around the obstruction.

All water level measurements should be made to an accuracy of 0.1 feet. The field technician should make at least two measurements. If measurements of static levels do not agree within 0.1 feet , the

technician should continue measurements until the reason for the disparity is determined, or the measurements are within 0.1 feet.

Where groundwater levels are found to be above ground surface, a sensitive pressure gage can be used to determine the height above the measuring point or a sealed well could have a manometer tube that would show the height above ground surface. A manometer tube may not be high enough to measure the water level if the groundwater is under more than 5 feet of pressure.

Record Keeping in the Field

The information recorded in the field is often the only remaining evidence of the conditions at the time of the monitoring event. It is important that the field book be protected carefully and that it contains the name of the field technician and appropriate contact information. Because the field book contains original tables of multiple monitoring events, copies of the tables should be made following each monitoring event. The data can be further protected by entering the data electronically as soon as practicable.

All field notes must be recorded during the time the work is being done in the field. Accurate documentation of field conditions cannot be made after the field technician has returned to the office. Because much of the data will be reviewed by office staff, and because more than one field technician may participate in the monitoring program, it is essential that notes be intelligible to anyone without requiring a verbal explanation. As a means to support field information, sketches or digital photos attached to field notes should be encouraged.

All field notes should be made with a sharp pencil with lead appropriate for the conditions. Erasures should not be made when recording data. A single line should be drawn through an error without obscuring its legibility, and the correct value or information should be written adjacent to it or in a new row below it.

During each monitoring event it is important to record any conditions at a well site and its vicinity that may affect groundwater levels, or the field technician's ability to obtain groundwater levels. Table 2 lists important information to record, however, additional information should be included when appropriate. Table 3, The Water Level Measurement Form, is a suggested format for recording field data.

**Table 2
Information Recorded at Each Well Site**

Well name	Property access conditions	Downhole obstructions
Name and organization of field technician	Changes in land use	Presence of oil in well
Date & time (time in 24-hour notation)	Changes in MP	Cascading water
Measurement method used	Nearby wells in use	Equipment problems
Sounder used	Weather conditions	Physical changes in wellhead
Most recent sounder calibration	Recent rainfall events	Comments

Measurement Techniques

Four standard methods of obtaining water levels are discussed below. The chosen method depends on site and downhole conditions, and the equipment limitations. In all monitoring situations, the procedures and equipment used should be documented in the field notes and in final reporting. Additional detail on manual methods of water level measurement is included in the attached U.S.G.S. Stand-Alone Procedure Documents and the “National Handbook of Recommended Methods for Water-Data Acquisition”. The attached “Introduction to Field Methods for Hydrologic and Environmental Studies” includes a discussion of pressure transducers.

Graduated Steel Tape

This method uses a graduated steel tape with a brass or stainless steel weight attached to its end. The tape is graduated in feet. The approximate depth to water should be known prior to measurement.

- Chalk the lower few feet of the tape by applying blue carpenter’s chalk.
- Lower the tape to just below the estimated depth to water so that a few feet of the chalked portion of the tape is submerged. Be careful not to lower the tape beyond its chalked length.
- Hold the tape at the MP and record the tape position (this is the “hold” position and should be at an even foot);
- Withdraw the tape rapidly to the surface;
- Record the length of the wetted chalk mark;
- Subtract the wetted chalk number from the “hold” position number and record this number in the “Depth to Water below MP” column;
- Perform a check by repeating the measurement using a different MP hold value;
- All data should be recorded to the nearest 0.01 foot;
- Disinfect the tape by pouring a small amount of chlorine bleach on a clean cloth and wiping down the portion of the tape that was submerged below the water surface.

The graduated steel tape is generally considered to be the most accurate method for measuring static water levels. Measuring water levels in wells with cascading water or with condensing water on the well casing causes potential errors, or can be impossible. The tape should be calibrated against another steel tape that is maintained in the office and is used only for calibration.

Electric Tape

An electric tape operates on the principle that an electric circuit is completed when two electrodes are submerged in water. Most electric tapes are mounted on a hand-cranked reel equipped with batteries and an ammeter, buzzer or light to indicate when the circuit is closed. Tapes are graduated in either one-foot intervals or in hundredths of feet depending on the manufacturer. Like graduated steel tapes, electric tapes are attached with brass or stainless steel weights.

- Check the circuitry of the tape before lowering the probe into the well by dipping the probe into water and observe if the ammeter needle or buzzer/light signals that the circuit is closed;
- Lower the probe slowly and carefully into the well until the signal indicates that the water surface has been reached;

- Place a finger or thumb on the tape at the MP when the water surface is reached;
- If the tape is graduated in one-foot intervals, partially withdraw the tape and measure the distance from the MP mark to the nearest one-foot mark to obtain the depth to water below the MP. If the tape is graduated in hundredths of a foot, simply record the depth at the MP mark as the depth to water below the MP;
- Make all readings using the same needle deflection point on the ammeter scale (if equipped) so that water levels will be consistent between measurements;
- Make check measurements until agreement shows the results to be reliable;
- All data should be recorded to the nearest 0.01 foot;
- Disinfect the tape by pouring a small amount of chlorine bleach on a clean cloth and wiping down the submerged portion of the tape;
- Periodically check the tape for breaks in the insulation. Breaks can allow water to enter into the insulation creating electrical shorts that could result in false depth readings.

The electric tape may give slightly less accurate results than the graduated steel tape. Errors can result from signal “noise” in cascading water, breaks in the tape insulation, or tape stretch. Electric tape products graduated in hundredths of a foot generally give more accurate results than electric tapes graduated in one-foot intervals. This accuracy difference is due to less stretch and ease of measurement in the tapes graduated in hundredths of a foot. All electric tapes should be calibrated periodically against a steel tape that is maintained in the office and used only for calibration.

Air Line

The air line method is usually used only in wells equipped with pumps. This method typically uses a 1/8 or 1/4-inch diameter, seamless copper tubing, brass tubing, or galvanized pipe with a suitable pipe tee for connecting an altitude or pressure gage. Plastic tubing may also be used, but is considered less desirable. An air line must extend far enough below the water level that the lower end remains submerged during pumping of the well. The air line is connected to an altitude gage that reads directly in feet of water, or to a pressure gage that reads pressure in pounds per square inch (psi). The gage reading indicates the length of the submerged air line.

The formula for determining the depth to water below the MP is: $d = k - h$ where d = depth to water; k = constant; and h = height of the water displaced from the air line. In wells where a pressure gage is used, h is equal to 2.31 ft/psi multiplied by the gage reading. The constant value for k is approximately equivalent to the length of the air line.

- Calibrate the air line by measuring an initial depth to water (d) below the MP with a graduated steel tape. Use a tire pump, air tank, or air compressor to pump compressed air into the air line until all the water is expelled from the line. When all the water is displaced from the line, record the stabilized gage reading (h). Add d to h to determine the constant value for k .
- To measure subsequent depths to water with the air line, expel all the water from the air line, subtract the gage reading (h) from the constant k , and record the result as depth to water (d) below the MP.

The air line method is not as accurate as a graduated steel tape or electric tape. Measurements with an altitude gage are typically accurate to approximately 0.1 foot, and measurements using a pressure

gage are accurate to the nearest one foot at best. Errors can occur with leaky air lines, or when tubing becomes clogged with mineral deposits or bacterial growth.

Submersible Pressure Transducers

Electrical pressure transducers make it possible to collect frequent and long-term water-level or pressure data from wells. These pressure-sensing devices, installed at a fixed depth in a well, sense the change in pressure against a membrane. The pressure changes occur in response to changes in the height of the water column in the well above the transducer. To compensate for atmospheric changes, transducers may have vented cables or they can be used in conjunction with a barometric transducer that is installed in the same well or a nearby observation well above the water level.

Transducers are selected on the basis of expected water-level fluctuation. The smallest range in water levels provides the greatest measurement resolution. Accuracy is generally 0.01 to 0.1 percent of the full scale range.

Retrieving data in the field is typically accomplished by downloading data through a USB connection to a portable “lap-top” computer. A site visit to retrieve data should involve several steps designed to safeguard the data and the continued useful operation of the transducer:

- Inspect the wellhead and check that the transducer cable has not moved or slipped;
- Ensure that the instrument is operating properly;
- Measure and record the depth to water with a graduated steel or electric tape;
- Document the site visit, including all measurements and any problems;
- Retrieve the data and document the process;
- Review the retrieved data by viewing the file or plotting the original data;
- Recheck the operation of the transducer prior to disconnecting from the computer.

A field notebook with a checklist of steps and measurements should be used to record all field observations and the current data from the transducer. It provides an historical record of field activities. In the office, maintain a binder with field information similar to that recorded on the field notebook so that a general historical record is available there and can be referred to before and after a field trip.

Summary and Recommendations

Static groundwater levels obtained for the NMMA monitoring program are determined by measuring the distance to water from wellhead MPs that have been surveyed using an accepted sea level-based datum. Subtracting the distance to water from the elevation of an MP determines groundwater surface elevations above or below sea level. The following items should be considered important to creating and maintaining a successful monitoring program:

- All wells should be surveyed by a licensed surveyor;

- Three survey points should be set for each well: the MP on the wellhead, the RP on a nearby permanent object, and the adjacent ground surface;
- The points should be surveyed to the nearest tenth of one foot vertically, and the nearest one foot horizontally;
- A one-inch diameter water-level sounding tube should be installed in each NMMA monitoring program well;
- Static water levels should always be measured to the nearest 0.01 feet from the same measuring point, using the same measuring techniques for each well;
- Measurement techniques using graduated steel tapes, electric tapes graduated in hundredths of feet, or pressure transducers should be considered appropriate for the monitoring program;
- Because of its lower accuracy and higher potential for errors than other methods, the air-line method should not be used in the program;
- Thorough and accurate field documentation and complete project files are essential to a successful monitoring program.

Appendix E: Additional Data and Maps

To estimate the annual amount of pumped groundwater used for crop irrigation in the NMMA, land use data are used together with crop water use estimates and local climate data. A spreadsheet model with a daily time step keeps track of various parameters, including evapotranspiration, precipitation, soil moisture, crop water requirements, and related information, to estimate how much irrigation water is required for a crop and, during wet periods, how much precipitation is recharged to the aquifer.

The model estimates a crop's water requirement, otherwise known as the evapotranspirative requirement (ET_C), based on the local weather and a crop coefficient (K_C), and keeps track of soil moisture. The crop coefficient is an estimated value that accommodates seasonal conditions such as growth stage and canopy cover. Reference evapotranspiration (ET_O) values used in the model are obtained from a California Irrigation Management Information System (CIMIS) station in Nipomo, which provides daily meteorological data.

Crop Water Requirement:

$$ET_C = K_C * ET_O \quad \text{where}$$

ET_C = crop evapotranspirative requirement

K_C = crop coefficient

ET_O = reference evapotranspiration (data from Nipomo CIMIS station)

The model then keeps track of the amount of water on a daily time-step that is needed to grow the crop, and whether that water first comes from precipitation (P) and then from soil water. When the total amount of soil water is reduced to half or less of the soil's water-holding capacity (calculated together with the crop's rooting depth), it is assumed that application of water via irrigation (AW_T) will occur to replenish the soil water.

Crop Evapotranspiration of Applied Water:

$$AW_T = ET_C - P \quad \text{where}$$

AW_T = total applied crop water

P = precipitation

The NMMA TG modified the methodology used to estimate the annual amount of pumped groundwater used for crop irrigation and parameter values used in the model calculation in 2010. The crop coefficients, K_C , and land use areas were subsequently updated in 2013 compared to those used in 2012 (this Annual Report; see Tables 1 and 2 below).

Table 1: Crop Coefficients (K_c) assigned to Land Use categories for 2012.

Crop Coefficient (K_c)		Native		Agriculture						Golf Course	
Month	Grasses	Trees and Shrubs	Deciduous	Pasture	Vegetable Rotational	Avocado and Lemon	Strawberries	Nursery	Un-irrigated Ag Land	Golf Course	Urban
1	0.42	0.89	1.33	1.33	1.33	0.40	0.18	0.50	1.33	0.60	0.42
2	0.42	1.33	0.31	0.31	1.00	0.50	0.36	0.50	0.31	0.60	0.42
3	0.42	1.26	0.58	1.00	1.00	0.55	0.56	0.50	0.13	0.60	0.42
4	0.42	1.49	0.72	1.00	1.00	0.55	0.65	0.50	0.08	0.60	0.42
5	0.42	1.47	0.83	1.00	0.51	0.60	0.68	0.50	0.03	0.60	0.42
6	0.00	1.67	0.90	1.00	0.01	0.65	0.69	0.50	0.01	0.60	0.42
7	0.00	1.64	0.96	1.00	0.49	0.65	0.35	0.50	0.00	0.60	0.42
8	0.00	1.38	0.96	1.00	1.00	0.65	0.05	0.50	0.05	0.60	0.42
9	0.42	1.63	0.92	1.00	1.00	0.60	0.13	0.50	0.13	0.60	0.42
10	0.42	1.28	0.81	1.00	1.00	0.55	0.12	0.50	0.12	0.60	0.42
11	0.42	0.95	0.54	0.54	0.54	0.55	0.54	0.50	0.54	0.60	0.42
12	0.42	0.87	1.20	1.20	1.20	0.50	1.20	0.50	1.20	0.60	0.42

Table 2: Crop Coefficients (K_c) assigned to Land Use categories for 2013.

Crop Coefficient (K_c)		Native		Agriculture						Golf Course	
Month	Grasses	Trees and Shrubs	Grape	Pasture	Vegetable Rotational	Avocado and Lemon	Strawberries and cane berries	Nursery	Un-irrigated Ag Land	Golf Course	Urban
1	0.42	0.89	0.00	0.54	0.65	0.54	0.78	0.65	1.33	1.00	0.42
2	0.42	1.33	0.00	0.54	0.65	0.31	0.78	0.65	0.31	1.00	0.42
3	0.42	1.26	0.00	1.00	0.65	0.58	0.78	0.65	0.13	1.00	0.42
4	0.42	1.49	1.00	1.00	0.65	0.72	0.78	0.65	0.08	1.00	0.42
5	0.42	1.47	1.00	1.00	0.65	0.83	0.78	0.65	0.03	1.00	0.42
6	0.00	1.67	1.00	1.00	0.65	0.90	0.78	0.65	0.01	1.00	0.42
7	0.00	1.64	0.00	1.00	0.65	0.96	0.78	0.65	0.00	1.00	0.42
8	0.00	1.38	0.00	1.00	0.65	0.96	0.78	0.65	0.05	1.00	0.42
9	0.42	1.63	0.00	1.00	0.65	0.92	0.78	0.65	0.13	1.00	0.42
10	0.42	1.28	0.00	1.00	0.65	0.81	1.00	0.65	0.12	1.00	0.42
11	0.42	0.95	0.00	0.54	0.65	0.54	0.78	0.65	0.54	1.00	0.42
12	0.42	0.87	0.00	0.54	0.65	0.54	0.78	0.65	1.20	1.00	0.42

The golf course, nursery, and pasture K_c values (Table 2) were calculated from measured irrigation in portions of the NMMA. Strawberry and cane berry, vegetable rotational, and citrus and avocado K_c values were derived from known water demands for these crops in nearby coastal regions.

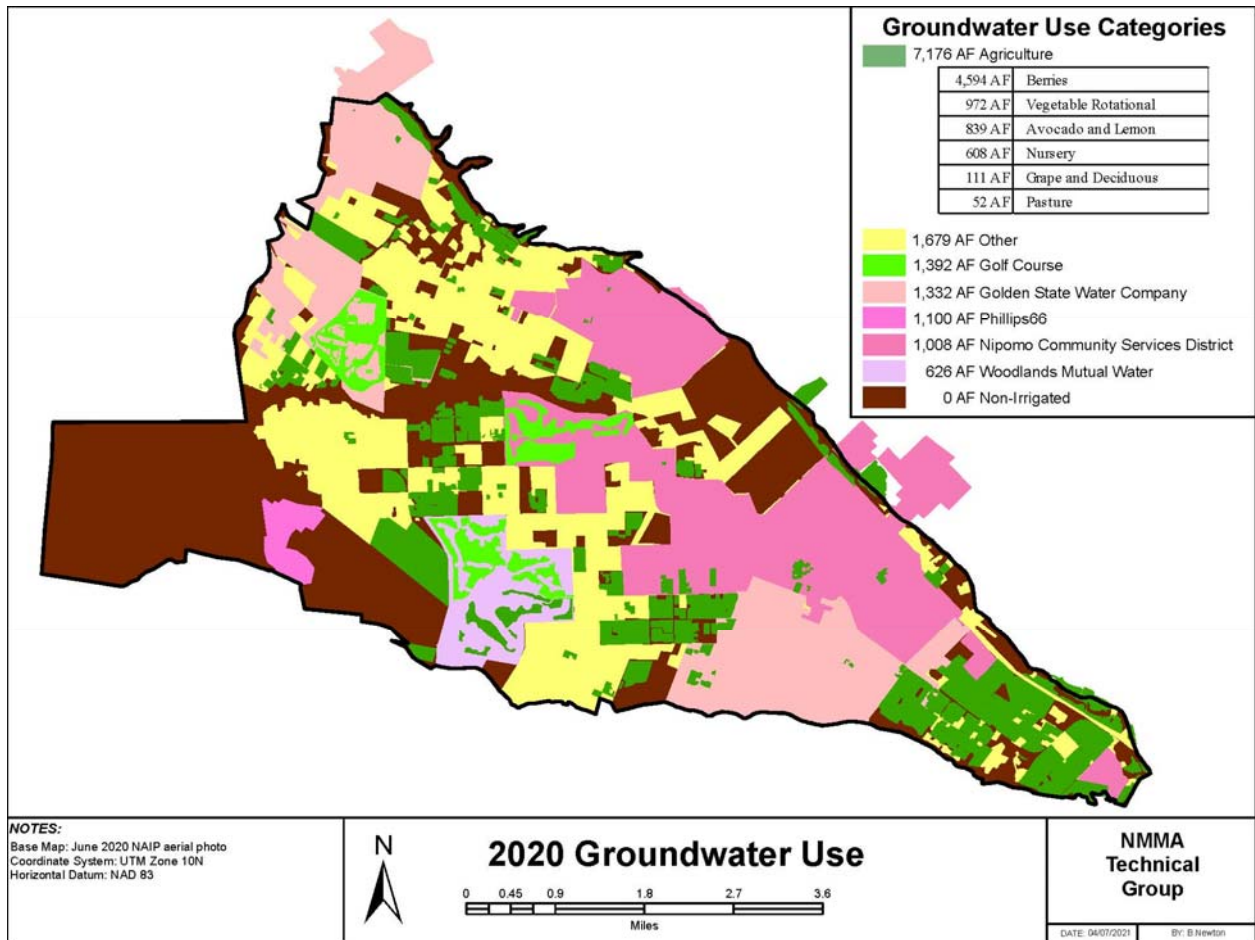





Figure 3-9. 2020 Groundwater Use

Appendix B- DWR Population Tool Results

Please print this page to a PDF and include as part of your UWMP submittal.

Confirmation Information			
Generated By	Water Supplier Name	Confirmation #	Generated On
Rob Lepore	Nipomo Community Service District	3263150870	3/2/2021 10:19:06 AM

Boundary Information		
Census Year	Boundary Filename	Internal Boundary ID
1990	NCS_D_BNDY_1990.kml	857
2000	NCS_D_BNDY_2000.kml	858
2010	NCS_D_BNDY_2010.kml	859

Baseline Period Ranges	
10 to 15-year baseline period	
Number of years in baseline period:	<input type="text" value="1"/> 
Year beginning baseline period range:	<input type="text" value="19"/> 
Year ending baseline period range ¹ :	2012
5-year baseline period	
Year beginning baseline period range:	<input type="text" value="20"/> 
Year ending baseline period range ² :	2010

¹ The ending year must be between December 31, 2004 and December 31, 2010.
² The ending year must be between December 31, 2007 and December 31, 2010.

Persons-Per-SF Connection and Persons-Per-MF/GQ Connection

Year	Census Block Group Level	Census Block Level			# SF Connections	# MF/GQ Connections	Persons per SF Connection	Persons per MF/GQ Connection
	% Population in SF Housing	Service Area Population	Population in SF Housing (calculated)	Population in MF/GQ Housing (calculated)				
1990	74.54%	3,976	2,964	1,012	1698	33	1.75	30.67
1991	-	-	-	-	-	-	1.82	28.19
1992	-	-	-	-	-	-	1.90	25.71
1993	-	-	-	-	-	-	1.98	23.24
1994	-	-	-	-	-	-	2.05	20.76
1995	-	-	-	-	-	-	2.13	18.28
1996	-	-	-	-	-	-	2.20	15.80
1997	-	-	-	-	-	-	2.27	13.32
1998	-	-	-	-	-	-	2.35	10.85
1999	-	-	-	-	-	-	2.42	8.37
2000	83.95%	8,768	7,360	1,408	2944	239	2.50	5.89
2001	-	-	-	-	-	-	2.54	5.69
2002	-	-	-	-	-	-	2.59	5.49
2003	-	-	-	-	-	-	2.64	5.29
2004	-	-	-	-	-	-	2.68	5.09
2005	-	-	-	-	-	-	2.73	4.88
2006	-	-	-	-	-	-	2.77	4.68
2007	-	-	-	-	-	-	2.81	4.48
2008	-	-	-	-	-	-	2.86	4.28
2009	-	-	-	-	-	-	2.91	4.08
2010	84.90%	12,148	10,314	1,834	3493	473	2.95	3.88
2011	-	-	-	-	-	-	3.00	3.68
2012	-	-	-	-	-	-	3.04	3.48
2013	-	-	-	-	-	-	3.09	3.27
2014	-	-	-	-	-	-	3.13	3.07
2015	-	-	-	-	-	-	3.18	2.87
2020	-	-	-	-	-	-	3.41 *	1.86 *

Population Using Persons-Per-SF Connection and Persons-Per-MF/GQ Connection

Year		# SF Connections	# MF/GQ Connections	Persons per SF Connection	Persons per MF/GQ Connection	SF Population	MF/GQ Population	Total Population
10 to 15 Year Baseline Population Calculations								
Year 1	1998	2637	235	2.35	10.85	6,197	2,549	8,746
Year 2	1999	2803	234	2.42	8.37	6,797	1,958	8,755
Year 3	2000	2944	239	2.50	5.89	7,360	1,408	8,768
Year 4	2001	3047	236	2.54	5.69	7,755	1,343	9,097
Year 5	2002	3093	239	2.59	5.49	8,011	1,312	9,323
Year 6	2003	3116	237	2.64	5.29	8,211	1,253	9,464
Year 7	2004	3354	235	2.68	5.09	8,989	1,195	10,184
Year 8	2005	3337	366	2.73	4.88	9,093	1,788	10,881
Year 9	2006	3423	390	2.77	4.68	9,482	1,827	11,308
Year 10	2007	3481	412	2.81	4.48	9,799	1,847	11,646
Year 11	2008	3481	421	2.86	4.28	9,956	1,803	11,758
Year 12	2009	3520	427	2.91	4.08	10,226	1,743	11,968
Year 13	2010	3493	473	2.95	3.88	10,314	1,834	12,148
Year 14	2011	3504	495	3.00	3.68	10,498	1,821	12,319
Year 15	2012	3506	492	3.04	3.48	10,665	1,710	12,375
5 Year Baseline Population Calculations								
Year 1	2006	3423	390	2.77	4.68	9,482	1,827	11,308
Year 2	2007	3481	412	2.81	4.48	9,799	1,847	11,646
Year 3	2008	3481	421	2.86	4.28	9,956	1,803	11,758
Year 4	2009	3520	427	2.91	4.08	10,226	1,743	11,968
Year 5	2010	3493	473	2.95	3.88	10,314	1,834	12,148
2020 Compliance Year Population Calculations								
2020		3786	463	3.41 *	1.86 *	12,904	862	13,766

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Appendix C- SBX7-7 Verification Form Submitted for the 2015 UWMP

SB X7-7 Table 0: Units of Measure Used in UWMP*

(select one from the drop down list)

Acre Feet

**The unit of measure must be consistent with Table 2-3*

NOTES:

SB X7-7 Table-1: Baseline Period Ranges

Baseline	Parameter	Value	Units
10- to 15-year baseline period	2008 total water deliveries	2,755	Acre Feet
	2008 total volume of delivered recycled water	0	Acre Feet
	2008 recycled water as a percent of total deliveries	0.00%	Percent
	Number of years in baseline period ¹	10	Years
	Year beginning baseline period range	1999	
	Year ending baseline period range ²	2008	
5-year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2004	
	Year ending baseline period range ³	2008	

¹ If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period.

² The ending year must be between December 31, 2004 and December 31, 2010.

³ The ending year must be between December 31, 2007 and December 31, 2010.

NOTES:

SB X7-7 Table 2: Method for Population Estimates

Method Used to Determine Population (may check more than one)	
<input type="checkbox"/>	1. Department of Finance (DOF) DOF Table E-8 (1990 - 2000) and (2000-2010) and DOF Table E-5 (2011 - 2015) when available
<input type="checkbox"/>	2. Persons-per-Connection Method
<input checked="" type="checkbox"/>	3. DWR Population Tool
<input type="checkbox"/>	4. Other DWR recommends pre-review

NOTES:

SB X7-7 Table 3: Service Area Population

Year		Population
10 to 15 Year Baseline Population		
Year 1	1999	8,485
Year 2	2000	8,768
Year 3	2001	8,835
Year 4	2002	9,323
Year 5	2003	9,464
Year 6	2004	10,184
Year 7	2005	10,881
Year 8	2006	11,308
Year 9	2007	11,646
Year 10	2008	11,758
<i>Year 11</i>		
<i>Year 12</i>		
<i>Year 13</i>		
<i>Year 14</i>		
<i>Year 15</i>		
5 Year Baseline Population		
Year 1	2004	10,184
Year 2	2005	10,881
Year 3	2006	11,308
Year 4	2007	11,646
Year 5	2008	11,758
2015 Compliance Year Population		
2015		12,886
NOTES:		

SB X7-7 Table 4: Annual Gross Water Use *

	Baseline Year <i>Fm SB X7-7 Table 3</i>	Volume Into Distribution System <i>Fm SB X7-7 Table(s) 4-A</i>	Deductions					Annual Gross Water Use
			Exported Water	Change in Dist. System Storage (+/-)	Indirect Recycled Water <i>Fm SB X7-7 Table 4-B</i>	Water Delivered for Agricultural Use	Process Water <i>Fm SB X7-7 Table(s) 4-D</i>	
10 to 15 Year Baseline - Gross Water Use								
Year 1	1999	2271.2			0	19	0	2,252
Year 2	2000	2414.51			0	20	0	2,394
Year 3	2001	2285.02			0	19	0	2,266
Year 4	2002	2520.79			0	17	0	2,504
Year 5	2003	2633.33			0	17	0	2,617
Year 6	2004	2907.83			0	18	0	2,890
Year 7	2005	2794.04			0	14	0	2,781
Year 8	2006	2726.77			0	16	0	2,710
Year 9	2007	2856.15			0	16	0	2,840
Year 10	2008	2755.24			0	16	0	2,740
<i>Year 11</i>	0	0			0		0	0
<i>Year 12</i>	0	0			0		0	0
<i>Year 13</i>	0	0			0		0	0
<i>Year 14</i>	0	0			0		0	0
<i>Year 15</i>	0	0			0		0	0
10 - 15 year baseline average gross water use								1,733
5 Year Baseline - Gross Water Use								
Year 1	2004	2,908			0	18	0	2,890
Year 2	2005	2,794			0	14	0	2,781
Year 3	2006	2,727			0	16	0	2,710
Year 4	2007	2,856			0	16	0	2,840
Year 5	2008	2,755			0	16	0	2,740
5 year baseline average gross water use								2,792
2015 Compliance Year - Gross Water Use								
	2015	1,948			0	17	0	1,930
* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3								
NOTES:								

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Complete one table for each source.

Name of Source Groundwater

This water source is:

- The supplier's own water source
 A purchased or imported source

Baseline Year <i>Fm SB X7-7 Table 3</i>	Volume Entering Distribution System	Meter Error Adjustment* <i>Optional (+/-)</i>	Corrected Volume Entering Distribution System
--	-------------------------------------	--	---

10 to 15 Year Baseline - Water into Distribution System

Year 1	1999	2271.2	2,271
Year 2	2000	2414.51	2,415
Year 3	2001	2285.02	2,285
Year 4	2002	2520.79	2,521
Year 5	2003	2633.33	2,633
Year 6	2004	2907.83	2,908
Year 7	2005	2794.04	2,794
Year 8	2006	2726.77	2,727
Year 9	2007	2856.15	2,856
Year 10	2008	2755.24	2,755
Year 11	0		0
Year 12	0		0
Year 13	0		0
Year 14	0		0
Year 15	0		0

5 Year Baseline - Water into Distribution System

Year 1	2004	2907.83	2,908
Year 2	2005	2794.04	2,794
Year 3	2006	2726.77	2,727
Year 4	2007	2856.15	2,856
Year 5	2008	2755.24	2,755

2015 Compliance Year - Water into Distribution System

2015	1626		1,626
-------------	------	--	-------

** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*

NOTES:

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Name of Source Supplemental Water Project

This water source is:

- The supplier's own water source
 A purchased or imported source

Baseline Year <i>Fm SB X7-7 Table 3</i>		Volume Entering Distribution System	Meter Error Adjustment* <i>Optional (+/-)</i>	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1999			0
Year 2	2000			0
Year 3	2001			0
Year 4	2002			0
Year 5	2003			0
Year 6	2004			0
Year 7	2005			0
Year 8	2006			0
Year 9	2007			0
Year 10	2008			0
Year 11	0			0
Year 12	0			0
Year 13	0			0
Year 14	0			0
Year 15	0			0
5 Year Baseline - Water into Distribution System				
Year 1	2004			0
Year 2	2005			0
Year 3	2006			0
Year 4	2007			0
Year 5	2008			0
2015 Compliance Year - Water into Distribution System				
2015		322		322
<i>* Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document</i>				
NOTES:				

SB X7-7 Table 4-A: Volume Entering the Distribution

Name of Source	Source 3			
This water source is:				
<input type="checkbox"/>	The supplier's own water source			
<input type="checkbox"/>	A purchased or imported source			
Baseline Year <i>Fm SB X7-7 Table 3</i>		Volume Entering Distribution System	Meter Error Adjustment* <i>Optional (+/-)</i>	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1999			0
Year 2	2000			0
Year 3	2001			0

SB X7-7 Table 4-C.1: Process Water Deduction Eligibility

Criteria 1

Industrial water use is equal to or greater than 12% of gross water use

Baseline Year <i>Fm SB X7-7 Table 3</i>	Gross Water Use Without Process Water Deduction	Industrial Water Use	Percent Industrial Water	Eligible for Exclusion Y/N	
10 to 15 Year Baseline - Process Water Deduction Eligibility					
Year 1	1999	2,252		0%	NO
Year 2	2000	2,394		0%	NO
Year 3	2001	2,266		0%	NO
Year 4	2002	2,504		0%	NO
Year 5	2003	2,617		0%	NO
Year 6	2004	2,890		0%	NO
Year 7	2005	2,781		0%	NO
Year 8	2006	2,710		0%	NO
Year 9	2007	2,840		0%	NO
Year 10	2008	2,740		0%	NO
Year 11	0	0			NO
Year 12	0	0			NO
Year 13	0	0			NO
Year 14	0	0			NO
Year 15	0	0			NO
5 Year Baseline - Process Water Deduction Eligibility					
Year 1	2004	2,890		0%	NO
Year 2	2005	2,781		0%	NO
Year 3	2006	2,710		0%	NO
Year 4	2007	2,840		0%	NO
Year 5	2008	2,740		0%	NO
2015 Compliance Year - Process Water Deduction Eligibility					
2015	1,930			0%	NO
NOTES:					

SB X7-7 Table 4-C.2: Process Water Deduction Eligibility

Criteria 2

Industrial water use is equal to or greater than 15 GPCD

Baseline Year <i>Fm SB X7-7 Table 3</i>	Industrial Water Use	Population	Industrial GPCD	Eligible for Exclusion Y/N	
10 to 15 Year Baseline - Process Water Deduction Eligibility					
Year 1	1999		8,485	0	NO
Year 2	2000		8,768	0	NO
Year 3	2001		8,835	0	NO
Year 4	2002		9,323	0	NO
Year 5	2003		9,464	0	NO
Year 6	2004		10,184	0	NO
Year 7	2005		10,881	0	NO
Year 8	2006		11,308	0	NO
Year 9	2007		11,646	0	NO
Year 10	2008		11,758	0	NO
<i>Year 11</i>	0		0		NO
<i>Year 12</i>	0		0		NO
<i>Year 13</i>	0		0		NO
<i>Year 14</i>	0		0		NO
<i>Year 15</i>	0		0		NO
5 Year Baseline - Process Water Deduction Eligibility					
Year 1	2004		10,184	0	NO
Year 2	2005		10,881	0	NO
Year 3	2006		11,308	0	NO
Year 4	2007		11,646	0	NO
Year 5	2008		11,758	0	NO
2015 Compliance Year - Process Water Deduction Eligibility					
2015			12,886	0	NO
NOTES:					

SB X7-7 Table 4-C.3: Process Water Deduction Eligibility

Criteria 3

Non-industrial use is equal to or less than 120 GPCD

Baseline Year <i>Fm SB X7-7 Table 3</i>	Gross Water Use Without Process Water Deduction <i>Fm SB X7-7 Table 4</i>	Industrial Water Use	Non-industrial Water Use	Population <i>Fm SB X7-7 Table 3</i>	Non-Industrial GPCD	Eligible for Exclusion Y/N	
10 to 15 Year Baseline - Process Water Deduction Eligibility							
Year 1	1999	2,252		2,252	8,485	237	NO
Year 2	2000	2,394		2,394	8,768	244	NO
Year 3	2001	2,266		2,266	8,835	229	NO
Year 4	2002	2,504		2,504	9,323	240	NO
Year 5	2003	2,617		2,617	9,464	247	NO
Year 6	2004	2,890		2,890	10,184	253	NO
Year 7	2005	2,781		2,781	10,881	228	NO
Year 8	2006	2,710		2,710	11,308	214	NO
Year 9	2007	2,840		2,840	11,646	218	NO
Year 10	2008	2,740		2,740	11,758	208	NO
Year 11	0	0		0	0		NO
Year 12	0	0		0	0		NO
Year 13	0	0		0	0		NO
Year 14	0	0		0	0		NO
Year 15	0	0		0	0		NO
5 Year Baseline - Process Water Deduction Eligibility							
Year 1	2004	2,890		2,890	10,184	253	NO
Year 2	2005	2,781		2,781	10,881	228	NO
Year 3	2006	2,710		2,710	11,308	214	NO
Year 4	2007	2,840		2,840	11,646	218	NO
Year 5	2008	2,740		2,740	11,758	208	NO
2015 Compliance Year - Process Water Deduction Eligibility							
2015		1,930		1,930	12,886	134	NO
NOTES:							

SB X7-7 Table 4-C.4: Process Water Deduction Eligibility

Criteria 4

Disadvantaged Community

Use *IRWM DAC Mapping tool* http://www.water.ca.gov/irwm/grants/resources_dac.cfm

California Median Household Income		Service Area Median Household Income	Percentage of Statewide Average	Eligible for Exclusion? Y/N
2015 Compliance Year - Process Water Deduction Eligibility				
2010	\$53,046		0%	YES

A "Disadvantaged Community" is a community with a median household income less than 80 percent of the statewide average.

NOTES:

SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)

Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Annual Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	1999	8,485	2,252	237
Year 2	2000	8,768	2,394	244
Year 3	2001	8,835	2,266	229
Year 4	2002	9,323	2,504	240
Year 5	2003	9,464	2,617	247
Year 6	2004	10,184	2,890	253
Year 7	2005	10,881	2,781	228
Year 8	2006	11,308	2,710	214
Year 9	2007	11,646	2,840	218
Year 10	2008	11,758	2,740	208
<i>Year 11</i>	0	0	0	
<i>Year 12</i>	0	0	0	
<i>Year 13</i>	0	0	0	
<i>Year 14</i>	0	0	0	
<i>Year 15</i>	0	0	0	
10-15 Year Average Baseline GPCD				232
5 Year Baseline GPCD				
Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use
Year 1	2004	10,184	2,890	253
Year 2	2005	10,881	2,781	228
Year 3	2006	11,308	2,710	214
Year 4	2007	11,646	2,840	218
Year 5	2008	11,758	2,740	208
5 Year Average Baseline GPCD				224
2015 Compliance Year GPCD				
2015		12,886	1,930	134
NOTES:				

SB X7-7 Table 6: Gallons per Capita per Day
Summary From Table SB X7-7 Table 5

10-15 Year Baseline GPCD	232
5 Year Baseline GPCD	224
2015 Compliance Year GPCD	134
NOTES:	

SB X7-7 Table 7: 2020 Target Method

Select Only One

Target Method		Supporting Documentation
<input checked="" type="checkbox"/>	Method 1	SB X7-7 Table 7A
<input type="checkbox"/>	Method 2	SB X7-7 Tables 7B, 7C, and 7D <i>Contact DWR for these tables</i>
<input type="checkbox"/>	Method 3	SB X7-7 Table 7-E
<input type="checkbox"/>	Method 4	Method 4 Calculator

NOTES:

SB X7-7 Table 7-A: Target Method 1

20% Reduction

10-15 Year Baseline	GPCD	2020 Target GPCD
232		185

NOTES:

SB X7-7 Table 7-E: Target Method 3

Agency May Select More Than One as Applicable	Percentage of Service Area in This Hydrological Region	Hydrologic Region	"2020 Plan" Regional Targets	Method 3 Regional Targets (95%)
<input type="checkbox"/>		North Coast	137	130
<input type="checkbox"/>		North Lahontan	173	164
<input type="checkbox"/>		Sacramento River	176	167
<input type="checkbox"/>		San Francisco Bay	131	124
<input type="checkbox"/>		San Joaquin River	174	165
<input checked="" type="checkbox"/>	100%	Central Coast	123	117
<input type="checkbox"/>		Tulare Lake	188	179
<input type="checkbox"/>		South Lahontan	170	162
<input type="checkbox"/>		South Coast	149	142
<input type="checkbox"/>		Colorado River	211	200
<p align="center">Target <i>(If more than one region is selected, this value is calculated.)</i></p>				<p align="center">117</p>
<p>NOTES:</p>				

SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target

5 Year Baseline GPCD <i>From SB X7-7 Table 5</i>	Maximum 2020 Target*	Calculated 2020 Target <i>From Appropriate Target Table</i>	Confirmed 2020 Target
224	213	185	185

* Maximum 2020 Target is 95% of the 5 Year Baseline GPCD

NOTES:

SB X7-7 Table 8: 2015 Interim Target GPCD

Confirmed 2020 Target <i>Fm SB X7-7 Table 7-F</i>	10-15 year Baseline GPCD <i>Fm SB X7-7 Table 5</i>	2015 Interim Target GPCD
185	232	208

NOTES:

SB X7-7 Table 9: 2015 Compliance

Actual 2015 GPCD	2015 Interim Target GPCD	Optional Adjustments <i>(in GPCD)</i>					Adjusted 2015 GPCD	2015 GPCD <i>(Adjusted if applicable)</i>	Did Supplier Achieve Targeted Reduction for 2015?
		Extraordinary Events	Weather Normalization	Economic Adjustment	TOTAL Adjustments				
134	208	0	0	0	0	133.7395554	133.7395554	YES	
NOTES:									

Appendix D- SBX7-7 2020 Compliance Form

SB X7-7 Table 0: Units of Measure Used in 2020 UWMP*

(select one from the drop down list)

Acre Feet

**The unit of measure must be consistent throughout the UWMP, as reported in Submittal Table 2-3.*

NOTES:

SB X7-7 Table 2: Method for 2020 Population Estimate

Method Used to Determine 2020 Population
(may check more than one)

<input type="checkbox"/>	1. Department of Finance (DOF) or American Community Survey (ACS)
<input type="checkbox"/>	2. Persons-per-Connection Method
<input checked="" type="checkbox"/>	3. DWR Population Tool
<input type="checkbox"/>	4. Other DWR recommends pre-review

NOTES:

SB X7-7 Table 3: 2020 Service Area Population

2020 Compliance Year Population

2020	13,766
-------------	--------

NOTES:

SB X7-7 Table 4: 2020 Gross Water Use

Compliance Year 2020	2020 Volume Into Distribution System <i>This column will remain blank until SB X7-7 Table 4-A is completed.</i>	2020 Deductions				2020 Gross Water Use	
		Exported Water *	Change in Dist. System Storage* (+/-)	Indirect Recycled Water <i>This column will remain blank until SB X7-7 Table 4-B is completed.</i>	Water Delivered for Agricultural Use*		Process Water <i>This column will remain blank until SB X7-7 Table 4-D is completed.</i>
	2,048			-		-	2,048

* Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3.

NOTES:

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s), Meter Error Adjustment

Complete one table for each source.

Name of Source		Groundwater	
This water source is (check one) :			
<input checked="" type="checkbox"/>	The supplier's own water source		
<input type="checkbox"/>	A purchased or imported source		
Compliance Year 2020	Volume Entering Distribution System ¹	Meter Error Adjustment ² <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System
	1,007	-	1,007
¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3. ² Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document			
NOTES			

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s) Meter Error Adjustment

Complete one table for each source.

Name of Source		Purchased or imported water	
This water source is (check one) :			
<input type="checkbox"/>	The supplier's own water source		
<input checked="" type="checkbox"/>	A purchased or imported source		
Compliance Year 2020	Volume Entering Distribution System ¹	Meter Error Adjustment ² <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System
	1,041		1,041
¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3. ² Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document			
NOTES:			

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s), Meter Error Adjustment

Complete one table for each source.

Name of Source		Enter Name of Source 3	
This water source is (check one) :			

SB X7-7 Table 4-B: 2020 Indirect Recycled Water Use Deduction (For use only by agencies that are deducting indirect recycled water)

2020 Compliance Year	2020 Surface Reservoir Augmentation				2020 Groundwater Recharge			Total Deductible Volume of Indirect Recycled Water Entering the Distribution System
	Volume Discharged from Reservoir for Distribution System Delivery ¹	Percent Recycled Water	Recycled Water Delivered to Treatment Plant	Transmission/Treatment Loss ¹	Recycled Volume Entering Distribution System from Surface Reservoir Augmentation	Recycled Water Pumped by Utility ^{1,2}	Transmission/Treatment Losses ¹		Recycled Volume Entering Distribution System from Groundwater Recharge
	-	0%	-		-			-

¹ Units of measure (AF, MG, or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3. ²
 Suppliers will provide supplemental sheets to document the calculation for their input into "Recycled Water Pumped by Utility". The volume reported in this cell must be less than total groundwater pumped - See Methodology 1, Step 8, section 2.c.

Data from this table will not be entered into WUEdata.
Instead, the entire table will be uploaded to WUEdata as a separate upload in Excel format.

**SB X7-7 Table 4-C: 2020 Process Water Deduction Eligibility
(For use only by agencies that are deducting process water) Choose Only One**

<input type="checkbox"/>	Criteria 1- Industrial water use is equal to or greater than 12% of gross water use. Complete SB X7-7 Table 4-C.1
<input type="checkbox"/>	Criteria 2 - Industrial water use is equal to or greater than 15 GPCD. Complete SB X7-7 Table 4-C.2
<input type="checkbox"/>	Criteria 3 - Non-industrial use is equal to or less than 120 GPCD. Complete SB X7-7 Table 4-C.3
<input type="checkbox"/>	Criteria 4 - Disadvantaged Community. Complete SB x7-7 Table 4-C.4

NOTES:

Data from this table will not be entered into WUEdata.
 Instead, the entire table will be uploaded to WUEdata as a separate upload in
 Excel format.

SB X7-7 Table 4-C.1: 2020 Process Water Deduction Eligibility *(For use only by agencies that are deducting process water using Criteria 1)*

Criteria 1
 Industrial water use is equal to or greater than 12% of gross water use

2020 Compliance Year	2020 Gross Water Use Without Process Water Deduction	2020 Industrial Water Use	Percent Industrial Water	Eligible for Exclusion Y/N
	2,048		0%	NO

NOTES:

Data from this table will not be entered into WUEdata.
 Instead, the entire table will be uploaded to WUEdata as a separate upload in Excel
 format.

SB X7-7 Table 4-C.2: 2020 Process Water Deduction Eligibility *(For use only by agencies that are deducting process water using Criteria 2)*

Criteria 2
 Industrial water use is equal to or greater than 15 GPCD

2020 Compliance Year	2020 Industrial Water Use	2020 Population	2020 Industrial GPCD	Eligible for Exclusion Y/N
		13,766	-	NO

NOTES:



Data from this table will not be entered into WUEdata.

Instead,

the entire table will be uploaded to WUEdata as a separate upload in Excel format.

SB X7-7 Table 4-C.3: 2020 Process Water Deduction Eligibility *(For use only by agencies that are deducting process water using Criteria 3)*

Criteria 3

Non-industrial use is equal to or less than 120 GPCD

2020 Compliance Year	2020 Gross Water Use Without Process Water Deduction <i>Fm SB X7-7 Table 4</i>	2020 Industrial Water Use	2020 Non-industrial Water Use	2020 Population <i>Fm SB X7-7 Table 3</i>	Non-Industrial GPCD	Eligible for Exclusion Y/N
	2,048		2,048	13,766	133	NO

NOTES:

Data from this table will not be entered into WUEdata.
 Instead, the entire table will be uploaded to WUEdata as a separate upload in
 Excel format.

SB X7-7 Table 4-C.4: 2020 Process Water Deduction Eligibility *(For use only by agencies that are deducting process water using Criteria 4)*

Criteria 4

Disadvantaged Community. A "Disadvantaged Community" (DAC) is a community with a median household income less than 80 percent of the statewide average.

SELECT ONE

"Disadvantaged Community" status was determined using one of the methods listed below:

1. IRWM DAC Mapping tool <https://gis.water.ca.gov/app/dacs/>

If using the IRWM DAC Mapping Tool, include a screen shot from the tool showing that the service area is considered a DAC.

2. 2020 Median Income

	California Median Household Income*		Service Area Median Household Income	Percentage of Statewide Average	Eligible for Exclusion? Y/N
	2020	\$75,235			
<input type="checkbox"/>	2020	\$75,235		0%	YES
*California median household income 2015 -2019 as reported in US Census Bureau QuickFacts.					

NOTES

SB X7-7 Table 5: 2020 Gallons Per Capita Per Day (GPCD)

2020 Gross Water <i>Fm SB X7-7 Table 4</i>	2020 Population <i>Fm</i> <i>SB X7-7 Table 3</i>	2020 GPCD
2,048	13,766	133

NOTES:

SB X7-7 Table 9: 2020 Compliance

Actual 2020 GPCD ¹	Optional Adjustments to 2020 GPCD					2020 Confirmed Target GPCD ^{1,2}	Did Supplier Achieve Targeted Reduction for 2020?
	Enter "0" if Adjustment Not Used			TOTAL Adjustments ¹	Adjusted 2020 GPCD ¹ <i>(Adjusted if applicable)</i>		
	Extraordinary Events ¹	Weather Normalization ¹	Economic Adjustment ¹				
133	-	-	-	-	133	184	YES

¹ All values are reported in GPCD

² **2020 Confirmed Target GPCD** is taken from the Supplier's SB X7-7 Verification Form Table SB X7-7, 7-F.

NOTES:

Appendix E- Wholesale Water Supply Agreement

RESOLUTION NO. 2013-40

**A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF SANTA MARIA, CALIFORNIA, APPROVING A
WHOLESALE WATER SUPPLY AGREEMENT WITH
NIPOMO COMMUNITY SERVICES DISTRICT**

WHEREAS, on September 7, 2004, the City Council entered into a Memorandum of Understanding with Nipomo Community Services District ("NCSD") to define the terms under which the City of Santa Maria ("City") and NCSD would negotiate for NCSD to purchase supplemental water from the City; and

WHEREAS, on June 30, 2005, a majority of the parties in the Santa Maria Groundwater Litigation, including the City and NCSD, entered into a Stipulated Agreement ("Stipulation"); and

WHEREAS, on June 25, 2008, the Superior Court of California (Santa Maria Groundwater Litigation Lead Case No. 1-97-CV-770214) entered into a judgment incorporating the Stipulation; and

WHEREAS, on January 5, 2010, the City Council adopted a statement of overriding consideration and made findings of consistency regarding the Final Environmental Impact Report on Resolution 2010-04; and

WHEREAS, on January 5, 2010, the City Council approved a Wholesale Water Supply Agreement ("Agreement") for the sale and delivery of supplemental water by the City to NCSD on Resolution 2010-04; and

WHEREAS, on May 9, 2012, the NCSD failed to achieve votes necessary to form an Assessment District to acquire approximately \$30 million in funding to construct infrastructure to deliver the quantities of water specified in the initial Agreement; and

WHEREAS, the NCSD desires to construct an interim project to deliver quantities of water greatly reduced from the original project, thereby reducing delivery capacity; and

WHEREAS, the City and NCSD wish to revise the initial Agreement, notably to modify the Minimum Takedown Schedule (i.e. Quantity) to reflect the reduced delivery capacity, and to modify renegotiation language; and

WHEREAS, the proposed revision to the initial Agreement was approved by the NCSD Board of Directors at their regular meeting on Wednesday, April 24, 2013; and

WHEREAS, all other terms in the Agreement approved on Resolution 2010-04 remain the same.

NOW, THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Santa Maria as follows:

- 1.) Authorize and direct the Director of Utilities to enter into a new Wholesale Water Supply Agreement with Nipomo Community Services District, hereto attached as Exhibit "A" and made a part of this resolution; and
- 2.) Authorize and direct the Director of Utilities, or his designee, to enter into extensions and modifications to the Agreement, consistent with the terms of the Agreement, in order to carry out the project.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Santa Maria, California, held this 7th day of May 2013.

/s/ ALICE M. PATINO

Mayor

ATTEST:

/s/ RHONDA M. GARIETZ, CMC

Chief Deputy City Clerk

APPROVED AS TO FORM



Sr. Ass. City Attorney

APPROVED AS TO CONTENT



City Manager



Department Head

WHOLESALE WATER SUPPLY AGREEMENT

This Wholesale Water Supply Agreement ("Agreement") is made and entered into as of May 7, 2013, by and between the **CITY OF SANTA MARIA ("City")**, a California municipal corporation and charter City, and **NIPOMO COMMUNITY SERVICES DISTRICT ("NCSD")**, an independent special district formed under and pursuant to Section 61000, *et seq.* of the California Government Code. City and NCSD are sometimes individually referred to herein as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, the City provides retail potable water service to customers within its service area in the Santa Maria Valley, in northern Santa Barbara County. The City holds a contract with the Central Coast Water Authority to receive water from the State Water Project ("SWP"). City also holds rights to recharge from Twitchell Reservoir and rights to pump groundwater from the Santa Maria Groundwater Basin ("Santa Maria Basin"); and

WHEREAS, NCSD provides retail potable water service and sewer service within its established boundaries located in and around the Nipomo Mesa Management Area ("NMMA") of the Santa Maria Basin; and

WHEREAS, both the City and the NCSD are Parties to a certain groundwater adjudication lawsuit commonly referred to as the Santa Maria Groundwater Litigation (Santa Maria Valley Water Conservation District vs. City of Santa Maria, et al.; Superior Court of California, County of Santa Clara Case no. 1-97-CV-770214) (referred to herein as "Basin Litigation"). On August 3, 2005, the Court approved a Settlement Stipulation (referred to herein as "Stipulation") that was signed by the Parties, related to the Basin Litigation which, among other things, provides that "the NCSD and City shall employ their best efforts to timely implement the Nipomo Supplemental Water Project, subject to their quasi-judicial obligations specified for administrative action and in the California Environmental Quality Act." The Stipulation was later incorporated into the final Judgment; and

WHEREAS, on a long term basis, City has water available for use in the NMMA that is surplus to that needed to serve City's current and long-term future anticipated demands; and

WHEREAS, pursuant to the Stipulation, NCSD seeks to acquire a Supplemental Water supply (referred to herein as "Supplemental Water") to alleviate pressure on the NMMA from groundwater pumping and to meet current needs and projected demands of NCSD customers; and

WHEREAS, consistent with the Stipulation and Judgment, and subject to the terms and conditions of this Agreement, City is willing to sell and deliver to NCSD an established quantity of Supplemental Water on a wholesale basis.

NOW THEREFORE, in consideration of the foregoing recitals and the promises and covenants contained herein, the Parties agree as follows:

1. **Purpose.** Consistent with the Stipulation and Judgment, the purpose of this Agreement is to formalize the terms and conditions by which City will provide Supplemental Water to NCSD, including an equivalent amount of capacity in City's water distribution system, for delivery to the NCSD water distribution system through the interconnection described in Paragraph 9, beginning on the Effective Date and continuing each year thereafter for as long as this Agreement remains in effect.

2. **Termination of MOU and Original Wholesale Water Supply Agreement.** City and NCSD executed a Memorandum of Understanding ("MOU") on September 7, 2004, to provide for the reservation of a Supplemental Water supply of up to three thousand (3,000) acre-feet per year ("AFY") in anticipation of the negotiation of the original Wholesale Water Supply Agreement ("Original Agreement"), executed on January 5, 2010. This Agreement shall supersede the terms of the MOU and Original Agreement, which shall terminate and be of no further force or effect. The initial reservation payment of \$37,500 made upon execution of the MOU has already been credited by City to the first quarterly invoice for water delivery pursuant to Paragraph 8.

3. **Term of Agreement.**

(a) **Contract Term.** The term of the Agreement shall commence on the Effective Date and end on June 30, 2085 ("Term"). Notwithstanding the Term, the delivery of Supplemental Water pursuant to this Agreement during any period on or after June 30, 2035, shall be subject to the renewal of the contract between the City and Central Coast Water Authority for SWP water. Furthermore, the terms of this Agreement shall be subject to renegotiation as described below in the event that the SWP contract or any subsequent SWP contract is not renewed or is renegotiated by the City and Central Coast Water Authority prior to June 30, 2035, and the terms of such renegotiation or renewal either (i) substantially impair the ability of City to continue to provide Supplemental Water in the quantities set forth in this Agreement; or (ii) the cost of continuing to provide Supplemental Water pursuant to the terms of this Agreement would create a significant financial burden on the City. In no event shall the City be required to deliver Supplemental Water at a financial loss following June 30, 2035, or in the event of a change in price due to a renegotiation occurring prior to June 30, 2035, as described in the foregoing sentence. Upon the occurrence of one of the foregoing events and within thirty (30) days of a written request from City to NCSD requesting renegotiation, the Parties shall negotiate in good faith and use their best efforts to equitably amend the terms of this Agreement to allow for the continued delivery of Supplemental Water on terms that are mutually beneficial to the Parties for the duration of the Term. The parties will meet in good faith in 2085 to determine whether to extend the term of the Agreement.

(b) **Dispute Resolution.** In the event of a dispute as to whether clause (i) and/or (ii) of Paragraph 3(a) have been triggered as a result of the renegotiation or non-renewal of the SWP contract, then such dispute shall be referred to the dispute resolution procedures referenced in Paragraph 19 of this Agreement. If a final finding is made as a result of such dispute resolution procedure that clause (i) and /or clause (ii) have been triggered, then the Parties shall negotiate in good faith pursuant to Paragraph 3(a). If the Parties cannot agree on the terms and conditions for equitably amending the terms of this

Agreement to address a substantial impairment pursuant to clause (i) of Paragraph 3(a), then whether or not there is a feasible solution to address such substantial impairment may also be referred to the dispute resolution procedures referenced in Paragraph 19 of this Agreement. Notwithstanding the foregoing, the allocation of cost and/or any revision in the price of Supplemental Water to implement a solution or address the existence of an impairment or significant financial burden as set forth in Paragraph 3(a) shall be solely determined by the Parties on mutually acceptable terms and the dispute resolution procedure shall have no authority to order or impose any change with respect to such terms.

(c) **Effective Date.** The "Effective Date" shall mean the date that the NCSD interconnection described in Paragraph 9 has been completed and approved by City's technical staff as operationally ready for commencement of delivery of Supplemental Water.

(d) **Delivery Year.** Each "Delivery Year" shall commence on the Effective Date and any anniversary thereof during the Term and continue for a period of one (1) year.

4. Quantity of Supplemental Water.

(a) **Minimum Delivery.** In each Delivery Year during the Term of this Agreement, City shall deliver and NCSD shall purchase the following minimum quantity of Supplemental Water ("Minimum Quantity"):

<u>Delivery Years</u>	<u>Minimum Delivery Volume (AFY)</u>
1	645
2-5	800
6-10	1,000
11-Term	2,500

Any portion of the Minimum Quantity of Supplemental Water that is available for delivery by City in accordance with the mutually agreeable to delivery schedule referenced in Paragraph 9(e) and that is not taken by NCSD during a given Delivery Year shall be forfeit and shall not roll over to the next year. In the event that City, in its sole and absolute discretion, agrees to deliver unused Supplemental Water in a subsequent Delivery Year, such late delivery shall be an accommodation to NCSD and shall not constitute a waiver or amendment to the terms of this Agreement.

(b) **Additional Delivery.** NCSD may request delivery of Supplemental Water in excess of the Minimum Quantity up to an additional thirty-two hundred (3,200) acre feet per year. NCSD shall give City no less than thirty (30) days written notice of its desire to purchase additional Supplemental Water and the proposed schedule for such delivery. City shall make a good faith effort to comply with such request subject to (i) the availability of excess Supplemental Water from sources used for delivery of water to City's retail customers; and (ii) sufficient delivery capacity to fulfill such request at the NCSD interconnection using the City's existing water distribution system. Any such additional Supplemental Water shall be purchased and delivered on the same terms as the Minimum Quantity, provided, however, that if the cost of procuring and delivering

additional Supplemental Water exceeds the cost of delivering the Minimum Quantity, City shall have the right to impose a surcharge to compensate City for such additional cost as a condition to delivery. City shall notify NCSD of the amount of any such surcharge prior to delivery of any additional Supplemental Water and NCSD shall have the right to withdraw its request. In no event shall City be required to undertake any capital cost or expansion of its existing infrastructure to provide additional Supplemental Water.

5. **Reservation of Minimum Quantity**. Subject to the terms and conditions of this Agreement, City shall hold on reserve sufficient Supplemental Water each year, including an equivalent amount of capacity in City's water distribution system, for City to fulfill its obligation to deliver the Minimum Quantity to NCSD under this Agreement. City shall deliver such Supplemental Water to NCSD from sources used to provide water to City's retail customers. Notwithstanding the foregoing, during the term of the Agreement, City may substitute or combine new or additional replacement sources of water for the source of Supplemental Water, provided, however, that any substitute, combined or additional sources must be equivalent in deliverability, reliability, quality, pressure, and environmental impacts to the source being replaced. Disputes regarding this Paragraph shall be resolved pursuant to Paragraph 19.

6. **Purchase Price for Supplemental Water**. The purchase price for Supplemental Water delivered by City to NCSD shall be based on the "Base Rate" of the City's Water Consumption Rates. For fiscal year 2012-13, the Base Rate is two dollars and ninety seven cents (\$2.97) per one hundred (100) cubic feet of water (or \$1,293.73 per acre-foot of water). The Base Rate may be adjusted each fiscal year subject to approval by the City Council, consistent with applicable legal requirements. Any such adjustment in the purchase price shall go into effect in the next quarterly billing period.

7. **Costs of Delivery**. Except as expressly set forth in this Agreement, City shall be responsible for all costs and expenses related to providing Supplemental Water to NCSD at the NCSD interconnection pursuant to this Agreement. Notwithstanding the foregoing, the purchase price for Supplemental Water includes a cost component for energy costs incurred by City to supply Supplemental Water to the NCSD interconnection equal to two hundred and six dollars and eighty five cents (\$206.85) per acre foot ("Base Energy Cost"). In the event that the actual cost of energy incurred by City to supply Supplemental Water in any Delivery Year exceeds the Base Energy Cost, then City shall have the right to charge NCSD a premium equal to the difference between the actual cost and the Base Energy Cost. The Base Energy Cost shall be adjusted each Delivery Year by a percentage which is equivalent to fifty (50) percent of the increase or decrease, if any, in the Consumer Price Index-Energy Services (Electricity and Natural Gas)-Los Angeles-Riverside-Orange County or any successor index.

8. **Payments for Supplemental Water**. City shall bill NCSD on a quarterly basis in arrears for Supplemental Water delivered to NCSD's interconnection during the previous three (3) months. The amount payable by NCSD to City shall be based on the total quantity in acre-feet of Supplemental Water delivered during the quarter just ended multiplied by the then-current purchase price (as determined in Paragraph 6), plus any costs payable by NCSD pursuant to this Agreement. Notwithstanding the foregoing, to the extent that NCSD has taken less than the Minimum Quantity as of the final quarterly billing

for a Delivery Year, City shall bill NCSD for the remainder of the Minimum Quantity whether or not such Supplemental Water has been delivered, provided that such water was made available for delivery to NCSD as provided in Paragraph 9. All invoices billed to NCSD shall be payable within thirty (30) days of the invoice date, provided that no charges are disputed. City shall have the right to charge late fees of up to five (5) percent of the overdue amount for any invoice that is not paid within such period. In the event NCSD disputes any charges on an invoice, the undisputed amount shall be paid consistent with this Paragraph and the original invoice shall be returned to City for correction and resubmission. If the parties are unable to reach an agreement regarding disputed charges, disputes shall be resolved pursuant to Paragraph 19.

9. Delivery of Water.

(a) **Point of Delivery.** The physical point of delivery of Supplemental Water pursuant to this Agreement shall be the proposed interconnection between the City water distribution system and the NCSD water distribution system located at Taylor Street and Blosser Road or such other alternative location as may be approved by City and NCSD. All facilities constructed by NCSD will be used solely for the purpose of delivering Supplemental Water to NCSD. NCSD shall cooperate with the reasonable requests of City with respect to taking any action necessary to preserve the integrity of the City's water distribution system and the City shall do likewise for NCSD. The operation and maintenance of the NSCD Interconnection will be detailed in an Operation Memorandum of Understanding that will be approved by the City and NCSD prior to connection. City shall waive any fees for City permits related to construction of facilities for delivery of the water. If the parties cannot agree on the terms of the Operations Memorandum of Understanding then the disputed terms will be subject to the dispute resolution procedures referenced in Paragraph 19 of this Agreement.

(b) **Facilities.** NCSD shall be responsible for designing, constructing and operating the NCSD interconnect. The plans and specifications of the NCSD interconnect shall be subject to prior approval by City, which approval shall not unreasonably be withheld provided that such plans and specifications conform to applicable code provisions and any technical requirements imposed for connections to the City's water distribution system. NCSD shall also be responsible for obtaining any and all regulatory and environmental permits, licenses or other approvals necessary to construct and operate the NCSD interconnection. NCSD and/or any contractor working on the NCSD interconnect shall provide insurance coverage naming the City as an additional insured and the scope of such insurance coverage shall be subject to the reasonable approval of City's Risk Manager prior to commencement of any work.

(c) **Construction, Regulatory/Permit and Other Costs.** NCSD shall be solely responsible for all costs related to the construction and operation of the NCSD interconnection with City's retail water distribution system. NCSD shall also be solely responsible for all regulatory and/or permit compliance and costs with respect to the NCSD interconnection.

(d) **City Streets: License to Use Easements and Rights of Way.** The City shall provide NCSD a license, at no additional cost, to use such portions of City streets,

easements, and right of ways as are reasonably necessary to build the NCSD interconnect and deliver the Supplemental Water to NCSD. Such license shall be non-revocable during the Term of this Agreement and shall automatically terminate upon the termination of this Agreement. The foregoing licenses shall not include the right of NCSD to make any alteration or improvement within such City streets, easements and rights of way except in compliance with Paragraph 9.

(e) **Delivery Schedule.** City will deliver the Supplemental Water to NCSD at the NCSD interconnection upon a mutually agreeable delivery schedule. The volume of delivery to the NCSD interconnection shall not exceed a maximum of two hundred seventy-five (275) acre-feet per month or a peak hour flow averaging twenty-five hundred (2,500) gallons per minute. Delivery pressure at the point of connection shall exceed sixty (60) psi during City's normal system operation, not including emergencies or incidents described in Paragraph 9(f). Before delivery begins, the District and City shall agree to an Operation Memorandum of Understanding (OMOU) to describe the specific procedures and limitation on the operations provided for in this Agreement.

(f) **Force Majeure.** If by reason of acts of God, earthquakes, droughts, floods, storms, explosion, fires, labor troubles, strikes, insurrection, riots, acts of the public enemy, or federal, or state, order, rule, or regulation, the City is prevented, in whole or in part, from the delivery of the Supplemental Water to NCSD, as provided herein, then City may reduce delivery of Supplemental Water up to the same percentage the City reduces water delivery to its retail customers.

(g) **Suspension.** The delivery of water may be suspended or curtailed during any period of public emergency or disaster that is declared by City. For the purposes of this Agreement, a public emergency or disaster shall not include ordinary measures taken during periods of drought or water shortage.

(h) **Obligations of City.** For the purposes of this Agreement and subject the limitations contained in this Paragraph 9, City shall have fulfilled its obligation to make Supplemental Water available for delivery so long as the amount of Supplemental Water purchased by NCSD is available at the NCSD interconnection for NCSD to take delivery of pursuant to a predetermined and mutually agreed upon delivery schedule.

10. **Water Quality.** City shall be responsible for ensuring that the quality of the Supplemental Water made available for delivery is of the same pressure and quality of water that City delivers to its residential customers. The quality of water which is delivered by the City to its residents complies with federal, state and local laws, regulations and permit requirements which are applicable to City, including standards applicable to wastewater discharge, as amended from time to time and subject to any compliance waiver granted to the City ("Quality Standards"). City shall provide NCSD with a copy of the Quality Standards (and any change thereto) which are applicable to City and NCSD shall be solely responsible for ensuring that the Quality Standards meet the federal, state and local laws, regulations and permit requirements for potable water delivery by NCSD to its customers, including the discharge of such water. To the extent that the quality standards which are applicable to NCSD exceed the Quality Standards, then NCSD shall be responsible for any necessary additional treatment of the Supplemental Water. City

agrees to indemnify and hold NCSD harmless from any actual liability which arises as a result of the failure of Supplemental Water which is delivered to the NCSD interconnection to meet the Quality Standards. NCSD shall be solely responsible for any actual liability resulting from a change in water quality following the point of delivery (including any additional treatment undertaken by NCSD) and shall indemnify and hold City harmless from any actual liability which arises from any such change. City and NCSD shall promptly notify the other in the event that either becomes aware of a material adverse change in the quality of the Supplemental Water and shall cooperate to identify the cause of such change.

11. **Remarketing of Supplemental Water.** NCSD shall be free to remarket the Supplemental Water to other Parties within the NMMA without restriction to price and terms. NCSD assumes all responsibility for delivery of Supplemental Water from the NCSD interconnection to its customers and contracting Parties. City's obligations under this Agreement are solely with NCSD and no customer of NCSD nor other third party shall have the right to enforce the terms of this Agreement as a third party beneficiary. City shall not sell water to other parties or persons within NCSD's service area or sphere of influence, as amended from time to time, without first receiving the written approval of NCSD.

12. **Regulatory Requirements.**

(a) **Obligations of the City.** The implementation of this Agreement shall be subject to satisfaction by City of the regulatory requirements set forth herein. City shall, if necessary, undertake the following: (i) Obtain all permits, consents, entitlements and approvals necessary to enable the City to reserve and sell, and NCSD to purchase, the Supplemental Water that is the subject of this Agreement; and (ii) fully and completely comply with the requirements of the California Environmental Quality Act ("CEQA"), including, if it is determined that this transaction is subject to CEQA and not exempt from CEQA. The completion of an initial study, and (1) either (a) there shall have been adopted a negative declaration or a mitigated negative declaration, or (b) a final environmental impact report shall have been completed and certified, and (2) the time shall have expired within which a judicial proceeding may be instituted challenging the validity or completeness of any such determination of exemption, or adoption of a negative declaration or of a mitigated negative declaration, or approval of a final environmental impact report.

(b) **Obligations of NCSD.** NCSD shall be solely responsible for obtaining all regulatory approvals necessary in connection with purchasing and taking delivery of the Supplemental Water.

13. **Service Area Integrity.** Nothing in this Agreement is intended nor shall it be interpreted to waive the right of City to provide water service to current or future areas within or adjacent to its existing service area.

14. **Representations or Warranties of City.** City makes the following representations, warranties, and covenants to NCSD:

(a) **Power and Authority to Execute and Perform this Agreement.** The City has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

(b) **Availability of Resource.** Based on information which is currently known to City and City's current forecast of future use, on a long-term basis, City has water and the necessary infrastructure available to fulfill City's obligations under this Agreement that is surplus to that needed to serve City's current and long-term future anticipated demand.

(c) **Enforceability.** This Agreement constitutes a legal, valid, and binding obligation of the City, and is enforceable against the City in accordance with its terms.

15. **Representations or Warranties of NCSD.** NCSD makes the following representations, warranties, and covenants to City:

(a) **Power and Authority to Execute and Perform this Agreement.** NCSD has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

(b) **Enforceability.** This Agreement constitutes a legal, valid, and binding obligation of NCSD, enforceable against NCSD in accordance with its terms.

16. **Default and Termination by City.** In the event NCSD fails to make any payment to City under this Agreement when due, or fails to perform any obligation otherwise required by this Agreement, City shall demand in writing that NCSD cure such non-performance. NCSD shall have thirty (30) days after receipt of such demand to cure. In the event NCSD fails to cure a default within the thirty (30) day period, City may suspend delivery of Supplemental Water and redirect such water to other uses for the duration of the suspension. City shall restore water delivery when NCSD has cured all outstanding defaults and paid all amounts due to the City in full. In the event that NCSD does not cure a default within one (1) year of suspension, then City may terminate this Agreement at any time thereafter.

17. **Default and Termination by NCSD.** NCSD shall have the right to terminate this Agreement, without recourse, if (i) the City is found to be in material breach of its obligations to deliver the Supplemental Water as set forth in this agreement; or (ii) upon written notice to City that NCSD is unable to pay for the Supplemental Water due to the majority protest procedures or other procedures referenced in Proposition 218; or (iii) upon three (3) years prior written notice to City, provided, however, that no such termination without cause shall become effective until the thirtieth (30th) anniversary of the Effective Date.

18. **Expiration of Term.** This Agreement shall terminate and be of no further force and effect as of the expiration of the Term.

19. **Dispute Resolution.** Except as otherwise limited by this Agreement, any dispute arising under this Agreement, including, without limitation, all disputes relating in any manner to the performance or enforcement of this Agreement, shall be resolved by

binding arbitration in the County of Santa Barbara, California, pursuant to the comprehensive arbitration rules and procedures of Judicial Arbitration and Mediation Services ("JAMS") or any successor thereto, as amended or as augmented in this Agreement (the "Rules"). Arbitration shall be initiated as provided by the Rules, although the written notice to the other party initiating arbitration shall also include a description of the claim(s) asserted and the facts upon which the claim(s) are based. Arbitration shall be final and binding upon the parties and shall be the exclusive remedy for all claims subject hereto, including any award of attorney's fees and costs. Either party may bring an action in court to compel arbitration under this Agreement and to enforce an arbitration award. All disputes shall be decided by a single arbitrator. The arbitrator shall be selected by mutual agreement of the parties within thirty (30) days of the effective date of the notice initiating the arbitration. If the parties cannot agree on an arbitrator, then the complaining party shall notify JAMS and request selection of an arbitrator in accordance with the Rules. The arbitrator shall have only such authority to award equitable relief, damages, costs, and fees as a court would have for the particular claim(s) asserted. In no event shall the arbitrator award punitive damages of any kind. The parties acknowledge that one of the purposes of utilizing arbitration is to avoid lengthy and expensive discovery and allow for prompt resolution of the dispute. The arbitrator shall have the power to limit or deny a request for documents or a deposition if the arbitrator determines that the request exceeds those matters which are directly relevant to the claims in controversy. The parties may make a motion for protective order or motion to compel before the arbitrator with regard to the discovery, as provided in the Code of Civil Procedure. Notwithstanding the election by the parties to arbitrate their disputes, nothing contained herein shall prevent a party from filing an action in a court of competent jurisdiction to seek any form of equitable remedy or relief.

20. **Indemnity.** NCSD, its successors and assigns, shall hold harmless, defend and indemnify City, its officials, employees, agents, successors and assigns (all of which are herein referred to as the "City Indemnified Parties") from and against all liabilities, obligations, claims, damages, losses, actions, judgments, suits, costs and expenses, including but not limited to reasonable attorneys' fees (collectively, "Damages"), which may be imposed on, incurred by, or asserted against City Indemnified Parties as a result of (i) a breach of NCSD's obligations; or (ii) the conduct of NCSD's operations associated with the NCSD interconnection to City's retail distribution system and the subsequent delivery of Supplemental Water to NCSD's customers. Notwithstanding the foregoing, in no event shall NCSD be liable to indemnify a City Indemnified Party for (i) any Damages resulting from the negligence or willful misconduct of City; (ii) any third party claim brought in connection with regulatory approvals; or (iii) any claim brought in connection with the quality of the Supplemental Water as provided in Paragraph 10 above. This indemnification shall survive termination of the Agreement.

21. **Third Party Claims.** Promptly following notice of any "Third Party Claim" for which City is indemnified hereunder, City shall notify NCSD of such claim in writing. NCSD shall have a period of thirty (30) days following the receipt of such notice to notify City of whether NCSD elects to assume the defense thereof. If NCSD so notifies City that it elects to assume the defense, NCSD thereafter shall undertake and diligently pursue the defense of the Third Party Claim. NCSD shall not consent to entry of a judgment or enter into any settlement agreement, without the consent of City, which does not include a

complete and unconditional release of City or which imposes injunctive or other equitable relief against City. City shall be entitled to participate in, but not control, the defense thereof, with counsel of its choice and at its own expense. If NCSD does not give the requisite notice, or fails to assume and diligently pursue the defense of such Third Party Claim, City may defend against such Third Party Claim in such manner as it may deem appropriate, at NCSD's expense, including without limitation settlement thereof on such terms as City may deem appropriate, and to pursue such remedies as may be available to City against NCSD. Notwithstanding the foregoing, City shall not consent to entry of a judgment or enter into any settlement agreement, without the consent of NCSD, which does not include a complete and unconditional release of NCSD.

22. **Notice of Claims.** The Parties shall promptly notify each other within ten (10) days of City or NCSD becoming aware of: (1) any claims or suits brought against City or NCSD which involve this Agreement or water supplied to NCSD pursuant to this Agreement, (2) any Third Party Claims, and (3) any force majeure event. Any such notice shall conform to the requirements specified in Paragraph 28 of this Agreement.

23. **Remedies Not Exclusive.** Remedies provided in this Agreement for enforcement of its terms are intended and shall be construed as cumulative rather than exclusive and shall not be deemed to deprive either Party from also using any other remedies provided by this Agreement or by law.

24. **No Transfer of Rights.** The rights granted to NCSD hereunder constitute the right to take delivery of Supplemental Water only and shall not be interpreted as a sale, transfer, or assignment of any of City's water rights.

25. **Subject to Applicable Law.** The Parties acknowledge and agree that this Agreement and the rights and obligations of the Parties shall be subject to the laws governing municipal corporations and special districts as they now exist and as they may be amended or codified by the Legislature of the State of California.

26. **Entire Agreement.** This Agreement contains the entire understanding between NCSD and City with respect to its subject matter, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between NCSD and City. This Agreement cannot be amended except in writing signed by both Parties.

27. **No Waiver.** Any failure or delay on the part of either Party to exercise any right under this Agreement shall not constitute a waiver of the right, and shall not preclude such Party from exercising or enforcing the right, or any other provision of this Agreement, on any subsequent occasion.

28. **Notices.** All notices or other communications required or desired to be given pursuant to this Agreement shall be in writing and shall be hand-delivered or sent by a reputable overnight courier service providing delivery confirmation. Each such notice or communication shall be deemed to be duly given when hand-delivered or one (1) day after being deposited for next day delivery with an overnight courier. Each such notice or communication shall be addressed to the Parties at their respective addresses set forth

next to their signatures below, or such other address as a Party notifies the other in writing.

29. **Headings; Paragraph References.** Captions and headings appearing in this Agreement are inserted solely as reference aids for the ease and convenience; they shall not be deemed to define or limit the scope or substance of the provisions they introduce, nor shall they be used in construing the intent or effect of such provisions.

30. **Separability.** If any provision of this Agreement is finally determined by a court to be invalid or unenforceable as written, the provision shall, if possible, be enforced to the extent reasonable under the circumstances and otherwise shall be deemed deleted from this Agreement. The other provisions of this Agreement shall remain in full force and effect so long as the material purposes of the Agreement and understandings of the Parties are not impaired.

31. **Binding Effect Assignment.** This Agreement shall be binding on and inure to the benefit of the Parties, and their respective successors and permitted assigns. NCSD shall have the right to assign its rights under this Agreement with the written consent of City, provided, however, that the City shall not unreasonably withhold such consent and further provided that the assignee agrees to be bound by all of the obligations of NCSD set forth herein. Notwithstanding the foregoing, no assignment permitted hereunder shall permit the delivery of Supplemental Water to any property or development other than the Property without the written consent of the City, in its sole and absolute discretion.

32. **Opinions and Determinations: Good Faith.** Where the terms of this Agreement provide for action to be based upon opinion, judgment, approval, review or determination of either party hereto, such terms are not intended to and shall never be construed to permit such opinion, judgment, approval, review or determination to be arbitrary, capricious or unreasonable. The City and the NCSD shall each act in good faith in performing their respective obligations as set forth in this Agreement.

33. **Incorporation of Recitals.** Recitals A through F are incorporated herein by reference as though set forth at length.

34. **Attorneys Fees.** In the event that any legal proceeding other than the dispute resolution procedures referenced in Paragraph 19, above, is brought to enforce one or more of the terms of this Agreement, to restrain an alleged violation of this Agreement, or to determine the validity of this Agreement or any part, the prevailing Party in any such action or proceeding shall be entitled to recover from the other its reasonable costs and attorneys' fees, in addition to any other remedies available to it in law or equity. If both Parties are successful in one or more causes of action during any such proceeding, the costs and fees shall be apportioned as determined by the court.


35. **Governing Law and Venue.** This Agreement is a contract governed in accordance with the laws of the State of California. THE PARTIES HEREBY AGREE THAT VENUE FOR ANY ACTION BROUGHT TO ENFORCE THE TERMS OF THIS AGREEMENT SHALL BE IN A COURT OF COMPETENT JURISDICTION IN THE

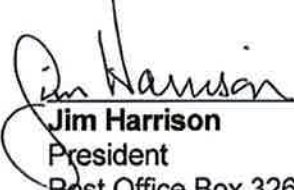
COUNTY OF SANTA BARBARA OTHER THAN A COURT LOCATED WITHIN THE CITY OF SANTA MARIA OR THE NORTHERN PORTION OF SANTA BARBARA COUNTY, CALIFORNIA, AND CONSENT TO THE JURISDICTION THEREOF.

IN WITNESS WHEREOF, the Parties have executed this agreement as of the date first written above.

CITY:
City of Santa Maria, a California
municipal corporation and charter city

NCSD:
Nipomo Community Services District,
a California public agency

By: 
Name: Richard G. Sweet, P.E.
Title: Director of Utilities
Address: 2065 East Main Street
Santa Maria, CA 93454
Fax: (805) 928-7240
Phone: (805) 925-0951 ext. 7211

By: 
Name: Jim Harrison
Title: President
Address: Post Office Box 326
Nipomo, CA 93444
Fax: (805) 929-1932
Phone: (805) 929-1133

APPROVED AS TO FORM:
Best, Best & Krieger LLP

APPROVED AS TO FORM:
District Counsel

By: 
Jill Willis, Partner

By: 
Michael W. Seitz, District Counsel

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA) ss.
CITY OF SANTA MARIA)


I, RHONDA M. GARIETZ, CMC, Chief Deputy City Clerk of the City of Santa Maria and ex officio Clerk of the City Council DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 2013-40 which was duly and regularly introduced and adopted by said City Council at a regular meeting held May 7, 2013, and carried on the following vote:

AYES: Councilmembers Boysen, Green, Orach, Zuniga,
 and Mayor Patino.

NOES: None.

ABSENT: None.

ABSTAIN: None.



Chief Deputy City Clerk
of the City of Santa Maria and
ex officio Clerk of the City Council



CITY OF SANTA MARIA
OFFICE OF THE CITY MANAGER
Records/City Clerk, Ext. 306

110 EAST COOK STREET, ROOM #3 • SANTA MARIA, CA 93454-5190 • 805-925-0951 • FAX 805-925-2243 • www.ci.santa-maria.ca.us

May 10, 2013

RECEIVED

MAY 13 2013

NIPOMO COMMUNITY
SERVICES DISTRICT

Jim Harrison
Nipomo Community Services District
P.O. Box 326
Nipomo, CA 93444

RE: WHOLESALE WATER SUPPLY AGREEMENT WITH NIPOMO COMMUNITY SERVICES DISTRICT (NCSD)

Dear Mr. Harrison:

At its regular meeting held on Tuesday, May 7, 2013, the City Council of the City of Santa Maria entered into an Agreement with Nipomo Community Services District ("NCSD") an independent special district formed under and pursuant to Section 61000, et seq. of the California Government Code. Enclosed are two execution originals of the Agreement.

Please sign the Agreements where indicated. Once you have done so, please return one fully executed original to me in the enclosed self-addressed envelope. You should retain one fully executed original for your records.

A certified copy of the Resolution approving the agreement is also enclosed for your records. Should you have any questions regarding the Council's action, please do not hesitate to contact this office at 805-925-0951, Ext. 307 or the Utilities Department at Ext. 7211.

Sincerely,

Rhonda M. Garietz, CMC
Chief Deputy City Clerk

Enclosure: Wholesale Water Supply Agreement x2
Resolution - Certified

pc: Utilities Department

**Appendix F – Supplemental Water Management and Groundwater
Replenishment Agreement**

NIPOMO SUPPLEMENTAL WATER PROJECT
SUPPLEMENTAL WATER MANAGEMENT AND GROUNDWATER
REPLENISHMENT AGREEMENT

This Nipomo Supplemental Water Project Supplemental Water Management and Groundwater Replenishment Agreement ("Agreement") is made this 16th day of ~~September~~ ^{October}, 2015, between the Nipomo Community Services District, Rural Water Company, The Woodlands Mutual Water Company of San Luis Obispo County and Golden State Water Company with regards to the following facts:

I. RECITALS:

A. The Nipomo Community Services District ("NCS D") is a public entity, independent special district organized and operated pursuant to Govt. Code section 61000 et seq. NCS D provides water and related services within the NCS D boundary located in the southern portion of San Luis Obispo County, within an area generally referred to as the Nipomo Mesa.

B. Golden State Water Company ("GSWC") is a California corporation and a public utility water corporation as defined by Public Utilities Code §§ 216 and 241 providing water service to customers within the Nipomo Mesa subject to California Public Utilities Commission ("PUC") regulation.

C. Rural Water Company ("RWC") is a California corporation and a public utility water corporation as defined by Public Utilities Code §§ 216 and 241 providing water service to customers within the Nipomo Mesa subject to PUC regulation.

D. The Woodlands Mutual Water Company of San Luis Obispo County ("WMWC") is a California corporation and a mutual water company providing water service to its shareholder – customers within the Nipomo Mesa.

E. Collectively, GSWC, RWC and WMWC, are referred to as the "Water Companies" and individually as a "Water Company". NCS D, GSWC, RWC and WMWC are collectively referred to as the "Parties" and individually as a "Party".

F. The Parties, along with hundreds of other individuals and entities are parties to a certain legal proceedings entitled "*Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*", Superior Court of the State of California, County of Santa Clara, Consolidated Cases CV770214 ("Santa Maria Litigation"), regarding the respective rights of the litigants to groundwater resources in the Santa Maria Groundwater Basin ("Basin").

G. After lengthy proceedings, the court entered an amended judgment

("Judgment") on April 17, 2014, which provides for the long-term management of the Basin water resources.

H. The court retained jurisdiction over the Judgment to ensure the parties manage the Basin water resources consistently with the Judgment.

I. Incorporated into and made a part of the Judgment is a Stipulation dated June 30, 2005 ("Stipulation"), which establishes a detailed management plan for three subareas within the Basin. The Nipomo Mesa is included in the subarea called the Nipomo Mesa Management Area ("NMMA").

J. The Judgment (through the Stipulation) requires NCSD to purchase and transmit to the NMMA a minimum of 2,500 acre-feet of "Nipomo Supplemental Water" each year. NCSD is further required to employ its best efforts to timely implement the Nipomo Supplemental Water Project (NSWP).

K. The Judgment further provides that once the Nipomo Supplemental Water is capable of being delivered, the Parties shall purchase the following portions of the Nipomo Supplemental Water each year to offset groundwater pumping within the NMMA.

Entity	Percent Allocation	AFY (2,500 AF NSWP Yield)
NCSD	66.68	1667.00
GSWC	8.33	208.25
RWC	8.33	208.25
WMWC	16.66	416.50
Total	100.00	2500.00

L. NCSD has entered into a Wholesale Water Supply Agreement with the City of Santa Maria (City), dated May 7, 2013, ("NCSD-City Agreement," attached and incorporated as Exhibit "A"). The NCSD-City Agreement provides a mechanism through which NCSD may purchase Nipomo Supplemental Water for sale and distribution in the NSWP, consistent with the obligations in the Judgment.

M. NCSD has completed construction of the first stage of the NSWP such that NCSD is taking delivery of Nipomo Supplemental Water as of July 1, 2015. The additional stages of the NSWP to allow increased water delivery of a minimum of 2,500 AFY, as required under the Judgment, are currently being planned.

N. On or about June 25, 2015, the PUC approved GSWC's acquisition of RWC. Upon completion of GSWC's acquisition of RWC, GSWC will assume the entirety of RWC's benefits and obligations under this Agreement.

O. NCSD has designed the NSWP to deliver 3,000 AFY. All costs associated with

the capacity in excess of 2,500 AFY are solely assigned to NCSD. Should the Parties, or any faction thereof, elect to expand NSWP facilities to deliver water in excess of 3,000 AFY, further negotiation and agreement among the participating Parties will be required.

P. The purpose of this Agreement is to implement the Parties' obligations with respect to the NSWP as provided in the Stipulation and the Judgment.

In consideration of the foregoing recitals that are incorporated herein by reference and the mutual terms and conditions set forth herein, the Parties agree as follows:

II. DEFINITIONS:

Terms used herein with initial capitalization, whether in singular or plural, shall have the following meanings:

A. "AFY" shall mean acre-feet per year.

B. "Costs" shall mean all the administrative, planning, design, permitting, capital, financing, construction, operation, maintenance, repair, replacement and overhead allocation costs associated with and arising out of the construction and ongoing operation of the NSWP, excluding costs of Points of Interconnection, which shall be funded as provided in Section VII. Costs shall include both actual expenses and reasonably anticipated NSWP related expenses expected to be incurred for the completion of the NSWP and for the ongoing operations of the NSWP. Costs include future financing of phases of the NSWP and future changes in water costs resulting from renegotiation of the NCSD-City Agreement.

C. "Effective Date" shall mean July 1, 2015.

D. "Fiscal Year" shall mean the twelve (12) month period commencing each July 1st during the term of this Agreement and ending the following June 30th.

E. "NSWP Enterprise Fund" shall mean the NSWP Enterprise Fund used by NCSD to account for, budget and track the Costs.

F. "Judgment" shall mean the amended judgment entered by the Court in that case entitled *Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*, Superior Court of the State of California, County of Santa Clara, consolidated cases CV770214.

G. "NCSD-City Agreement" shall mean the agreement between the City of Santa Maria and Nipomo Community Services District titled "Wholesale Water Supply Agreement," dated May 7, 2013.

H. "Nipomo Mesa Management Area" or "NMMA" shall mean the area so defined and described in the Judgment.

I. "Nipomo Supplemental Water" shall mean up to 2,500 AFY of water delivered within the NMMA to offset groundwater pumping.

J. "Nipomo Supplemental Water Project" or "NSWP" shall mean the facilities and appurtenances, including each Point of Interconnection, necessary to deliver Nipomo Supplemental Water as provided in Section VI.(A) of the Stipulation.

K. "NMMA Technical Group" is the group formed pursuant to the requirements of the Stipulation and Judgment.

L. "Point of Interconnection" shall mean those components of the NSWP extending from NCSD's water distribution system to each Water Company through which Nipomo Supplemental Water may be delivered to each Water Company.

M. "Prudent Utility Practice" shall mean the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts (including but not limited to the practices, methods, and acts engaged in or approved by a significant portion of the water utility industry prior thereto) known at the time the decision was made, would have been expected to accomplish the desired result at the lowest reasonable cost consistent with good business practices, reliability, safety, and expedition, taking into account the fact that Prudent Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be a spectrum of possible practices, methods, or acts which could have been expected to accomplish the desired result. Prudent Utility Practice includes due regard for manufacturers' warranties and requirements of agencies of competent jurisdiction.

N. "PUC" shall mean the California Public Utilities Commission, the entity with regulatory oversight responsibility for RWC and GSWC.

O. "PUC Application" shall mean those materials and testimony required so that GSWC and RWC may obtain PUC approval adequate to satisfy the conditions subsequent set forth in Section V below.

P. "Stipulation" shall mean the agreement dated June 30, 2005, by and between the majority of the litigants in the Santa Maria Litigation, settling their disputes and imposing a physical solution on the management of water resources in the Santa Maria Basin. The Stipulation is incorporated in and is a part of the Judgment.

Q. "Uncontrollable Force" shall mean any cause or event which is beyond the control of the Party affected, including, but not restricted to, failure of or threat of failure of facilities, flood, earthquake, storm, fire, lightning, epidemic, war, riot, civil disturbance or disobedience, labor dispute or strike, labor or material shortage, sabotage, restraint by court order or public authority and action or non-action by or

failure to obtain the necessary authorizations or approvals from any governmental agency or authority which by exercise of due diligence such party could not reasonably have been expected to avoid and which by exercise of due diligence it shall be unable to overcome.

III. PURPOSE:

A. The purpose of this Agreement is to enable the Parties to meet their respective obligations under the Judgment, based on the percentage allocations presented in Section I.K, regarding the NSWP. In particular, the Parties intend this Agreement to provide for: (1) payment to NCSD for each Party's allocation of Costs, and (2) distribution and use of Nipomo Supplemental Water.

B. The underlying premise of the NSWP is to use Nipomo Supplemental Water within the NMMA to offset 2,500 AFY of groundwater pumping in those areas within the NMMA where groundwater levels are most depressed and thus augment the replenishment of groundwater in those critical areas within the NMMA. As described herein, the Parties will use the Nipomo Supplemental Water to increase groundwater replenishment within the NMMA and improve the long-term reliability and integrity of groundwater availability within the NMMA. The Nipomo Supplemental Water delivered to the Parties pursuant to this Agreement shall be used exclusively for the benefit of properties within the existing jurisdictions and service areas of the Parties and in accordance with the Judgment and Stipulation.

IV. EFFECTIVE DATE AND TERM:

A. This Agreement shall be effective on July 1, 2015 and shall terminate on June 30, 2085 ("Term").

B. Notwithstanding the Term, the delivery of Nipomo Supplemental Water to the Parties subsequent to June 30, 2035, is subject to the renewal of the contract for state water between the City and the Central Coast Water Authority. The NCSD-City Agreement provides that it is subject to renegotiation in the event that the City's contract with the Central Coast Water Authority is not renewed as of June 30, 2035 or if the renewal terms would create a significant financial burden to the City or impair the ability of the City to provide Nipomo Supplemental Water in the quantities set forth in the NCSD-City Agreement.

C. Should renegotiation of the NCSD-City Agreement be required, NCSD and the City are required to negotiate and use their best efforts to equitably amend the terms of the NCSD-City Agreement to allow for the continued delivery of Nipomo Supplemental Water on terms mutually beneficial to both parties for the duration of the Term. NCSD will consult and confer with the Water Companies prior to entering into any material amendments to the NCSD-City Agreement.

D. Obligations incurred hereunder but not satisfied prior to termination of this Agreement shall survive such termination until fully discharged, including any payments due by one Party to another Party hereunder.

V. CONDITIONS SUBSEQUENT:

This Agreement shall terminate and shall be of no further force and effect as to either or both GSWC and RWC, subject to the following conditions.

A. As promptly as is reasonably practicable and in no event later than October 30, 2015, GSWC shall apply for PUC approval for imposition of the necessary rate adjustments so that GSWC may meet its financial obligations provided under this Agreement. GSWC shall provide NCSD with written notice of the satisfaction or waiver of this provision. If GSWC fails to obtain this PUC approval, through a PUC decision or order that is no longer subject to appeal, on or before December 31, 2017, either NCSD or GSWC may, each in its sole discretion, declare a failure to satisfy this condition and terminate this agreement as to GSWC. If either NCSD or GSWC exercises this termination right, the provisions of Article X(D)(1) of the Stipulation shall apply.

B. As promptly as is reasonably practicable and in no event later than October 30, 2015, RWC shall apply to for PUC approval for imposition of the necessary rate adjustments so that RWC may meet its financial obligations provided under this Agreement. RWC shall provide NCSD with written notice of the satisfaction or waiver of this provision. If RWC fails to obtain this PUC approval, through a PUC decision or order that is no longer subject to appeal, on or before December 31, 2017, either NCSD or RWC may, each in its sole discretion, declare a failure to satisfy this condition and terminate this agreement as to RWC. If either NCSD or RWC exercises this termination right, the provisions of Article X(D)(1) of the Stipulation shall apply.

C. The Parties shall make every reasonable business effort to coordinate and cooperate in providing any necessary data, information and testimony to support the PUC approval processes contemplated in this Section.

D. GSWC and RWC shall each be responsible for its own PUC Application. However, each entity expects its PUC Application to be substantially the same in its content. Each PUC Application shall include a request for full financial participation in the NSWP as provided in this Agreement, as of the Effective Date. RWC and GSWC shall make their reasonable best efforts to obtain a prompt and reasonable response to the PUC Application from the PUC, including making every reasonable attempt to reach an acceptable settlement of the PUC Application in lieu of processing the PUC Application through a contested administrative hearing at the PUC. The Parties acknowledge that obtaining PUC approval of each PUC Application may take 12 months or more, following the date of submission of the PUC Application, and that neither GSWC nor RWC have control over the time it takes the PUC to process and

resolve each PUC Application. Notwithstanding the Effective Date, neither GSWC's, nor RWC's financial obligations provided in this Agreement accrue and are enforceable as to either entity, unless and until the PUC provides GSWC and RWC approval to make the necessary customer water rate adjustments equal to each entity's respective share of the Costs provided in this Agreement as of the Effective Date and otherwise consistent with Section IX.B.

E. Until the conditions subsequent in this section are satisfied with written notice, or waived, neither NCSD, RWC, nor GSWC waive their rights to exercise the provisions of Article X(D)(1) of the Stipulation.

VI. USE OF NIPOMO SUPPLEMENTAL WATER.

NCSD shall be responsible for the distribution and use of the Nipomo Supplemental Water between and among the Parties subject to the following:

A. Subject to the groundwater management and recharge protocols provided in this Agreement, the presumed quantity and rate of delivery of Nipomo Supplemental Water for each Party shall be as provided in the table below, based upon an assumed delivery of 2,500 AFY. To the extent Nipomo Supplemental Water is not available for delivery at the volumes or rates shown, each Party's deliveries shall be reduced on a proportional basis. To the extent the implementation of groundwater management and recharge protocols provide for alternative deliveries, each Party shall be responsible for its portion of the Costs as otherwise provided in this Agreement.

Entity	Annual (AF)	Quarterly (AF)	Maximum per Month (AF)
NCSD	1668	417	139
GSWC	208	52	17
RWC	208	52	17
WMWC	416	104	35

B. The highest priority use of Nipomo Supplemental Water shall be to offset groundwater pumping within those regions within the NMMA where depressed groundwater levels exist.

C. Provided that such reduction does not materially and adversely affect its ability to provide water for the reasonable and beneficial use of its customers, for each AF of the 2,500 AFY Nipomo Supplemental Water used within the NMMA, the user shall reduce its groundwater pumping by the same amount. The Parties shall develop a method of confirming this reduction in groundwater use.

D. Over the term of this Agreement, the Advisory Committee (as defined in XII.A) shall periodically meet and confer with the NMMA Technical Group regarding the distribution of the Nipomo Supplemental Water between the Parties, given the priority

specified in subsections VI.A and B, above. Based on the input from the Advisory Committee and the NMMA Technical Group, the status of Points of Interconnection as provided in the Section VII.A below and other relevant hydrologic conditions, NCSD shall determine the distribution of Nipomo Supplemental Water among the Parties. NCSD shall make its determination regarding the distribution of Nipomo Supplemental Water, following the consultation described in this subsection and based upon a reasonable, good faith interpretation of how best to manage the then existing hydrologic conditions within the NMMA, the availability of Nipomo Supplemental Water and the ability to rely on existing Points of Interconnection and establish a new Point of Interconnection with RWC, if one has not yet been established.

E. Pursuant to section VI(B)(3) of the Stipulation, provided WMWC is concurrently using or has made arrangements for other Parties to use within the NMMA the Nipomo Supplemental Water allocated to the WMWC under Section VI(A), above, WMWC shall not be subject to restriction in the reasonable and beneficial use of groundwater necessary for full development of its service area; provided however, nothing in this Agreement is intended to modify or amend the benefits and obligations provided in the Stipulation and the Judgment applicable to WMWC, or the court's retained jurisdiction pursuant to the Stipulation and the Judgment.

VII. POINTS OF INTERCONNECTION, CONTROL AND MEASUREMENT OF NIPOMO SUPPLEMENTAL WATER DELIVERIES.

A. Point(s) of Interconnection. As of the Effective Date, NCSD's water system is interconnected with GSWC and WMWC water systems. Each of these existing interconnections will require improvements, and possibly reconstruction, to be fully functional "Point(s) of Interconnection." No Point of Interconnection is in place between NCSD and RWC. If, pursuant to Section VI.D, the Parties determine each or all Points of Interconnection are necessary to make optimal use of Nipomo Supplemental Water, NCSD and each Water Company shall develop the most cost effective design and arrange for the construction of the Points of Interconnection as promptly as practical. The Cost of each Point of Interconnection, including the improvements required for existing Points of Interconnection with WMWC and GSWC, shall be incorporated into the NSWSP Costs and NSWSP Enterprise Fund as provided in this Agreement. The Parties acknowledge and agree that the Point of Interconnection with RWC, if and when established, will be included as a component of the NSWSP. However, the Parties agree that allocation of Costs for the pipeline portion of the RWC Point of Interconnection may differ from the allocation set forth in Section I.K above, to be agreed upon by the Parties once those Costs are determined. The Costs for the RWC Point of Interconnection, excluding the Costs of the pipeline portion of the RWC Point of Interconnection, shall be shared consistent with the allocation set forth in Section I.K in a magnitude equivalent to that included in the Costs for the WMWC and GSWC Points of Interconnection.

B. Each Point of Interconnection shall include flow control and metering devices

used to control and measure the delivery of Nipomo Supplemental Water at the Point of Interconnection. Each Point of Interconnection and the appurtenant facilities shall be considered part of the NSWP and shall be owned, operated and maintained by NCSD.

C. NCSD shall arrange for the inspection and testing of the metering devices at least once per calendar year, unless more frequent testing and inspection is appropriate as a result of repairs to or replacements of a metering device. NCSD shall provide reasonable advance notice to and coordinate with each Water Company to accomplish required testing or inspection activities.

D. The operation and maintenance of any Point of Interconnection will be detailed in an Operation Memorandum of Understanding that will be approved by the NCSD and other affected parties prior to connection. If the Parties cannot agree on the terms of the Operations Memorandum of Understanding then the disputed terms will be subject to the dispute resolution procedures referenced in XII of this Agreement.

VIII. NSWP ENTERPRISE FUND BUDGET:

A. NCSD shall operate the NSWP as an enterprise fund ("NSWP Enterprise Fund"), separating all Costs related to the NSWP within and only to that NSWP Enterprise Fund. Prudent Utility Practices shall apply to NCSD's management of the NSWP Enterprise Fund and the NSWP.

B. Each Fiscal Year NCSD shall prepare a NSWP Enterprise Fund Budget ("Budget") for all revenues and expenditures related to the NSWP Enterprise Fund. The Budget shall include a summary of projected Nipomo Supplemental Water deliveries and the Costs associated with those deliveries. A draft of the Budget shall be available to each Water Company for review by May 1st of each year. NCSD shall make every reasonable effort to adopt the final Budget during June of each year at a regularly scheduled NCSD board meeting. The Advisory Committee shall determine the most effective content, format and reporting frequency for financial and budget reports for the NSWP Enterprise Fund.

C. The Budget shall provide the basis for and detail the cost allocations and quarterly billings described in Section IX.

D. Unless the Parties agree otherwise, every five years, a third party expert accounting firm shall perform an overhead allocation analysis for NCSD, including the NSWP Enterprise Fund. The overhead allocation recommendations of that study shall be applied in the next annual budgeting cycle for the NSWP Enterprise Fund. The cost of this study shall be included in the administrative overhead allocated to the NSWP Enterprise Fund. The Advisory Committee shall appoint the accounting firm to perform the overhead allocation analysis.

E. The Water Companies acknowledge and agree that NCSD has incurred

NSWP Supplemental Water Management and Groundwater Replenishment Agreement

Page 9 of 20

substantial Costs related to the completed portions of the NSWP as of the Effective Date and will incur additional Costs to complete the NSWP. These costs include, but are not limited to, planning, environmental reviews, legal fees, acquisition of easements, an assessment election, and the construction and financing of the primary distribution pipeline extending from the City to NCSD facilities and future stages of the NSWP project. These Costs have been funded by NCSD, with very limited contributions from the Water Companies.

F. The Budget shall include the amortized recovery of the NSWP capital costs (whether funded by NCSD with internal funds or borrowed funds) attributable to each Water Company, pursuant to Section I.K above, plus interest on the unamortized balance of such costs. The capital costs to be amortized in each Budget shall include amounts expended to date and the additional costs necessary to complete the NSWP. NCSD shall not recover interest on the capital portion of NSWP Costs that are funded through the use of NSWP Enterprise Fund assets or reserves.

G. The amortization period for capital costs shall be 30 years beginning July 1, 2015. Interest will be charged monthly on the remaining unamortized balance as of the prior month end.

H. Each Water Company may elect to make early payments of its amortized portion of the capital costs and such early payments shall be credited against the capital obligation of that Water Company.

I. The interest rates to be charged to each Water Company will be determined as follows:

1. For GSWC and RWC, the interest rate charged will be equal to the interest rate on amounts NSCD has borrowed to finance a portion of the project Costs plus one-half of one percent. In the event GSWC's credit rating drops materially below its current rating of A+, and such change would have a material impact on any expected borrowing or financial security related to the NSWP Enterprise Fund, the interest rate charged will be subject to renegotiation between GSWC, RWC and NCSD. The interest specified in this subsection applicable to RWC is predicated on expectation that GSWC will complete its acquisition of RWC prior to the PUC approval of this Agreement. The interest rate and security assurance applicable to RWC's capital obligation shall be subject to renegotiation should GSWC fail to complete its acquisition prior to the PUC's approval of this Agreement.

2. For WMWC, the interest rate charged will be equal to the interest rate on amounts NSCD has borrowed to finance a portion of the project Costs plus two percent. In the event there is a material change in WMWC's financial condition, the interest rate charged will be subject to renegotiation between NCSD and WMWC. WMWC acknowledges that its agreement to amend its bylaws to authorize recordation and enforcement of liens under Corporations

Code § 14304 (“Section 14304 Lien Rights”) constitutes a material inducement to NCSD to forego other forms of security for repayment of WMWC’s capital obligations, and agrees that it shall not subsequently revise its bylaws to relinquish its Section 14304 Lien Rights without having previously agreed to provide alternate security reasonably acceptable to NCSD.

3. In the event NCSD makes additional borrowings to finance subsequent stages of the NSW, the interest rates charged GSWC, RWC and WMWC will be adjusted based on the weighted average of the interest rates attributable to unamortized balances of prior stages of the NSW and the interest rate attributable to the capital costs of the new stage.

J. The NSW Enterprise Fund shall include a funded replacement reserve (“NSW Enterprise Fund Reserve”) to accumulate funds for the future replacement of NSW equipment and facilities. The initial NSW Enterprise Fund Reserve amount shall be set at one percent of total project Costs. Thereafter, the NSW Enterprise Fund Reserve shall be increased annually based upon the percentage increase in the Consumer Price Index (CPI) – All Urban Consumers (Los Angeles-Riverside-Orange Co., CA area) for the immediately preceding calendar year, subject to the following.

1. The maximum balance in the NSW Enterprise Fund Reserve shall be \$3,000,000. The NSW Enterprise Fund Reserve maximum shall be increased annually based upon the percentage increase in the Consumer Price Index (CPI) – All Urban Consumers (Los Angeles-Riverside-Orange Co., CA area) for the immediately preceding calendar year. Once the balance in the NSW Enterprise Fund Reserve reaches the maximum then in effect, the annual reserve shall cease to be collected until such time as the NSW Enterprise Fund Reserve balance drops below the maximum. Should required expenditures exceed the balance then in the NSW Enterprise Fund Reserve, the Advisory Committee will establish a plan for funding the deficit in a timely manner. The maximum balance in the NSW Enterprise Fund Reserve may be increased or decreased subject to unanimous approval by the Advisory Committee.

2. Subject to approval by the Advisory Committee, the balance in the NSW Enterprise Fund Reserve can be used to fund extraordinary unbudgeted operations and maintenance expenses in those cases where the NSW Enterprise Fund does not have sufficient operating funds to cover the expenditure.

3. Interest income earned on the NSW Enterprise Fund Reserve shall remain in the NSW Enterprise Fund.

IX. RATES AND CHARGES: Based on the Budget, NCSD shall allocate Costs to and invoice the Water Companies as follows:

A. Each Water Company shall be responsible for its share of the Costs of Nipomo Supplemental Water and the NSWP based on the pro-rata shares of the NSWP as provided in Section I.K and the Budget. The Cost allocations shall take into account all Costs for the NSWP. An energy (pumping) credit shall be provided to each Party for any portion of its Nipomo Supplemental Water not delivered directly to that Party, but instead used by another Party pursuant to Section VI.

B. During the term of this Agreement, and where applicable subject to the jurisdiction and approval by the PUC, each Water Company shall charge and collect rates and charges for the water services furnished in its service area which will yield gross revenues sufficient to pay all costs of operating and maintaining the water system within the designated area, including all payments due under this Agreement, as they become due and payable.

C. Following each calendar quarter, NCSD shall provide a written invoice to each Water Company for its share of the Costs during the prior quarter. All invoices will be payable within thirty (30) days of delivery of the invoice. NCSD shall have the right to charge late fees of up to five (5) percent of the overdue amount for any invoice that is not paid within such period.

D. Until such time as GSWC and RWC receive approval from the PUC as provided in Section V, NCSD will not charge late fees on outstanding GSWC and RWC invoices; however, interest will accrue on outstanding charges at the rate specified in Section VIII.

E. In the event a Party disputes any charges on an invoice, the undisputed amount shall be paid and no late fee will be assessed pending resolution of the disputed amount. Along with payment of the undisputed amount, the Party shall provide a detailed written description of the nature and amount in dispute. NCSD and the Party with the dispute shall make every reasonable business effort to resolve the dispute promptly.

F. Within 90 days after the end of each fiscal year, NCSD shall compare prior year actual Costs to the total amount billed to the Parties for that year. If actual Costs exceed the amount billed for that year, each Party will be billed for its allocated share of the excess costs. If actual Costs are less than the amount billed for that year, each party will have the option to have its allocated share of the difference be (1) credited against any unamortized capital costs then due NCSD or (2) be refunded.

X. CONTINUITY OF SERVICE:

A. NCSD reserves the right to temporarily interrupt or curtail delivery of Nipomo Supplemental Water to make repairs, replacements, modifications, or to perform maintenance work on the NSWP, or to respond to an existing or impending Uncontrollable Force, as determined in NCSD's sole judgment. NCSD shall use its

reasonable best business efforts to provide advance written notice to the Water Companies of any restriction or interruption in the use of the NSWP or planned deliveries of Nipomo Supplemental Water.

B. In addition to limitations specified in X.A. above, NCSD may interrupt or curtail the use of the NSWP to the extent that the continued use of the NSWP could: (i) materially and adversely affect the reliability of the NSWP; or (ii) cause NCSD to violate the terms of any rule, regulation, or binding obligation it may otherwise have with respect to the production, treatment or delivery of Nipomo Supplemental Water.

XI. DEVELOPMENT OF EXPANDED GROUNDWATER MANAGEMENT AND RECHARGE CAPABILITY:

The Parties acknowledge and agree that the availability of additional Nipomo Supplemental Water would be beneficial for use within the NMMA. The Parties agree to negotiate an amendment to this Agreement to include the expanded use of Nipomo Supplemental Water for the benefit of the groundwater resources water balance within the NMMA. The Parties shall use their reasonable best efforts to complete the negotiation as promptly as practical.

XII. RESOLUTION OF DISPUTES:

The Parties' shall attempt to amicably and promptly resolve any dispute arising between the Parties and under this Agreement. Nothing in this Agreement shall preclude any Party from taking any lawful action it deems appropriate to enforce its rights under this Agreement. The Parties shall initially attempt to resolve any dispute by the means set forth below:

A. Advisory Committee. The Parties shall exercise best efforts to resolve disputes through consensus. An Advisory Committee shall be established and be comprised of two representatives of each Party. The Advisory Committee shall be convened whenever necessary to ensure this Agreement is being administered and implemented consistent with the intentions of all the Parties. An NCSD representative shall chair the Advisory Committee. The Chair shall be responsible for scheduling all meetings under this section. Any Party may request a meeting of the Advisory Committee.

B. Annual Meeting. The Advisory Committee shall meet annually, or as often as necessary, to review the administration and implementation of this Agreement. The Advisory Committee shall use its best efforts to obtain consensus on the resolution of technical, administrative, financial, legal and operational issues that may arise from time to time with regard to this Agreement.

C. Dispute Resolution Procedure. The Parties shall submit any dispute related to or arising out of this Agreement to the Advisory Committee for consideration. The

Chair may request the Party or Parties to any dispute to submit a description of the dispute in writing prior to convening the Advisory Committee. As soon as practical, and within 14 days of the submission of a written description of a dispute, the Chair shall schedule a meeting of the Advisory Committee. The Advisory Committee shall convene within 30 days of the submission of a written description of a dispute and shall make every reasonable effort to resolve the dispute.

D. Failure of the Advisory Committee to Resolve the Dispute. If the Advisory Committee fails to resolve a dispute, the Parties may elect to refer the dispute to mediation. If the Parties are unable to agree promptly upon a mediator or a mediation process, each Party may freely pursue any equitable and legal remedy.

E. Emergencies. Where an unresolved dispute may pose an imminent danger to the public, health, safety or welfare, the Parties shall not be subject to the provisions of this Section.

XIII. LIABILITY AND INDEMNIFICATION:

A. Limitation of Liability: Except as to the negligent or willful misconduct of a Party, each Party shall release and hold harmless the other Parties from and against any and all liability, loss, damage and expense arising from, alleged to arise from, in connection with, or incident to the services rendered under this Agreement.

B. Indemnification and Defense: Each Party shall indemnify, defend and hold harmless the other Parties, its directors, members, officers, employees and agents from and against any and all third-party claims, suits or actions instituted on account of personal injuries or death of any person (including but not limited to workers and the public) or physical damage to property resulting from or arising out of the indemnitor's willful misconduct or negligent act or omission while engaged in the performance of obligations or exercise of rights under this Agreement.

C. Limitation on Damages: No Party shall be liable to any other Party for any consequential, incidental, punitive, special or exemplary damages or lost opportunity costs, lost profit or other business interruption damages, by statute or in tort or contract, under any provision of this Agreement.

D. Water Quality. NCSD shall be responsible for ensuring that the quality of the Nipomo Supplemental Water made available for delivery is of the same pressure and quality of water that NCSD delivers to its residential customers. The quality of water which is delivered by NCSD to its residents shall comply with all federal, state and local laws, regulations and permit requirements which are applicable to NCSD, including standards applicable to wastewater discharge, as amended from time to time and subject to any compliance waiver granted to NCSD ("Quality Standards"). NCSD shall provide GSWC, RWC and WMWC with a copy of the Quality Standards (and any change thereto) which are applicable to NCSD and GSWC, RWC and WMWC shall be solely responsible for ensuring that the Quality Standards meet the federal, state and local laws, regulations and

permit requirements for potable water delivery by GSWC, RWC and WMWC to its customers, including the discharge of such water. To the extent that the quality standards which are applicable to GSWC, RWC and WMWC exceed the Quality Standards, then GSWC, RWC and WMWC shall be responsible for any necessary additional treatment of the Nipomo Supplemental Water. NCS D agrees to indemnify and hold GSWC, RWC and WMWC harmless from any liability which arises as a result of the failure of the Nipomo Supplemental Water which is delivered to the GSWC, RWC and WMWC to meet the Quality Standards. GSWC, RWC and WMWC shall be solely responsible for any actual liability resulting from a change in water quality following the Point of Interconnection (including any additional treatment undertaken by GSWC, RWC and WMWC) and shall indemnify and hold NCS D harmless from any actual liability which arises from any such change. NCS D and GSWC, RWC and WMWC shall promptly notify the other in the event that either becomes aware of a material adverse change in the quality of the Nipomo Supplemental Water and shall cooperate to identify the cause of such change.

XIV RELATIONSHIP OF THE PARTIES:

The covenants, obligations and liabilities of the Parties are intended to be several and not joint or collective and nothing herein contained shall ever be construed to create an association, joint venture, trust or partnership, or to impose a trust or partnership covenant, obligation or liability on or with regard to any Party. Each Party shall be individually responsible for its own covenants, obligations and liabilities as herein provided. No Party shall be under the control of or shall be deemed to control another Party. No Party shall be the agent of or have a right or power to bind another Party without such other Party's express written consent, except as provided in this Agreement.

XV. UNCONTROLLABLE FORCES:

If the existence of an Uncontrollable Force, as defined in Section II.Q above, disables a Party from performing its obligations under this Agreement (except for such Party's obligations to make payments hereunder), such Party shall not be considered to be in default in the performance of any such obligations while such disability of performance exists. A Party rendered unable to fulfill any of its obligations under this Agreement by reason of an Uncontrollable Force shall exercise due diligence to remove such inability with all reasonable dispatch. Nothing contained herein shall be construed so as to require a Party to settle any strike or labor dispute in which it may be involved.

XVI. AUDITS:

Each Party shall have the right to audit any costs, payments, settlements or other supporting information pertaining to this Agreement, including the Costs and the Budget. Any such audit shall be undertaken by the requesting Party or its representative at reasonable times and in conformance with generally accepted auditing standards. The audited Party shall fully cooperate with any such audit, the cost of which shall be paid by the requesting Party. The right to audit a billing shall extend for a period of three (3) years

following the rendering of the bill. Each Party shall retain all necessary records or documentation for the entire length of such three (3) year period and shall, to the extent permitted by law, take all steps reasonably available to assure the confidentiality of the audited Party's accounting records and supporting documents.

XVII. THIRD PARTY BENEFICIARIES:

There are no third Party beneficiaries to this Agreement. This Agreement shall not confer any right or remedy upon any person or entity other than the Parties and their respective successors and assigns permitted under Section XVIII. This Agreement shall not release or discharge any obligation or liability of any third party to any Party or give any third party any right of subrogation or action over or against a Party.

XVIII. ASSIGNMENT OF INTERESTS:

A. No Party shall assign this Agreement without the prior written consent of the other Parties, which consent shall not be unreasonably withheld or delayed. Each Water Company expressly understands and agrees that it shall not be unreasonable for NCSD to withhold or delay its consent to any proposed or purported assignment to any person or entity ("Assignee") that has not demonstrated to NCSD's reasonable satisfaction that NCSD's interests as contemplated herein will not be adversely affected thereby.

B. Any assignment by a Party of its interest in this Agreement which is made without the prior written consent of the other Parties shall not relieve the assigning Party from primary liability for any of its duties and obligations under this Agreement, and in the event of any such assignment, the assigning Party shall continue to remain primarily liable for payment of any and all money due the other Parties as provided under this Agreement, and for the performance and observance of all covenants, duties and obligations to be performed and observed under this Agreement by the Party to the same extent as though no assignment had been made.

C. Whenever an assignment of a Party's interest in this Agreement is made with the written consent of the other Parties, the assigning Party's assignee shall expressly assume in writing the duties and obligations under this Agreement of the assigning party and, within thirty (30) days after any such assignment and assumption of duties and obligations, the assigning Party shall furnish, or cause to be furnished, to the other Party a true and correct copy of such assignment and assumption of duties and obligations. Upon the effective date of such assignment, the assigning Party shall be relieved of its obligations and duties under this Agreement.

D. Subject to the foregoing restrictions on assignment, this Agreement shall be binding upon, inure to the benefit of and be enforceable by the Parties and their respective successors and assigns.

XIX. NO DEDICATION OF FACILITIES:

Any undertaking by a Party to another Party under this Agreement shall not constitute the dedication of the system, or any portion thereof, of that Party to the public or to another Party, nor affect the status of that Party as an independent system.

XX. COMPLETE AGREEMENT:

This Agreement contains the entire agreement and understanding between the Parties as to the subject matter of this Agreement and supersedes all prior commitments, representations and discussions between the Parties.

XXI. CONSTRUCTION OF AGREEMENT:

Ambiguities or uncertainties in the wording of this Agreement shall not be construed for or against any Party, but shall be construed in a manner that most accurately reflects the intent of the Parties when this Agreement was executed and is consistent with the nature of the rights and obligations of the Parties with respect to the matter being construed.

XXII. NON-DISCRIMINATION:

During the performance of this Agreement, no Party shall deny the Agreement's benefits to any person, nor shall any Party discriminate unlawfully against any employee or applicant for employment, on the grounds of or because of race, color, creed, national origin, ancestry, age, sex, sexual orientation, marital status or disability, including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto. Each party shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination.

XXIII. EVENTS OF DEFAULT:

In the event that a Party shall materially default in the performance of its obligations under this Agreement, the Authorized Representatives of the non-defaulting Parties may give written notice of the default to the Authorized Representative of the defaulting Party. If within thirty (30) days after the non-defaulting Parties' Authorized Representative shall have given such written notice to the defaulting Party's Authorized Representative, the defaulting Party shall have failed to cure the default in its performance of this Agreement, or if such default requires more than thirty (30) days to cure and the defaulting Party fails to commence such cure and diligently prosecute such cure to completion, in addition to any other remedies provided by law, the non-defaulting Parties may terminate this Agreement by written notice of termination as provided for in Section **XXVIII**. In addition to any other cause of default arising hereunder, a Party shall be in a default if:

- A. It becomes insolvent; or

B. It makes a general assignment of substantially all of its assets for the benefit of its creditors, files a petition for bankruptcy or reorganization or seeks other relief under any applicable insolvency laws; or

C. It has filed against it a petition for bankruptcy, reorganization or other relief under any applicable insolvency laws and such petition is not dismissed within sixty (60) days after it is filed.

D. In the event of a default and termination of the Agreement as to the defaulting Party, the non-defaulting Parties shall use commercially reasonable best efforts to negotiate any revisions to this Agreement that are necessary or appropriate in light of such termination, which revisions shall be consistent with the purpose and intent of this Agreement and shall preserve, to the maximum extent possible, all material consideration to the remaining parties. Termination of this Agreement, either in its entirety or as to one or more Parties, shall not affect the validity or enforceability of the Stipulation and Judgment or the rights and obligations of any Party thereunder.

XXIV. AMENDMENTS:

This Agreement may be modified, supplemented or amended only by a writing duly executed by the Parties.

XXV. WAIVERS:

A. Any waiver at any time by any Party of its rights with respect to a default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or other matter arising in connection therewith. Any delay, short of the statutory period of limitation in asserting or enforcing any right, shall not be deemed a waiver of such right.

B. Nothing in this Agreement shall limit, nor act as a waiver, of any Party's rights or defenses in pursuing or defending against any legal or equitable claim or remedy that may be asserted regarding each Party's rights and obligations to participate in the NSWP and bear its percentage allocation of the Costs of the NSWP (as presented in Recital K).

XXVI. SECTION HEADINGS:

All captions and headings appearing in this Agreement are inserted to facilitate reference and shall not govern, except where logically necessary, the interpretations of the provisions hereof.

XXVII. GOVERNING LAW:

NSWP Supplemental Water Management and Groundwater Replenishment Agreement

Page 18 of 20

This Agreement shall be interpreted, governed by and construed under the laws of the State of California or the laws of the United States as applicable, as if executed and to be performed wholly within the State of California.

XXVIII. NOTICES:

A. Any notice, demand or request provided for in this Agreement, or served, given or made in connection with it, shall be in writing and shall be deemed properly served, given or made if delivered in person, by email or sent by United States mail, postage prepaid, to the persons specified below, unless otherwise provided for in this Agreement:

Nipomo Community Services District
Attention: General Manager
P.O. Box 326
Nipomo, California 93444-326
generalmanger@ncsd.ca.gov

Golden State Water Company
Attention: Senior Vice President of Regulated Utilities
630 East Foothill Blvd
San Dimas, CA 91773

Rural Water Company
c/o Frank B. & Associates
Attention: Frank Brommenschenkel
134 Davis Street
Santa Paula, CA 93060

Woodlands Mutual Water Company
c/o Wallace Group
Attention: Robert S. Miller
612 Clarion Ct.
San Luis Obispo, CA 93401

B. Any Party may at any time, by written notice to the other Parties, change the designation or address of the person so specified as the one to receive notices pursuant to this Agreement.

[signatures on following page]

XXIX. SIGNATURE CLAUSE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

NIPOMO COMMUNITY SERVICES DISTRICT

Michael S. LeBrun
Date: October 16, 2015
By: MICHAEL S. LEBRUN
GENERAL MANAGER

GOLDEN STATE WATER COMPANY

Date: _____, 2015
BY: _____

RURAL WATER COMPANY

Date: _____, 2015
BY: _____

WOODLANDS MUTUAL WATER COMPANY

Date: _____, 2015
BY: _____

XXIX. SIGNATURE CLAUSE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

NIPOMO COMMUNITY SERVICES DISTRICT

Date: _____, 2015
By: MICHAEL S. LEBRUN
GENERAL MANAGER

GOLDEN STATE WATER COMPANY

Date: Robert J. Spronks
September 10, 2015
BY: Robert J. Spronks
President & CEO

RURAL WATER COMPANY

Date: _____, 2015
BY:

WOODLANDS MUTUAL WATER COMPANY

Date: _____, 2015
BY:

XXIX. SIGNATURE CLAUSE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

NIPOMO COMMUNITY SERVICES DISTRICT

Date: _____, 2015
By: MICHAEL S. LEBRUN
GENERAL MANAGER

GOLDEN STATE WATER COMPANY

Date: _____, 2015
BY:

RURAL WATER COMPANY

Date: Charles M Baker
Sept 9, 2015
BY: Chuck Baker

WOODLANDS MUTUAL WATER COMPANY

Date: _____, 2015
BY:

XXIX. SIGNATURE CLAUSE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

NIPOMO COMMUNITY SERVICES DISTRICT

Date: _____, 2015
By: MICHAEL S. LEBRUN
GENERAL MANAGER

GOLDEN STATE WATER COMPANY

Date: _____, 2015
BY:

RURAL WATER COMPANY

Date: _____, 2015
BY:

WOODLANDS MUTUAL WATER COMPANY

Date: Don R. Go _____, 2015
10 / 15 _____, 2015
BY: _____

**Appendix G – Final Santa Maria River Valley Groundwater Basin
Judgement**

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SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF SANTA CLARA

SANTA MARIA VALLEY WATER
CONSERVATION DISTRICT,

Plaintiff,

v.

CITY OF SANTA MARIA, et al.,

Defendants.

) SANTA MARIA GROUNDWATER
) LITIGATION
) Lead Case No. CV 770214
) (CONSOLIDATED FOR ALL PURPOSES)

) [Consolidated With Case Numbers:
) CV 784900; CV 785509; CV 785522;
) CV 787150; CV 784921; CV 785511;
) CV 785936; CV 787151; CV 784926;
) CV 785515; CV 786791; CV 787152;
) CV 036410]

AND RELATED CROSS-ACTIONS AND
ACTIONS CONSOLIDATED FOR ALL
PURPOSES

) San Luis Obispo County Superior Court Case
) Nos. 990738 and 990739

) [Assigned to Judge Jack Komar for All
) Purposes]

STIPULATION (JUNE 30, 2005 VERSION)

TABLE OF CONTENTS

	<u>Page</u>
1	
2	
3	I. INTRODUCTION -- ALL MANAGEMENT AREAS 1
4	A. Parties and Jurisdiction 1
5	B. Further Trial 2
6	C. Definitions 2
7	II. EXHIBITS 6
8	III. DECLARATION OF RIGHTS -- ALL MANAGEMENT AREAS 6
9	A. Recognition of Priority of Overlying Rights 7
10	B. Prescriptive Rights 7
11	C. Appropriative Rights 7
12	D. Developed Water Rights 7
13	E. Rights to Storage Space 7
14	F. Other Surface Water Rights 7
15	IV. PHYSICAL SOLUTION – ALL MANAGEMENT AREAS 8
16	A. Authority 8
17	B. Purposes and Objectives 8
18	C. Basin Management Areas 8
19	D. Groundwater Monitoring 9
20	E. New Developed Water 10
21	F. Severe Water Shortage Response 11
22	V. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO SANTA MARIA VALLEY MANAGEMENT AREA 11
23	A. Water Rights to Sources of Supply 11
24	B. Monitoring and Management 14
25	C. Response to Varying Conditions 15
26	D. Management and Administration of the Twitchell Project 17
27	E. New Urban Uses – Santa Maria Valley Management Area 20
28	VI. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NIPOMO MESA MANAGEMENT AREA 21
29	A. Supplemental Water 21
30	B. Rights to Use Groundwater 23
31	C. NMMA Technical Group 24
32	D. Potentially Severe and Severe Water Shortage Conditions 25
33	E. New Urban Uses 27
34	VII. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NORTHERN CITIES MANAGEMENT AREA 28
35	VIII. INJUNCTION – ALL MANAGEMENT AREAS 29
36	A. Use Only Pursuant to Stipulation 29
37	B. Injunction Against Transportation From the Basin 29

1	C.	No Third Party Beneficiaries	29
2	IX.	RESERVED JURISDICTION – ALL MANAGEMENT AREAS	30
3	A.	Reserved Jurisdiction; Modifications, Cancellations, Amendments.....	30
4	B.	Noticed Motion	31
5	C.	<i>De Novo</i> Nature of Proceeding	31
6	D.	Filing and Notice.....	31
7	X.	MISCELLANEOUS PROVISIONS – ALL MANAGEMENT AREAS	31
8	A.	Unenforceable Terms	31
9	B.	Water Quality	32
10	C.	Duty to Cooperate	32
11	D.	Stipulating Parties Under Public Utilities Commission Regulation	32
12	E.	Designation of Address, for Notice and Service	33
13	F.	No Loss of Rights	33
14	G.	Intervention After Judgment	33
15	H.	Stipulation and Judgment Binding on Successors, Assigns, etc.	34
16	I.	Costs	34
17	J.	Non-Stipulating Parties	34
18	K.	Counterparts	35
19	L.	Effective Date.....	35

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1 **I. INTRODUCTION -- ALL MANAGEMENT AREAS**

2 The Stipulating Parties hereby stipulate and agree to entry of judgment containing the
3 terms and conditions of this Stipulation.

4 **A. Parties and Jurisdiction**

5 1. Plaintiff and Cross-Defendant Santa Maria Valley Water Conservation District
6 (“District”) is a water conservation district organized under California Water Code section 74000,
7 *et seq.* The District does not pump Groundwater from the Basin.

8 2. Defendants, Cross-Complainants and Cross-Defendants the City of Santa Maria
9 (“Santa Maria”), City of Guadalupe (“Guadalupe”), Southern California Water Company
10 (“SCWC”), Nipomo Community Services District (“NCS D”), Rural Water Company (“RWC”),
11 City of Arroyo Grande (“Arroyo Grande”), City of Pismo Beach (“Pismo Beach”), City of Grover
12 Beach (“Grover Beach”) and Oceano Community Services District (“Oceano”) rely, in part, on
13 Groundwater to provide public water service to customers within the Basin.

14 3. Cross-Defendant County of San Luis Obispo (“San Luis Obispo”) is a subdivision
15 of the State of California. Cross-Defendant San Luis Obispo County Flood Control and Water
16 Conservation District (“SLO District”) is a public entity organized pursuant to the laws of the
17 State of California. Neither San Luis Obispo nor SLO District pumps Groundwater from the
18 Basin.

19 4. Cross-Defendant County of Santa Barbara (“Santa Barbara”) is a subdivision of
20 the State of California. Santa Barbara does not pump Groundwater from the Basin.

21 5. Numerous other Cross-Defendants and Cross-Complainants are Overlying
22 Owners. Many of these Overlying Owners pump Groundwater from the Basin, while others do
23 not currently exercise their Overlying Rights. Those Overlying Owners who are Stipulating
24 Parties are identified on Exhibit “A”.

25 6. This action presents an *inter se* adjudication of the claims alleged between and
26 among all Parties. This Court has jurisdiction over the subject matter of this action and over the
27 Parties herein.

28 ///

1 **B. Further Trial**

2 The Stipulating Parties recognize that not all Parties have entered into this Stipulation and
3 that a trial will be necessary as to all non-Stipulating Parties. No Stipulating Party shall interfere
4 or oppose the effort of any other Stipulating Party in the preparation and conduct of any such
5 trial. All Stipulating Parties agree to cooperate and coordinate their efforts in any trial or hearing
6 necessary to obtain entry of a judgment containing the terms and conditions of this Stipulation.
7 No Stipulating Party shall have any obligation to contribute financially to any future trial.

8 **C. Definitions**

9 As used in this Stipulation, the following terms shall have the meanings herein set forth:

- 10 1. Annual or Year – That period beginning January 1 and ending December
11 31.
- 12 2. Annual Report – The report prepared and filed with the Court annually for
13 each Management Area.
- 14 3. Appropriative Rights – The right to use surplus Native Groundwater for
15 reasonable and beneficial use.
- 16 4. Available State Water Project Water – The amount of SWP Water an
17 Importer is entitled to receive in a given Year based upon the California Department of Water
18 Resources final Table A allocation.
- 19 5. Basin - The groundwater basin described in the Phase I and II orders of the
20 Court, as modified, and presented in Exhibit “B”.
- 21 6. Developed Water – Groundwater derived from human intervention as of
22 the date of this Stipulation, which shall be limited to Twitchell Yield, Lopez Water, Return
23 Flows, and recharge resulting from storm water percolation ponds.
- 24 7. Groundwater – Twitchell Yield, Lopez Water, Return Flows, storm water
25 percolation, Native Groundwater and all other recharge percolating within the Basin.
- 26 8. Importer(s) – Any Party who brings Imported Water into the Basin. At the
27 date of this Stipulation, the Importers are Santa Maria, SCWC, Guadalupe, Pismo Beach, and
28 Oceano.

1 9. Imported Water – Water within the Basin, originating outside the Basin
2 that absent human intervention would not recharge or be used in the Basin.

3 10. Lopez Project – Lopez Dam and Reservoir located on Arroyo Grande
4 Creek, together with the associated water treatment plant, delivery pipeline and all associated
5 facilities, pursuant to State Water Resources Control Board permit No. 12814 (A-18375) and
6 pending application No. A-30826.

7 11. Lopez Water – Groundwater within the Basin derived from the operation of
8 the Lopez Project.

9 12. Management Areas – The three areas within the Basin that have sufficient
10 distinguishing characteristics to permit the water resources and facilities of each area to be
11 individually managed. The Management Areas are: the Northern Cities Management Area, the
12 Nipomo Mesa Management Area, and the Santa Maria Valley Management Area, as shown on
13 Exhibit "C".

14 13. Management Area Engineer – The individual(s) or consulting firm(s) that
15 are hired to prepare the Monitoring Plan(s) and Annual Report(s) for one or more of the
16 Management Areas.

17 14. Monitoring Parties – Those Parties responsible for conducting and funding
18 each Monitoring Program.

19 15. Monitoring Program – The data collection and analysis program to be con-
20 ducted within each Management Area sufficient to allow the preparation of the Annual Report.

21 16. Native Groundwater – Groundwater within the Basin, not derived from
22 human intervention, that replenishes the Basin through precipitation, stream channel infiltration,
23 tributary runoff, or other natural processes.

24 17. New Developed Water – Groundwater derived from human intervention
25 through programs or projects implemented after the date of this Stipulation.

26 18. New Urban Uses – Municipal and industrial use which may occur on land
27 that, as of January 1, 2005, was located: 1) within the boundaries of a municipality or its sphere of
28 influence, or within the process of inclusion in its sphere of influence; or 2) within the certificated

1 service area of a publicly regulated utility. The New Urban Use areas are identified in Exhibit
2 “D”. New Urban Uses does not include the current DJ Farms development within Guadalupe
3 City limits (including Santa Barbara County APN 113-080-18, 113-080-24).

4 19. Nipomo Mesa Management Area or NMMA – That Management Area
5 shown on Exhibit “C”.

6 20. Nipomo Mesa Management Area Technical Group – The committee
7 formed to administer the relevant provisions of the Stipulation regarding the Nipomo Mesa
8 Management Area.

9 21. Northern Cities Management Area – That Management Area which is part
10 of Zone #3 of the San Luis Obispo County Flood Control and Water Conservation District as
11 shown on Exhibit “C”.

12 22. Northern Cities – Arroyo Grande, Pismo Beach, Grover Beach and
13 Oceano.

14 23. Northern Parties – The Northern Cities, the Overlying Owners within the
15 Northern Cities Management Area, San Luis Obispo and the SLO District.

16 24. Overlying Right – The appurtenant right of an Overlying Owner to use
17 Native Groundwater for overlying, reasonable and beneficial use.

18 25. Overlying Owner(s) – Owners of land overlying the Basin who hold an
19 Overlying Right.

20 26. Party – Each Person in this consolidated action, whether a Stipulating
21 Party or a non-Stipulating Party.

22 27. Person – Any natural person, firm, association, organization, joint venture,
23 partnership, business, trust, corporation, or public entity.

24 28. Public Hearing – A hearing after notice to all Parties and to any other
25 person legally entitled to notice.

26 29. Return Flows – Groundwater derived from use and recharge within the
27 Basin of water delivered through State Water Project facilities.

28 ///

1 30. Santa Maria Valley Management Area – That Management Area shown on
2 Exhibit “C”.

3 31. Severe Water Shortage Conditions – Those conditions, as separately
4 defined in a Severe Water Shortage Response Plan for each Management Area, that trigger
5 certain discretionary and mandatory responses by the Stipulating Parties upon order of the Court.

6 32. Severe Water Shortage Response Plan – The discretionary and mandatory
7 responses for each Management Area that are to be implemented when Severe Water Shortage
8 Conditions exist.

9 33. State Water Project Water or SWP Water – Water imported through the
10 State of California State Water Resources Development System pursuant to Division 6, Part 6,
11 Chapter 8, of the California Water Code.

12 34. Stipulating Party – A Party that has signed this Stipulation, as listed in
13 Exhibit “A”, or its heirs, executors, administrators, trustees, successors, assigns, and agents.

14 35. Storage Space – The portion of the Basin capable of holding water for sub-
15 sequent reasonable and beneficial uses.

16 36. SWP Contract(s) – Those series of contracts that entitle the Importers to
17 use SWP facilities to bring Imported Water into the Basin.

18 37. Twitchell Management Authority or TMA – The committee formed to
19 administer the relevant provisions of the Stipulation regarding the Santa Maria Valley Manage-
20 ment Area.

21 38. Twitchell Participants – Those Stipulating Parties holding rights to
22 Twitchell Yield.

23 39. Twitchell Project – Dam and reservoir authorized by Congress as the
24 “Santa Maria Project” on September 3, 1954 (Public Law 774, 83d Congress, ch. 1258, 2d
25 session, 68 Stat. 1190) and located on the Cuyama River, approximately six miles upstream from
26 its junction with the Sisquoc River, pursuant to that certain License For Diversion And Use of
27 Water, License No. 10416, issued by the State Water Resources Control Board.

28 ///

1 40. *Twitchell Water* – Groundwater derived from operation of the Twitchell
2 Project.

3 41. *Twitchell Yield* – The total amount of Groundwater allocated annually to
4 the Twitchell Participants.

5 **II. EXHIBITS**

6 The following Exhibits are attached to this Stipulation and incorporated herein:

7 1. *Exhibit "A"*, list identifying the Stipulating Parties and the parcels of land
8 bound by the terms of this Stipulation.

9 2. *Exhibit "B"*, Phase I and II Orders, as modified, and the attached map
10 depicting the Santa Maria Basin.

11 3. *Exhibit "C"*, map of the Basin and boundaries of the three Management
12 Areas.

13 4. *Exhibit "D"*, map identifying those lands as of January 1, 2005: 1) within
14 the boundaries of a municipality or its sphere of influence, or within the process of inclusion in its
15 sphere of influence; or 2) within the certificated service area of a publicly regulated utility; and a
16 list of selected parcels that are nearby these boundaries which are excluded from within these
17 areas.

18 5. *Exhibit "E"*, 2002 Settlement Agreement between the Northern Cities and
19 Northern Landowners.

20 6. *Exhibit "F"*, the agreement among Santa Maria, SCWC and Guadalupe
21 regarding the Twitchell Project and the TMA.

22 7. *Exhibit "G"*, the Court's Order Concerning Electronic Service of Pleadings
23 and Electronic Posting of Discovery Documents dated June 27, 2000.

24 8. *Exhibit "H"*, the form of memorandum of agreement to be recorded.

25 **III. DECLARATION OF RIGHTS -- ALL MANAGEMENT AREAS**

26 The terms and conditions of this Stipulation set forth a physical solution concerning
27 Groundwater, SWP Water and Storage Space, consistent with common law water rights priorities.

28 ///

1 **A. Recognition of Priority of Overlying Rights**

2 Except as expressly modified by the settlement agreement among the Northern Parties
3 (Exhibit “E”), all Overlying Owners that are also Stipulating Parties have a prior and paramount
4 Overlying Right, whether or not yet exercised.

5 **B. Prescriptive Rights**

6 As to the Stipulating Parties, no Party has proved prescriptive rights to any Native
7 Groundwater. Future use by the Stipulating Parties will not be adverse and will not ripen into a
8 prescriptive right as between the Stipulating Parties.

9 **C. Appropriative Rights**

10 Consistent with the specific provisions governing each Management Area, the Stipulating
11 Parties owning and exercising Appropriative Rights have the right to the reasonable and bene-
12 ficial use of Native Groundwater that is surplus to the reasonable and beneficial uses of the
13 Stipulating Parties that are Overlying Owners. New appropriative uses shall be subordinate to
14 existing appropriations and shall be prioritized on a first in time, first in right basis.

15 **D. Developed Water Rights**

16 The Stipulating Parties owning Developed Water or New Developed Water have the right
17 to its reasonable and beneficial use, consistent with the specific provisions governing each
18 Management Area. The right to use Developed Water is a right to use commingled Groundwater
19 and is not limited to the corpus of that water.

20 **E. Rights to Storage Space**

21 The Court shall reserve jurisdiction over the use of the Storage Space, and any Party may
22 apply to the Court for the approval of a project using Storage Space. The Court must approve any
23 project using Storage Space before any Party can claim a right to stored water from that project.
24 The Stipulating Parties agree that Groundwater derived from Developed Water is exempt from
25 the Court approval requirements of this Paragraph.

26 **F. Other Surface Water Rights**

27 Nothing in this Stipulation affects or otherwise alters common law riparian rights or any
28 surface water rights, unless expressly provided in this Stipulation.

1 **IV. PHYSICAL SOLUTION – ALL MANAGEMENT AREAS**

2 **A. Authority**

3 Pursuant to Article X, section 2 of the California Constitution, the Stipulating Parties
4 agree that the Court has the authority to enter a judgment and physical solution containing the
5 terms and conditions of this Stipulation. Unless the Court imposes this physical solution, poten-
6 tial changes in water use could affect Basin adequacy and integrity. The Declaration of Rights is
7 a component of this physical solution.

8 **B. Purposes and Objectives**

9 The terms and conditions of this Stipulation are intended to impose a physical solution
10 establishing a legal and practical means for ensuring the Basin’s long-term sustainability. This
11 physical solution governs Groundwater, SWP Water and Storage Space, and is intended to ensure
12 that the Basin continues to be capable of supporting all existing and future reasonable and
13 beneficial uses. This physical solution is: 1) a fair and equitable basis for the allocation of water
14 rights in the Basin; 2) in furtherance of the mandates of the State Constitution and the water
15 policy of the State of California; and 3) a remedy that gives due consideration to applicable
16 common law rights and priorities to use Groundwater and Storage Space, without substantially
17 impairing any such right.

18 **C. Basin Management Areas**

19 Development and use of Groundwater, SWP Water and Storage Space have historically
20 been financed and managed separately in three Management Areas. For example, only the
21 Northern Parties have paid for, managed, and benefited from the Lopez Project; whereas only
22 Santa Maria Valley parties have paid for, managed, and benefited from the Twitchell Project. In
23 contrast, the Nipomo Mesa parties have not been involved in the funding or management of either
24 the Twitchell or Lopez Projects.

25 The Stipulating Parties agree that Groundwater, SWP Water and Storage Space can be
26 more efficiently allocated and managed in three Management Areas, given the physical, geo-
27 graphical, political, economic, and historic conditions. The three Management Areas, as shown
28 on Exhibit “C,” are as follows: Northern Cities Management Area; Nipomo Mesa Management

1 Area; and Santa Maria Valley Management Area. The Stipulating Parties intend that manage-
2 ment through three Management Areas will preserve the Basin's integrity.

3 **D. Groundwater Monitoring**

4 1. Monitoring Program. A Monitoring Program shall be established in each
5 of the three Management Areas to collect and analyze data regarding water supply and demand
6 conditions. Data collection and monitoring shall be sufficient to determine land and water uses in
7 the Basin, sources of supply to meet those uses, groundwater conditions including groundwater
8 levels and quality, the amount and disposition of Developed Water supplies, and the amount and
9 disposition of any other sources of water supply in the Basin. The Northern Cities Management
10 Area shall not be required to include in its Monitoring Program or Annual Reports quantification
11 of groundwater recharge from the Lopez Project or storm water percolation ponds, unless the
12 Court orders inclusion of this information.

13 Within one hundred and eighty days after entry of judgment, representatives of the Moni-
14 toring Parties from each Management Area will present to the Court for its approval their
15 proposed Monitoring Program. The Management Area Engineers shall freely share available well
16 data, groundwater models, and other products and tools utilized in monitoring and analysis of
17 conditions in the three Management Areas, consistent with the confidentiality provisions of this
18 Stipulation.

19 Absent a Court order to the contrary, all Stipulating Parties shall make available relevant
20 information regarding groundwater elevations and water quality data necessary to implement the
21 Monitoring Program approved for their respective Management Area. The Monitoring Parties
22 shall coordinate with the Stipulating Parties to obtain any needed data on reasonable terms and
23 conditions. Metering may only be imposed on Stipulating Parties upon a Court order following a
24 showing that such data is necessary to monitor groundwater conditions in the Basin, and in the
25 case of an Overlying Owner, that Overlying Owner has failed to provide information comparable
26 to that provided by other Overlying Owners. The confidentiality of well data from individual
27 owners and operators will be preserved, absent a Court order or written consent.

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2. Monitoring Parties. The Monitoring Parties are as follows:

- (a) Santa Maria Valley Management Area – The Twitchell Management Authority.
- (b) Northern Cities Management Area – The Northern Cities.
- (c) Nipomo Mesa Management Area – The NMMA Technical Group.

3. Annual Reports. Within one hundred and twenty days after each Year, the Management Area Engineers will file an Annual Report with the Court. The Annual Report will summarize the results of the Monitoring Program, changes in groundwater supplies, and any threats to Groundwater supplies. The Annual Report shall also include a tabulation of Management Area water use, including Imported Water availability and use, Return Flow entitlement and use, other Developed Water availability and use, and Groundwater use. Any Stipulating Party may object to the Monitoring Program, the reported results, or the Annual Report by motion.

4. Management Area Engineer. The Monitoring Parties may hire individuals or consulting firms to assist in the preparation of the Monitoring Programs and the Annual Reports. Except as provided below for the Santa Maria Valley Management Area, the Monitoring Parties, in their sole discretion, shall select, retain and replace the Management Area Engineer.

E. New Developed Water

1. Stipulating Parties in each Management Area may prepare and implement plans to develop, salvage or import additional water supplies.

2. The Stipulating Parties that pay, or otherwise provide consideration, for New Developed Water are entitled to use it to the extent the New Developed Water augments the water supplies in that Management Area. If more than one Stipulating Party finances or participates in generating New Developed Water, rights to the supply of New Developed Water shall be proportional to each Stipulating Party’s financial contribution or other consideration, or as otherwise mutually agreed to by the participating Stipulating Parties. This paragraph does not apply to Return Flows.

///

1 3. The Stipulating Parties who desire to claim New Developed Water supplies
2 must bring a motion, and obtain an order from the Court, quantifying and allocating the rights to
3 the New Developed Water, before they have the prior right to the New Developed Water.

4 **F. Severe Water Shortage Response**

5 This physical solution sets forth a Severe Water Shortage Plan for each Management Area
6 which is intended to provide an effective response to Severe Water Shortage Conditions that may
7 develop within each or all of the Management Areas. The specific Severe Water Shortage Plans
8 for each Management Area are incorporated herein and made a part of the physical solution.

9 **V. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO SANTA MARIA VALLEY**
10 **MANAGEMENT AREA**

11 As supplemented by the provisions of this Stipulation that apply to all Management Areas,
12 the following terms govern rights to Groundwater, SWP Water and Storage Space in the Santa
13 Maria Valley Management Area.

14 **A. Water Rights to Sources of Supply**

15 1. *Overlying Rights.* The Stipulating Parties who are Overlying Owners
16 within the Santa Maria Valley Management Area each have the prior and paramount right to use
17 Native Groundwater. Subject to Paragraph V(C)(2)(b)(vi), all Overlying Rights are appurtenant
18 to the overlying land and cannot be assigned or conveyed separate or apart from those lands.

19 2. *Appropriative Rights.* The Parties listed in Exhibit "A" are the owners of
20 Appropriative Rights exercised in the Santa Maria Valley Management Area. Each Appropriative
21 Right is limited to Native Groundwater that is surplus to reasonable and beneficial uses of the
22 Stipulating Parties that are Overlying Owners in the Santa Maria Valley Management Area. New
23 appropriative uses shall be subordinate to existing Appropriative Rights and shall be prioritized
24 on a first in time, first in right basis.

25 3. *Developed Water.* The Stipulating Parties owning Developed Water have
26 the right to its reasonable and beneficial use, subject only to the Severe Water Shortage Plan. On
27 an annual basis, the Stipulating Parties shall have the right to the reasonable and beneficial use of
28 Developed Water that is surplus to the reasonable and beneficial uses of the owners of that

1 Developed Water. The right to use Developed Water is a right to use commingled Groundwater
2 and is not limited to the corpus of that water.

3 (a) New Developed Water. The ownership and use of New Developed
4 Water shall be subject to Court order.

5 (b) Twitchell Water.

6 (i) *Amount*. The Twitchell Project annually provides a variable
7 amount of Developed Water that augments the Groundwater in the Santa Maria Valley Manage-
8 ment Area. Twitchell Yield is thirty-two thousand acre-feet per year (“afy”).

9 (ii) *Division of Twitchell Yield*. Twitchell Yield shall be
10 divided as follows: 80% to Santa Maria, SCWC and Guadalupe, and 20% to the Overlying
11 Owners within the District who are Stipulating Parties.

12 a. The Twitchell Yield allocated to Santa Maria,
13 SCWC and Guadalupe is suballocated pursuant to the agreement among Santa Maria, SCWC and
14 Guadalupe, as attached and incorporated herein as Exhibit “F”.

15 b. The Twitchell Yield allocated to the Overlying
16 Owners who are Stipulating Parties within the District shall be equally allocated to each acre of
17 land within the District owned by these Stipulating Parties. Concurrently with the execution of
18 this Stipulation, each of these Stipulating Parties shall report their acreage of overlying land
19 within the District on a parcel specific basis. Within one hundred and twenty days of the effec-
20 tive date of this Stipulation, the Management Area Engineer shall create a list of all the Stipu-
21 lating Parties and their respective allocation of the Twitchell Yield.

22 (iii) *Recapture of Twitchell Yield*. The right to use Twitchell
23 Yield is a right to use commingled Groundwater and is not limited to the corpus of that water.

24 (iv) *Transfer of Twitchell Yield*. Twitchell Yield may be trans-
25 ferred, temporarily or permanently, only between Stipulating Parties and the transfer market shall
26 be as open and competitive as practical. A memorandum of agreement summarizing each transfer
27 shall be filed with the Court and provided to the TMA. Any such memorandum of agreement
28 shall state the Parties to the transfer, the amount of Twitchell Yield transferred, the price per acre-

1 foot, and the Party responsible for the financial obligation associated with the Twitchell Yield.

2 (v) *Carryover.* Any portion of Twitchell Yield that is not used
3 in a given Year shall not be carried over into the following Year.

4 (c) State Water Project Water.

5 (i) *Import and Use of State Water Project Water.* Santa Maria,
6 SCWC and Guadalupe all have SWP Contracts. Santa Maria will import and use within the Santa
7 Maria Valley Management Area not less than 10,000 acre-feet each Year of Available SWP
8 Water, or the full amount of Available SWP Water if the amount physically available is less than
9 10,000 acre-feet in a given Year under Santa Maria's SWP Contract. Guadalupe will import and
10 use within the Santa Maria Valley Management Area a minimum of 75% of its Available SWP
11 Water. SCWC will import and use within the Basin all its Available SWP Water. Santa Maria,
12 SCWC and Guadalupe will not voluntarily relinquish or terminate their current SWP Contracts,
13 and shall seek renewal of these SWP Contracts.

14 (ii) *Return Flows.*

15 a. *Fixed Amount.* The Return Flows available to each
16 Importer is fixed based on a percentage of the annual amount of SWP Water the Importer uses
17 within the Basin. The fixed percentage for each importer is as follows: (a) Santa Maria 65%; (b)
18 SCWC 45%; and (c) Guadalupe 45%. The percentage provided to SCWC and Guadalupe shall
19 be adjusted through a Court order if: a) either entity increases its use of water imported into the
20 Basin, b) the applicable method of wastewater treatment and discharge to the Basin is altered, or
21 c) good cause is shown.

22 b. *Recapture.* The right to use Return Flows does not
23 attach to the corpus of SWP water deliveries or the treated SWP wastewater discharged into the
24 Basin but is a right to use the commingled Groundwater. The Importer's right to Return Flows is
25 assignable in whole or in part, subject to necessary accounting.

26 c. *Quantification of Return Flows.* Return Flows equal
27 the total amount of SWP Water used by the Importer in the prior five Years, divided by five, and
28 then multiplied by the Importer's percentage as provided in Paragraph V(A)(3)(c)(ii)(a) above.

1 d. Carryover. Any portion of Return Flows that is not
2 used in a given Year shall not be carried over into the following Year.

3 **B. Monitoring and Management**

4 1. Status of Management Area. Current Groundwater and SWP Water sup-
5 plies are sustaining existing water uses. Changes in land and water use and demographic con-
6 ditions can be expected to occur, possibly resulting in changes in water supply or demand
7 requirements.

8 2. Need for Monitoring. Monitoring and reporting of changes in land and
9 water use and demographic conditions are necessary to ensure that water supplies continue to be
10 sufficient to support water uses.

11 3. Monitoring Program.

12 (a) Annual Report: Content and Processing.

13 The Annual Report shall include an analysis of the relationship between projected water demands
14 and projected water supplies.

15 (i) The Annual Report shall be prepared and signed by the
16 Management Area Engineer, and shall be simultaneously submitted to the Court and the TMA.

17 (ii) Within forty-five days of submission, the TMA shall hold a
18 noticed public hearing to take comments on and consider for adoption the Annual Report. No
19 later than forty-five days from the date of the public hearing, the TMA shall submit to the Court
20 its recommendations regarding the Annual Report.

21 (iii) Within one hundred and twenty days of the date of the
22 submission of the Annual Report to the Court, it shall conduct a noticed hearing on the Annual
23 Report. Any Party may submit comments on the Annual Report. After the hearing, the Court
24 shall accept the Annual Report or direct its modification.

25 (b) Management Area Engineer

26 (i) Absent the unanimous consent of the TMA, the Manage-
27 ment Area Engineer shall not concurrently be employed by any Party holding rights to use
28 Groundwater in the Santa Maria Valley Management Area.

1 (ii) The Management Area Engineer shall initially be the engin-
2 eering firm of Luhdorff & Scalmanini. Luhdorff & Scalmanini shall be the Management Area
3 Engineer for a minimum of the shorter of five years from the date of this Stipulation or the date
4 upon which Mr. Joseph Scalmanini discontinues full time work for that firm.

5 (iii) The TMA shall employ the following process to replace the
6 Management Area Engineer:

7 a. The TMA shall solicit candidates for Management
8 Area Engineer through a public process. All submissions and candidate materials shall be avail-
9 able to any Party upon request. The TMA shall conduct its interview through a public process to
10 the extent practical, and include District and Overlying Owner representatives in the candidate
11 review process.

12 b. Once a short list of candidates (less than five) for
13 Management Area Engineer is obtained, the TMA shall hold a noticed public hearing to take
14 comments on and consider the candidates for Management Area Engineer. The TMA shall make
15 a reasonable effort to select the Management Area Engineer with a unanimous vote. If the TMA
16 unanimously endorses a candidate, that nominee shall be recommended to the Court. Otherwise,
17 the short list of candidates shall be submitted.

18 c. The Court shall appoint the Management Area
19 Engineer following a noticed hearing.

20 4. *Funding.* The TMA shall pay for the Monitoring Program for the Santa
21 Maria Valley Management Area, which includes the cost of the Management Area Engineer and
22 the Annual Report. The cost of the Monitoring Program shall be divided among the Twitchell
23 Participants on the same basis as the allocation of their Twitchell Yield.

24 **C. Response to Varying Conditions**

25 1. *Early Response to Avoid Severe Water Shortage Conditions.* If the Man-
26 agement Area Engineer determines that projected demands are expected to materially exceed
27 projected water supplies, then the Management Area Engineer may recommend programs and
28 projects to augment the Management Area's water supplies. The Stipulating Parties will collabo-

1 rate on a response based upon current conditions, but absent Severe Water Shortage Conditions,
2 implementation of programs and projects will not be mandated.

3 The Stipulating Parties may voluntarily participate in any recommended program or
4 project, either through financial or other contributions. The Stipulating Parties that contribute to
5 such a program or project shall have a priority to the water supplies generated by that program or
6 project with Court approval. The Stipulating Parties agree to aggressively pursue New
7 Developed Water sources, including necessary funding.

8 2. Severe Water Shortage Conditions and Response.

9 (a) Determination. Severe Water Shortage Conditions shall be found
10 to exist when the Management Area Engineer, based on the results of the ongoing Monitoring
11 Program, finds the following: 1) groundwater levels in the Management Area are in a condition of
12 chronic decline over a period of not less than five Years; 2) the groundwater decline has not been
13 caused by drought; 3) there has been a material increase in Groundwater use during the five-Year
14 period; and 4) monitoring wells indicate that groundwater levels in the Santa Maria Valley
15 Management Area are below the lowest recorded levels.

16 (b) Response.

17 (i) If the Management Area Engineer determines that Severe
18 Water Shortage Conditions exist within the Santa Maria Valley Management Area, the Manage-
19 ment Area Engineer shall file and serve, as part of its Annual Report, findings and recommen-
20 dations to alleviate such shortage conditions or the adverse effects caused by such water shortage.

21 (ii) Upon the filing of the Annual Report, the Court shall hold a
22 noticed hearing regarding the existence and appropriate response to the Severe Water Shortage
23 Conditions. If, after that hearing, the Court finds that Severe Water Shortage Conditions exist in
24 the Santa Maria Valley Management Area, the Court shall first order all use of Groundwater to be
25 limited to: (a) for Guadalupe, Santa Maria and SCWC, their Developed Water; (b) entitled
26 Stipulating Parties to their New Developed Water; and (c) for the Overlying Owners, the Native
27 Groundwater plus any Developed Water to which individual Overlying Owners are entitled.

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1 (iii) The Court may also order Stipulating Parties to address
2 specific adverse effects caused by the Severe Water Shortage Conditions. The responses may
3 include, but are not limited to: (a) measures recommended in the Annual Report and the related
4 Court proceedings; and (b) other measures intended to address localized problems in the Santa
5 Maria Valley Management Area directly related to the Severe Water Shortage Conditions.

6 (iv) The Court may adjust the Groundwater use limitations
7 imposed on any Stipulating Party(ies) who implement programs or projects providing additional
8 water supplies within the Santa Maria Valley Management Area.

9 (v) If the Court finds that Management Area conditions have
10 deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further
11 limitations on Groundwater use. If the Court imposes further limitations on Groundwater use, a
12 Stipulating Party shall be exempt from those limitations to the extent: (a) the Stipulating Party can
13 demonstrate that it has already implemented limitations in its Groundwater use, equivalent to
14 those ordered by the Court; or (b) the Stipulating Party can demonstrate that further limitations
15 would not avoid or reduce the deteriorating conditions.

16 (vi) During Severe Water Shortage Conditions, the Stipulating
17 Parties may make agreements for temporary transfer of rights to pump Native Groundwater,
18 voluntary fallowing, or the implementation of extraordinary conservation measures. Transfers of
19 Native Groundwater must benefit the Management Area and be approved by the Court.

20 **D. Management and Administration of the Twitchell Project**

21 1. Operational Parameters. All Twitchell Project operations (operation and
22 maintenance and capital projects) will be performed consistent with the following parameters
23 (Operational Parameters):

24 (a) Maximize recharge of the Santa Maria Valley Management Area
25 from Twitchell Water, including without limitation, the avoidance of impacts on recharge
26 resulting from ongoing accumulation of silt to the maximum extent practical.

27 (b) Operate the Twitchell Project in accordance with the requirements
28 of applicable law including, without limitation, the requirements of the Bureau of Reclamation

1 and Army Corps of Engineers.

2 (c) Operate the Twitchell Project in accordance with industry standards
3 and best management practices.

4 2. Twitchell Project Manual.

5 (a) The TMA will hire and pay for a professional engineering con-
6 sulting firm with expertise in dam and reservoir operations and maintenance, acceptable to the
7 District and the TMA, to develop an integrated operation and maintenance procedure manual
8 (“Twitchell Project Manual”) and provide recommendations for capital and maintenance projects
9 that are consistent with the Operational Parameters.

10 (b) The District shall hold one or more public hearings to solicit input
11 regarding the content of the Twitchell Project Manual.

12 (c) Within eighteen months of entry of the judgment, the TMA and the
13 District shall adopt a final Twitchell Project Manual.

14 (d) Any disagreement between the District and the TMA regarding the
15 content of the final Twitchell Project Manual shall be presented for Court review and determina-
16 tion pursuant to the judicial review provisions provided in this Stipulation.

17 (e) The District will exercise its discretionary authority to conduct all
18 its operation and maintenance activities for the Twitchell Project in accordance with the Twitchell
19 Project Manual.

20 3. Twitchell Project Funding.

21 (a) District will maintain its current operation and maintenance (O&M)
22 assessments. These funds will be used for District staff salaries, property, equipment, rent,
23 expenses, and other day-to-day operations, and will be expended consistent with the Twitchell
24 Project Manual to the extent it is applicable.

25 (b) The TMA will separately fund, administer, construct and manage
26 any additional Twitchell Project expenses or projects, including Capital Improvement Projects
27 (see below) and O&M, (Extraordinary Project Operations) consistent with the Twitchell Project
28 Manual. The TMA and the District will make reasonable efforts to work cooperatively to imple-

1 ment Extraordinary Project Operations.

2 (c) Consistent with the provisions of this Paragraph V(D), the District
3 and the TMA shall be responsible for ensuring the ongoing operational integrity of the Twitchell
4 Project and the maintenance of the Twitchell Yield. The Stipulating Parties expect that this
5 ongoing responsibility may involve significant expenditures. Within 120 days of the effective
6 date of this Stipulation, and annually thereafter, the Twitchell Participants shall establish an
7 operating budget for the TMA to fund its responsibilities set forth in this Stipulation. For the first
8 five years following the PUC approval as provided below, the TMA's annual budget shall be
9 established at an amount between \$500,000 to \$700,000. Following the initial budgeting period,
10 the TMA shall set its budget in three- to five-year increments, as it deems necessary to meet its
11 obligations to preserve the Twitchell Yield. Any unused revenues shall be segregated into a
12 reserve account, for future funding needs of the Twitchell Project. The Stipulating Parties agree
13 to cooperate and coordinate their efforts to enable the TMA to fulfill its responsibilities as pro-
14 vided in this Stipulation.

15 4. Twitchell Management Authority.

16 (a) The TMA shall be comprised of one representative of each of the
17 following parties: Santa Maria, Guadalupe, Southern California Water Company, the District, and
18 Overlying Landowners holding rights to Twitchell Yield.

19 (b) Only those parties holding an allocation of Twitchell Yield shall be
20 voting members of the TMA. Voting shall be based on each party's proportionate allocation of
21 Twitchell Yield.

22 (c) The TMA shall be responsible for all the Extraordinary Project
23 Operations.

24 (d) The TMA shall be responsible for developing proposals for Capital
25 Improvement Projects relating to the Twitchell Project. Capital Improvement Projects shall mean
26 projects involving the expenditure of funds for the improvement or enhancement of the Twitchell
27 Project, but shall not include normal operation, maintenance or repair activities.

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1 (e) Upon the development of a proposal for a Capital Improvement
2 Project, the TMA shall, in cooperation with the District, hold one or more public hearings to
3 solicit input.

4 (f) Following the public hearing process, the TMA may vote on
5 whether to implement the Capital Improvement Project.

6 (g) The cost of TMA-sponsored Extraordinary Project Operations and
7 Capital Improvement Projects shall be divided among Twitchell Participants on the same basis as
8 the allocation of their Twitchell Yield.

9 (h) The District shall assume operation and maintenance responsibility
10 for any TMA sponsored Capital Improvement Project to the extent practical within the District's
11 day-to-day operations.

12 5. Regulatory Compliance. The TMA or the District shall provide advance
13 notice to the Court and all Parties of the initiation of any regulatory proceeding relating to the
14 Twitchell Project.

15 6. Existing Contracts. The Twitchell Reservoir Project will continue to be
16 governed by and subject to the terms and conditions of the December 1955 agreement between
17 the District and the Santa Barbara County Water Agency and nothing in this Stipulation is
18 intended to modify the rights or obligations provided in that agreement. To the extent that the
19 approval of Santa Barbara County Water Agency or the United States Bureau of Reclamation is
20 required in connection with the implementation of this Stipulation, the Stipulating Parties agree to
21 work cooperatively to obtain such approval(s).

22 **E. New Urban Uses – Santa Maria Valley Management Area**

23 1. New Urban Uses shall obtain water service from the local public water
24 supplier. The local public water supplier shall provide water service on a reasonable and non-
25 discriminatory basis.

26 2. New municipal and industrial uses on land adjacent to or within one-
27 quarter mile of the boundary line depicted in Exhibit D shall comply with any applicable Cor-
28 porations Code provisions and negotiate in good faith to obtain water service from the local

1 public water supplier, before forming a mutual water company to provide water service.

2 3. No modification of land use authority. This Stipulation does not modify
3 the authority of the entity holding land use approval authority over the proposed New Urban
4 Uses.

5 4. New Urban Uses shall provide a source of supplemental water to offset the
6 water demand associated with that development. For the purposes of this section, supplemental
7 water shall include all sources of Developed Water, except: i) Twitchell Water, ii) storm water
8 percolation ponds existing as of the date of entry of the judgment, or iii) Overlying Owners' right
9 to use of surplus Developed Water.

10 **VI. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NIPOMO MESA MAN-**
11 **AGEMENT AREA**

12 As supplemented by the provisions of this Stipulation that apply to all Management Areas,
13 the following terms shall apply to the Nipomo Mesa Management Area.

14 **A. Supplemental Water**

15 1. MOU. NCS D has entered into a Memorandum of Understanding
16 ("MOU") with Santa Maria which contemplates the wholesale purchase and transmission from
17 Santa Maria to the NMMA of a certain amount of water each Year (the "Nipomo Supplemental
18 Water"). All water delivered pursuant to the MOU for delivery by NCS D to its ratepayers shall
19 be applied within the NCS D or the NCS D's sphere of influence as it exists at the time of the
20 transmission of that water.

21 2. The NCS D agrees to purchase and transmit to the NMMA a minimum of
22 2,500 acre-feet of Nipomo Supplemental Water each Year. However, the NMMA Technical
23 Group may require NCS D in any given Year to purchase and transmit to the NMMA an amount
24 in excess of 2,500 acre-feet and up to the maximum amount of Nipomo Supplemental Water
25 which the NCS D is entitled to receive under the MOU if the Technical Group concludes that such
26 an amount is necessary to protect or sustain Groundwater supplies in the NMMA. The NMMA
27 Technical Group also may periodically reduce the required amount of Nipomo Supplemental
28 Water used in the NMMA so long as it finds that groundwater supplies in the NMMA are not

1 endangered in any way or to any degree whatsoever by such a reduction.

2 3. The Stipulating Parties agree to support (and, conversely, not to oppose in
3 any way or to encourage or assist any other Person or party in opposing or challenging) the imple-
4 mentation of the MOU, which includes environmental and regulatory permits and approvals, the
5 approval of a wholesale water supply agreement between Santa Maria and NCSD, and the
6 alignment and construction of a pipeline and related infrastructure necessary to deliver the
7 Nipomo Supplemental Water from Santa Maria to the NMMA (“Nipomo Supplemental Water
8 Project”). ConocoPhillips retains the right to object to or provide input on the alignment of any
9 pipelines associated with the Nipomo Supplemental Water Project if they might interfere with the
10 location of existing ConocoPhillips pipelines. The Stipulating Parties retain their rights to be
11 compensated for any interest or property acquired in implementing the Nipomo Supplemental
12 Water Project.

13 4. NCSD and Santa Maria shall employ their best efforts to timely implement
14 the Nipomo Supplemental Water Project, subject to their quasi-judicial obligations specified for
15 administrative actions and in the California Environmental Quality Act.

16 5. The enforcement of the provisions of Paragraph VI(D) below is condi-
17 tioned upon the full implementation of the Nipomo Supplemental Water Project, including the
18 Yearly use of at least 2,500 acre-feet of Nipomo Supplemental Water (subject to the provisions of
19 Paragraph VI(A)(2) above) within the NMMA. In the event that Potentially Severe Water
20 Shortage Conditions or Severe Water Shortage Conditions are triggered as referenced in Para-
21 graph VI(D) before Nipomo Supplemental Water is used in the NMMA, NCSD, SCWC,
22 Woodlands and RWC agree to develop a well management plan that is acceptable to the NMMA
23 Technical Group, and which may include such steps as imposing conservation measures, seeking
24 sources of supplemental water to serve new customers, and declaring or obtaining approval to
25 declare a moratorium on the granting of further intent to serve or will serve letters. In the event
26 that it becomes apparent that the Nipomo Supplemental Water will not be fully capable of being
27 delivered, any Stipulating Party may apply to the Court, pursuant to a noticed motion, for appro-
28 priate modifications to this portion of the Stipulation and the judgment entered based upon the

1 terms and conditions of this Stipulation, including declaring this Paragraph VI to be null and void,
2 and of no legal or binding effect.

3 6. Once the Nipomo Supplemental Water is capable of being delivered, those
4 certain Stipulating Parties listed below shall purchase the following portions of the Nipomo
5 Supplemental Water Yearly:

6 NCS D - 66.68%

7 Woodlands Mutual Water Company - 16.66%

8 SCWC - 8.33%

9 RWC - 8.33%

10 **B. Rights to Use Groundwater**

11 1. ConocoPhillips and its successors-in-interest shall have the right to the
12 reasonable and beneficial use of Groundwater on the property it owns as of the date of this Stipu-
13 lation located in the NMMA (“ConocoPhillips Property”) without limitation, except in the event
14 the mandatory action trigger point (Severe Water Shortage conditions) described in Paragraph
15 VI(D) (2) below is reached. Further, any public water supplier which provides water service to
16 the ConocoPhillips Property may exercise that right subject to the limitation described in Para-
17 graph VI(D)(2).

18 2. Overlying Owners that are Stipulating Parties that own land located in the
19 NMMA as of the date of this Stipulation shall have the right to the reasonable and beneficial use
20 of Groundwater on their property within the NMMA without limitation, except in the event the
21 mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph
22 VI(D)(2) below is reached.

23 3. The Woodlands Mutual Water Company shall not be subject to restriction
24 in its reasonable and beneficial use of Groundwater, provided it is concurrently using or has made
25 arrangements for other NMMA parties to use within the NMMA, the Nipomo Supplemental
26 Water allocated to the Woodlands in Paragraph VI(A)(5). Otherwise, the Woodlands Mutual
27 Water Company shall be subject to reductions equivalent to those imposed on NCS D, RWC and
28 SCWC, as provided in Paragraph VI(D)(1-2).

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2 **C. NMMA Technical Group**

3 1. The NMMA Technical Group shall include representatives appointed by
4 NCSD, SCWC, ConocoPhillips, Woodlands Mutual Water Company and an agricultural Over-
5 lying Owner who is also a Stipulating Party.

6 2. The NMMA Technical Group shall develop a Monitoring Program for the
7 NMMA (“NMMA Monitoring Program”), which shall be consistent with the Monitoring
8 Program described in Paragraph IV(D). The NMMA Monitoring Program shall also include the
9 setting of well elevation and water quality criteria that trigger the responses set forth in Paragraph
10 D below. The Stipulating Parties shall provide monitoring and other production data to the
11 NMMA Technical Group at no charge, to the extent that such data has been generated and is
12 readily available. The NMMA Technical Group shall adopt rules and regulations concerning
13 measuring devices and production reports that are, to the extent feasible, consistent with the
14 Monitoring Programs for other Management Areas. If the NMMA Technical Group is unable to
15 agree on any aspect of the NMMA Monitoring Program, the matter may be resolved by the Court
16 pursuant to a noticed motion.

17 3. The NMMA Technical Group meetings shall be open to any Stipulating
18 Party. NMMA Technical Group files and records shall be available to any Stipulating Party upon
19 written request. Notices of the NMMA Technical Group meetings, as well as all its final work
20 product (documents) shall be posted to groups.yahoo.com/group/NipomoCommunity/

21 4. The NMMA Technical Group functions shall be funded by contribution
22 levels to be negotiated by NCSD, SCWC, RWC, ConocoPhillips, and Woodlands Mutual Water
23 Company. In-lieu contributions through engineering services may be provided, subject to agree-
24 ment by those parties. The budget of the NMMA Technical Group shall not exceed \$75,000 per
25 year without prior approval of the Court pursuant to a noticed motion.

26 5. Any final NMMA Technical Group actions shall be subject to *de novo*
27 Court review by motion.

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2 **D. Potentially Severe and Severe Water Shortage Conditions**

3 1. Caution trigger point (Potentially Severe Water Shortage Conditions)

4 (a) Characteristics. The NMMA Technical Group shall develop
5 criteria for declaring the existence of Potentially Severe Water Shortage Conditions. These
6 criteria shall be approved by the Court and entered as a modification to this Stipulation or the
7 judgment to be entered based upon this Stipulation. Such criteria shall be designed to reflect that
8 water levels beneath the NMMA as a whole are at a point at which voluntary conservation
9 measures, augmentation of supply, or other steps may be desirable or necessary to avoid further
10 declines in water levels.

11 (b) Responses. If the NMMA Technical Group determines that Poten-
12 tially Severe Water Shortage Conditions have been reached, the Stipulating Parties shall coordi-
13 nate their efforts to implement voluntary conservation measures, adopt programs to increase the
14 supply of Nipomo Supplemental Water if available, use within the NMMA other sources of
15 Developed Water or New Developed Water, or implement other measures to reduce Groundwater
16 use.

17 2. Mandatory action trigger point (Severe Water Shortage Conditions)

18 (a) Characteristics. The NMMA Technical Group shall develop the
19 criteria for declaring that the lowest historic water levels beneath the NMMA as a whole have
20 been reached or that conditions constituting seawater intrusion have been reached. These criteria
21 shall be approved by the Court and entered as a modification to this Stipulation or the judgment to
22 be entered based upon this Stipulation.

23 (b) Responses. As a first response, subparagraphs (i) through (iii) shall
24 be imposed concurrently upon order of the Court. The Court may also order the Stipulating
25 Parties to implement all or some portion of the additional responses provided in subparagraph (iv)
26 below.

27 (i) For Overlying Owners other than Woodlands Mutual Water
28 Company and ConocoPhillips, a reduction in the use of Groundwater to no more than 110% of

1 the highest pooled amount previously collectively used by those Stipulating Parties in a Year,
2 prorated for any partial Year in which implementation shall occur, unless one or more of those
3 Stipulating Parties agrees to forego production for consideration received. Such forbearance shall
4 cause an equivalent reduction in the pooled allowance. The base Year from which the calculation
5 of any reduction is to be made may include any prior single Year up to the Year in which the
6 Nipomo Supplemental Water is transmitted. The method of reducing pooled production to 110%
7 is to be prescribed by the NMMA Technical Group and approved by the Court. The quantifica-
8 tion of the pooled amount pursuant to this subsection shall be determined at the time the manda-
9 tory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is
10 reached. The NMMA Technical Group shall determine a technically responsible and consistent
11 method to determine the pooled amount and any individual's contribution to the pooled amount.
12 If the NMMA Technical Group cannot agree upon a technically responsible and consistent
13 method to determine the pooled amount, the matter may be determined by the Court pursuant to a
14 noticed motion.

15 (ii) ConocoPhillips shall reduce its Yearly Groundwater use to
16 no more than 110% of the highest amount it previously used in a single Year, unless it agrees in
17 writing to use less Groundwater for consideration received. The base Year from which the calcu-
18 lation of any reduction is to be made may include any prior single Year up to the Year in which
19 the Nipomo Supplemental Water is transmitted. ConocoPhillips shall have discretion in deter-
20 mining how reduction of its Groundwater use is achieved.

21 (iii) NCSD, RWC, SCWC, and Woodlands (if applicable as
22 provided in Paragraph VI(B)(3) above) shall implement those mandatory conservation measures
23 prescribed by the NMMA Technical Group and approved by the Court.

24 (iv) If the Court finds that Management Area conditions have
25 deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further
26 mandatory limitations on Groundwater use by NCSD, SCWC, RWC and the Woodlands. Manda-
27 tory measures designed to reduce water consumption, such as water reductions, water restrictions,
28 and rate increases for the purveyors, shall be considered.

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2 (v) During Severe Water Shortage Conditions, the Stipulating
3 Parties may make agreements for temporary transfer of rights to pump Native Groundwater,
4 voluntary fallowing, or the implementation of extraordinary conservation measures. Transfer of
5 Native Groundwater must benefit the Management Area and be approved by the Court.

6 **E. New Urban Uses**

7 1. Within the sphere of influence or service area. New Urban Uses shall
8 obtain water service from the local public water supplier. The local public water supplier shall
9 provide water service on a reasonable and non-discriminatory basis.

10 2. Outside the sphere of influence or service area. New municipal and indus-
11 trial uses on land adjacent to or within one quarter mile of the boundary line depicted in Exhibit D
12 shall comply with any applicable Corporations Code provisions, including good faith negotiations
13 with the local water purveyor(s), prior to forming a mutual water company to provide water
14 service.

15 3. The ConocoPhillips property, owned as of the date of this Stipulation and
16 located within the NMMA, is not in the sphere of influence or service area, nor is it in the process
17 of being included in the sphere of influence, of a municipality or within the certificated service
18 area of a publicly regulated utility as of the date of this Stipulation, nor is it adjacent to or in close
19 proximity to the sphere of influence of a municipality or the certificated service area of a publicly
20 regulated utility as of the date of this Stipulation, as those terms are used in Paragraphs VI(E)(1
21 and 2).

22 4. No modification of land use authority. This Stipulation does not modify the
23 authority of the entity holding land use approval authority over the proposed New Urban Uses.

24 5. New Urban Uses as provided in Paragraph VI(E)(1) above and new muni-
25 cipal and industrial uses as provided in Paragraph VI(E)(2) above shall provide a source of
26 supplemental water, or a water resource development fee, to offset the water demand associated
27 with that development. For the purposes of this Paragraph, supplemental water shall include all
28 sources of Developed Water or New Developed Water.

1 **VII. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NORTHERN CITIES**
2 **MANAGEMENT AREA**

3 These terms, supplemented by the provisions of this Stipulation that apply to all
4 Management Areas, govern water rights and resources in the Northern Cities Management Area.

5 1. Groundwater Monitoring. Groundwater monitoring in the Northern Cities
6 Management Area will be conducted by the Northern Cities in the manner described above.

7 2. Lopez Project. The Lopez Project will continue to be managed by the SLO
8 District. The Northern Cities and Landowners will continue to bear costs of the Lopez Reservoir
9 and no costs of the Twitchell Reservoir.

10 3. Independent Management Per Settlement Agreement.

11 (a) Existing Groundwater, SWP Water and Storage Space in the
12 Northern Cities Management Area will continue to be allocated and independently managed by
13 the Northern Parties in accordance with the Northern Cities and Northern Landowners' 2002
14 Settlement Agreement (Exhibit "E") for the purpose of preserving the long-term integrity of water
15 supplies in the Northern Cities Management Area. That Settlement Agreement initially allocates
16 57% of the safe yield of groundwater in Zone 3 to the farmers and 43% to the cities; and it
17 provides *inter alia* that any increase or decrease in the safe yield will be shared by the cities and
18 landowners on a pro rata basis. That Settlement Agreement is reaffirmed as part of this Stipula-
19 tion and its terms are incorporated into this Stipulation, except that the provisions regarding con-
20 tinuing jurisdiction (§ 4), groundwater monitoring, reporting, and the Technical Oversight
21 Committee (§§ 7-20) are canceled and superseded by the provisions of this Stipulation dealing
22 with those issues.

23 (b) Without the written agreement of each of the Northern Cities, no
24 party other than Northern Parties shall have any right to:

25 (i) pump, store, or use Groundwater or surface water within the
26 Northern Cities Management Area; or

27 (ii) limit or interfere with the pumping, storage, management or
28 usage of Groundwater or surface water by the Northern Parties within the Northern Cities

1 Management Area.

2 (c) For drought protection, conservation, or other management pur-
3 poses, the Northern Parties may engage in contractual transfers, leases, licenses, or sales of any of
4 their water rights, including voluntary fallowing programs. However, no Groundwater produced
5 within the Northern Cities Management Area may be transported outside of the Northern Cities
6 Management Area without the written agreement of each of the Northern Cities.

7 4. Current and future deliveries of water within the spheres of influence of the
8 Northern Cities as they exist on January 1, 2005 shall be considered existing uses and within the
9 Northern Cities Management Area.

10 **VIII. INJUNCTION – ALL MANAGEMENT AREAS**

11 **A. Use Only Pursuant to Stipulation**

12 Each and every Stipulating Party, their officers, agents, employees, successors and
13 assigns, are enjoined and restrained from exercising the rights and obligations provided through
14 this Stipulation in a manner inconsistent with the express provisions of this Stipulation.

15 **B. Injunction Against Transportation From the Basin**

16 Except upon further order of the Court, each and every Stipulating Party and its officers,
17 agents, employees, successors and assigns, is enjoined and restrained from transporting Ground-
18 water to areas outside the Basin, except for those uses in existence as of the date of this Stipula-
19 tion; provided, however, that Groundwater may be delivered for use outside the Basin as long as
20 the wastewater generated by that use of water is discharged within the Basin, or agricultural
21 return flows resulting from that use return to the Basin.

22 **C. No Third Party Beneficiaries**

23 This Stipulation is intended to benefit the Stipulating Parties and no other Parties. Only a
24 Stipulating Party may enforce the terms of this Stipulation or assert a right to any benefits of, or
25 enforce any obligations contained in this Stipulation.

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1 **IX. RESERVED JURISDICTION – ALL MANAGEMENT AREAS**

2 **A. Reserved Jurisdiction; Modifications, Cancellations, Amendments**

3 Jurisdiction, power and authority are retained by and reserved to the Court as set forth in
4 this Paragraph. Nothing in the Court's reserved jurisdiction shall authorize modification, cancel-
5 lation or amendment of the rights provided under Paragraphs III; V(A, E); VI(A, B, D); VII(2, 3);
6 VIII(A); IX(A, C); and X(A, D) of this Stipulation. Subject to this limitation, the Court shall
7 make such further or supplemental orders as may be necessary or appropriate regarding the
8 following:

- 9 1. enforcement of this Stipulation;
- 10 2. claims regarding waste/unreasonable use of water;
- 11 3. disputes between Stipulating Parties across Management Area boundaries;
- 12 4. interpretation and enforcement of the judgment;
- 13 5. consider the content or implementation of a Monitoring Program;
- 14 6. consider the content, conclusions, or recommendations contained in an
15 Annual Report;
- 16 7. consider Twitchell Project operations, including, but not limited to: i) the
17 content of the Twitchell Project Manual; ii) TMA or District compliance
18 with the Twitchell Project Manual; iii) decisions to implement Extraor-
19 dinary Project Operations; or iv) the maintenance of Twitchell Yield;
- 20 8. claims of localized physical interference between the Stipulating Parties in
21 exercising their rights pursuant to this Stipulation; provided, however,
22 rights to use Groundwater under this Stipulation shall have equal status;
23 and
- 24 9. modify, clarify, amend or amplify the judgment and the Northern Parties
25 Settlement Agreement; Provided, however, that all of the foregoing shall
26 be consistent with the spirit and intent of this Stipulation.

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1 **B. Noticed Motion**

2 Any party that seeks the Court’s exercise of reserved jurisdiction shall file a noticed
3 motion with the Court. Any noticed motion shall be made pursuant to the Court’s Order Con-
4 cerning Electronic Service of Pleadings and Electronic Posting of Discovery Documents dated
5 June 27, 2000, attached and incorporated as Exhibit “G”. Any request for judicial review shall be
6 filed within sixty days of the act or omission giving rise to the claim. Upon a showing of good
7 cause, the Court may extend the sixty-day time limitation.

8 **C. De Novo Nature of Proceeding**

9 The Court shall exercise *de novo* review in all proceedings. The actions or decisions of
10 any Party, the Monitoring Parties, the TMA, or the Management Area Engineer shall have no
11 heightened evidentiary weight in any proceedings before the Court.

12 **D. Filing and Notice**

13 As long as the Court’s electronic filing system remains available, all Court filings shall be
14 made pursuant to Exhibit “G”. If the Court’s electronic filing system is eliminated and not
15 replaced, the Stipulating Parties shall promptly establish a substitute electronic filing system and
16 abide by the same rules as contained in the Court’s Order.

17 **X. MISCELLANEOUS PROVISIONS – ALL MANAGEMENT AREAS**

18 **A. Unenforceable Terms**

19 The Stipulating Parties agree that if any provision of this Stipulation or the judgment
20 entered based on this Stipulation is held to be invalid, void, or unenforceable, the remaining pro-
21 visions shall nevertheless continue in full force and effect; provided, however, any order which
22 invalidates, voids, deems unenforceable, or materially alters those Paragraphs enumerated in
23 Paragraph IX(A) or any of them, shall render the entirety of the Stipulation and the judgment
24 entered based on this Stipulation voidable and unenforceable, as to any Stipulating Party who
25 files and serves a motion to be released from the Stipulation and the judgment based upon the
26 Stipulation within sixty days of entry of that order, and whose motion is granted upon a showing
27 of good cause.

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1 **B. Water Quality**

2 Nothing in the Stipulation shall be interpreted as relieving any Stipulating Party of its
3 responsibilities to comply with state or federal laws for the protection of water quality or the
4 provisions of any permits, standards, requirements, or orders promulgated thereunder.

5 **C. Duty to Cooperate**

6 The Stipulating Parties agree not to oppose, or in any way encourage or assist any other
7 party in opposing or challenging, any action, approval, or proceeding necessary to obtain
8 approval of or make effective this Stipulation or the judgment to be entered on terms consistent
9 with this Stipulation.

10 **D. Stipulating Parties Under Public Utilities Commission Regulation**

11 1. To the extent allowed by law, SCWC and RWC shall comply with this
12 Stipulation, prior to obtaining California Public Utilities Commission (“PUC”) approval. If the
13 PUC fails to approve SCWC’s and RWC’s participation or fails to provide approval of the neces-
14 sary rate adjustments so that SCWC and RWC may meet their respective financial obligations,
15 including the participation in Developed Water projects, Monitoring Programs, TMA and as
16 otherwise provided in this Stipulation, shall render the entirety of the Stipulation and those terms
17 of any judgment based on this Stipulation invalid, void and unenforceable, as to any Stipulating
18 Party who files and serves a notice of rescission within sixty days of notice by SCWC or RWC of
19 a final PUC Order.

20 2. Any Party, or its successors or assigns, agreeing to become a new customer
21 of SCWC or RWC, or an existing customer proposing to increase its water use through a change
22 in land use requiring a discretionary land use permit or other form of land use entitlement, that
23 has not executed reservation contracts for supplemental water as specified in Exhibit F will
24 provide the following, once approved by the PUC:

25 (a) If in the Santa Maria Valley Management Area, a water resource
26 development fee as specified in Exhibit F or a source of supplemental water sufficient to offset
27 the consumptive demand associated with the new use as provided in Paragraph V(E); or

28 ///

1 (b) If in the NMMA, a water resource development fee, or a source of
2 supplemental water sufficient to offset the consumptive demand associated with the new use.

3 3. Any Person who is not engaged in a New Urban Use and who agrees to
4 become a customer of SCWC or RWC shall retain its right to contest the applicable water
5 resource development fee, should that fee ever become applicable to that Person.

6 **E. Designation of Address, for Notice and Service**

7 Each Stipulating Party shall designate the name, address and e-mail address, if any, to be
8 used for purposes of all subsequent notices and service, either by its endorsement on the Stipula-
9 tion for entry of judgment or by a separate designation to be filed within thirty days after execu-
10 tion of this Stipulation. This designation may be changed from time to time by filing a written
11 notice with the Court. Any Stipulating Party desiring to be relieved of receiving notices may file
12 a waiver of notice on a form approved by the Court. The Court shall maintain at all times a
13 current list of Parties to whom notices are to be sent and their addresses for purposes of service.
14 The Court shall also maintain a full current list of names, addresses, and e-mail addresses of all
15 Parties or their successors, as filed herein. Copies of such lists shall be available to any Person.
16 If no designation is made, a Stipulating Party's designee shall be deemed to be, in order of
17 priority: i) the Party's attorney of record; ii) if the Party does not have an attorney of record, the
18 Party itself at the address specified.

19 **F. No Loss of Rights**

20 Nothing in this Stipulation shall be interpreted to require or encourage any Stipulating
21 Party to use more water in any Year than is actually required. As between the Stipulating Parties,
22 failure to use all of the water to which a Stipulating Party is entitled hereunder shall not, no matter
23 how long continued, be deemed or constitute an abandonment or forfeiture of such Stipulating
24 Party's rights, in whole or in part.

25 **G. Intervention After Judgment**

26 Any Person who is not a Party or successor to a Party, who proposes to use Groundwater
27 or Storage Space, may seek to become a Party to the judgment through a petition for intervention.
28 The Court will consider an order confirming intervention following thirty days notice to the

1 Parties. Thereafter, if approved by the Court, such intervenor shall then be a Party bound by the
2 judgment as provided by the Court.

3 **H. Stipulation and Judgment Binding on Successors, Assigns, etc.**

4 The Stipulating Parties agree that all property owned by them within the Basin is subject
5 to this Stipulation and the judgment to be entered based upon the terms and conditions of this
6 Stipulation. This Stipulation and the judgment will be binding upon and inure to the benefit of
7 each Stipulating Party and their respective heirs, executors, administrators, trustees, successors,
8 assigns, and agents. This Stipulation and the judgment to be entered based the terms and condi-
9 tions of this Stipulation shall not bind the Stipulating Parties that cease to own property within the
10 Basin, or cease to use Groundwater. As soon as practical after the effective date of this Stipula-
11 tion, a memorandum of agreement referencing this Stipulation shall be recorded in Santa Barbara
12 and San Luis Obispo Counties by Santa Maria, in cooperation with the Northern Cities and
13 SCWC. The document to be recorded shall be in the format provided in Exhibit "H".

14 **I. Costs**

15 No Stipulating Party shall recover any costs or attorneys fees from another Stipulating
16 Party incurred prior to the entry of a judgment based on this Stipulation.

17 **J. Non-Stipulating Parties**

18 It is anticipated that the Court will enter a single judgment governing the rights of all
19 Parties in this matter. The Stipulating Parties enter into this Stipulation with the expectation that
20 the Court will enter, as a part of the judgment, the terms and conditions of this Stipulation. This
21 Stipulation shall not compromise, in any way, the Court's legal and equitable powers to enter a
22 single judgment that includes provisions applicable to the non-Stipulating Parties that may
23 impose differing rights and obligations than those applicable to the Stipulating Parties. As against
24 non-Stipulating Parties, each Stipulating Party expressly reserves and does not waive its right to
25 appeal any prior or subsequent ruling or order of the Court, and assert any and all claims and
26 defenses, including prescriptive claims. The Stipulating Parties agree they will not voluntarily
27 enter into a further settlement or stipulation with non-Stipulating Parties that provides those non-
28 Stipulating Parties with terms and conditions more beneficial than those provided to similarly

1 situated Stipulating Parties.

2 **K. Counterparts**

3 This Stipulation may be signed in any number of counterparts, including counterparts by
4 facsimile signature, each of which shall be deemed an original, but all of which shall together
5 constitute one and the same instrument. The original signature pages shall be filed with Court.

6 **L. Effective Date**

7 This Stipulation shall be effective when signed by the Stipulating Parties listed on Exhibit
8 “A” and accepted by the Court.

Party	Signature, title, and date	Parcels Subject to Stipulation
Attorney of Record	Approved as to form: By: _____ Date: _____	

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PROOF OF SERVICE

I am a resident of the State of California, over the age of eighteen years, and not a party to the within action. My business address is HATCH & PARENT, 21 E. Carrillo Street, Santa Barbara, California 93101.

Pursuant to the Court's Order dated June 28, 2000, I, Gina Lane, did the following:

- Posted the following document at approximately 4:30 p.m. on June 30, 2005.

STIPULATION (JUNE 30, 2005 VERSION)

- Mailed a Notice of Availability to all parties (designating or defaulting to mail service) on the current website's service list.

I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

Executed on June 30, 2005, at Santa Barbara, California.



GINA M. LANE

**Appendix H – Board Resolution 2014-1335 Water Shortage Response
and Management Plan**

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2014-1335**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTING A WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN PURSUANT TO
WATER CODE § 375**

WHEREAS, the Nipomo Community Services District ("District") provides water service within the District's water service area pursuant to § 61100 (a) of the Community Services District Law which provides:

"(a) Supply water for any beneficial uses, in the same manner as a municipal water district, formed pursuant to the Municipal Water District Law of 1911, Division 20 (commencing with Section 71000) of the Water Code. In the case of any conflict between that division and this division, the provisions of this division shall prevail"; and

WHEREAS, § 61060 (b) of the Community Services District Law provides in relevant part:

"A district shall have and may exercise all rights and powers, expressed and implied, necessary to carry out the purposes and intent of this division, including, but not limited to, the following powers:

(b) To adopt, by ordinance, and enforce rules and regulations for the administration, operation, and use and maintenance of the facilities and services listed in Part 3 (commencing with Section 61100)"; and

WHEREAS, California Water Code Section 375 States in pertinent part:

(a) Notwithstanding any other provision of the law, any public entity which supplies water at retail or wholesale for the benefit of persons within the service area or area of jurisdiction of the public entity may, by ordinance or **resolution** adopted by a majority of the members of the governing body after holding a public hearing upon notice and making appropriate findings of necessity for the adoption of a water conservation program, adopt and enforce a water conservation program to reduce the quantity of water used by those persons for the purpose of conserving the water supplies of the public entity; and

WHEREAS, it is essential for the protection of the health, welfare, and safety of the residents of the District and the public benefit of the State of California ("State"), that the groundwater resources of the Nipomo Mesa be conserved; and

WHEREAS, Governor Jerry Brown on January 17, 2014 proclaimed that the entire State of California to be in a Drought State of Emergency; and

WHEREAS, the District's current water supply is limited to groundwater extracted from the Nipomo Mesa Management Area (NMMA) (also referred to as the Nipomo Mesa Water

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2014-1335**

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NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTING A WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN PURSUANT TO WATER
CODE § 375**

Conservation Area (NMWCA) by the County of San Luis Obispo), of the Santa Maria Groundwater Basin; and

WHEREAS, the District is a party to a groundwater adjudication, Santa Maria Valley Water Conservation District v. City of Santa Maria, etc. et al., Case No. CV 770214 (“Groundwater Litigation”); and

WHEREAS, pursuant to Section VI D(1) of the June 2005 Stipulation as incorporated into the January 25, 2008 Final Judgment in the Groundwater Litigation the Nipomo Mesa Management Area Technical Group declared that a Potentially Severe water shortage condition has existed within the Nipomo Mesa Management Area since the spring of 2008 and during the intervening year, the drought continued and it is anticipated that in May of 2014 that the Nipomo Mesa Management Area Technical Group will declare a Severe water shortage condition; and

WHEREAS, the San Luis Obispo County Department of Planning and Building’s 2004 Resource Capacity Study for the Water Supply in the Nipomo Mesa Area recommended a Level of Severity III (existing demand equals or exceeds dependable supply) be certified for the Nipomo Mesa Water Conservation Area (NMWCA) and that measures be implemented to lessen adverse impacts of future development (said Study and referenced documents are incorporated herein by reference); and

WHEREAS, on June 26, 2007, the San Luis Obispo County Board of Supervisors certified the waters underlying the NMWCA at a Severity Level III; and

WHEREAS, the resource protection goals of the San Luis Obispo County South County Area Plan include the following:

- Balance the capacity for growth allowed by the Land Use Element with the sustained availability of resources.
- Avoid the use of public resources, services and facilities beyond their renewable capacities, and monitor new development to ensure that its resource demands will not exceed existing and planned capacities or service levels; and

WHEREAS, District Code §3.28.020 provides:

“...all intent-to-serve letters shall be based on findings that sufficient excess water and sewer capacity exists to serve the project...”; and

WHEREAS, Water Code § 71640 of the Municipal Water Service District Law provides:

“A district may restrict the use of district water during any emergency caused by drought, or other threatened or existing water shortage, and may prohibit the wastage of district water or the use of district water during such periods for any

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2014-1335**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTING A WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN PURSUANT TO WATER
CODE § 375**

purpose other than household uses or such other restricted uses as the district determines to be necessary. A district may also prohibit use of district water during such periods for specific uses which it finds to be nonessential"; and

WHEREAS, the District Board of Directors has noticed this public meeting pursuant to Water Code § 375 and has considered the Staff Report and public testimony regarding the adoption of this Resolution; and

WHEREAS, The District Board of Directors wishes to set forth a Water Shortage Response and Management Plan that provides a range of alternative actions that allows for flexibility in responding to a water shortage emergency; and

WHEREAS, based on the Staff Report, staff presentation, the reports and studies referenced in this Resolution and public comment, the District Board of Directors finds that:

- (a) That the Nipomo Mesa Management Area Technical Group has declared the Mesa to be in a Potentially Severe water shortage condition for the past six years; and
- (b) That based upon the lack of rainfall during the winter of 2013/2014 and the increase pumping by District and other purveyors in response, it is anticipated that in the near future, Nipomo Mesa Management Area Technical Group will find that the Nipomo Mesa is in a Severe water shortage condition; and
- (c) That it is necessary for the District to adopt a Water Shortage Response and Management Plan to be able to respond to the lack of available groundwater for the purpose of serving District residents.

WHEREAS, based on the Staff Report, staff presentation and public comment, the Board further finds:

- A. That the purpose and intent of this Resolution is consistent with the purposes found in the Judgment and Stipulation in the Groundwater Litigation imposing a physical solution to assure long-term sustainability of the groundwater basin and the San Luis Obispo County's certification of a Severity Level III for the waters underlying the NMWCA; and
- B. That adoption of the Water Shortage Response and Management Plan will provide greater assurances that there will be adequate groundwater to meet the present needs of District residents consistent with District Code §3.28.020 and the resource protection goals of the San Luis Obispo County South County Area Plan; and
- C. That adopting this Resolution will further conserve the water supply for the greater public benefit, with particular regards to domestic use, sanitation and fire protection; and
- D. That this Resolution adopts Rules and Regulations for the administration, operation and use of District services; and

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2014-1335**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTING A WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN PURSUANT TO WATER
CODE § 375**

WHEREAS, by adopting this Resolution, the District does not intend to limit other means of managing, protecting and conserving the groundwater basin by the District. Further, the District intends to work cooperatively with the NMMA Technical Group and other agencies, such as the County of San Luis Obispo, to implement regional solutions such as groundwater management and the importation of Supplemental Water to the NMMA\NMWCA; and

WHEREAS, based on the Staff Report, staff presentation and public comment, the District Board of Directors further finds this Resolution is adopted for the protection of the health, safety and welfare of District water customers who depend on the underlying groundwater basin as their source of water supply.

NOW, THEREFORE BE IT RESOLVED, DETERMINED AND ORDERED by the Board of Directors of the Nipomo Community Services District, as follows:

1. That the above recitals are true and correct.
2. The Board adopts the Water Shortage Response and Management Plan attached as Exhibit "A" to this Resolution.
3. The Board of Directors reserves the right to order or not order all of the provisions within the Water Shortage Response and Management Plan based upon the circumstances at the time that this policy needs to be enforced.


Upon motion by Director Harrison, seconded by Director Gaddis, on the following roll call vote, to wit:

AYES: Directors Harrison, Gaddis, Blair, Vierheilig and Armstrong
NOES: None
ABSENT: None
ABSTAIN: None


the foregoing resolution is hereby passed and adopted this 9th day of April, 2014.


CRAIG ARMSTRONG,
President of the Board of Directors

ATTEST:


MICHAEL S. LEBRUN
General Manager and Secretary to the Board

APPROVED:


MICHAEL W. SEITZ
District Legal Counsel

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2014-1335**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
NIPOMO COMMUNITY SERVICES DISTRICT
REAPPROVING A WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN
PURSUANT TO WATER CODE § 375**

EXHIBIT "A"

NCSD WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN

STAGE	GROUNDWATER CONDITION	RESPONSE ACTIONS	RELIEF OF RESTRICTIONS
I	All times	<ul style="list-style-type: none"> • Active outreach and education programs regarding water conservation best management practices. • Four Tier escalating water rates. • Recommended Customer Measures: <ul style="list-style-type: none"> ○ Fix all plumbing and irrigation leaks immediately. ○ Irrigate after 8PM and before 9AM. ○ Minimum to no irrigation in winter months. ○ Check all irrigation systems monthly. ○ Do not allow excessive run off. ○ Recirculate water in ornamental water features (fountains) • New applications for water service are accepted and processed. • Supplemental water is allocated to all new projects • New water service connections are made. 	Not Applicable.
II	Potentially Severe Water Shortage Conditions exists	<ul style="list-style-type: none"> • More aggressive conservation outreach and education efforts. • Four-Tier escalating water rates. • Encourage customers to implement the following practices: <ul style="list-style-type: none"> ○ All Stage I Measures ○ Cover Swimming Pools and spas. ○ Do not use water to wash down exterior surfaces (e.g. driveway, deck, home) • New applications for water service are accepted and processed. • Supplemental water is allocated to new projects. • New water service connections are made. 	Potentially Severe Water Shortage no longer exist.

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2014-1335**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTING A WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN PURSUANT TO WATER
CODE § 375**

STAGE	GROUNDWATER CONDITION	RESPONSE ACTIONS	RELIEF OF RESTRICTIONS
III	Severe Water Shortage conditions exists	<ul style="list-style-type: none"> • District targets a 30% reduction in production (Equating to a 752 acre foot or 245 million gallons of reduction in production on an annual basis). • Implement Stage III Drought Rates to encourage reduction in customer water demand. • Encourage customers to implement the following practices. <ul style="list-style-type: none"> ○ All Stage I and II measures. ○ Turn off all automated irrigation systems. ○ Provide minimum necessary irrigation to preserve trees and high-value landscape. ○ Do not drain or fill swimming pools or spas. ○ Do not use water for dust control or construction. ○ Do not use hoses to wash cars or equipment. ○ Turn off and drain ornamental fountains and water features • Suspend accepting applications for new water service. • Existing applications for new water service continue to be processed with allocations of supplemental water. • New water service connections are made. 	Severe Water Shortage no longer exist.**
IV	Severe Water Shortage conditions exists for >1YEAR or is triggered by both the Key Wells Index and the Coastal Criterion.	<ul style="list-style-type: none"> • District targets a 50% reduction in production (Equating to a 1,254 acre foot reduction in production on an annual basis). • Implement Stage IV Drought Rates to encourage reduction in customer water demand. • Encourage customers to implement the following practices: 	Severe Water Shortage conditions no longer exist.

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2014-1335**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTING A WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN PURSUANT TO WATER
CODE § 375**

STAGE	GROUNDWATER CONDITION	RESPONSE ACTIONS	RELIEF OF RESTRICTIONS
		<ul style="list-style-type: none"> ○ All Stage I, II, and III measures. ○ Do not use District water for irrigation/outdoor uses of any sort. ● New applications for water service are NOT accepted (Stage III) ● Cease processing existing applications for new water service. No allocation of supplemental water is made. ● New water service connections are made only to projects with preexisting service commitments. 	
V	Severe Water Shortage conditions for >2 years with BOTH triggers (Key Wells Index and Coastal Area Criterion).	<ul style="list-style-type: none"> ● District targets a 60% reduction in production. (Equating to a 1,504 acre foot reduction in production on an annual basis). ● Implement Stage V Drought Rates to encourage additional reduction in customer water demand. ● Declaration of a Water Shortage Emergency in accordance with CA Water Code Section 350. ● Suspend all new water service connections. ● Encourage customers to implement all Stage I-IV measures and to use only the absolute minimum water necessary for health and sanitation purposes. <ul style="list-style-type: none"> ○ All Stage I, II, and III measures. ○ Do not use District water for irrigation/outdoor uses of any sort. ○ Do not drain or fill swimming pools or spas. ○ All measures possible to reduce water use. ● New applications for water service are NOT accepted (Stage III) ● Existing applications for new water service are not processed (Stage IV) 	Severe Water Shortage conditions no longer exist.

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2014-1335**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTING A WATER SHORTAGE RESPONSE AND MANAGEMENT PLAN PURSUANT TO WATER
CODE § 375**

** The Nipomo Mesa Management Area (NMMA) Technical Group may determine Severe Water Shortage Conditions no longer exist when groundwater quality criteria threshold are no longer exceeded in a single measurement.

General Notes

1. The implementation of all rate increases and changes in the acceptance and processing of new services applications are subject to approval by the Board of Directors at the time each stage is triggered.
2. Potentially Severe and Severe Water Shortage conditions, Key Wells Index, and Coastal Criterion are as defined in the NMMA Technical Group, Water Shortage Conditions Response Plan, dated April 2009. Key criterion are as follows:

<u>Potentially Severe Water Shortage Conditions</u>	<u>Severe Water Shortage Conditions</u>
<ul style="list-style-type: none">• <i>Key Wells Index less than 31.5 ft msl</i>• <i>Greater than 250 mg/l chloride in any NMMA coastal monitoring well</i>	<ul style="list-style-type: none">• <i>Key Wells Index is less than 16.5 ft. msl</i>• <i>Greater than 500 mg/l chloride in any NMMA coastal monitoring well</i>

3. Reduction goals are a percentage of average annual production volumes for the five calendar years prior to the first year Nipomo Supplemental Water is delivered. NCSD's 2009-2013 average (2507 AFY) is used in the table above.

Appendix I- Consumer Confidence Report



Nipomo Community Services District

2019 CONSUMER CONFIDENCE REPORT

Annual Tests Show Nipomo's Water Meets Quality Standards

This report contains important information regarding your drinking water provided by the Nipomo Community Services District during 2019. If needed, you may choose to translate it or speak with someone who understands the report.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Favor de comunicarse con Nipomo Community Services District al (805) 929-1133 o 148 S. Wilson Street, Nipomo para asistirlo en español.

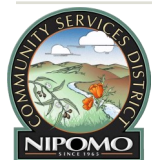
High Quality Water Delivered to Your Tap

Last year, Nipomo Community Services District (District) tap water met all USEPA and State drinking water health standards. The District vigilantly safeguards its water supplies and we are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies.



Questions

For more information about this report, or for any questions relating to your drinking water, please call (805) 929-1133 and ask for General Manager, Mario Iglesias, or visit our website at www.ncsd.ca.gov.



NCSD Elected Board of Directors: Dan Allen Gaddis, President | Craig Armstrong, Vice President
Bob Blair, Director | Ed Eby, Director | Dan Woodson, Director

District General Manager: Mario Iglesias

Results of 2019 Drinking Water Quality Tests

The tables on the next page list all of the drinking water contaminants that were detected during the most recent sampling. The presence of contaminants in the water does not necessarily indicate the water poses a health risk. State and Federal regulations require us to monitor for certain contaminants less frequently than once per year because the concentrations of those contaminants are not expected to vary significantly from year to year.

TERMS AND ABBREVIATIONS

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disin-

fectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect health at the MCL levels.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Unregulated: Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

LRAA: Locational Running Annual Average

NA: Not Applicable

ND: Not Detected

NL: Notification Level

NTU: Nephelometric Turbidity Units

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter ($\mu\text{g/L}$)

pCi/L: picocuries per liter

TON: Threshold Odor Number

$\mu\text{S/cm}$: microsiemens per centimeter (unit of specific conductance of water)

NOTES

(a) **Aluminum** also has a Secondary MCL of 200 ppb.

(b) **Arsenic** (10 ppb) is based on a running 1-year average. While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

(c) **Hexavalent Chromium:** There is currently no MCL for Hexavalent Chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.

(d) **Fluoride** target levels are set by State Water Resources Control Board Division of Drinking Water. As of October 1, 2018 the City of Santa Maria discontinued adding fluoride to the water supply.

(e) **Nitrate:** Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

(f) **City of Santa Maria - Total coliform MCL:** No more than 5% of monthly samples may be Total Coliform positive.

NCS D - Total coliform MCL: No more than 1 monthly sample may be Total Coliform positive.

(g) Compliance based on the locational running annual average (LRAA) of distribution system samples.

(h) **Turbidity:** Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

(i) All samples were below action levels.

(j) **Lead:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with the service lines and home plumbing. *Nipomo Community Services District* is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.

In 2019, no schools requested lead sampling.

(k) Water quality information from individual wells includes samples collected from 2019 and previous years as noted.

PRIMARY DRINKING WATER STANDARDS - MANDATORY HEALTH-RELATED STANDARDS

Parameter	Units	State MCL	PHG (MCLG)	PURCHASED CITY OF SANTA MARIA WATER			LOCAL GROUNDWATER (k)			MAJOR SOURCES
				RANGE	AVERAGE	YEAR	RANGE	AVERAGE	YEAR	
Aluminum (a)	ppb	1000	600	ND-94	56	2019	ND	ND	2017	Residue from water treatment; erosion of natural deposits.
Arsenic (b)	ppb	10	0.004	NA	NA	2019	3-5	4.3	2017	Residue from water treatment; erosion of natural deposits.
Hexavalent Chromium (c)	ppb	10	0.02	NA	NA	2019	ND-1.2	0.88	2017	Erosion of natural deposits; industrial wastes.
Fluoride (d)	ppm	2	1	0.10-0.25	0.12	2019	ND	ND	2017	Erosion of natural deposits; additive to promote strong teeth.
Nitrate as N (e)	ppm	10	10	0.4-4.6	1.2	2019	1.8-9.3	5.3	2019	Leaching from fertilizers; erosion of natural deposits.
Selenium	ppb	50	30	NA	NA	2019	ND-11	5	2017	Erosion of natural deposits; industrial wastes.
Gross Alpha	pCi/L	15	(0)	3-11	6	2019	2.5-11.2	5.5	2017	Erosion of natural deposits.
Uranium	pCi/L	20	0.43	3.2-4.1	3.7	2019	1.71-4.8	3.3	2017	Erosion of natural deposits.

DISTRIBUTION SYSTEM MONITORING

Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	1.2-3.2	2.5	2019	1.77-2.24	2	2019	Measure of the disinfection of the water.
Total Coliform Bacteria (f)	NA	See note (d)	(0)	NA	0.0%	2019	0	0	2019	Naturally present in the environment.
Total Trihalomethanes (g)	ppb	80	NA	31.1-41.4	34.5	2019	ND-28	13	2019	Byproduct of drinking water chlorination.
Haloacetic Acids (g)	ppb	60	NA	11.3-14.8	12.4	2019	ND-21	8.5	2019	Byproduct of drinking water chlorination.

SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS

Chloride	ppm	500	NA	17-60	37	2019	48-57	53.5	2017	Runoff/leaching from natural deposits; seawater influence.
Iron	ppb	300	NA	100-220	120	2019	ND	ND	2019	Runoff/leaching from natural deposits; industrial wastes.
Odor Threshold	TON	3	NA	1-2	1.8	2019	ND	ND	2017	Naturally-occurring organic materials.
Specific Conductance	µS/cm	1600	NA	370-980	663	2019	662-1000	847.3	2017	Substances that form ions when in water; seawater influence.
Sulfate	ppm	500	NA	21-280	155	2019	139-283	212.3	2017	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids	ppm	1000	NA	99-690	407	2019	420-680	557.5	2017	Runoff/leaching from natural deposits.
Turbidity (h)	NTU	5	NA	0.1-0.2	0.11	2019	0.3-0.8	0.5	2017	Soil runoff.

ADDITIONAL PARAMETERS (UNREGULATED)

Alkalinity (Total) as CaCO ₃	ppm	NA	NA	70-190	125	2019	100-160	133	2017	Runoff/leaching from natural deposits; seawater influence.
Boron	ppb	NL = 1000	NA	140-200	173	2019	ND-100	50	2017	Runoff/leaching from natural deposits; seawater influence.
Calcium	ppm	NA	NA	11-94	53	2019	51-90	71	2017	Runoff/leaching from natural deposits; seawater influence.
Hardness (Total) as CaCO ₃	ppm	NA	NA	42-420	235	2019	218-393	310	2017	Leaching from natural deposits.
Magnesium	ppm	NA	NA	9.8-24	24.9	2019	22-41	33	2017	Runoff/leaching from natural deposits; seawater influence.
pH	pH units	NA	NA	7.3-8.9	8.2	2019	7.0-7.7	7.4	2017	Runoff/leaching from natural deposits; seawater influence.
Potassium	ppm	NA	NA	1.4-3.2	2.4	2019	2-3	2.5	2017	Runoff/leaching from natural deposits; seawater influence.
Sodium	ppm	NA	NA	19-57	43	2019	46-60	54	2017	Runoff/leaching from natural deposits; seawater influence.
Vanadium	ppb	NL = 50	NA	3.2-4.1	3.5	2019	11-12	11.8	2017	Runoff/leaching from natural deposits; combustion of fossil fuels

LEAD AND COPPER SAMPLING PROGRAM - SAMPLING OCCURRED IN AUGUST 2018

Parameter	Units	Samples Collected	90th Percentile Level Detected	Number of Sites Exceeding AL	AL	PHG	MAJOR SOURCES			
Copper (i)	ppm	36	ND	0	1.3	0.3	Plumbing system corrosion; erosion of natural deposits.			
Lead (i)(j)	ppb	36	0.4	0	15	0.2	Plumbing system corrosion; erosion of natural deposits.			

Our Water Quality Professionals Provide Around-the-Clock Service

Our water quality professionals maintain, treat, and test the water system ensuring quality water is delivered to your home or business. On-call personnel are available after hours 7 days a week.

GENERAL INFORMATION

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Radioactive contaminants, that can be naturally-occurring or the result of oil and gas production and mining activities.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application and septic systems.

ENSURING WATER SAFETY

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

PEOPLE WITH SPECIAL NEEDS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care provider. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline: (1-800-426-4791).

YOUR NCSD WATER

The Nipomo Community Services District is committed to producing the highest quality drinking water from two sources of supply: District water wells located in the Nipomo Mesa, and City of Santa Maria water delivered to the District via the Nipomo Supplemental Water Project interconnect. City of Santa Maria Water is a blend of groundwater and surface water. In 2019, the District received about 50 percent of its water from the City of Santa Maria.

All water is disinfected and introduced to the District water distribution system. The District's water distribution system includes over ninety miles of piping and 5 storage tanks with 4 million gallons of combined capacity. Ground elevation relative to the tanks controls the water pressure throughout the system.

WATER SOURCE ASSESSMENT AND SECURITY

An assessment of the drinking water sources for the Nipomo Community Services District was completed in 2001. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: historic gas stations, low and high density septic systems and wastewater treatment plants. A copy of the complete assessment is available at the District office or from SWRCB, DDW, 1180 Eugenia PL, Suite 200, Carpinteria, CA 93013, 1-805-566-1326.

The District has implemented security systems to protect the distribution and storage of the drinking water. These measures are part of our ongoing operation and ensure the safe treatment and delivery of your drinking water.

STAY CONNECTED

NCSD Regular Board meetings are open to the public. Meetings take place every second and fourth Wednesday of the month at 9:00 AM in the NCSD Board Room, 148 S. Wilson St, Nipomo.

If you have questions regarding the information in this report, please call the District at (805) 929-1133 Monday - Friday 8AM - 4:30PM or email info@ncsd.ca.gov



Nipomo Community Services District

148 S Wilson St, PO Box 326, Nipomo, CA 93444 | (805) 929-1133 | info@ncsd.ca.gov | www.ncsd.ca.gov



Appendix J- Water Shortage Contingency Plan



NIPOMO COMMUNITY SERVICES DISTRICT

WATER SHORTAGE CONTINGENCY PLAN

DECEMBER 2021

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Nipomo Community Services District
Water Shortage Contingency Plan
December 2021

Board of Directors

Ed Eby

Dan Allen Gaddis

Bob Blair

Dan Woodson

Richard Malvarose

NCSD Staff

Mario Iglesias – General Manager

Peter V. Sevcik, PE – Director of Engineering and Operations

Elizabeth Villanueva, EIT – Assistant Engineer

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Table of Contents

CHAPTER 1 INTRODUCTION 1-1

 1.1 Law 1-1

 1.2 Nipomo Community Services District 1-1

CHAPTER 2 Water Supply Analysis 2-1

 2.1 Water Supply Reliability Analysis 2-1

 2.2 Annual Water Supply and Demand Assessment Procedures 2-2

 2.2.1 Assessment Methodology 2-3

 2.2.2 Water Supply Reliability Analysis Timeline 2-3

 2.3 Six Standard Water Shortage Levels 2-4

CHAPTER 3 Water Shortage Response Actions 3-1

 3.1 Shortage Response Actions 3-1

 3.1.1 Demand Reduction 3-1

 3.1.2 Supply Augmentation 3-2

 3.1.3 Operational Changes 3-2

 3.1.4 Additional Mandatory Restrictions 3-2

CHAPTER 4 Emergency Response Actions 4-1

 4.1 Emergency Response Plan 4-1

 4.2 Seismic Risk Assessment and Mitigation Plan 4-1

 4.2.1 Faults, Earthquakes, and Liquefaction 4-2

 4.2.2 Seismic Risk 4-6

 4.2.3 Mitigation 4-6

CHAPTER 5 Shortage Response Effectiveness 5-1

 5.1 Communication Protocols 5-1

CHAPTER 6 Compliance and Enforcement 6-1

 6.1 Compliance and Enforcement 6-1

 6.2 Legal Authorities 6-1

 6.3 Financial Consequences of WSCP 6-2

6.4 Monitoring and Reporting 6-2

CHAPTER 7 WSCP Refinement, Adoption and Submittal 7-1

7.1 WSCP Refinement Procedures 7-1

7.1.1 Special Water Feature Distinction 7-1

7.2 Plan Adoption, Submittal and Availability 7-1

List of Tables

Table 2-1: Climate Change Vulnerability Screening..... 2-1

Table 2-2: Key Data Inputs..... 2-3

Table 2-3: Water Shortage Contingency Plan Levels 2-5

Table 3-1 Demand Reduction Actions 3-1

Table 3-2: Supply Augmentation and Other Actions 3-2

Table 4-1: Catastrophic Supply Interruption Actions 4-1

Table 5-1: Stages of Water Shortage Contingency Plan – Communication Protocols..... 5-1

Table 6-1: Excessive Water Use Penalties and Charges..... 6-1

Table 7-1: Notification to Cities and Counties 7-1

List of Figures

Figure 2-1: Water Supply Reliability Analysis Timeline..... 2-3

Figure 2-2: Crosswalk for the District’s 2015 Shortage Levels and the 2020 WSCP Mandated Shortage Levels..... 2-5

Figure 4-1: Earthquake Fault Line Map..... 4-4

Figure 4-2: Ground Shaking Potential Map..... 4-5

Appendices

Appendix A – Relevant Water Code Sections

Appendix B – Relevant Sections of San Luis Obispo County Local Hazard Mitigation Plan October 2019

Appendix C – Notification to Cities and Counties

Appendix D – WSCP Adoption Resolution

Appendix E – Electronic Submittal to DWR

Appendix F – Water Savings Estimates

Bibliography

The following reports, studies, and other material were reviewed during preparation of this Urban Water Management Plan update.

- 1) Nipomo Community Services District 2020 Urban Water Management Plan dated August 2021 and prepared by MKN & Associates.
- 2) 2020 Urban Water Management Plans Guidebook for Urban Water Suppliers dated March 2021 and prepared by the California Department of Water Resources.
- 3) Nipomo Management Area 13th Annual Report (NMMA TG Annual Report) Calendar Year 2020 dated April 2020 and prepared by NMMA Technical Group.
- 4) San Luis Obispo County Multi-Jurisdictional Hazard Mitigation Plan dated October 2019 and prepared by Wood.

List of Acronyms

AB - Assembly Bill	IRWMP - Integrated Regional Water Management Plans
ADU – Accessory Dwelling Unit	KWI – Key Wells Index
AF – Acre-Foot	MG – Million Gallons
AFY – Acre-Feet per Year	MGY – Million Gallons per Year
AMI – Advanced Metering Infrastructure	NA – Not Applicable
AWIA – America’s Water Infrastructure Act	NCMA - Northern Cities Management Area
AWWA – American Water Works Association	NCS D - Nipomo Community Services District
BMP – Best Management Practice	NMMA – Nipomo Mesa Management Area
CASGEM – California Statewide Groundwater Elevation Monitoring Program	NMMA TG – Nipomo Mesa Management Area Technical Group
CA – California	NMWCA – Nipomo Mesa Water Conservation Area
CD – Compact Disc	PWS – Public Water System
CII – Commercial, Industrial, Institutional, water use sectors	Report – NMMA-TG’s Annual Report
CIMIS – California Irrigation Management Information System	RRA – Risk and Assessment
City – City of Santa Maria	RUWMP – Regional Urban Water Management Plan
CUWCC – California Urban Water Conservation Council	SB – Senate Bill
CWC – California Water Code	SWRCB – State Water Resources Control Board
DACs – Disadvantaged Communities	SLOCOG – San Luis Obispo Council of Governments
DMMs – Demand Management Measures	SLO-PD - San Luis Obispo Planning and Development
DOF – Department of Finance	SOI- Sphere of Influence
DRA – Drought Risk Assessment	SQ FT – Square Feet
DU – Dwelling Unit	SMVMA - Santa Maria Valley Management Area
DWR – Department of Water Resources	NSWP - Nipomo Supplemental Water Project
eARDWP - Electronic Annual Reports to the Drinking Water Program (SWRCB)	SB X7-7 – Senate Bill Seven of the Senate’s Seventh Extraordinary Session of 2009
ETo - Reference Evapotranspiration	UMWP - Urban Water Management Plan
GIS - Geographic Information System	US EPA - United States Environmental Protection Agency
GPCD - Gallons per Capita per Day	WMWC - Woodlands Mutual Water Company
GSA - Groundwater Sustainability Agency	WRF - Water Reclamation Facility
GSWC - Golden State Water Company	WSCP - Water Shortage Contingency Plan
GSWCCR – Golden State Water Company Cypress Ridge	WSS - WaterSense Specification
HECW - High-Efficiency Clothes Washer	WUE - Water Use Efficiency
HET/DFT - High-Efficiency Toilet	WWTP - Wastewater Treatment Plant
ID - Identifier	

CHAPTER 1 INTRODUCTION**1.1 Law**

This Water Shortage Contingency Plan (WSCP) for the Nipomo Community Services District (District) outlines a program for responding to water supply limitations. The intent of the water conservation measures, progressive restrictions on water use, and method of use identified in this WSCP is to enable the District to implement water management measures in a fair and orderly manner for the benefit of the public.

This WSCP describes measures to be implemented during times of declared water shortages, or declared water shortage emergencies by either the Nipomo Mesa Management Area Technical Group (NMMA-TG), the District, State or Federal government. It establishes six stages of drought response actions to be implemented in times of shortage, with increasing restrictions on water use in response to decreasing available supplies.

1.2 Nipomo Community Services District

The District was formed on January 28, 1965 to provide water and sewer services as allowed under the Community Service District Law of Government Code Section 61000 et. seq. The current service area boundary encompasses approximately 3,907 acres (parcel acreage only and excludes right-of-way) in the Nipomo area of southern San Luis Obispo County, and serves water to an estimated current year (2020) population of 13,771 people. The District service area consists primarily of residential land uses, with some light commercial and suburban residential. The District is comprised of one water system with three pressure zones; one zone serves the Blacklake Specific Plan area, one zone serves the Maria Vista Pressure Zone, and the third zone serves the core of the service area.

Groundwater was the sole source of the District's water supply until 2015, when the District began importing water from the City of Santa Maria (City) as part of the Nipomo Supplemental Water Project (NSWP), dictated by the Final Judgement of Santa Maria River Valley Groundwater Basin.

With respect to groundwater extraction from the Santa Maria River Valley Groundwater Basin, the District coordinates with the NMMA-TG, which is the court-assigned entity responsible for managing groundwater within the Santa Maria River Valley Groundwater Basin.

It should be noted that relevant sections of the water code as related to the WSCP are included in Appendix A.

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CHAPTER 2 WATER SUPPLY ANALYSIS

2.1 Water Supply Reliability Analysis

As described in Chapter 6 of the District’s 2020 UWMP, the water supply portfolio consists of groundwater from the Santa Maria Valley Groundwater Basin with a maximum pumping limit of 2,533 AFY and imported water from the Nipomo Supplemental Water Project. The District executed the Wholesale Water Supply Agreement (Wholesale Agreement) with the City on May 7, 2013. Supplemental water consists of a “municipal mix” of both surface water from the State Water Project and groundwater from the City of Santa Maria. The Wholesale Agreement dictates a minimum water delivery to the District of 2,500 AFY by fiscal year 2025-26 with a maximum allowable delivery of 6,200 AFY. It should be noted that the existing Santa Maria River crossing, pump station and portion of transmission pipeline were designed to deliver 6,200 AFY. However, pump replacements and additional pipelines would be required to deliver the full 6,200 AFY to the District service area. Based on redundancy within the Joshua Road Pump Station, multiple wells sites throughout the system, and groundwater management practices under the NMMA, the District’s water supply sources are considered 100% reliable and available during normal, single and multiple dry year conditions.

To identify potential water supply reliability concerns, the District completed a preliminary climate change vulnerability screening analysis (including impacts from extreme heat, water quality, sea level rise, flooding, and wildfire) for its supplies as shown in **Table 2-1**.

Table 2-1: Climate Change Vulnerability Screening		
Preliminary Assessment	Groundwater	Imported Water
	Level of Risk	Level of Risk
I. Water Supply and Demand		
Are the water supply diversions sensitive to climate change?	3	2
Is the water supply source affected by urban or agricultural water demand that might be climate sensitive?	2	2
Is groundwater a major supply source?	5	3
Does the water supply source rely on or could it be affected by snowmelt?	Not applicable	3
Does the water supply source come from or could it be affected by coastal aquifers? Has saltwater intrusion been a problem in the past?	2	Not applicable
Does the water supply source rely on or could it be affected by changes in stored water supplies?	2	2
II. Extreme Heat		
Could extreme heat impact operations of the water supply project or diversions?	Not applicable	Not applicable
Does the supply source rely on equipment or infrastructure that could be impacted by extreme or prolonged heat?	Not applicable	Not applicable
III. Water Quality		
Could water quality issues, such as low dissolved oxygen, algal blooms, disinfectant biproducts affect the water supply source?	Not applicable	Not applicable
Could reduction in assimilative capacity of a receiving water body affect the water supply source?	Not applicable	1

Table 2-1: Climate Change Vulnerability Screening		
Preliminary Assessment	Groundwater	Imported Water
	Level of Risk	Level of Risk
Could the water supply source be affected by water quality shifts during rainfall/runoff events?	2	1
IV. Sea Level Rise		
Is any of the water supply source infrastructure located in area that could be exposed to rising tides?	Not applicable	Not applicable
Could coastal erosion affect the water supply source?	Not applicable	Not applicable
Is the water supply source dependent on coastal structures, such as levees or breakwaters, for protection from flooding?	Not applicable	Not applicable
V. Flooding		
Is the water supply or any of its associated infrastructure located within the 200-year floodplain? Does the water supply source rely on flood protection infrastructure such as levees or dams?	Not applicable	Not applicable
VI. Wildfire		
Is the water supply source located in an area that is expected to experience an increase in wildfire activity or severity? Would a wildfire result in damage to the water supply source infrastructure or interruption of its ability to perform as designed? Could the water supply source be affected by an increase in wildfire activity or severity in an upstream watershed or other adjacent area?	Not applicable	1
Notes: SMVGWB = Santa Maria River Valley Groundwater Basin NSWP = Nipomo Supplemental Water Project Level of Risk: 1 - low, 3-medium, 5-high		

Per **Table 2-1**, the District’s existing water distribution system has a low vulnerability to potential extreme heat, water quality, sea level rise, flooding, and wildfire impacts.

2.2 Annual Water Supply and Demand Assessment Procedures

In accordance with California Water Code (CWC) 10632 the District will conduct an annual water supply and demand assessment by July 1st of each year.

A copy of the annual assessment will be submitted to the Board Members ahead of the meeting for review. The Board of Directors will listen to the findings and recommendations outlined in the report and vote to approve and implement the actions described in the annual report starting at the May 2022 Board meeting.

The WSCP team will consist of the District’s General Manager and District Engineer. The team will draft and prepare the annual water supply reliability analysis report. The report will use the key data inputs and methodology described in **Table 2-2** to determine the unconstrained demand, available water supply, and reliability for the current year and one dry year.

Table 2-2: Key Data Inputs		
Data Inputs:		Description:
Current year Customer Demand and Available Supply	Public Water System Statistics Report	The water statistics sheet is prepared by the District’s general manager in January for the previous year. The statistics sheet will be used to calculate water supply by source and show unconstrained water demand.
Projected Water Supply	Well Production History Worksheet, NMMA TG Annual Report	This worksheet is prepared by the District’s general manager and is updated each year. This worksheet provides the monthly production totals for each well. This will be used to help determine water supply reliability. The NMMA TG Annual Report would identify drought conditions and groundwater pumping limitations.
Infrastructure Considerations	Annual Project List and Schedule	This list will be prepared by the general manager and describe all the planned District projects for the year. The annual project list will be used to assess infrastructure capabilities and any potential constraints to the water system.

2.2.1 Assessment Methodology

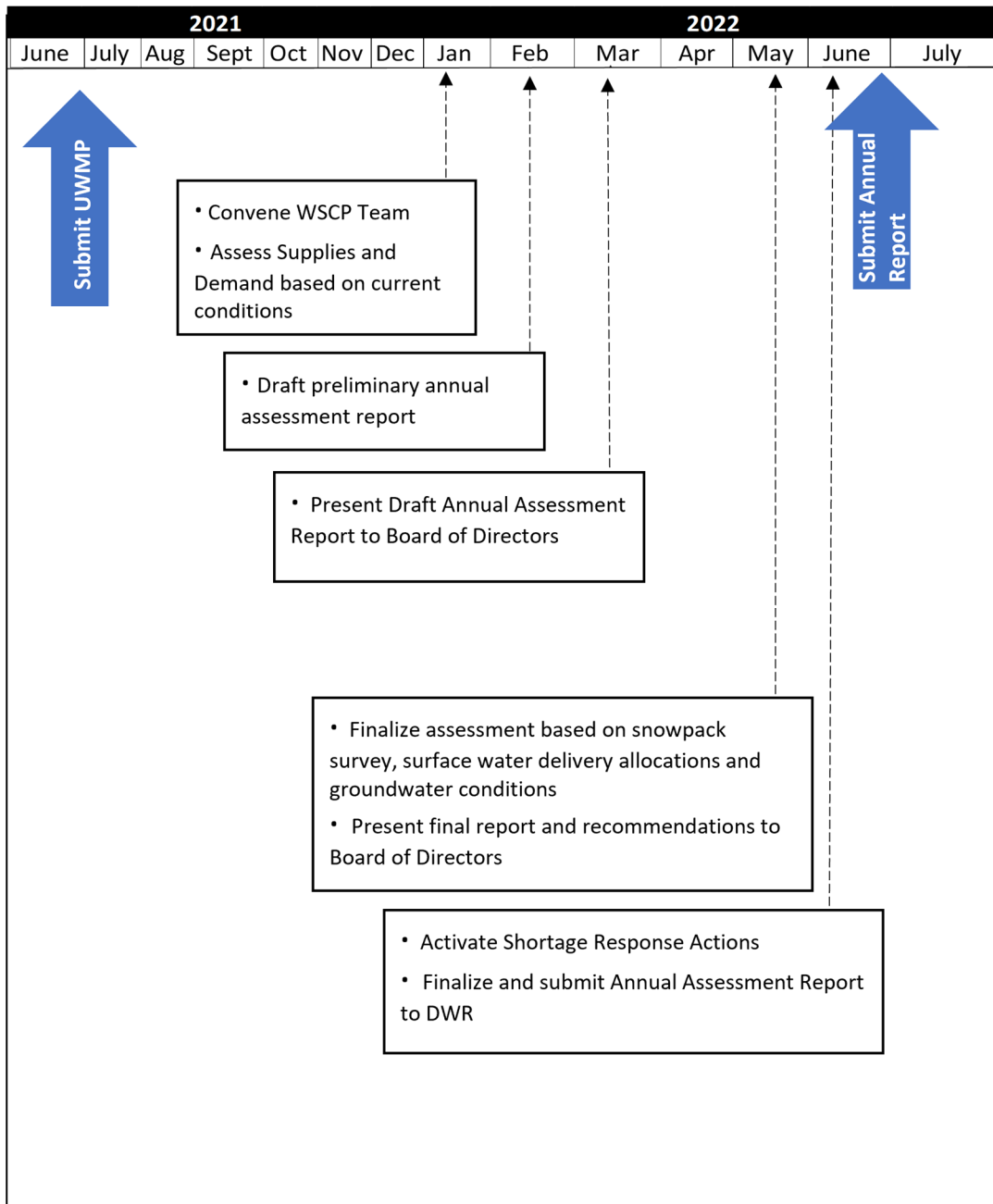
The District will enact water shortage response actions if Stage 2 or higher is in place, as defined by NMMA. The District will take the following steps to evaluate the water supply and demand:

1. Evaluate Water Supply: Using the current NMMA Annual Report, determine the available amount of water available to the District.
2. Calculate Unconstrained Customer Demand: Using the Public Water System Statistics Sheet calculate the total water delivered the previous year.
3. Planned Water Use for Current Year Considering Dry Year: Compare the available water supply and the customer demand and determine if there is an expected water shortage.
4. Infrastructure Considerations: Using relevant future project lists and schedule, determine if any projects will reduce or increase supply.
5. Compare supply and demand and decide on the level of water supply reliability for current year and one dry year, declare a water shortage level, and issue relevant communication, if necessary.

2.2.2 Water Supply Reliability Analysis Timeline

The District will start to evaluate the water supply availability in January and will submit the report to the DWR in June of each year as shown in **Figure 2-1**.

Figure 2-1: Water Supply Reliability Analysis Timeline




2.3 Six Standard Water Shortage Levels

This WSCP identifies water conservation measures and progressive restrictions on water use to enable the District to implement water management measures in a fair and orderly manner for the benefit of the public in accordance with CWC §10632(a)(3). This WSCP establishes six (6) stages of drought response actions that could be voluntarily implemented by the District in times of shortage, with increasing restrictions on water use in response to decreasing supplies. This WSCP includes both voluntary and mandatory water use reductions depending on the causes, severity, and anticipated duration of the water supply shortage. Water use reduction stages may be triggered by contamination in one water source, combination of sources, or during times that a shortage is declared by the NMMA-TG, District, State, or Federal government. Because shortages overlap stages, triggers automatically implement the more restrictive stage. Specific criteria for triggering the District’s water use reduction stages are shown in **Table 2-3**.

Table 2-3: Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Shortage Response Actions
1	Up to 10%	Always in place with voluntary measures and outreach.
2	Up to 20%	Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 20% reduction in groundwater production.
3	Up to 30%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 30% reduction in groundwater production.
4	Up to 40%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 30% reduction in groundwater production.
5	Up to 50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion with goal of voluntary 50% reduction in groundwater production.
6	>50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion with goal of voluntary 60% reduction in groundwater production.

Figure 2-2 provides a comparison that shows the District’s water shortage levels (per NMMA defined drought levels) to those mandated by statute.

Figure 2-2: Comparison for the District’s 2015 Shortage Levels and the 2020 WSCP Mandated Shortage Levels

Stages from 2015 UWMP			Crosswalk	2020 WSCP Mandated Shortage Levels			
Stage	Percent Supply Reduction	Water Supply Condition		Stage	Percent Supply Reduction	Water Supply Condition	Mandatory compliance with water savings measures
1	0%	Always in place		1	0% to 10%	Normal	Voluntary, always in place
2	20%	Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	 	2	10% to 20%	Slightly Restricted	Mandatory compliance
3	30%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	 	3	20% to 30%	Moderately Restricted	Mandatory compliance
4	50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion		4	30% to 40%	Restricted	Mandatory compliance
5	60%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion.		5	40% to 50%	Severely Restricted	Mandatory compliance
				6	50% and above	Extremely Restricted	Mandatory compliance

CHAPTER 3 WATER SHORTAGE RESPONSE ACTIONS

3.1 Shortage Response Actions

3.1.1 Demand Reduction

Table 3-1 summarizes the restrictions and prohibitions on end uses during each stage of water shortage response implemented by the District in accordance with CWC §10632(a)(4)(B). The shortage response actions are aligned to the six water shortage levels with the goal of reducing the gap between supply and demand by the required amount per level.

Table 3-1 Demand Reduction Actions			
Stage	Demand Reduction Actions	Estimated Extent of Reducing the Water Shortage Gap	Penalty, Charge, or Other Enforcement?
1	Other - Education for water conservation methods.	Low	No
1	Other - Public outreach for voluntary reduction in water use by 15%	Low	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	High	Yes
1	Landscape - Limit landscape irrigation to specific times	High	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Medium	Yes
1	Water Features - Restrict water use for decorative water features, such as fountains	High	Yes
1	Landscape- Check all irrigation systems periodically	Low	Yes
2	All Stage 1 reduction actions	Medium	Yes
2	Water Features- Cover swimming pools and spas when not in use	Low	Yes
2	Other - Prohibit use of potable water for washing hard surfaces	Low	Yes
3	All Stage 1 and 2 reduction actions	High	Yes
3	Landscape - Limit landscape irrigation to specific days	High	Yes
3	Other – Prohibit use of hoses without automatic shut-off devices	High	Yes
3	Landscape - Other landscape restriction or prohibition	High	Yes
3	Other – Prohibit use of potable water for construction and dust control	Low	Yes
3	Other - Turn off all automated irrigation systems	High	Yes
3	Water Features – Prohibit water use for decorative water features, such as fountains	High	Yes
4	All Stage 1,2 and 3 reduction actions	Medium	Yes
4	Landscape - Other landscape restriction or prohibition	High	Yes
5	All Stage 1,2,3 and 4 reduction actions	Medium	Yes
5	Landscape - Other landscape restriction or prohibition	High	Yes
6	All Stage 1,2,3,4 and 5 reduction actions	Medium	Yes

3.1.2 Supply Augmentation

Table 3-2 summarizes the restrictions and prohibitions on end uses during each stage of water shortage response implemented by the District in accordance with CWC §10632(a)(4)(B). The shortage response actions are aligned to the six water shortage levels with the goal of reducing the gap between supply and demand by the required amount per level.

Table 3-2: Supply Augmentation and Other Actions			
Stage	Supply Augmentation Methods and Other Actions by Water Supplier	Estimated Extent of Reducing the Water Shortage Gap	Penalty, Charge, or Other Enforcement?
All Stages	Expand Public Information Campaign	Medium	No
All Stages	Other - Demand Reduction Program	Medium	No
All Stages	Other - Use Prohibitions	Low	No
1 and 2	Other - Voluntary Water Use Reductions	Medium	No
3	Other - Flow Restriction	Medium	No
4	Other - Prohibit landscape irrigation	High	No
5 and 6	Other - Interrupt Irrigation Services	High	No

3.1.3 Operational Changes

In the event of an extreme water shortage the District will implement, if necessary, some or all of the following operational changes in accordance with CWC §10632(a)(4)(C) and §10632.5(a):

- The District shall provide prompt notice to customer whenever the District obtains information that indicates a leak may exist within the end-user’s exclusive control. The customer must repair all leaks within twenty-four (24) hours of notification by the District.
- Restrict or prohibit the issuance of new water services.

3.1.4 Additional Mandatory Restrictions

District customers shall comply to the mandatory water shortage response actions listed in **Table 3-1** associated with a level 3 or higher water shortage event in accordance with §10632(a)(4)(D).

CHAPTER 4 EMERGENCY RESPONSE ACTIONS

4.1 Emergency Response Plan

A catastrophic event may result in a complete loss of water supplies for a temporary period lasting from a day to a week or more. Examples of catastrophic events include earthquakes, widespread power outage, contamination, long-term drought, or loss of imported supplies. Through information included in billing inserts, and information on its website, the District encourages its customers to be prepared for emergencies and potential interruption of water supply system. The District has an Emergency Response Plan which provides guidance for emergency situations. In the event of a catastrophic emergency the District will immediately declare and enact level six (6) water shortage level and response actions, shown in **Table 3-1**. The UWMP Act requires a catastrophic supply interruption plan. This plan looks at the vulnerability of each source and distribution system to events such as wildfires, flooding, earthquakes, landslides, rockslides, other natural disasters, and unforeseen emergencies. The actions taken to address each catastrophe are presented in **Table 4-1** below:

Table 4-1: Catastrophic Supply Interruption Actions	
Possible Catastrophe	Summary of Actions
Wildfire Flooding	Notification of affected customers and implementation of voluntary and mandatory rationing, only if necessary, in the affected portions of the service area. Isolation, as needed, to minimize the area affected by flooding damage. Large scale system impact is not expected from flooding events.
Earthquake/ Fault Rupture/ Liquefaction	Emergency response plan procedures would go into effect. These procedures would insure any damaged sections of the distribution system were isolated; customers would be notified of the need to limit use; groundwater pumping would be established using backup generators if necessary; and water supply would be supplemented using water in storage.
Landslides/ Rockslides	Given the location and nature of District facilities, these events are not considered significant threats to the District water production or distribution system.

4.2 Seismic Risk Assessment and Mitigation Plan

The District provides water to its customers through a combination of groundwater wells and imported water from the City of Santa Maria. The distribution system is comprised of three pressure zones – Main, Blacklake, and Maria Vista Estates. Water to the Main Zone is delivered through the groundwater wells, Foothill Tanks, Standpipe Tank and the Joshua Road Pump Station, which conveys imported water from the City of Santa Maria. The District also operates two wastewater treatment facilities within the water service area.

With respect to the seismic risk assessment and mitigation plan, the District completed the America’s Water infrastructure Act (AWIA) Risk and Resiliency Assessment (RRA) of the existing water distribution system in June 2021, which assessed seismic risk for the District’s critical infrastructure. The District also has an existing Emergency Response Plan (ERP) that will be reviewed/updated as part of AWIA by December 31, 2021 and will include a mitigation plan to address seismic risk. The District has also developed catastrophic supply interruption actions, as stated in Section 4.1 of this chapter, that identifies the actions the District would implement following a seismic event.

In addition, the County of San Luis Obispo, in partnership with the District, developed a Multi-Jurisdictional Hazard Mitigation Plan (Hazard Plan), which evaluated seismic risk within District’s service area. The following sections provide a summary of the general findings from the Hazard Plan with respect to potential impacts from earthquakes, faults, and liquefaction within the District’s service area.

4.2.1 Faults, Earthquakes, and Liquefaction

Per the Hazard Plan, the following provides a description of major faults within the County of San Luis Obispo:

The California Geological Survey (CGS) is charged with recording and mapping faults throughout California. The Alquist-Priolo Earthquake Fault Zoning (AP) Act was passed into law following the destructive February 9, 1971 6.6 San Fernando earthquake. The AP Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the AP Act is to insure public safety by prohibiting the siting of most structures for human occupancy on or near active faults that constitute a potential hazard to structures from surface faulting or fault creep. Fault zoning is continually updated and reviewed by CGS and it is likely that other faults in addition to those currently listed by CGS will be added to the list in the future. The primary active faults identified by the AP Act in the County include the San Andreas, San Simeon-Hosgri, and Los Osos faults.

San Andreas Fault: The San Andreas is a historically active fault thought to be capable of an earthquake up to and above the 8.0 magnitude range and generally runs along the eastern county border. It enters the County near the Cholame area, passes through the Carrizo Plain, and exits the county near Maricopa. As it passes through the County, three relatively distinct portions of the fault have separate potentials for causing a damaging earthquake. The portion of the fault that runs from Monterey County into San Luis Obispo County to an area near Cholame has commonly been known as the Parkfield segment of the San Andreas fault system. That portion of the fault system is the one that has an approximate 5.6 – 6.0 magnitude earthquake from time to time. A segment of the system that runs from approximately the Cholame area to about the northern edge of the Carrizo Plain area has been commonly known as the Cholame segment. The portion running from the northern Carrizo Plain area and out of the County into Kern County has been commonly known as the Carrizo segment.

It is believed that in 1857 a large (possible 7.8 or larger) earthquake occurred on the San Andreas fault that possibly originated in the Parkfield area and stretched along the fault to the area near San Bernardino. This is perhaps an illustration of the potential for the San Andreas to cause a very powerful earthquake and the need to be prepared.

A major earthquake along any section of the San Andreas Fault could result in serious damage within San Luis Obispo County. An earthquake of 8.0 or greater magnitude would result in severe ground motion and could cause damage throughout the County.

With respect to the District's service area, the Santa Maria River, Wilmer Avenue, Oceano and West Huasna faults are the closest in proximity and are described below based on the Hazard Plan:

The faults in the Nipomo area include the Santa Maria River, Wilmar Avenue, Oceano and West Huasna faults. The buried trace of the Santa Maria/Wilmar Avenue fault is inferred to parallel U.S. Highway 101 in the vicinity of Nipomo. The Oceano fault generally is trending northwest across the Nipomo Mesa and into the town of Oceano.

The West Huasna fault is mapped along the eastern side of the valley. These faults generally have a subdued topographic expression and are considered to be potentially active by CSG. Review of the Oceano fault suggests that the fault is inactive. On the basis of that information, potentially active faults present moderate fault rupture hazard in the Nipomo area. The inactive Oceano fault presents a very low potential as a fault rupture hazard. Although the Oceano fault is inactive, it is often undesirable to site structures over any fault as a result of non-uniform foundation support conditions and the potential for co-seismic movement that could result from earthquakes on other nearby faults. Further studies to evaluate the activity of the Wilmar Avenue and West Huasna faults are warranted, prior to placing structures near the mapped fault traces.

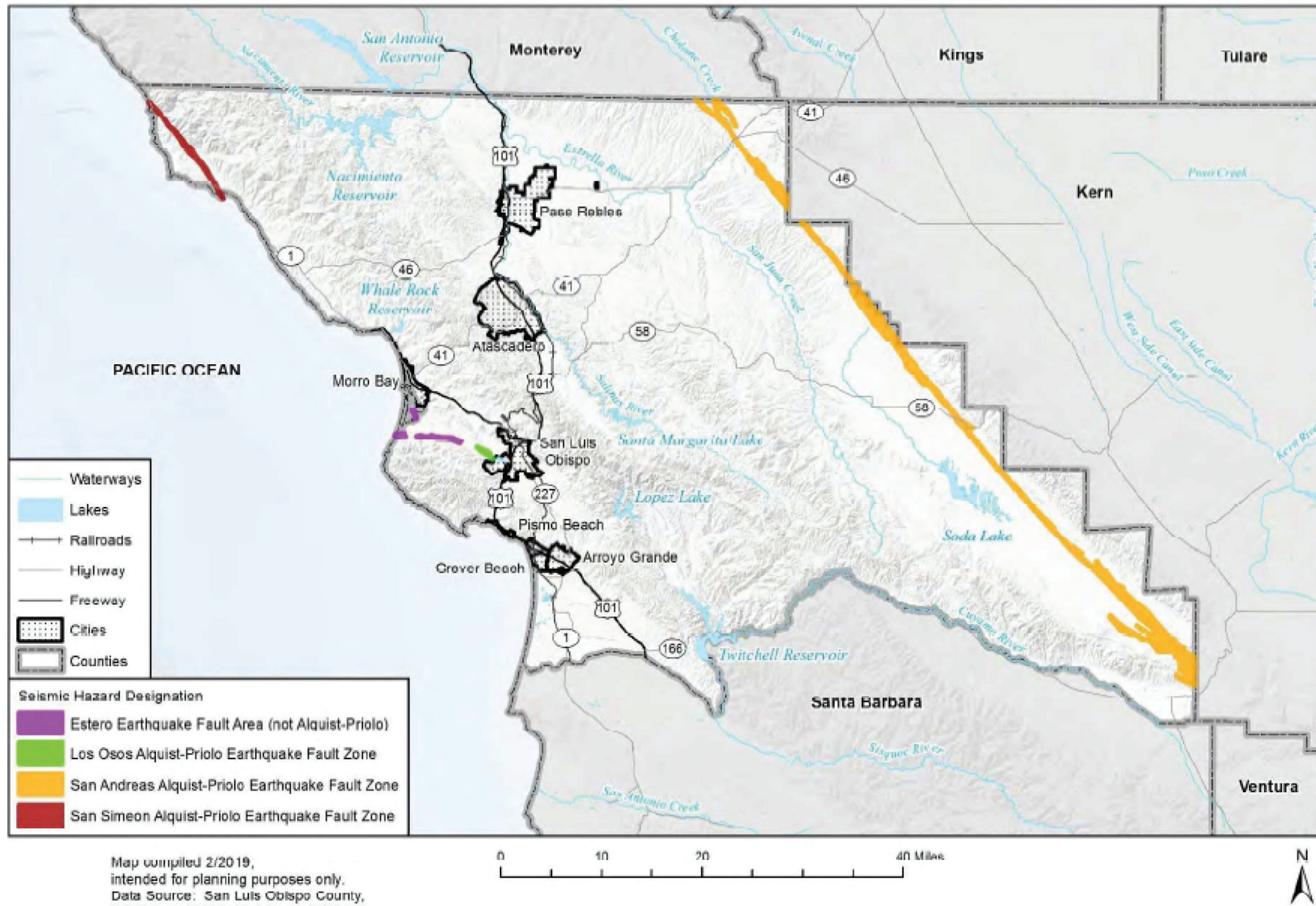
The Hazard Plan does not identify any specific risks of liquefaction in the District's service area.

Figure 4-1 provides an overview of the primary active earthquake fault lines described and **Figure 4-2** provides an overview of ground shaking potential across the County. Relevant sections of the Hazard Plan are included as Appendix B.

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Figure 4-1:
Earthquake Fault Line Map



Map compiled 2/2019,
intended for planning purposes only.
Data Source: San Luis Obispo County,
US Census TIGER Database, CA Open
Data Portal

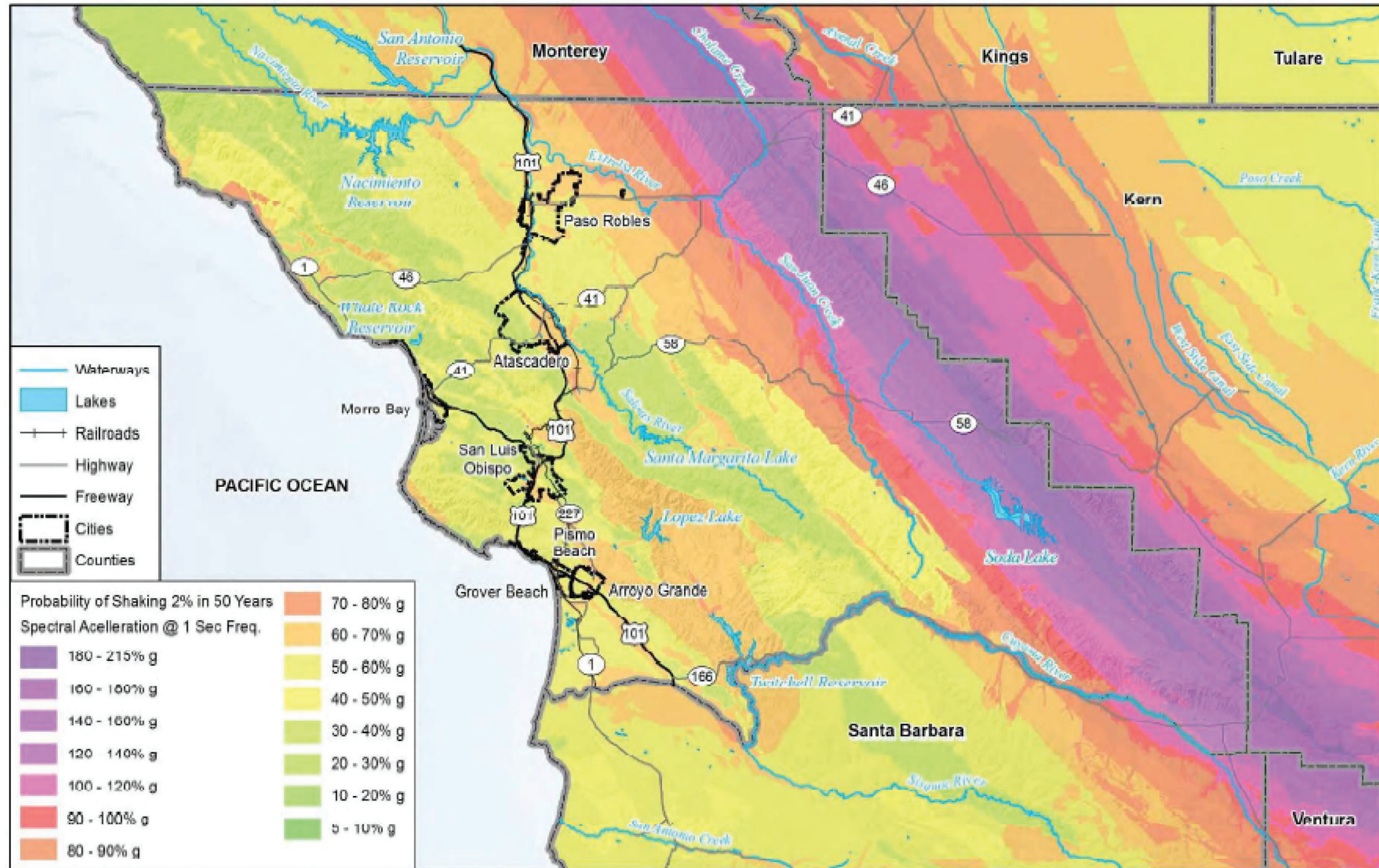
Notes:
Map includes Figure 5-56 Earthquake Fault Zone
Designations from San Luis Obispo County Local
Hazard Mitigation Plan October 2019.



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Figure 4-2:
Ground Shaking Potential Map



Map compiled 2/2019;
intended for planning purposes only.
Data Source: San Luis Obispo County,
US Census TIGER Database, CA Open
Data Portal, California Geological Survey,
USGS

0 10 20 40 Miles



Notes:
Map includes Figure 5-54 Ground Shaking Potential
From San Luis Obispo County Local Hazard
Mitigation Plan October 2019.



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4.2.2 Seismic Risk

Per the California Department of Conservation Earthquake Hazards Zone Application (EQ Zapp) and the area maps included in the Hazard Plan, the District's existing water distribution facilities were not identified to be within critical fault, liquefaction, or landslide hazard zones.

4.2.3 Mitigation

In the event of a system disruption to existing water supplies from an earthquake, fault rupture, or liquefaction response actions are described in the District's emergency response plan.

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CHAPTER 5 SHORTAGE RESPONSE EFFECTIVENESS

All water shortage response actions are intended to reduce the water demand below the available water supply, during a water shortage event. To ensure that all water response actions are effective in reducing the demand to the level necessary, the District will continue to routinely monitor water production levels monthly through the current in place meter system as described below in **Section 6.4** of this plan. If the shortage response actions are not effective in reducing water consumption to the required level the District will refine and update the water shortage response actions until effective.

5.1 Communication Protocols

The District will inform the public and the necessary local, regional, and state government entities regarding any current or predicted water shortages based on the results of the Annual Water Supply and Demand Assessment in accordance with CWC §10632(a)(5). The District will also notify all necessary entities of any shortage response actions mandated in response to the Annual Assessment. In the event of a water shortage due to an emergency, the District will follow emergency communication protocols outlined in the Emergency Response Plan as described by Section 4.1. **Table 5-1** summarizes communication protocols at each stage.

Table 5-1: Stages of Water Shortage Contingency Plan – Communication Protocols		
Stage	Communication Protocol and Procedure	Recipient to be Notified
1	General conservation measures and resources will be posted on the District’s website, published in the newsletter.	The public
2	Bill stuffers will be distributed to all customers that inform of the Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 20% reduction in groundwater production. The Stage 2 water shortage response actions will be included in the newsletter and posted on the District’s website.	The public
3	Bill stuffers will be distributed to all customers that inform of the Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 30% reduction in groundwater production. The Stage 3 water shortage response actions will be included in the newsletter and posted on the District’s website.	The public
4	Bill stuffers will be distributed to all customers that inform of the Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 40% reduction in groundwater production. The Stage 4 water shortage response actions will be included in the newsletter and posted on the District’s website.	The public
5	Bill stuffers will be distributed to all customers that inform of the Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 50% reduction in groundwater production. The Stage 5 water shortage response actions will be included in the newsletter and posted on the District’s website.	The public
6	Bill stuffers will be distributed to all customers that inform of the Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 60% reduction in groundwater production. The Stage 6 water shortage response actions will be included in the newsletter and posted on the District’s website.	The public

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CHAPTER 6 COMPLIANCE AND ENFORCEMENT

6.1 Compliance and Enforcement

The following compliance and enforcement actions to be taken by the District under a declared water shortage condition were developed in accordance with CWC §10632(a)(6).

The District’s Board of Directors may impose a special water waste penalties against a customer’s account and may temporarily or permanently discontinue or restrict, with a flow regulating device, water service to the affected property in the event that the customer or political entity is found by the Board to be in violation of any restrictions or prohibitions under a water shortage mandate declared by the Board.

Before taking such actions, the Board shall give any such customer thirty (30) days written notice and an opportunity to be heard and protest the finding of such violation and the imposition of such measure.

Table 6-1 summarizes the compliance measures that District may implement during a declared water shortage. The Board has determined that the surcharges listed below reasonably compensate District and its customers for all loss of water and other damages incurred and will foster water conservation within the service area. District will implement the following penalties and charges for excessive water use within its service areas:

Table 6-1: Excessive Water Use Penalties and Charges		
Stage	Violation	Notices and Surcharges
1	1st	No person shall make, permit, approve or allow any water connections or extensions contrary to the provisions of this chapter. Any violations hereof shall constitute a misdemeanor punishable as provided by law.
1	2nd	Any violation of the provisions hereof shall also constitute a public nuisance. In addition to criminal prosecution or judicial abatement procedures otherwise authorized, the District shall have authority, after due notice and public hearing, to abate any violations hereof terminating water service to all properties associated with or involved in the violation, and by assessing all costs of abatement against all property owners allowing, permitting or otherwise authorizing the illegal connection, water use or other violation.

6.2 Legal Authorities

The District is governed by a five (5) member Board of Directors who are elected every two years and serve a four-year term. The Board of Directors has the legal authority to implement and enforce any and all of the water shortage response actions of this WSCP.

In the event of a water shortage emergency where the ordinary demands and requirements of the District’s cannot be satisfied without depleting District’s water supply to the extent that there would be insufficient water for human consumption, sanitation, and fire protection the District Board of Directors will declare a water shortage condition in accordance with CWC Division 1, §350.

If the District’s Board of Directors declares a water shortage emergency, the District shall coordinate with the City of Santa Maria and the County of San Luis Obispo to issue a proclamation of a local emergency in accordance with CWC §10632(a)(7)(D).

6.3 Financial Consequences of WSCP

The District recognizes that there are additional operating expenses associated with the various water shortage condition stages including, but not limited to: the hiring of a part-time water conservation technician; additional outreach and education; additional state reporting; additional monitoring of water use to gage the effectiveness of compliance efforts; responding to customers, inquiries and complaints; investigating and monitoring of violations of watering restrictions and prohibitions; and increased facilities, pumping, and utility costs. In addition, water sales revenues will decrease due to lower water use by the District's customers.

The District has established water rates that allow reasonable operating reserves to be maintained. These reserves are reviewed by the Board of Directors in a quarterly financial report. If projection indicate a depleting of these reserves, the Board of Director has sole discretion on adjusting water rates. To offset increased expenses, non-critical capital investments may be deferred.

6.4 Monitoring and Reporting

The District will monitor, analyze and report on water production and use data in accordance with CWC §10632(a)(9).

All District customer accounts are metered and meter classes include single-family residential, multi-family residential, mixed use, commercial, industrial, and landscape.

Under all water supply conditions, potable water production figures are recorded daily by Water Treatment Operators. Totals are reported monthly to the General Manager. The General Manager and District Engineer incorporates the information into a monthly water supply/demand report to the Board of Directors.

During a Stage 1 or Stage 2, water shortage, the General Manager compares the monthly production to the target monthly production to verify that the reduction goal is being met. The General Manager presents monthly reports to the Board of Directors. If reduction goals are not met, the General Manager will notify the Board of Directors so that corrective action can be taken.

During a Stage 3 water shortage or Stage 4, the procedures listed above are followed, with the addition of a bi-monthly production report to the Board of Directors.

During a Stage 5, 6, or an emergency event, reports may also be provided weekly to the Board of Directors. During emergency shortages, production figures are reported to the General Manager regularly or as needed.

CHAPTER 7 WSCP REFINEMENT, ADOPTION AND SUBMITTAL

7.1 WSCP Refinement Procedures

The WSCP is intended to implement water shortage mitigation strategies that can quickly and effectively reduce water demand during a water shortage event in accordance with CWC §10632(a)(10) . The water shortage response actions listed in Section 3.1 will be routinely monitored as outlined in Section 6.4. If shortage response actions are not effective in meeting the required water use reduction the District’s Board of Directors will have the ability to amend the WSCP as deemed necessary.

7.1.1 Special Water Feature Distinction

The District specifically distinguishes between “Decorative Water Features” and all other water features in the WSCP. In the event of a water shortage potable water use for decorative water features such as fountains is prohibited, and only re-circulated water can be used to operate ornamental fountains or other decorative water features.

7.2 Plan Adoption, Submittal and Availability

The notice of the public hearing, held November 10, 2021 at the District’s office, was sent to the City of Santa Maria and County of San Luis Obispo on September 10, 2021, in accordance with CWC §10632(a)(c). A copy of the letters from the District to the City and County are included in Appendix C of this WSCP.

Table 7-1: Notification to Cities and Counties		
City Name	60 Day Notice	Notice of Public Hearing
City of Santa Maria	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
County Name	60 Day Notice	Notice of Public Hearing
San Luis Obispo	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

A public hearing was held on November 10, 2021 at the District’s office. The public hearing provided opportunity for community input.

The WSCP update was adopted by the District on December 8, 2021 by approval of Resolution 2020-XXXX. A copy of the resolution can be viewed in Appendix D.

Within 30 days of adoption, the District will submit the WSCP update to the DWR for review. During the DWR review process the District will coordinate with DWR reviewers as necessary. The District will use the online submittal tool located at www.wuedata.water.ca.gov/secure/ developed by the DWR to electronically submit the WSCP update. Confirmation of the electronic submittal will be included in Appendix E.

Within 30 days of adoption, the District will submit a CD of the adopted WSCP to the California State Library at the following address:

California State Library
 Government Publications Section
 P.O. Box 942867
 Sacramento, CA 94237-001
 Attention: Coordinator, Urban Water Management Plans

A copy of the transmittal to the State Library will be included in Appendix E.

Within 30 days of adoption, the District will submit an electronic copy of the adopted WSCP update to the City of Santa Maria and the County of San Luis Obispo electronically in accordance with CWC Section 10632(a)(c). A copy of the transmittals to said agencies will be included in Appendix C.

Commencing no later than December 8, 2021, the District will have a copy of the WSCP update available for public review at the District Offices (see address below) during normal business hours and available on the District's website, <https://ncsd.ca.gov/>.

Nipomo Community Services District
148 S Wilson St.
Nipomo, CA 93444
Phone – 805.929.1133

Appendix K- 60 Day Notification to Cities and Counties

NIPOMO COMMUNITY

BOARD MEMBERS

ED EBY, **PRESIDENT**
DAN ALLEN GADDIS, **VICE PRESIDENT**
BOB BLAIR, **DIRECTOR**
DAN WOODSON, **DIRECTOR**
RICHARD MALVAROSE, **DIRECTOR**



SERVICES DISTRICT

STAFF

MARIO IGLESIAS, **GENERAL MANAGER**
LISA BOGNUDA, **FINANCE DIRECTOR**
PETER SEVCIK, P.E., **DIRECTOR OF ENG. & OPS.**
CRAIG STEELE, **GENERAL COUNSEL**

Serving the Community since 1965

148 SOUTH WILSON STREET POST OFFICE BOX 326 NIPOMO, CA 93444 - 0326
(805) 929-1133 FAX (805) 929-1932 Website address: ncsd.ca.gov

January 12, 2021

Mark Zimmer
Santa Maria CSA General Manager
Golden State Water Company
2330 A St Suite A
Santa Maria, CA 93455

SUBJECT: 2020 URBAN WATER MANAGEMENT PLAN UPDATE

Dear Mr. Zimmer,

The Nipomo Community Services District (District) is currently in the process of reviewing and updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) for the 2020 cycle. The Department of Water Resources requires water suppliers to update their UWMP every five years. Among other things, the UWMP will evaluate current and projected water supplies and demands within the District's service area over a 20-year planning horizon.

The District encourages local agencies, the public, and other interested parties in its service area to participate in the update process. If necessary, a stakeholder workshop may be scheduled in February 2021 to review the administrative draft. The public draft of the UWMP is anticipated to be available for review in March 2021. The plan will be available for review on the District's website, <https://ncsd.ca.gov/>, or at its administrative office, 148 South Wilson Street, Nipomo, Monday through Friday, 8 a.m.-4:30 p.m.

Please send comments to:

Robert Lepore, GISP
MKN & Associates, Inc.
PO Box 1604
Arroyo Grande, CA 93421
(805) 904-6530
rlepore@mknassociates.us

The District will review and possibly take action on the updated UWMP at its June 2021 Board Meeting. Additional notice regarding the date and time of the June meeting will be published before the meeting.

Sincerely,

NIPOMO COMMUNITY SERVICES DISTRICT



Peter Sevcik, P.E.
Director of Engineering and Operations

NIPOMO COMMUNITY

BOARD MEMBERS

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DAN ALLEN GADDIS, **VICE PRESIDENT**
BOB BLAIR, **DIRECTOR**
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148 SOUTH WILSON STREET POST OFFICE BOX 326 NIPOMO, CA 93444 - 0326
(805) 929-1133 FAX (805) 929-1932 Website address: ncsd.ca.gov

January 12, 2021

Shad Springer
Utilities Director
City of Santa Maria
110 E. Cook Street
Santa Maria, CA 93454

SUBJECT: 2020 URBAN WATER MANAGEMENT PLAN UPDATE

Dear Mr. Springer,

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Please send comments to:

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Sincerely,

NIPOMO COMMUNITY SERVICES DISTRICT



Peter Sevcik, P.E.
Director of Engineering and Operations

NIPOMO COMMUNITY

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MARIO IGLESIAS, **GENERAL MANAGER**
LISA BOGNUDA, **FINANCE DIRECTOR**
PETER SEVCIK, P.E., **DIRECTOR OF ENG. & OPS.**
CRAIG STEELE, **GENERAL COUNSEL**

Serving the Community since 1965

148 SOUTH WILSON STREET POST OFFICE BOX 326 NIPOMO, CA 93444 - 0326
(805) 929-1133 FAX (805) 929-1932 Website address: ncsd.ca.gov

January 12, 2021

Wade Horton
County Administrative Officer
County of San Luis Obispo
1055 Monterey Street
San Luis Obispo, CA 93408

SUBJECT: 2020 URBAN WATER MANAGEMENT PLAN UPDATE

Dear Mr. Horton,

The Nipomo Community Services District (District) is currently in the process of reviewing and updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) for the 2020 cycle. The Department of Water Resources requires water suppliers to update their UWMP every five years. Among other things, the UWMP will evaluate current and projected water supplies and demands within the District's service area over a 20-year planning horizon.

The District encourages local agencies, the public, and other interested parties in its service area to participate in the update process. If necessary, a stakeholder workshop may be scheduled in February 2021 to review the administrative draft. The public draft of the UWMP is anticipated to be available for review in March 2021. The plan will be available for review on the District's website, <https://ncsd.ca.gov/>, or at its administrative office, 148 South Wilson Street, Nipomo, Monday through Friday, 8 a.m.-4:30 p.m.

Please send comments to:

Robert Lepore, GISP
MKN & Associates, Inc.
PO Box 1604
Arroyo Grande, CA 93421
(805) 904-6530
rlapore@mknassociates.us

The District will review and possibly take action on the updated UWMP at its June 2021 Board Meeting. Additional notice regarding the date and time of the June meeting will be published before the meeting.

Sincerely,

NIPOMO COMMUNITY SERVICES DISTRICT



Peter Sevcik, P.E.
Director of Engineering and Operations

NIPOMO COMMUNITY

BOARD MEMBERS

ED EBY, **PRESIDENT**
DAN ALLEN GADDIS, **VICE PRESIDENT**
BOB BLAIR, **DIRECTOR**
DAN WOODSON, **DIRECTOR**
RICHARD MALVAROSE, **DIRECTOR**



SERVICES DISTRICT

STAFF

MARIO IGLESIAS, **GENERAL MANAGER**
LISA BOGNUDA, **FINANCE DIRECTOR**
PETER SEVCIK, P.E., **DIRECTOR OF ENG. & OPS.**
CRAIG STEELE, **GENERAL COUNSEL**

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(805) 929-1133 FAX (805) 929-1932 Website address: ncsd.ca.gov

January 12, 2021

Robert Miller
General Manager
Woodlands Mutual Water Company
1775 Via Entrada Way
Nipomo, CA 93444

SUBJECT: 2020 URBAN WATER MANAGEMENT PLAN UPDATE

Dear Mr. Miller,

The Nipomo Community Services District (District) is currently in the process of reviewing and updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) for the 2020 cycle. The Department of Water Resources requires water suppliers to update their UWMP every five years. Among other things, the UWMP will evaluate current and projected water supplies and demands within the District's service area over a 20-year planning horizon.

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The District will review and possibly take action on the updated UWMP at its June 2021 Board Meeting. Additional notice regarding the date and time of the June meeting will be published before the meeting.

Sincerely,

NIPOMO COMMUNITY SERVICES DISTRICT



Peter Sevcik, P.E.
Director of Engineering and Operations

Appendix L- Newspaper Notification

*** Proof of Publication ***

RECEIVED
OCT 19 2021
NIPOMO COMMUNITY
SERVICES DISTRICT

Proof of Publication
(2015.5 C.C.P)

State of California

SANTA MARIA TIMES

NIPOMO COMMUNITY SERV DISTRICT-LEGALS
LISA BOGNUDA
PO BOX 326
NIPOMO CA 93444
USA

ORDER NUMBER 49065

I am the principal clerk of the printer of the Santa Maria Times, newspaper of general circulation, printed and published in the city of Santa Maria, County of Santa Barbara, and which newspaper has been adjudged a newspaper of general circulation by the superior court of the County of Santa Barbara, State of California adjudication #463687.

That the notice of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Section: Legals
Category: 986 Legals
PUBLISHED ON: 10/08/2021 10/15/2021

TOTAL AD COST: 166.32
FILED ON: 10/15/2021

Dated at Santa Maria, CA

This 15th day of October, 2021

Jeresa Ramirez

Signature

NOTICE OF PUBLIC HEARING
2020 URBAN WATER
MANAGEMENT PLAN
NIPOMO COMMUNITY
SERVICES DISTRICT
THE NIPOMO COMMUNITY
SERVICES DISTRICT WILL HOLD
A PUBLIC HEARING TO
CONSIDER ADOPTION OF THE
2020 URBAN WATER
MANAGEMENT PLAN (UWMP)
AND WATER SHORTAGE
CONTINGENCY PLAN (WSCP) ON
NOVEMBER 10, 2021, AT 9:00
A.M. AT THE DISTRICTS JOHN S
SEITZ BOARD ROOM 148 SOUTH
WILSON STREET, NIPOMO,
CALIFORNIA.
THE 2020 URBAN WATER
MANAGEMENT PLAN AND
WATER SHORTAGE
CONTINGENCY PLAN ARE
AVAILABLE FOR REVIEW AT THE
DISTRICT OFFICE AT 148 S
WILSON STREET, BETWEEN THE
HOURS OF 8:00 A.M. AND 4:00
P.M. MONDAY THROUGH FRIDAY
AND ON THE DISTRICT'S
WEBSITE AT NCSD.CA.GOV.
AFTER RECEIPT OF PUBLIC
TESTIMONY, THE DISTRICT
BOARD MAY APPROVE THE
UWMP AND WSCP OR
CONTINUE ITS APPROVAL OF
THE UWMP AND WSCP TO
ANOTHER DATE.
THE DISTRICT ENCOURAGES
PUBLIC PARTICIPATION AND
COMMENT.
Note: Publish on Friday, October 8
and October 15.
Legal #49065
Pub dates: Oct 8 & 15, 2021



Beaufort Gazette
 Belleville News-Democrat
 Bellingham Herald
 Bradenton Herald
 Centre Daily Times
 Charlotte Observer
 Columbus Ledger-Enquirer
 Fresno Bee

The Herald - Rock Hill
 Herald Sun - Durham
 Idaho Statesman
 Island Packet
 Kansas City Star
 Lexington Herald-Leader
 Merced Sun-Star
 Miami Herald

el Nuevo Herald - Miami
 Modesto Bee
 Raleigh News & Observer
 The Olympian
 Sacramento Bee
 Fort Worth Star-Telegram
 The State - Columbia
 Sun Herald - Biloxi

Sun News - Myrtle Beach
 The News Tribune Tacoma
 The Telegraph - Macon
 San Luis Obispo Tribune
 Tri-City Herald
 Wichita Eagle

AFFIDAVIT OF PUBLICATION

Account #	Order Number	Identification	Order PO	Amount	Cols	Depth
28444	147967	Print Legal Ad - IPL0043805	2020 Urban Water Manag	\$153.36	1	35 L

Attention:

Linda Bognuda
 PO BOX 326
 NIPOMO, CA 93444

In The Superior Court of The State of California
 In and for the County of San Luis Obispo

No. of Insertions: 2
 Beginning Issue of: 10/08/2021
 Ending Issue of: 10/15/2021

NOTICE OF PUBLIC HEARING

2020 URBAN WATER
 MANAGEMENT PLAN
 NIPOMO COMMUNITY
 SERVICES DISTRICT
 THE NIPOMO COMMUNITY SERVICES DISTRICT WILL HOLD A PUBLIC HEARING TO CONSIDER ADOPTION OF THE 2020 URBAN WATER MANAGEMENT PLAN (UWMP) AND WATER SHORTAGE CONTINGENCY PLAN (WSCP) ON NOVEMBER 10, 2021, AT 9:00 A.M. AT THE DISTRICT'S JOHN S SEITZ BOARD ROOM 148 SOUTH WILSON STREET, NIPOMO, CALIFORNIA.

THE 2020 URBAN WATER MANAGEMENT PLAN AND WATER SHORTAGE CONTINGENCY PLAN ARE AVAILABLE FOR REVIEW AT THE DISTRICT OFFICE AT 148 S WILSON STREET, BETWEEN THE HOURS OF 8:00 A.M. AND 4:00 P.M. MONDAY THROUGH FRIDAY AND ON THE DISTRICT'S WEBSITE AT NCSO.CA.GOV.

AFTER RECEIPT OF PUBLIC TESTIMONY, THE DISTRICT BOARD MAY APPROVE THE UWMP AND WSCP OR CONTINUE ITS APPROVAL OF THE UWMP AND WSCP TO ANOTHER DATE.

THE DISTRICT ENCOURAGES PUBLIC PARTICIPATION AND COMMENT.
 IPL0043805
 Oct 8, 15 2021

Jane E. Durand

Legals Clerk

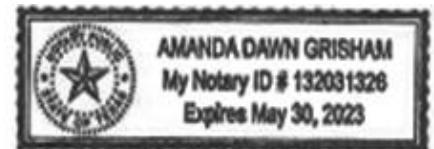
STATE OF TEXAS)
 SS
 County of Dallas)

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen and not interested in the above entitled matter; I am now, and at all times embraced in the publication herein mentioned was, the principal clerk of the printers and publishers of The Tribune, a newspaper of general Circulation, printed and published daily at the City of San Luis Obispo in the above named county and state; that notice at which the annexed clippings is a true copy, was published in the above-named newspaper and not in any supplement thereof - on the following dates to wit; From 10/08/2021 To 10/15/2021 that said newspaper was duly and regularly ascertained and established a newspaper of general circulation by Decree entered in the Superior Court of San Luis Obispo County, State of California, on June 9, 1952, Case #19139 under the Government Code of the State of California.

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Amanda Grisham

Notary Public in and for the state of Texas, residing in Dallas County



Extra charge for lost or duplicate affidavits.
 Legal document please do not destroy!

Appendix M- Adoption Resolution

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2021-1608**

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTING THE URBAN WATER MANAGEMENT PLAN 2020 UPDATE**

WHEREAS, California Water Code Section 10621(a) requires each urban water supplier to update its urban water management plan at least once every five years on or before December 31, in years ending in five and zero; and

WHEREAS, pursuant to Water Code Section 10621(b), NCSD notified the County of San Luis Obispo on September 10, 2021, that it would be preparing its 2020 UWMP, and subsequently met with, or consulted with and obtained comments from the San Luis Obispo County, the City of Santa Maria, Golden State Water Company, and Woodlands Mutual Water Company; and

WHEREAS, Nipomo Community Services District (NCSD) began its public outreach and community involvement in the preparation of the Draft Urban Water Management Plan 2020 Update (UWMP) on August 20, 2021, with its scheduled agency coordination meeting to discuss the project; and

WHEREAS, on October 15, 2021, the Draft UWMP 2020 Update was posted to NCSD's website; and

WHEREAS, on November 10, 2021, NCSD held a public hearing properly noticed pursuant to Water Code Section 10642 and Government Code Section 6066, at which time NCSD's Board of Directors reviewed the Draft UWMP 2020 Update and, as part of that review, considered a presentation of the Draft UWMP 2020 Update by its staff and consultants, oral and written public comments; and

WHEREAS, pursuant to Water Code Section 10620(d)(2), NCSD coordinated the preparation of its Draft UWMP 2020 Update with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable; and

WHEREAS, pursuant to Water Code Section 10620(f), NCSD describes in the Draft UWMP 2020 Update water management tools and options used by NCSD that will maximize resources and minimize the need to import water from other regions; and

WHEREAS, pursuant to Water Code Section 10642, NCSD encouraged the active involvement of diverse social, cultural, and economic elements of the population within its service area prior to and during the preparation of the Draft UWMP 2020 Update, which included, but is not limited to, posting the Draft UWMP 2020 Update on NCSD's website; distributing the Notice of Availability of the Draft UWMP 2020 Update to the City of Santa Maria, the County of San Luis Obispo, and numerous other interested parties, holding a public meetings on November 10, 2021, regarding the Draft UWMP 2020 Update and coordinating the preparation of the Draft UWMP 2020 Update with the local retail water agencies; and

WHEREAS, to assure public participation in the process, NCSD has met the requirements of the UWMP Act, by holding at least one public hearing; and

WHEREAS, the NCSD Board of Directors has considered the public and Board comments made at the public hearing, as well as written public comments on the Draft UWMP 2020 Update distributed to the Board of Directors; and

RESOLUTION NO. 2021-1608

A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE NIPOMO COMMUNITY SERVICES DISTRICT
ADOPT THE URBAN WATER MANAGEMENT PLAN 2020 UPDATE

WHEREAS, the NCSD Board of Directors has carefully reviewed the Draft UWMP 2020 Update, the erratas and any modifications made at the hearing; and

WHEREAS, NCSD Board of Directors finds that the Revised Final Draft UWMP 2020 Update is fully adequate and complete in its compliance with the requirements of the UWMP Act, and further finds that the conclusions reached in the Revised Final Draft UWMP 2020 Update are supported by substantial evidence.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED BY THE BOARD OF DIRECTORS OF THE NIPOMO COMMUNITY SERVICES DISTRICT does hereby adopt the Final Draft UWMP 2020 Update attached hereto as Exhibit "A" and incorporated herein by this reference, including the erratas and modifications made at the December 8, 2021 adoption meeting as NCSD's Urban Water Management Plan 2021 Update;

1. RESOLVED FURTHER that NCSD shall implement the UWMP 2020 Update in accordance with the schedule set forth therein;
2. RESOLVED FURTHER that NCSD shall submit to the Department of Water resources, the California State Library, and the City of Santa Maria and San Luis Obispo County a copy of the UWMP 2020 Update;
3. RESOLVED FURTHER that NCSD shall make the UWMP 2020 Update available for public review at NCSD administrative offices at 148 South Wilson Street, Nipomo, California during normal business hours.
4. RESOLVED FURTHER that the above Recitals are incorporated herein and support the adoption of the Final Draft UWMP 2020 Update.


On the motion by Director Armstrong, seconded by Director Woodson, and on the following roll call vote, to wit:

AYES: Director Armstrong, Woodson, Malvarose, Gaddis, and Eby
NOES: NONE
ABSENT: NONE
ABSTAIN: NONE

The foregoing resolution is hereby adopted this 8th day of December, 2021.



Ed Eby, President
 Nipomo Community Services District

APPROVED AS TO FORM:


Craig A. Steele
 General Counsel

ATTEST:


Mario E. Iglesias
 General Manager and Secretary to the Board

RESOLUTION NO. 2021-1608

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE NIPOMO COMMUNITY SERVICES DISTRICT
ADOPT THE URBAN WATER MANAGEMENT PLAN 2020 UPDATE**

EXHIBIT "A"

UWMP 2020 UPDATE
(Attached hereto)

Appendix N- 2020 UWMP Checklist

Appendix F: UWMP Checklist

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and Overview	
x	x	Chapter 1	10630.5	Each plan shall include a simple description of the supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a supplier may also choose to include a simple description at the beginning of each chapter.	Summary	
x	x	Section 2.2	10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	2-1
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 2.6	10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	2-2
x	x	Section 2.6.2	10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan Preparation	2-3
x		Section 2.6, Section 6.1	10631(h)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) - if any - with water use projections from that source.	System Supplies	2-3, 6-1
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)

	x	Section 2.6	10631(h)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	
x	x	Section 3.1	10631(a)	Describe the water supplier service area.	System Description	3-1
x	x	Section 3.3	10631(a)	Describe the climate of the service area of the supplier.	System Description	3-2
x	x	Section 3.4	10631(a)	Provide population projections for 2025, 2030, 2035, 2040 and optionally 2045.	System Description	3-6
x	x	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	System Description	3-7
x	x	Sections 3.4 and 5.4	10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	3-6
x	x	Section 3.5	10631(a)	Describe the land uses within the service area.	System Description	3-7
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 4.2	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	4-1
x	x	Section 4.2.4	10631(d)(3)(C)	Retail suppliers shall provide data to show the distribution loss standards were met.	System Water Use	4-3
x	x	Section 4.2.6	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	System Water Use	4-4
x	x	Section 4.2.6	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System Water Use	4-4
x	optional	Section 4.3.2.4	10631(d)(3)(A)	Report the distribution system water loss for each of the 5 years preceding the plan update.	System Water Use	
x	optional	Section 4.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	4-7
x	x	Section 4.5	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System Water Use	4-7
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)

x		Chapter 5	10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	5-1
x		Chapter 5	10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Baselines and Targets	5-1
	x	Section 5.1	10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	5-1
x		Section 5.2	10608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	5-3
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x		Section 5.5	10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5-year baseline. This does not apply if the suppliers base GPCD is at or below 100.	Baselines and Targets	
x		Section 5.5 and Appendix E	10608.4	Retail suppliers shall report on their compliance in meeting their water use targets. The data shall be reported using a standardized form in the SBX7-7 2020 Compliance Form.	Baselines and Targets	5-3
x	x	Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought.	System Supplies	6-1
x	x	Sections 6.1	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, <i>including changes in supply due to climate change.</i>	System Supplies	6-1
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System Supplies	6-1

x	x	Section 6.1.1	10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	System Supplies	6-1
x	x	Section 6.2.8	10631(b)	Identify and quantify the existing and planned sources of water available for 2020, 2025, 2030, 2035, 2040 and optionally 2045.	System Supplies	6-11
x	x	Section 6.2	10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	6-3
x	x	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	6-3
x	x	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System Supplies	6-3
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	6-3
x	x	Section 6.2.2.1	10631(b)(4)(B)	For unadjudicated basins, indicate whether or not the department has identified the basin as a high or medium priority. Describe efforts by the supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	System Supplies	6-3
x	x	Section 6.2.2.4	10631(b)(4)(C)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	6-3
x	x	Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	6-3
x	x	Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long- term basis.	System Supplies	6-11
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	6-6
x	x	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	6-6

x	x	Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	6-6
x	x	Section 6.2.5	10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	6-7
x	x	Section 6.2.5	10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	6-7
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	6-7
x	x	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System Supplies	6-10
x	x	Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area with quantified amount of collection and treatment and the disposal methods.	System Supplies (Recycled Water)	6-6
x	x	Section 6.2.8, Section 6.3.7	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and for a period of drought lasting 5 consecutive water years.	System Supplies	6-11
x	x	Section 6.4 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a supplier can readily obtain.	System Suppliers, Energy Intensity	6-13
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 7.2	10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	
x	x	Section 7.2.4	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	7-7

x	x	Section 7.3	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	7-1
x	x	Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water Supply Reliability Assessment	7-7
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts 5 consecutive years.	Water Supply Reliability Assessment	7-7
x	x	Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water Supply Reliability Assessment	7-7
x	x	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.	Water Supply Reliability Assessment	7-7
x	x	Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	Water Supply Reliability Assessment	7-7
x	x	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water Shortage Contingency Planning	8-1
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Chapter 8	10632(a)(1)	Provide the analysis of water supply reliability (from Chapter 7 of Guidebook) in the WSCP	Water Shortage Contingency Planning	8-1
x	x	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the water shortage contingency plan to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water Shortage Contingency Planning	8-8
x	x	Section 8.2	10632(a)(2)(A)	Provide the written decision- making process and other methods that the supplier will use each year to determine its water reliability.	Water Shortage Contingency Planning	8-1

x	x	Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Water Shortage Contingency Planning	8-1
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10, 20, 30, 40, 50 percent shortage and greater than 50 percent shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water Shortage Contingency Planning	8-2
x	x	Section 8.3	10632(a)(3)(B)	Suppliers with an existing water shortage contingency plan that uses different water shortage levels must cross reference their categories with the six standard categories.	Water Shortage Contingency Planning	8-2
x	x	Section 8.4	10632(a)(4)(A)	Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water Shortage Contingency Planning	8-5
x	x	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water Shortage Contingency Planning	8-5
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water Shortage Contingency Planning	8-5
x	x	Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions are appropriate to local conditions.	Water Shortage Contingency Planning	8-5
x	x	Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Water Shortage Contingency Planning	8-5
x	x	Section 8.4.6	10632.5	The plan shall include a seismic risk assessment and mitigation plan.	Water Shortage Contingency Plan	8-6
x	x	Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Water Shortage Contingency Planning	8-6

x	x	Section 8.5 and 8.6	10632(a)(5)(B) 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water Shortage Contingency Planning	8-6
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x		Section 8.6	10632(a)(6)	Retail supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water Shortage Contingency Planning	8-7
x	x	Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the supplier to enforce shortage response actions.	Water Shortage Contingency Planning	8-7
x	x	Section 8.7	10632(a)(7)(B)	Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3.	Water Shortage Contingency Planning	8-7
x	x	Section 8.7	10632(a)(7)(C)	Provide a statement that the supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water Shortage Contingency Planning	8-7
x	x	Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	8-7
x	x	Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	8-7
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x		Section 8.8	10632(a)(8)(C)	Retail suppliers must describe the cost of compliance with Water Code Chapter 3.3: Excessive Residential Water Use During Drought	Water Shortage Contingency Planning	8-7
x		Section 8.9	10632(a)(9)	Retail suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water Shortage Contingency Planning	8-7
x		Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water Shortage Contingency Planning	8-8

x	x	Sections 8.12 and 10.4	10635(c)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 30 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	8-8
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.14	10632(c)	Make available the Water Shortage Contingency Plan to customers and any city or county where it provides water within 30 after adopted the plan.	Water Shortage Contingency Planning	8-8
	x	Sections 9.1 and 9.3	10631(e)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	9-1
x		Sections 9.2 and 9.3	10631(e)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	9-3
x		Chapter 10	10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan Adoption, Submittal, and Implementation	10-2
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. Reported in Table 10-1.	Plan Adoption, Submittal, and Implementation	10-1
x	x	Section 10.4	10621(f)	Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.	Plan Adoption, Submittal, and Implementation	10-3
x	x	Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the urban water supplier made the plan and contingency plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan and contingency plan.	Plan Adoption, Submittal, and Implementation	10-1, 10-2
x	x	Section 10.2.2	10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	10-1

x	x	Section 10.3.2	10642	Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	10-2
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 10.4	10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	10-3
x	x	Section 10.4	10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	10-3
x	x	Sections 10.4.1 and 10.4.2	10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	10-3
x	x	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	10-4
x	x	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	10-4
Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 10.6	10621(c)	If supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan Adoption, Submittal, and Implementation	10-4
x	x	Section 10.7.2	10644(b)	If revised, submit a copy of the water shortage contingency plan to DWR within 30 days of adoption.	Plan Adoption, Submittal, and Implementation	

Appendix O- UWMP Water Code

CHAPTER 1 INTRODUCTION AND OVERVIEW

1.1 UWMP Organization

1.2 UWMP in Relation to Other Efforts

1.3 UWMPs and Grant or Loan Eligibility

Law

CWC 10608.56

(a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

(f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

CWC 10608.56

An urban water supplier is not eligible for a water grant or loan awarded or administered by the state unless the urban water supplier complies with this part.

California Code of Regulations Section 596.1 (b)(2) "disadvantaged community" means a community with a median household income that is less than 80 percent of the statewide annual median household income.

CHAPTER 2 PLAN PREPARATION

2.1 Plan Preparation

2.2 Basis for Preparing a Plan

Law

CWC 10617

“Urban water supplier” means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems.

CWC 10620

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

CWC 10621

(a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

(d) Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.

2.2.1 Public Water Systems

Law

CWC 10644

(a)(2) The plan, or amendments to the plan, submitted to the department ... shall include any standardized forms, tables, or displays specified by the department.

(h) “Public Water System” means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year

2.2.2 Suppliers Serving Multiple Service Areas/Public Water Systems

2.3 Regional Planning

2.4 Individual or Regional Planning and Compliance

2.4.1 Regional UWMP

Law

CWC 10620

(d)(1) An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basin wide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

2.4.2 Regional Alliance

Law

CWC 10608.20

(a)(1) ...Urban retail water suppliers may elect to determine and report progress toward achieving these targets on an individual or regional basis as provided in subdivision (a) of Section 10608.28...

CWC 10608.28

(a) An urban retail water supplier may meet its urban water use target within its retail service area, or through mutual agreement by any of the following:

- (1) Through an urban wholesale water supplier.*
- (2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31 (commencing with Section 81300)).*
- (3) Through a regional water management group as defined in Section 10537.*
- (4) By an integrated regional water management funding area.*
- (5) By hydrologic region.*
- (6) Through other appropriate geographic scales for which computation methods have been developed by the department.*

(b) A regional water management group, with the written consent of its member agencies, may undertake any or all planning, reporting, and implementation functions under this chapter for the member agencies that consent to those activities. Any data or reports shall provide information both for the regional water management group and separately for each consenting urban retail water supplier and urban wholesale water supplier.

2.5 Fiscal or Calendar Year and Units of Measure

2.5.1 Fiscal or Calendar Year

Law

CWC 1608.20

(a)(1) Urban retail water suppliers...may determine the targets on a fiscal year or calendar year basis

2.5.2 Reporting Complete 2020 Data

The 2020 UWMP includes water use and planning data for the entire calendar year of 2020.

2.5.3 Units of Measure

Water volumes presented in this 2020 UWMP are measured in acre-feet (AF) as identified in **Table 2-3**.

2.6 Coordination and Outreach

2.6.1 Wholesale and Retail Coordination

Law

CWC 10631

(j) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier’s plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

2.6.2 Coordination with Other Agencies and the Community

Law

CWC 10620

(d)(3) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

CWC 10642

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.

2.6.3 Notice to Cities and Counties

Law

CWC 10621 (b)

Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

DRAFT

CHAPTER 3 SYSTEM DESCRIPTION

New Requirements for 2020 Update

Law

CWC Section 10631

Describe the service area of the supplier, including current and projected population, climate, and other social, economic, and demographic factors affecting the supplier’s water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available. The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier’s water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities, as developed pursuant to Article 5 (commencing with Section 65300) of Chapter 3 of Division 1 of Title 7 of the Government Code.

3.1 General Description

3.2 Service Area Boundary Maps

3.3 Service Area Climate

Law

CWC Section 10631(a)

Describe the service area of the supplier, including climate.

CWC Section 10630

It is the intention of the Legislature, in enacting this part, to permit levels of water management planning... while accounting for impacts of climate change.

3.4 Service Area Population and Demographics

3.4.1 Service Area Population

Law

CWC Section 10631(a)

Describe the service area of the supplier, including current and projected population ...The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

3.4.2 Other Social, Economic, and Demographic Factors

3.4.2.1 Relevant County of San Luis Obispo Land Use Ordinances

3.4.2.2 Nipomo Mesa Management Area

3.4.2.3 Accessory Dwelling Unit (ADU) Ordinance

Law

CWC Section 10631

Describe the service area of the supplier, including... other social, economic and demographic factors affecting the supplier's water management planning.

3.5 Land Uses within Service Area

Law

CWC Section 10631(a)

The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities...

DRAFT

CHAPTER 4 WATER USE CHARACTERIZATION

4.1 Non-Potable Versus Potable Water Use

4.2 Past, Current, and Projected Water Use by Sector

Law

CWC 10635

(a) Every urban water Supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

CWC 10631 (d)

(1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following...

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(4)(A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following: (i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections. (ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

4.2.1 Water Use Sectors Listed in Water Code

Law

CWC 10631(d)

(1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following uses:

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

(H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

(I) Agricultural

(J) Distribution system water loss

4.2.2 Water Use Sectors in Addition to Those Listed in Water Code

4.2.3 Past Water Use

4.2.4 Distribution System Water Loss

Law

CWC 10631(d)(1)

For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following...

(J) Distribution system water loss....

CWC 10631(d)(3)

(A) The distribution system water loss shall be quantified for each of the five years preceding the plan update, in accordance with rules adopted pursuant to Section 10608.34

(B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.

(C) In the plan due July 1, 2021, and in each update thereafter, data shall be included to show whether the urban retail water supplier met the distribution loss standards enacted by the board pursuant to Section 10608.34.

4.2.5 Current Water Use

4.2.6 Projected Water Use

Law

CWC 10635

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

CWC 10631

(h) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available... The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier’s plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

CWC 10631(d)(4)

(A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:

(i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.

(ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

4.2.7 Characteristic Five-Year Water Use

Law

CWC 10635(b)

Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following...

(3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period. [Emphasis added]

(4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

4.3 Worksheets and Reporting Tables

4.4 Water Use for Lower Income Households

Law

CWC 10631.1

(a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

California Health and Safety Code Section 50079.5 (a)

“Lower income households” means persons and families whose income does not exceed the qualifying limits for lower income families... In the event the federal standards are discontinued, the department shall, by regulation, establish income limits for lower income households for all geographic areas of the state at 80 percent of area median income, adjusted for family size and revised annually.

4.5 Climate Change Considerations

4.6 Guidance for Wholesale Suppliers

Law

CWC 10608.12. (w)

“Urban wholesale water supplier,” means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

4.7 SB X7-7 Forms and Summary Tables

4.7.1 SB X7-7 Verification Form (Baselines and Targets)

4.7.2 SB X7-7 2020 Compliance Form

4.7.3 Submittal Tables 5-1 and 5-2

4.7.4 Regional UWMP/Regional Alliance

4.8 Baseline and Target Calculations for 2020 UWMPs

4.8.1 Supplier Submitted 2015 UMWP, No Change to Service Area

4.8.2 Supplier Did Not Submit 2015 UWMP

4.8.3 Supplier Newly Subject to UWMP Requirements

4.8.4 Distribution Area Expansion

4.8.5 Distribution Area Contraction

4.8.6 Large Partial Customers Become Whole Customers

4.9 Methods for Calculating Population and Gross Water Use

4.9.1 Service Area Population

Law

CWC 10608.20

(e) An urban retail water supplier shall include in its urban water management plan due in 2010... the baseline per capita water use... along with the bases for determining those estimates, including references to supporting data.

(f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.

CWC 10644

(a)(2) The plan...shall include any standardized forms, tables or displays specified by the department.

4.9.2 Gross Water Use

Law

CWC 10608.12

(g) "Gross Water Use" means the total volume of water, whether treated or untreated, entering the distribution system of an urban retail water supplier, excluding all of the following:

(1) Recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier

(2) The net volume of water that the urban retail water supplier places into long term storage

(3) The volume of water the urban retail water supplier conveys for use by another urban water supplier

(4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.

California Code of Regulations Title 23 Division 2 Chapter 5.1 Article

Section 596 (a) An urban retail water supplier that has a substantial percentage of industrial water use in its service area is eligible to exclude the process water use of existing industrial water customers from the calculation of its gross water use to avoid a disproportionate burden on another customer sector.

4.10 2020 Compliance Daily Per-Capita Water Use (GPCD)

Law

CWC 10608.12

(f) "Compliance daily per-capita water use" means the gross water use during the final year of the reporting period...

CWC 10608.20

(e) An urban retail water supplier shall include in its urban water management plan due in 2010 . . . compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.

4.10.1 2020 Adjustments for Factors Outside of Supplier’s Control

Law

CWC 10608.24

(d)(1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:

(A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.

(B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.

(C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.

(2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.

Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use, Methodology 4

This section discusses adjustments to compliance-year GPCD because of changes in distribution area caused by mergers, annexation, and other scenarios that occur between the baseline and compliance years.

4.10.2 Special Situations

4.10.3 If Supplier Does Not Meet 2020 Target

4.11 Regional Alliance

CHAPTER 5 WATER SUPPLY CHARACTERIZATION

5.1 Water Supply Analysis Overview

Law

CWC 10631 (b)

Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier [in five-year increments to 20 years or as far as data is available]1 providing supporting and related information, including all of the following:

- (1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.
- (2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.
- (3) For any planned sources of water supply, a description of the measures that are being undertaken to acquire and develop those water supplies.

CWC 10631 (h)

An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier’s plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

5.2 Water Supply Characterization

5.2.1 Purchased or Imported Water

5.2.2 Groundwater

Law

CWC 10631 (b)(4)

If groundwater is identified as an existing or planned source of water available to the supplier, all the following information shall be included in the plan:

(A) The current version of any groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720), any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management for basins underlying the urban water supplier’s service area.

(B) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For a basin that has not been adjudicated, information as to whether the department has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to coordinate with groundwater sustainability agencies or groundwater management agencies listed in subdivision (c) of Section 10723 to maintain or achieve sustainable groundwater conditions in accordance with a groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720).

(C) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(D) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

5.2.2.1 Basin Description

5.2.2.2 Groundwater Management

5.2.2.3 Overdraft Conditions

Law

CWC 10631

(b) ...If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:

(3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

5.2.2.4 Past Five Years

5.2.3 Surface Water

5.2.4 Stormwater

5.2.5 Wastewater and Recycled Water

Law

CWC 10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier’s service area, and shall include all of the following:

(a) A description of the wastewater collection and treatment systems in the supplier’s service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier’s service area, including, but not limited to, the type, place, and quantity of use.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier’s service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(g) A plan for optimizing the use of recycled water in the supplier’s service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

5.2.5.1 Recycled Water Coordination

Law

CWC 10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier’s service area...

5.2.5.2 Wastewater Collection, Treatment, and Disposal

Law

CWC 10633 (a)

A description of the wastewater collection and treatment systems in the supplier’s service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

5.2.5.3 Recycled Water System Description

Law

CWC 10633 (c)

A description of the quantity of recycled water currently being used in the supplier’s service area, including but not limited to, the type, place, and quantity of use.

5.2.5.4 Potential, Current, and Projected Recycle Water Uses

Law

CWC 10633

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier’s service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

5.2.5.5 Actions to Encourage and Optimize Future Recycled Water Use

Law

CWC 10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier... and shall include the following:

(g) A plan for optimizing the use of recycled water in the supplier’s service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

5.2.6 Desalinated Water Opportunities

Law

CWC 10631

(g) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

5.2.7 Water Exchanges and Transfers

Law

CWC 10631 (c)

Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

5.2.8 Future Water Projects

Law

CWC 10631 (f)

Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs... that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

5.2.9 Summary of Existing and Planned Sources of Water

Law

CWC 10631

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision 10631(a), providing supporting and related information, including all of the following...

(b)(2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.

(h) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier’s plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

5.2.9.1 Description of Supplies

5.2.9.2 Quantification of Supplies

5.2.10 Special Conditions

5.2.10.1 Climate Change Effects

5.2.10.2 Regulatory Conditions and Project Development

5.2.10.3 Other Locally Applicable Criteria

5.3 Submittal Tables

5.4 Energy Intensity

Law

CWC 10631.2. (a)

In addition to the requirements of Section 10631, an urban water management plan shall include any of the following information that the urban water supplier can readily obtain:

- (1) An estimate of the amount of energy used to extract or divert water supplies.*
- (2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.*
- (3) An estimate of the amount of energy used to treat water supplies.*
- (4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.*
- (5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.*
- (6) An estimate of the amount of energy used to place water into or withdraw from storage.*
- (7) Any other energy-related information the urban water supplier deems appropriate.*

CHAPTER 6 WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

6.1 Introduction

6.2 Water Service Reliability Assessment

Law

CWC 10635

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional or local agency population projections within the service area of the urban water supplier.

6.2.1 Service Reliability - Constraints on Water Sources

Law

CWC 10631

(b)(1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

6.2.2 Service Reliability - Year Type Characterization

6.2.3 Water Service Reliability

Law

CWC 10631

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

6.2.3.1 Water Service Reliability – Normal Year Supply

6.2.3.2 Water Service Reliability – Single Dry Year

6.2.3.3 Water Service Reliability – Five Consecutive Dry Year Supply and Demand Comparison

6.2.4 Description of Management Tools and Options

Law

CWC 10620 (f)

An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

6.3 Drought Risk Assessment

Law

CWC 10635(b)

Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following:

- (1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.*
- (2) A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.*
- (3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.*
- (4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria..*

6.3.1 Data, Methods, and Basis for Water Shortage Condition

6.3.2 DRA Individual Water Source Reliability

6.3.3 Total Water Supply and Use Comparison

CHAPTER 7 WATER SHORTAGE CONTINGENCY PLAN

Law

CWC 10632

(a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier.

7.1 Water Supply Reliability Analysis

Law

CWC 10632(a)(1)

The analysis of water supply reliability conducted pursuant to Section 10635.

7.2 Annual Water Supply and Demand Assessment Procedures

Law

CWC 10632(a)(2)

The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:

- (A) The written decision-making process that an urban water supplier will use each year to determine its water supply reliability.*
- (B) The key data inputs and assessment methodology used to evaluate the urban water supplier’s water supply reliability for the current year and one dry year, including all of the following:*
 - (i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.*
 - (ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.*
 - (iii) Existing infrastructure capabilities and plausible constraints.*
 - (iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.*
 - (v) A description and quantification of each source of water supply.*

CWC 10632.1.

An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier’s water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.

7.2.1 Decision- Making Process

7.2.2 Data and Methodologies

7.3 Six Standard Water Shortage Levels

Law

CWC 10632(a)(3)

(A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers’

water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other potential emergency events.

(B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross-reference relating its existing categories to the six standard water shortage levels.

7.4 Shortage Response Actions

Law

CWC 10632

(a)(1) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.

(a)(4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:

(A) Locally appropriate supply augmentation actions.

(B) Locally appropriate demand reduction actions to adequately respond to shortages.

(C) Locally appropriate operational changes.

(D) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.

(E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

7.4.1 Demand Reduction

7.4.2 Supply Augmentation

7.4.3 Operational Changes

7.4.4 Additional Mandatory Restrictions

7.4.5 Emergency Response Plan

7.4.6 Seismic Risk Assessment and Mitigation Plan

Law

CWC 10632.5. (a)

In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

(b) An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.

(c) An urban water supplier may comply with this section by submitting, pursuant to Section 10644, a copy of the most recent adopted local hazard mitigation plan or multihazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multihazard mitigation plan addresses seismic risk.

7.4.7 Shortage Response Action Effectiveness

7.5 Communication Protocols

Law

CWC 10632 (a)(5)

Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:

- (A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.*
- (B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.*

7.6 Compliance and Enforcement

Law

CWC 10632 (a)(6)

For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.

7.7 Legal Authorities

Law

CWC 10632 (a)(7)

- (A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.*
- (B) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1. [see below]*
- (C) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.*

CWC Division 1, Section 350

Declaration of water shortage emergency condition. The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.

7.8 Financial Consequences of WSCP

Law

CWC 10632 (a)(8)

A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:

- (A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).*

- (B) *A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).*
- (C) *A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.*

7.9 Monitoring and Reporting

Law

CWC 10632 (a)(9)

For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

7.10 WSCP Refinement Procedures

Law

CWC 10632 (a)(10)

Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

7.11 Special Water Feature Distinction

Law

CWC 10632 (b)

For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

7.12 Plan Adoption, Submittal and Availability

CHAPTER 8 DEMAND MANAGEMENT MEASURES

New Requirements for 2020 Update

8.1 Demand Management Measures for Wholesale Suppliers

8.2 Existing Demand Management Measures for Retail Suppliers

Law

CWC 10631

(e) Provide a description of the supplier’s water demand management measures. This description shall include all of the following:

(1)(A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measure that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

(B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures:

(i) Water waste prevention ordinances.

(ii) Metering.

(iii) Conservation pricing.

(iv) Public education and outreach.

(v) Programs to assess and manage distribution system real loss.

(vi) Water conservation program coordination and staffing support.

(vii) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented

8.2.1 Water Waste Prevention Ordinances

8.2.2 Metering

Law

CWC 526

(a) Notwithstanding any other provisions of law, an urban water supplier that, on or after January 1, 2004, receives water from the federal Central Valley Project under a water service contract or subcontract... shall do both of the following:

(1) On or before January 1, 2013, install water meters on all service connections to residential and nonagricultural commercial buildings... located within its service area.

CWC 527

(a) An urban water supplier that is not subject to Section 526 shall do both the following:

(1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

8.2.3 Conservation Pricing

8.2.4 Public Education and Outreach

8.2.5 Programs to Assess and Manage Distribution System Real Loss

8.2.6 Water Conservation Program Coordination and Staffing Support

8.2.7 Other Demand Management Measures

8.3 Reporting Information

8.3.1 Implementation Over the Past Five years

8.3.2 Implementation to Achieve Water Use Targets

8.4 Water Use Objectives (Future Requirements)

DRAFT

CHAPTER 9 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

9.1 Inclusion of all 2015 Data

9.2 Notice of Public Hearing

9.2.1 Notice to Cities and Counties

Law

CWC 10621

(b) Every urban water supplier required to prepare a plan shall... at least 60 days prior to the public hearing on the plan ... notify any city or county within which the supplier provides waters supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

CWC 10642

...The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area...

9.2.1.1 60 Day Notification

9.2.1.2 Notice of Public Hearing

9.2.1.3 Submittal TABLES

9.2.2 Notice to the Public

Law

CWC 10642

...Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection...Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code...

Government Code 6066

Publication of notice pursuant to this section shall be once a week for two successive weeks. Two publications in a newspaper published once a week or oftener, with at least five days intervening between the respective publication dates not counting such publication dates, are sufficient. The period of notice commences upon the first day of publication and terminates at the end of the fourteenth day, including therein the first day.

9.3 Public Hearing and Adoption

Law

CWC 10642

...Prior to adopting either, the [plan or water shortage contingency plan], the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon.

CWC 10608.26

(a) In complying with this part, an urban retail water supplier shall conduct at least one public hearing to accomplish all of the following:

(1) Allow community input regarding the urban retail water supplier’s implementation plan for complying with this part.

(2) Consider the economic impacts of the urban retail water supplier’s implementation plan for complying with this part.

(3) Adopt a method, pursuant to subdivision (b) of Section 10608.20 for determining its urban water use target.

9.3.1 Public Hearing

9.3.2 Adoption

Law

CWC 10642

...After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing.

9.4 Plan Submittal

Law

CWC 10621

(e) Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021...

CWC 10644

(a)(1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption.

(a)(2) The plan, or amendments to the plan, submitted to the department... shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

CWC 10635

(c) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

9.4.1 Submitting a UWMP and Water Shortage Contingency Plan to DWR

9.4.2 Electronic Data Submittal

Law

CWC 10644

(a)(2) The plan, or amendments to the plan, submitted to the department... shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

9.4.3 Submitting a UWMP to the California State Library

9.4.4 Submitting a UWMP to Cities and Counties

9.5 Public Availability

Law

CWC 10645

(a) Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

(b) Not later than 30 days after filing a copy of its water shortage contingency plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

9.6 Notification to Public Utilities Commission

Law

CWC 10621(c)

An urban water supplier regulated by the Public Utilities Commission shall include its most recent plan and water shortage contingency plan as part of the supplier's general rate case filings.

9.7 Amending an Adopted UWMP or Water Shortage Contingency Plan

Law

CWC 10621

(d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

(a)(1) Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

9.7.1 Amending a UWMP

9.7.2 Amending a Water Shortage Contingency Plan

DRAFT

**Dana Reserve Water Supply Assessment
(Revised February 15, 2024)**

DANA RESERVE

WATER SUPPLY ASSESSMENT

Prepared by Richard G Sweet and RRM Design
Group

Date: 6-23-2020 (Revised 02-15-2024)

Prepared for N.K.T. Nipomo Properties L.L.C. for the
Nipomo Community
Services District

ENGINEER OF RECORD:



DATE: 03-07-2024

CONTENTS

1. INTRODUCTION 6

 1.1 Background..... 6

2. PROJECT LOCATION AND DESCRIPTION 7

3. URBAN WATER MANAGEMENT PLAN APPLICABILITY 8

4. WATER SUPPLY 9

 4.1 Nipomo Supplemental Water Project 9

 4.2 Recycled Water Supply..... 12

 4.3 Return Flows..... 12

 4.4 Water Use Reduction 13

5. WATER RESOURCE AVAILABILITY AND RELIABILITY 14

 5.1 Water Availability 14

 5.2 Nipomo Supplemental Water Project..... 15

 5.2.1 Groundwater Reliability 19

6. WATER USAGE 20

 6.1 Water Conservation Program..... 20

7. ENTITLEMENTS/REGULATORY APPROVALS..... 21

8. DANA RESERVE SPECIFIC PLAN PROJECT..... 21

9. CONCLUSION..... 24

10. REFERENCES 25

APPENDECES

Appendix 1: NCSD Service Area and Sphere of Influence

Appendix 2: Dana Reserve Land Use Plan

Appendix 3: Dana Reserve location relative to **NCSD** Service Area other local water suppliers

Appendix 4: Santa Maria Valley Water Conservation District vs City of Santa Maria et al; Stipulation (June 2005)

Appendix 5: Wholesale Water Supply Agreement between NCSD and City of Santa Maria (May 2013)

Appendix 6: Supplemental Water Management and Groundwater Replenishment Agreement (October 2015)

Appendix 7: NMMA 15th Annual Report for the Year 2022 Submitted April 2023

Appendix 8: 2020 NCSD Urban Water Management Plan

SUMMARY

If approved by the San Luis Obispo County Board of Supervisors, the proposed Dana Reserve Specific Plan 2024 ("the Dana Reserve Project" or the "Project") would authorize the development of 288 acres that will consist of 1,370 workforce, affordable, or single-family dwelling units, approximately 154 accessory dwelling units (ADUs), 100 of which would be constructed concurrent with the initial construction of the Project's single family dwelling units, community commercial space, open space, and parks.¹ The property is located in the unincorporated area of San Luis Obispo County ("County") southwest of the Willow/US 101 Interchange and within the existing sphere of influence (SOI) of the Nipomo Community Services District (NCSD). See Appendix 1. The project is proposed to be annexed into the NCSD for water and wastewater services.

The purpose of this Water Supply Assessment (WSA), which has been prepared at the County's request, is to address the requirements of Senate Bill (SB) 610, as amended in 2018 (Wat. Code, § 10910 et seq.), as they apply to the Dana Reserve Project. SB 610 generally requires that a "public water system" that may be called upon to serve a proposed "project" (as defined in Water Code section 10912) determine whether the public water system will be able to provide water for such a project using "existing water supply entitlements, water rights, or water service contracts" during "normal, single dry, and multiple dry water years." The WSA must consider a 20-year planning period, considering "the public water system's existing and planned future uses, including agricultural and manufacturing uses." (Wat. Code, § 10910(c)(3).) Where the answer to this inquiry is negative, the public water system must set forth its plans for acquiring the "additional water supplies needed" to serve the project. (Wat. Code, § 10911(a).) If the projected water demand associated with the proposed project was accounted for in the public water system's most recently adopted urban water management plan, the public water system may incorporate the requested information from that urban water management plan (UWMP). (Wat. Code, § 10910(c)(2)).

This WSA, as requested by the County, is an updated version of an earlier WSA for the Project. The County requested this updated WSA for two reasons. First, the potential water demand for the Dana Reserve Project has increased (though modestly) following the San Luis Obispo County Planning Commission's October 24, 2023, recommendation to the Board of Supervisors that the Project include additional multi-family affordable units, the addition of a sheriff's sub-station and a fire station, inclusion of accessory dwelling units (ADUs), changes to park uses and a small reduction in commercial uses that were not included in the original Project proposal. The update in Project uses and the related change in water demands are detailed in Table 8.1.A. And second, the Planning Commission had received correspondence from the Golden State Water Company (Golden State) raising issues about the earlier WSA. This updated WSA addresses both the increased Project water demand and issues raised by Golden State.

Because the future annexation of the Project site was anticipated at the time NCSD adopted its most recent Urban Water Management Plan (UWMP), the anticipated water demand for the Project was included in that UWMP. Specifically, the UWMP shows the Project site as an "annexation under review" and accounted for the water demand that would arise if the site were annexed and developed. Thus, consistent with the provisions of Water Code section 10910(c)(2), the UWMP is referenced in this WSA to address items regarding water supply, water reliability, and water entitlements.

As explained below, NCSD will be able to serve the Project with existing supplies during normal, single dry, and multiple dry water years over a 20-year planning period, taking into account existing and planned future uses in NCSD's service area, including agricultural and manufacturing uses. **Thus, there is no need for NCSD to identify any additional water supplies to serve the Project.** The annual water demand for the Dana Reserve Project, is 377 AF. The water demand for the Project is detailed in Table 8.1.

¹ A copy of the 2024 Specific Plan Site Plan is included as Appendix 2 to this document.

This amount of water is available from existing water supplies, as explained below.

The NCS D's UWMP states that, in the fifth dry year of five successive dry years, in the year 2045, the total available **water supply will be 4,013 AF**. This water supply consists of 1,013 AF of groundwater from the Nipomo Mesa Management Area (NMMA) portion of the adjudicated Santa Maria River Valley Groundwater Basin and 3,000 AF of imported water from the Nipomo Supplemental Water Project (NSWP), which includes both surface water from the State Water Project (originating in the Feather River) and groundwater from the Santa Maria Valley Management Area (SMVMA) portion of the Santa Maria River Valley Groundwater Basin. The NSWP was a required element of the Santa Maria Groundwater Adjudication, Stipulated Agreement ("Stipulation"), and is further defined within the Wholesale Water Supply Agreement and the Supplemental Water Management and Groundwater Replenishment Agreement (see Appendices 4 and 5). NCS D's annexation policy requires that annexed properties shall be served entirely by imported water. The NSWP imports water from the City of Santa Maria to the NMMA. The City of Santa Maria UWMP substantiates that, in the fifth year of five successive dry years, in 2045, there will be more than an ample water supply to provide the 3,000 AF of imported water to the NSWP. The primary physical features of the NSWP are already in place, and the NSWP is presently delivering over 1,000 AFY. The remaining items to be constructed to deliver the 3,000 AFY are scheduled to be completed by the NCS D by 2025.

The water demand in 2045 for the NCS D, as illustrated in the UWMP, **is 3,573 AF**. The water demand consists of the water required to serve the Dana Reserve Project (as originally proposed), water needed to serve all properties within the NCS D boundary, the water required to serve all possible ADUs, and water transferred to Golden State Water Company and Woodlands Mutual Water Company, pursuant to the terms of the Supplemental Water Management and Groundwater Replenishment Agreement.

The UWMP thus shows that, in the fifth dry year of five successive dry years, in 2045, NCS D's water supply will exceed water demand by 440 AF (4,013 minus 3,573).

The projected water demand includes:

- The complete build out of all parcels within the present NCS D boundary
- The construction of every accessory dwelling unit (ADU) that could possibly be built within the current NCS D boundary (a conservative and unlikely scenario)
- The full development of the Dana Reserve Project as initially proposed (352 AFY).

The proposed Dana Reserve Specific Plan (DRSP) ultimately could assist NCS D in reducing its net effect on groundwater pumping in the NMMA by increasing the water available to recharge the basin. This is because, in effect, the Project will convert imported water from the City of Santa Maria into treated wastewater available to recharge the NMMA directly through percolation.

Per the terms of the Stipulated Agreement, the NMMA Technical Group (TG) must prepare and file with the court an annual report that, in summary, must describe the results of the monitoring program changes in groundwater supplies, identify threats to groundwater supplies, and tabulate water use in the NMMA.

The technical recommendation within the annual report prioritizes the following recommendation as the highest priority recommendation:

"1. **Supplemental Water Supplies** – Reducing pumping is the most effective method to reduce stress on the aquifers and to allow groundwater to recover; continued operation of the NSWP is another viable method to achieve these goals. The TG recommends that this project continue to be implemented consistent with the Judgment and Stipulation."

The NCSD and its customers have significantly reduced the need for groundwater pumping in the NMMA since 2009; importing the maximum amount of water available from the NWSP is consistent with this recommendation.

Even when considering the reduction of NCSD groundwater usage within the NMMA from the 1,013 AFY available to NCSD in the most severe groundwater basin condition as indicated in the UWMP, there would continue to be sufficient water to serve the demands of the Project, including:

- additional multi-family affordable units,
- the addition of a sheriff's sub-station,
- the addition of a fire station,
- the addition of accessory dwelling units (ADUs),
- changes to park uses, and
- a small reduction in commercial uses that were not included in the original Project proposal.

The total project water demand, as detailed in Table 8.1, is 377 AFY. This is 25 AFY greater than the water demand of the original project of 352 AFY, as identified in the UWMP. The difference in uses and water demand are detailed in Table 8.1.A. The original water demand of 352 AFY shown in the UWMP illustrates that under the most severe conditions there would remain 440 AFY of surplus water. Including the additional water demand of 25 AFY for the present Project to the water demand of the original project (352 AFY + 25 AFY = 377 AFY) shows that a total surplus of 415 AFY (440 AFY – 25 AFY = 415 AFY) will exist.

The wastewater from the Project will be processed at the NCSD's Southland WWTF. The total amount of wastewater available for use to the NCSD after the contribution of the wastewater from the Project will be approximately 729 AFY. NCSD will utilize all processed wastewater to recharge the groundwater basin (return flows).

1. INTRODUCTION

This WSA was prepared for the proposed DRSP pursuant to the requirements of Water Code section 10910 et seq. (also known as S.B. 610) (Stats. 2001, Ch. 643). The NCSD is the local water purveyor and is the proposed water supplier. This WSA analyzes the NCSD's ability to serve the Project.

1.1 Background

Water Code section 10910 requires that a city or county faced with consideration of a "project" as defined in Water Code section 10912 that is subject to the California Environmental Quality Act (CEQA) identify any public water system that may supply water for the project and to request that public water system prepare a specified water supply assessment. The assessment must ultimately determine whether the public water system's water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

As part of this analysis, the assessment is required to include an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts. The assessment must be approved by the governing body of the public water system supplying water to the project. If the projected water demand associated with the project was included as part of the most recently adopted urban water management plan, the public water system may incorporate the requested information from the UWMP in the water supply assessment. In this instance, the Project's water demand is included in the NCSD 2020 UWMP. The Project property is within the NCSD UWMP area and within the SOI as determined by the San Luis Obispo Local Agency Formation Commission (LAFCo).

If the public water system concludes that existing water supply entitlements, water rights, or water service contracts are, or will be, insufficient, plans for acquiring additional water supplies are required to be submitted to the city or county. The city or county must include the water supply assessment in any environmental document prepared for the project pursuant to the act.

As defined under Section 10912 of the Water Code, a "project" includes the following:

- a. A proposed residential development of more than 500 dwelling units
- b. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space
- c. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space
- d. A proposed hotel or motel, or both, having more than 500 rooms
- e. A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area
- f. A mixed-use project that includes one or more of the projects specified in this subdivision
- g. A project that would demand an amount of water equivalent to, or greater than the amount of water required by a 500-dwelling unit project

The Project is a master-planned neighborhood development comprised of a mix of uses and meets the definition of a "project" under Section 10912(a) of the Water Code.

2. PROJECT LOCATION AND DESCRIPTION

The proposed DSRP is in the southern portion of San Luis Obispo County, California. This property is located immediately north of the Urban Reserve Line of the NCSD, and within the District's LAFCo-approved SOI. The Project is proposed to be annexed into the NCSD's jurisdictional boundaries. The Project site is bounded by Willow Road and Cherokee Place to the north, existing residential ranchettes to the south and west, and U.S. Highway 101 to the east. The property is less than a mile north of Tefft Street, a primary commercial corridor servicing the community, and just south of the new Willow Road interchange. Nipomo Regional Park is within 1,500 feet of the property's southwest corner.

The Project encompasses three parcels totaling approximately 288+/- acres and is currently undeveloped. The Project site includes the +/- 275-acre western portion of the property, formerly referred to as Cañada Ranch, as well as two additional +/- 6.5-acre properties to the north that will provide access to Willow Road.

The development areas are listed in Table 2-1.

TABLE 2.1
Dana Reserve Land Use

HOUSING DEVELOPMENT NEIGHBORHOOD TOTALS ON GROSS SITE

LAND USE TOTALS

NBD	PRODUCT TYPE	LAND USE	LAND USE ACRES	% OF GROSS SITE	UNIT COUNT
1	MULTI-FAMILY	DR-MF	8.7	3.0%	173
2	MULTI-FAMILY	DR-MF	10.5	3.6%	210
3	CLUSTER	DR-SF2	15.3	5.3%	124
4	4,000-5,000 SF LOT	DR-SF1	11.4	4.0%	72
5	4,000-5,000 SF LOT	DR-SF1	17.2	6.0%	104
6	4,000-5,000 SF LOT	DR-SF1	18.6	6.5%	114
7	4,500-8,700 SF LOT	DR-SF1	28.9	10.0%	157
8	5,000-8,600 SF LOT	DR-SF1	16.8	5.8%	62
9	4,500 SF - 10,000 SF LOT	DR-SF1	37.9	13.2%	198
SUBTOTAL:			165.3	57.4%	1,214
10A	AFFORDABLE	DR-MF	3.5	1.2%	84 MIN
10B	AFFORDABLE	DR-MF	3.0	1.1%	72 MIN
AFFORDABLE SUBTOTAL:	AFFORDABLE	DR-MF	6.5	2.3%	156 MIN
N/A	INTERNAL NEIGHBORHOOD ROADS ¹	-	-	-	-
N/A	POCKET PARKS (PARK) ¹	-	-	-	-
N/A	RECREATION	DR-REC	8	2.8%	-
N/A	PRIMARY ROADS	-	22	7.6%	-
N/A	PARK AND RIDE ²	-	-	-	-
N/A	RESIDENTIAL RURAL ³	RR	10	3.5%	-
TOTAL:			211.8	73.6%	1,370

Potential ADUs (100 of which are to be constructed concurrent with initial construction of Project's single family homes) 154

Total Unit Count (including potential ADUs) : 1,524

COMMERCIAL TOTALS ON GROSS SITE

LAND USE TOTALS

	LAND USE	LAND USE ACRES	% OF GROSS SITE
FLEX COMMERCIAL	DR-FC	17.9	6.2%
VILLAGE COMMERCIAL	DR-VC	4.4	1.5%
TOTAL:		22.3	7.7%

OPEN SPACE ON GROSS SITE

LAND USE TOTALS

	LAND USE	LAND USE ACRES	% OF GROSS SITE
OPEN SPACE	DR-OS	53.9	18.7%
TOTAL:		53.9	18.7%

3. URBAN WATER MANAGEMENT PLAN APPLICABILITY

Water Code Section 10910(c)(1) requires a determination of whether the water demand of a proposed project, as defined, was accounted for in the applicable public water system's most recently adopted UWMP. The NCSD Board of Directors adopted its most recent UWMP on December 8, 2021. It provides a description of NCSD's service area (including NCSD's sphere of influence), demographics, multi-source water supply, treatment, and conveyance/distribution facilities. The UWMP also includes historical and future water demand to serve the build-out of NCSD service areas and is generally consistent with the Future service areas / General plan build-out, which

includes the Project. (See Appendix 1, which shows the Project is within the NCSD LAFCo approved SOI.) The UWMP identifies the project area known as "Dana Reserve" as "Annexations Under Review" and accounts for service to the Dana Reserve within Table 4-2 entitled, "Retail: Demands for Potable and Raw Water-Projected." Water service to the Dana Reserve is included in the evaluation of all water supply scenarios included within the UWMP.

The NCSD 2020 UWMP includes policies related to present water demand and overall projected water demand through 2045. The UWMP also addresses water conservation, water resource availability, multi-source water supply, and recycled water.

The City of Santa Maria 2020 UWMP is referenced in section 5.2.1. of this report to illustrate the substantial water resources available to the City of Santa Maria to fulfill the terms of the Wholesale Water Supply Agreement (Appendix 5) in support of the Nipomo Supplemental Water Project (NWSP).

4. WATER SUPPLY

Water Code Section 10910(b) requires the identification of the public water system that may serve the Project. The NCSD, formed in 1965, provides sewer, water, solid waste, and some street lighting, drainage, and landscape maintenance services and is the proposed water supplier for the Project.

4.1 Nipomo Supplemental Water Project

Before July 2015, groundwater was the sole source of water supply to the Nipomo Mesa. In 1997, legal action was filed by the Santa Maria Valley Water Conservation District against the City of Santa Maria for adjudication of the groundwater basin. In this lengthy litigation, hundreds of property owners and numerous water purveyors in both San Luis Obispo and Santa Barbara Counties were also named. During the process to resolve the litigation, a Stipulation (Appendix 4) was entered into by all of the water purveyors, numerous property owners, and both San Luis Obispo and Santa Barbara Counties and approved by the court. The Stipulation defines the purpose and objective of the Stipulation as follows: "The terms and conditions of this Stipulation are intended to impose a physical solution establishing a legal and practical means for ensuring the Basin's long-term sustainability. This physical solution governs Groundwater, SWP [Supplemental Water Project] Water and Storage Space and is intended to ensure that the Basin continues to be capable of supporting all existing and future reasonable beneficial uses."

The Stipulation defines three management areas within the basin that have sufficient distinguishing characteristics to permit the water resources and facilities of each area to be individually managed. The management areas are the Northern Cities Management Area, the Nipomo Mesa Management Area, and the Santa Maria Valley Management Area." Exhibit "C" of the Stipulation defines the boundaries of the three management areas. In general, the Northern Cities Management Area (NCMA) is the northern portion of the basin. It encompasses the area north of Nipomo Mesa and contains the Cities of Grover Beach, Arroyo Grande, and portions of Pismo Beach. The Oceano urban area is also within the NCMA. The Santa Maria Valley Management Area (SMVMA) lays over a majority of the Santa Maria Valley and incorporates the entire cities of Santa Maria and Guadalupe. It also overlays the entire Orcutt Urban Area. The Nipomo Mesa Management Area (NMMA) encompasses the Nipomo Mesa and is north of the SMVMA and south of the NCMA. The Project would be located within the area defined as the NMMA.

The physical solution for each of the three management areas requires that each management area establish a monitoring program that specifies that each management area collects and analyzes data regarding water supply and demand conditions. Also, "[w]ithin one hundred and twenty days after each year, each management area must file an annual report with the Court." The annual report will summarize the results of the management program, changes in groundwater supplies and any threats to groundwater supplies. The annual report shall also include a tabulation

of management area water use, including imported water availability and use, return flow entitlement and use, other developed water availability and use, and groundwater use." The NMMA Annual Report for 2022 is Appendix 7.

A provision of the physical solution specific to the NMMA defines the import of water from the City of Santa Maria to the NMMA. The stipulation states that, "The NCSD agrees to purchase and transmit to the NMMA a minimum of 2,500 acre-feet of Nipomo Supplemental Water each year. However, the NMMA Technical Group may require the NCSD in any given year to purchase and transmit to the NMMA an amount in excess of 2,500 acre-feet and up to a maximum amount of supplemental water which the NCSD is entitled to receive under the MOU if the Technical Group concludes that such an amount is necessary to protect or sustain the groundwater supplies in the NMMA."

Facilitation of the import of Nipomo Supplemental Water resulted in the execution of the Wholesale Water Supply Agreement 2013, between the City of Santa Maria and the NCSD, and the execution of the Supplemental Water Management and Groundwater Replenishment Agreement (October 2016) between the NCSD and the other water purveyors in the NMMA (Golden State Water Company (GSWC), Rural Water Company (now GSWC) and Woodlands Mutual Water Company (WMWC)).

The Wholesale Water Supply Agreement, 2013 states, "This Agreement shall supersede the terms of the MOU and Original Agreement." The Wholesale Water Supply Agreement thus replaced and superseded the MOU cited in the Stipulation. The Wholesale Water Supply Agreement provides for a minimum delivery schedule that increases from 645 AFY in the initial year to 2,500 AFY in the 11th year and through the term of the agreement. The initial delivery occurred in 2015. The term of the agreement is 85 years from the initial delivery of Nipomo Supplemental Water. The Wholesale Water Supply Agreement also provides for an additional delivery of 3,200 AFY above the minimum delivery. The agreement requires the City of Santa Maria to "hold on reserve sufficient supplemental water each year, including an equivalent amount of capacity in the City's water distribution system, for the City to fulfill its obligation to deliver the minimum quantity to the NCSD under this Agreement." The Wholesale Water Supply Agreement also addresses pricing, points of connection, and operational issues.

The Supplemental Water Management and Groundwater Replenishment Agreement (October 2015) is an agreement between the NCSD and the "Water Companies" on the Nipomo Mesa. The Water Companies are identified as Golden State Water Company (GSWC), Rural Water Company (RWC), and Woodlands Mutual Water Company (WMWC). Subsequently GSWC acquired the assets of RWC. The purpose of the Supplemental Water Management and Groundwater Replenishment Agreement is stated as follows:

PURPOSE:

- A. The purpose of this Agreement is to enable the Parties to meet their respective obligations under the Judgment, based on the percentage allocations presented in Section I.K, regarding the NSWP. In particular, the Parties intend this Agreement to provide for: (1) payment to NCSD for each Party's allocation of Costs, and (2) distribution and use of Nipomo Supplemental Water.
- B. The underlying premise of the NSWP is to use Nipomo Supplemental Water within the **NMMA** to offset 2,500 AFY of groundwater pumping in those areas within the **NMMA** where groundwater levels are most depressed and thus augment the replenishment of groundwater in those critical areas within the NMMA. As described herein, the Parties will use the Nipomo Supplemental Water to increase groundwater replenishment within the NMMA and improve the long-term reliability and integrity of groundwater availability within the NMMA. The Nipomo Supplemental Water delivered to the Parties pursuant

to this Agreement shall be used exclusively for the benefit of properties within the existing jurisdictions and service areas of the Parties and in accordance with the Judgment and Stipulation.

The Supplemental Water Management and Groundwater Replenishment Agreement provides that, "the Parties shall purchase the following portions of the Nipomo Supplemental Water each year to offset groundwater pumping within the NMMA."

Entity	Percent Allocation	AFY (2,500 AF NSWP Yield)
NCS D	66.68	1667.00
G S W C	8.33	208.25
R W C	8.33	208.25
W M W C	16.66	416.50
Total	100.00	2500.00

The Supplemental Water Management and Groundwater Replenishment Agreement further acknowledges the initial delivery of supplemental water in 2015, and that upon completion of the sale of RWC to GSWC, GSWC will assume the entirety of RWC's benefits and obligations under this agreement. It further recognizes that the NCS D has designed the NSWP to deliver 3,000 AFY and all costs associated with the capacity in excess of 2,500 AFY are solely assigned to the NCS D.

To provide for the physical delivery of NSW, the NCS D engaged in a large construction project that included:

- Installation of a 24-inch diameter pipe which interconnected with the City of Santa Maria Water Distribution system and traverses under the Santa Maria River
- A flow meter and flow control station
- A pump station with a water storage tank
- A chloramination system and related power, back-up power
- Controls and instrumentation systems
- A pressure reducing station
- A chloramination systems at five (5) existing NCS D production wells

In July 2015, the initial water was delivered to the NCS D.

The Table below identifies the amount of water that the NCS D and each Water Company will receive, consistent with the Supplemental Water Management and Groundwater Replenishment Agreement within a delivery of 3,000 AFY from the NSWP. As noted within the Supplemental Water Management and Groundwater Replenishment Agreement, NCS D has designed the NSWP to deliver 3,000 AFY and all costs associated with the capacity in excess of 2,500 AFY are solely assigned to the NCS D.

TABLE 4.1.1
Nipomo Supplemental Water Project
Total Water Available Per Purveyor (2025-2026)

Purveyor	Contracted Delivery (A.F.Y.)	Additional Capacity (A.F.Y.)	Total (A.F.Y.)
NCSD	1,667	500	2,167
GSWC	208.25		208.25
RWC (GSWC)	208.25		208.25
WMWC	416.5		416.5
Total	2,500	500	3,000

Note: This WSA only evaluates supply and demand for the NCSD and does not evaluate supply and demand for other water purveyors within the NMMA.

4.2 Recycled Water Supply

Currently NCSD operates two wastewater treatment facilities (WWTF) within the water service area. Southland WWTF collects and treats wastewater from much of the Nipomo Community Services District and discharges treated effluent back into the Santa Maria Groundwater Basin via percolation ponds. The percolation rates into the groundwater from these ponds are discussed in section 4.3 below.

The Blacklake WWTF is planned to be decommissioned in 2025. Once this plant is decommissioned, sewer from the Blacklake Sewer Service Area will be pumped to the Southland WWTF for treatment and disposal. Currently, the Blacklake WWTF treats wastewater through secondary treatment methods and discharges wastewater to the water hazards at Blacklake Golf Course. Water is extracted from the water hazards as necessary to irrigate the rough areas of three holes of the golf course adjacent to the WWTF. Blacklake WWTF operates under reclamation orders from Regional Water Quality Control Board. NCSD does not provide recycled water to any other users.

4.3 Return Flows

Wastewater recharged into the underlying groundwater basin is referred to as "return flows." The NMMA 15th Annual Report identifies present Wastewater Discharge and Reuse quantities in the NMMA. The annual report identifies 2022 wastewater flows to the Southland WWTF and Blacklake WWTF at 593 AFY. Due to the anticipated decommissioning of the Blacklake WWTF as noted above, flows from both plants are included in these flow calculations. Accounting for losses due to solids removal and evaporation from the settling ponds, the amount identified for infiltration back into the groundwater basin was 516 AFY. The 516 AFY represents a thirteen percent (13%) loss from the original influent value of 593 AFY. Wastewater flows from the Project will be conveyed to the Southland WWTF and consist of the following projected quantities:

TABLE 4.3.1
Wastewater Flows From the Dana Reserve

Residential	208 AFY
Commercial	36.4 A.F.Y.
Park	5.5 A.F.Y. (not added to waste flow)
Total	244.40 AFY

Adding the 244.40+/- AFY flow from the Project to the existing flow to the Southland WWTF and Blacklake WWTF results in projected total inflow to the Southland WWTF of 837.40 AFY.

Reducing this total inflow number by thirteen percent (13%) in losses results in **projecting total inflow to the basin (return flows) for a recharge of approximately 729 AFY. This is a way to maximize the recharge of the basin to offset groundwater use.**

**TABLE 4.3.2
Summary of Return Flows
Sources and Losses**

Wastewater Source	Wastewater Quantity	Return Flow Available (13% loss)
Dana Reserve	244.40 AFY	213 AFY
Combined Southland and Blacklake W.W.T.F	593.0 AFY	516 AFY
Total	837.4 AFY	729 AFY

4.4 Water Use Reduction

As required in the Stipulated Agreement, NCSD has dramatically reduced overall water demand and significantly reduced its reliance on groundwater through the importation of NSWP water. The Stage IV water severity condition that the NMMA is presently in sets a goal that groundwater deliveries be reduced by fifty percent from average production in 2009 through 2013. For NCSD, the average for the five-year period is 2,533.4 AFY, so NCSD has targeted its groundwater pumping to not exceed 1,266.7 AFY. Since 2016 the NCSD has pumped less than 1,266.7 AFY.

The water production summary table, Table 4.4.1, shows that from 2000 to 2022, the NCSD reduced its pumping demand on the groundwater basin from a high of **3,033 AFY in 2003 to a low of 748 AFY in 2022**, a seventy-five percent (75%) reduction in groundwater production. The 748 AFY of groundwater production is significantly lower than the requested 1,266.7 AFY production level requested under the Stage IV water severity condition. The water production summary table illustrates the reduction in groundwater production since 2000. The Table also shows both the amount of NSWP water delivered and total water utilized by NCSD. Values are derived from the 2005 Updated UWMP, the 2010 UWMP or, when available (from 2008 forward), the NMMA Annual Reports.

**TABLE 4.4.1
 Nipomo Community Services District
 Water Production Summary**

Year	Groundwater (AFY)	NSWP (AFY)	Total (AFY)
2000	2,414	0	2,414
2001	2,285	0	2,285
2002	2,710	0	2,710
2003	3,033	0	3,033
2004	2,908	0	2,908
2005	2,794	0	2,794
2006	2,727	0	2,727
2007	2,839	0	2,839
2008	2,700	0	2,700
2009	2,560	0	2,560
2010	2,370	0	2,370
2011	2,488	0	2,488
2012	2,572	0	2,572
2013	2,646	0	2,646
2014	2,224	0	2,244
2015	1,626	321	1,947
2016	1,078	759	1,837
2017	999	941	1,940
2018	1,003	959	1,962
2019	901	967	1,868
2020	1,008	1,041	2,049
2021	935	1,064	1,999
2022	748	1,141	1,889

This Table clearly illustrates that groundwater pumping over this period has declined from a high of 3,033 AFY in 2003 to a low of 748 AFY in 2022. This reduction clearly complies with the intent of the Supplemental Water Management and Groundwater Replenishment Agreement as required in the Stipulation and Final Judgement.

5. WATER RESOURCE AVAILABILITY AND RELIABILITY

5.1 Water Availability

The NCSD relies on imported NSWP water and groundwater as its two primary water sources. Table 5.1 from the UWMP illustrates the most severe water supply scenario of multiple dry years. The table illustrates that in the year 2045 and in the fifth of five successive dry years, the water supply exceeds the water demand by 440 AF. The table includes the baseline water demand for the Project in the amount of 352 AF as "Annexations Under Review."

**TABLE 5.1.1
Retail: Multiple Dry Years Supply and Demand Comparison**

		2025	2030	2035	2040	2045
First year (NMMA Stage 2)	Groundwater Supply	2,027	2,027	2,027	2,027	2,027
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	5,027	5,027	5,027	5,027	5,027
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,900	1,656	1,589	1,522	1,454
Second year (NMMA Stage 3)	Groundwater Supply	1,733	1,733	1,733	1,733	1,733
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,733	4,733	4,733	4,733	4,733
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,606	1,362	1,295	1,228	1,160
Third year (NMMA Stage 4)	Groundwater Supply	1,267	1,267	1,267	1,267	1,267
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,267	4,267	4,267	4,267	4,267
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,140	896	829	762	694
Fourth year (NMMA Stage 5)	Groundwater Supply	1,013	1,013	1,013	1,013	1,013
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,013	4,013	4,013	4,013	4,013
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	886	642	575	508	440
Fifth year (NMMA Stage 5)	Groundwater Supply	1,013	1,013	1,013	1,013	1,013
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,013	4,013	4,013	4,013	4,013
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	886	642	575	508	440

5.2 Nipomo Supplemental Water Project

The NCS D 2020 UWMP states, "Based on the existing infrastructure of the NSWP and contractual obligations, between NCS D and the City, this water supply source is considered 100% reliable and is available during normal, single, and multiple dry year conditions."

The City of Santa Maria 2020 Urban Water Management Plan Table 5.2.1 identifies water demands through the year 2045 and clearly identifies 2,500 AFY of water conveyed to Nipomo, see below.

TABLE 5.2.1
City of Santa Maria Water Demand through 2045
City of Santa Maria UWMP

Submittal Table 5.2.1 Retail: Use for Potable and Non-Potable ¹ Water – Projected						
Use Type	Additional Description (as needed)	Projected Water Use ² <i>Report To the Extent that Records are Available</i>				
		2025	2030	2035	2040	2045 (opt)
Single Family		5,878	6,155	6,432	6,708	6,809
Multi-Family	Includes mobile home parks	2,053	2,149	2,246	2,343	2,378
Commercial	Includes mobile home parks	2,124	2,223	2,323	2,423	2,460
Industrial		786	823	860	897	911
Landscape		1,557	1,630	1,704	1,777	1,804
Sales/Transfers/Exchanges to other Suppliers	Obligation to Golden State water Company in agreement	20	20	20	20	20
Sales/Transfers/Exchanges to other Suppliers	Orcutt supplemental water	800	900	900	900	900
Sales/Transfers/Exchanges to other Suppliers	Sale to Nipomo	1,000	2,500	2,500	2,500	2,500
Losses		531	556	581	606	615
	Other	277	290	303	316	320
TOTAL		15,026	17,247	17,869	18,490	18,716
¹ Recycled water demands are NOT reported in this Table. Recycled water demands are reported in Table 6-4. ² Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.						
NOTES: All projections assume variable population growth per Santa Barbara County Association of Governments Regional Growth Forecast 2050						

While the 2,500 AFY delivered to Nipomo identified in this Table is 500 AFY less than the 3,000 AFY identified within the NCSD's 2020 Urban Water Management Plan, Table 7-4, The City of Santa Maria 2020 Urban Water Management Plan Appendix Table 5.2.2 below, illustrates that in 2045 after five consecutive dry years there is clearly ample supply to provide the NCSD with the additional 500 AFY for a total of 3,000 AFY per the terms of the Wholesale Water Supply Agreement between the City of Santa Maria and the NCSD.

**TABLE 5.2.2
Retail: Multiple Dry Years Supply and Demand Comparison**

Submittal Table 5.2.2 Retail: Multiple Dry Years Supply and Demand Comparison						
		2025*	2030*	2035*	2040*	2045* (Opt)
First year	Supply totals	29,189	29,662	30,136	30,610	31,084
	Demand totals	15,026	17,247	17,869	18,490	18,716
	Difference	14,163	12,415	12,267	12,120	12,368
Second year	Supply totals	29,605	28,989	28,374	27,758	27,143
	Demand totals	15,026	17,247	17,869	18,490	18,716
	Difference	14,579	11,742	10,505	9,268	8,427
Third year	Supply totals	27,169	26,417	25,665	24,913	24,161
	Demand totals	15,026	17,247	17,869	18,490	18,716
	Difference	12,143	9,170	7,796	6,423	5,445
Fourth year	Supply totals	30,126	30,121	30,116	30,111	30,106
	Demand totals	15,026	17,247	17,869	18,490	18,716
	Difference	15,100	12,874	12,247	11,621	11,390
Fifth year	Supply totals	25,735	25,396	25,058	24,720	24,382
	Demand totals	15,026	17,247	17,869	18,490	18,716
	Difference	10,709	8,149	7,189	6,230	5,666
Sixth year <i>(optional)</i>	Supply totals					
	Demand totals					
	Difference	0	0	0	0	0

Table 5.2.3 of the City of Santa Maria 2020 Urban Water Management Plan illustrates the City's water supply under multiple dry year periods.

**TABLE 5.2.3
Supply Reliability for the City of Santa Maria for Year 2040**

Source	Normal	Single-Dry	Multiple-Dry Water Years (1930-1934)				
	Water Year	Water Year (1977)	Year 1	Year 2	Year 3	Year 4	Year 5
Imported Water from SWP	10,118	1,960	4,633	4,336	1,782	7,603	2,079
Twitchell Yield	14,300	14,300	14,300	14,300	14,300	14,300	14,300
Groundwater	5,100	5,100	5,100	5,100	5,100	5,100	5,100
Return flows from SWP water	6,577	5,516	6,577	5,864	5,112	4,028	3,701
Total	36,095	26,876	30,610	29,600	26,294	31,031	25,180
Notes: A. Granted under the Stipulation; subject to adjustments that could be ordered by the Court. B. Return flows are based on a five-year rolling average of imported water. Single-dry year impacts will not affect availability of return flows for previous five-year average. C. Multiple-dry year reliability of return flows considers the previous five-year rolling average of SWP imports. These projections assume five years of normal water years before the beginning of the multiple-dry year period. D. Groundwater supplies are based on prescriptive rights in Santa Maria Groundwater Basin as defined in the Judgement. Pursuant to the Court's Phase 5 Statement of Decision, the City has been assigned 5,100 AF/YR of prescriptive right.							

Twitchell Yield, as referred to in Table 5.2.3, is water that is released from the Twitchell Reservoir for restoration of the groundwater basin within the Santa Maria Valley Management Area. The reservoir is on the Sisquoc River and is approximately six miles upstream with its confluence with the Santa Maria River. The project was constructed in the late 1950's by the US Bureau of Reclamation for the purpose of flood control and the release of water to restore the groundwater basin in the Santa Maria Valley. Releases of water from the reservoir are managed by the Santa Maria Valley Water Conservation District with maximizing the potential groundwater recharge as their primary objective.

The Stipulation identifies the yield (amount of water stored in the basin) from the Twitchell Project in Section V, "Physical Solution; Provisions Specific to the Santa Maria Valley."

A. Twitchell Water

- i. *Amount.* The Twitchell Project annually provides a variable amount of developed water that augments the groundwater in the Santa Maria Valley Management Area. Twitchell Yield is thirty-two thousand AFY.
- ii. *Division of Twitchell Yield.* Twitchell Yield shall be divided as follows: 80% to Santa Maria, SCWC, and Guadalupe and 20% to the overlying owners within the district who are Stipulating Parties.
 - a. The Twitchell Yield allocated to Santa Maria, SCWC, and Guadalupe, as attached and incorporated herein as Exhibit "F".

Section 4 of Exhibit "F" of the Stipulation cites the following:

Twitchell Yield

The Parties agree that 80% of the 32,000 acre-feet of Twitchell Yield shall be allocated as follows: Santa Maria 14,300 acre-feet; Guadalupe 1,300 acre-feet, and SCWC 10,000

acre-feet. The Parties acknowledge that the remaining 20% of the Twitchell Yield (6,400 acre-feet) is allocated to the Overlying Owners within the District who are Stipulating Parties, subject to the terms of the Stipulation.

Of recent note is the litigation of San Luis Obispo Coastkeeper, Los Padres Forest Watch versus Santa Maria Valley Water Conservation District Board of Directors; et al. The plaintiffs argued that the operation of Twitchell Reservoir must provide additional releases to sustain Steelhead. The United States Court of Appeals for the Ninth Circuit reversed the District Court's Judgment and concluded that "Twitchell Dam can readily be operated to provide **modest** releases at certain times of the year and during certain water years, while still satisfying the dam's primary purpose of conserving water for consumptive purposes" (United States Court of Appeals for the Ninth Circuit, San Luis Obispo Coastkeeper v SMVWCD, filed September 23, 2022). This decision was the subject of a Petition for Certiorari with the United States Supreme Court, which was denied on October 2, 2023. The matter will be returned to the District Court and ultimately the Bureau of Reclamation for additional action. The likely practical impact of the decision will be additional "modest releases" from the reservoir, as cited in the Appeals Court Decision, though that actual extent of the impact on reservoir operations has yet to be defined.

5.2.1 Groundwater Reliability

As referenced in prior sections of this report, the Stipulated Agreement established physical solutions to ensure the viability of the groundwater basin.

A significant factor in the physical solution is the NWSP, which replaces groundwater in the NMMA portion of the Santa Maria River Valley Groundwater Basin with imported water supplied by the City of Santa Maria, which uses State Water Project surface water and groundwater from the SMVMA portion of the Santa Maria River Valley Groundwater Basin. Portions of the NWSP are completed and approximately 1,000 AFY is presently being delivered to the NCSD.

The NWSP will be improved to deliver the 2,500 AFY by 2025-26 fiscal year as required by the Wholesale Water Supply Agreement between the City of Santa Maria and the NCSD.

Additional basin management measures include:

- I. Development of a groundwater monitoring plan. The NMMA technical group has adopted and implemented a groundwater monitoring program
2. Preparation of an annual report by the Technical Group of the NMMA that shall include the following:
 - a. Summarize the results of the groundwater monitoring program.
 - b. Changes in groundwater supplies.
 - c. Identify threats to groundwater supplies.
 - d. Tabulation of management area water use as identified below:
 - i. Imported water availability and use
 - ii. Return flow availability and use
 - iii. Groundwater availability and use
3. Severe Water Shortage Response Plan - Technical Group has developed a Severe Water Shortage Response plan that establishes criteria to define potentially severe and severe water conditions. The stipulating parties are coordinating efforts to implement voluntary conservation measures and adopt programs to increase the supply of Nipomo Supplemental Water. As noted throughout this report, the NCSD has significantly reduced its use of groundwater, including to less than 800 AFY in 2022.
4. New Urban Water Uses – New urban uses within the SOI or service area are required to obtain water service from the local water supplier, which is the NCSD. The local public

water supplier shall provide service on a reasonable and non-discriminatory basis. The NCSD has implemented an NSWSP fee to be paid by each new water meter connection.

In April 2023, the NMMA Technical Group submitted the 15th Annual Report (included as Appendix 7), which reflects conditions found in the NMMA in 2022. In summary, the 15th Annual Report concluded as follows:

- Severe water shortage conditions continue to exist as indicated by the lowest Key Well Index on Record
- The NCSD delivered 1,141 AF of imported water through the NSWSP
- A total reduction of 2,423 AF delivered of water by the water purveyors (-43%) was accomplished in 2022 as compared to 2013
- There is no evidence of seawater intrusion based on coastal water quality
- The total Wastewater Treatment facility effluent discharged in the NMMA was 658 AF and contour maps suggest that groundwater flow is generally east to west (toward the ocean)
- The contour maps also show a landward gradient from the coast in the deep aquifer, which is an indication that groundwater flow is from the coastal areas, resulting in an increased potential for seawater intrusion

The technical recommendation within the Annual Report prioritizes the following recommendation as the highest priority recommendation.

"1. Supplemental Water Supplies – Reducing pumping is the most effective method to reduce stress on the aquifers and to allow groundwater to recover: continued operation of the NSWSP is another viable method to achieve these goals. The Technical Group recommends that this project continue to be implemented consistent with the Judgment and Stipulation."

The additional NSWSP water to serve the Dana Reserve project will provide NCSD the opportunity increase the amount of imported water delivered by the NSWSP thereby addressing both recommendations of the NMMA Technical Group.

6. WATER USAGE

Current water use provided by NCSD includes single-family, multifamily, commercial (including institutional and industrial), landscape, and irrigation customers. As reported in the 2020 Urban Water Management Plan, the total water demand for the NCSD in 2020 was 2,050(+/-) A.F.

6.1 Water Conservation Program

Section 4.4 of this report, entitled "Water Use Reduction," provides considerable data illustrating the reduction in water use by NCSD. For the 2022 calendar year, NCSD pumped 748 AF of groundwater. As described earlier, the 748 AFY of groundwater production is a 71 percent reduction in pumping from the 2,533.4 AFY baseline groundwater production value. This significant reduction in groundwater pumping was accomplished by the implementation of water conservation strategies, the importation of NSWSP water, significant rain during the year.

In 2009, the Legislature passed Senate Bill X7-7, requiring water agencies to reduce per capita water use by 25% by the year 2020. NCSD has complied with the Memorandum of Understanding (MOU) regarding urban water conservation, which was a negotiated agreement between water purveyors statewide and environmental organizations on how best to utilize the State's water resources by incorporating conservation into their water management practices. The NCSD has actively pursued the implementation of the water efficiency best management practices (BMP) prescribed in the MOU. The BMP have been developed over the years by water purveyors, environmental groups, and industry stakeholders.

These BMP are identified in the NCSD 2020 Urban Water Management Plan as demand management measures and include (measures marked with # are not currently in effect):

- A plumbing retrofit program requiring the installation of low flow fixtures before the sale of property
- Customers must repair leaks, breaks, and malfunctions in a timely manner
- Landscape - restrict or prohibit runoff from landscape irrigation
- #Landscape - limit landscape irrigation to specific times
- Pools and spas - require covers for pools and spas
- #Prohibit use of potable water for washing hard surfaces
- #Prohibit use of potable water for construction and dust control
- #Conservation pricing

Further reduction in groundwater pumping is reliant on NCSD's ability to import more NSWP water and demand reduction through continued conservation efforts. Increasing the amount of NSWP water NCSD can deliver is dependent on two items:

- Completion of the infrastructure for the NSWP to deliver more than 1,000 AFY
- Revenues of substantial value to pay the City of Santa Maria for the wholesale water supply

7. ENTITLEMENTS/REGULATORY APPROVALS

Water Code Section 10910(d)(2) requires the identification of existing water supply entitlements, water rights, or water service contracts, federal, state, and local permits for construction of necessary infrastructure, and any regulatory approvals required to be able to deliver the water supply. The entitlements for NCSD are described above in the section describing water supply and water usage.

8. DANA RESERVE SPECIFIC PLAN PROJECT

The DRSP 2024 is proposed as a master-planned neighborhood development comprised of a mix of uses. Table 8-1 was developed to project DRSP's water demand using the water use factors from the UWMP, City of Santa Barbara, and/or San Luis Obispo County if there was not a direct water usage factor listed in the 2015 UWMP. Using these water demand factors shows that the total estimated water use for the DRSP as recommended by the Planning Commission would be 377 (+/-) A.F.Y.

Table 8-1 details the project water demands under each land use area of the proposed site.

TABLE 8.1
Dana Reserve Specific Plan
Water Demand

Type of Usage	Units	gal/unit-day	Acreage	Demand (A.F.Y.)
Residential				
Condominiums	173	114		22.14
Townhomes	210	129		30.24
Small Lot SFR (Lot size < 5,000 sq. ft.)	571	186		118.77
Medium Lot SFR (Lot size > 5,000 and < 7,000)	260	300		87.36
Multifamily	156	129		22.46
Total Residential	1,370			280.98
Commercial + Daycare				
Commercial Bldg. (1/3 parking, 1/3 bldg., 1/3 landscaping) source S.B. City Planning		0.136 AF per 1000 sq ft	7.46	44.25
Commercial Landscaping (1AF/Acre)		1 A.F./Acre	7.46	7.46
Parking		0	7.46	0
Total Commercial			22.41	51.71
Public		A.F./Acre		
Fire station		0.136 AF/Year/1000 sf (assumes 12,000+/- sf building)		1.63
Sheriff Station		0.136 AF/Year/1000 sf (assumes 7,500+/- sf building)		1.02
Public Park		1	1	1
Neighborhood Parks		1	12	12
Streetscape/Parkways		1	6.5	6.5
Total Public				22.15
Grand Subtotal				
Residential	1,370			280.98
Commercial				51.71
Public				22.15
Subtotal				354.84
154 Potential ADUs	154			21.56
Total	1,524			376.40

* Water usage factors used in the table above are derived from the following sources: 2020 NCSD UWMP, The City of Santa Barbara, and the County of SLO were used if there wasn't a direct water usage factor listed in the 2015 UWMP. for each land use designation. The water demand usage factors have been reduced by the mandated 20% as described in the 2020 UWMP.

As the Project proceeded through the planning process, several changes to the project occurred, which modestly increased the Project's water demand by 25 AFY. These changes consisted of:

- The addition of ADUs
- The addition of affordable multifamily units
- The addition of a sheriff's substation

- The addition of a fire station
- Changes from active park to passive open space
- Reduction in commercial area.

These changes are detailed in Table 8.1.A.

**Table 8.1A
Dana Reserve Specific Plan
Water Demand
Comparison**

Type of Use	Units Original Project	Water Demand Original (AFY)	Units Present Project	Water Demand Present (AFY)	Change In Units	Change In Water (AFY)
Residential						
Condominiums	173	22.14	173	22.14	0	0.00
Townhouses	210	30.24	210	30.24	0	0.00
Small Lot SFR	571	118.77	571	118.77	0	0.00
Medium Lot SFR	260	87.36	260	87.36	0	0.00
Multifamily	75	10.84	156	22.46	81	11.62
Total Residential	1289	269.35	1,370	280.97	81	11.62
Commercial/Daycare						
Commercial Bldg	7.65 ac	45.36	7.46 ac	44.25	-0.19 ac	-1.11
Comm. Landscape	7.65 ac	7.66	7.46 ac	7.46	-0.19 ac	-0.20
Parking	7.65 ac	0.00	7.46 ac	0.00	-0.19 ac	0.00
Total Commercial	10.65 ac	53.02	22.38 ac	51.71	-0.57 ac	-1.31
Public						
Fire Station	0	0.00	1.00	1.63	1.00	1.63
Sheriff Station	0	0.00	1.00	1.02	1.00	1.02
Public Park	11 ac	11.00	1 ac	1.00	-10.0 ac	-10.00
Neighborhoods Parks	12 ac	12.00	12 ac	12.00	0.00 ac	0.00
Streetscapes/Prkways	6.5 ac	6.50	6.5 ac	6.50	0.00 ac	0.00
Total Public		29.50		22.15		-7.35
ADU	0	0.00	154	21.56	154	21.56
Subtotal						
Residential	1289	269.35	1370	280.97	81	11.62
Commercial		53.02		51.71		-1.31
Public		29.50		22.15		-7.35
ADU	0	0.00	154	21.56	154	21.56
Total		351.87		376.39		24.52

9. CONCLUSION

The NCSD 2020 UWMP, Table 7-4 entitled, "Retail: Multiple Dry Years Supply and Demand Comparison" (see Table 5.1.1) illustrates the comparison of supply versus demand after successive five dry years in 2045. This projection includes the water use for the Project, a groundwater pumping volume of 1,013 AFY, and indicates an excess in water supply of 440 AFY. Under the most severe condition of the groundwater basin within the NMMA (Stage V), NCSD has a 60% targeted groundwater production and, at this level, can continue to pump 1,013 AFY of groundwater. It should be noted that the water demand reflects the NCSD's water demand projection of 100 percent infill within present NCSD boundaries and with all eligible lots having installed an ADU.

Per the NCSD's annexation policy, the water demands from the Project provide the NCSD the opportunity to increase the amount of imported water from the NSWP, which in turn will result in total water returned to the NMMA area through return flows resulting from treated wastewater.

Adding an additional 25 AFY of water demands to the Project due to changes to the project that occurred in the planning process, as detailed in Table 8.1.A, to the baseline water demand of 352 AFY results in a total projected water demand for the Project of 377 AFY (Table 8.1). Table 9.1 illustrates that with the addition of the 25 AFY to the water demand of the original project identified within the UWMP (352 AFY) that, under the most severe water supply conditions, there will be a surplus water supply of 415 AFY.

TABLE 9.1
Adjustments to Supply and Demand Illustrating
Groundwater Use Reduction and
Increased Water Demand from Possible ADUs

Water Demand	AFY
Increase form original Project, detailed Table 8.A.1	25
Total from Table 7-4 of UWMP	3,573
Revised including revised Project water demand	3,598
Water Supply	
Minimum groundwater supply	1,013
NSWP	3,000
Total supply	4,013
Surplus Water	415 AFY

10. REFERENCES

Nipomo Community Services District 2020 Urban Water Management Plan. Final December 2021, prepared by MKN & Associates

City of Santa Maria 2020 UWMP. Final June 2021, prepared by Provost and Pritchard

Nipomo Mesa Management Area, 15th Annual Report, calendar year 2022, prepared by NMMA Technical Group.

Nipomo Mesa Management Area T.G. Well Management Plan

Meeting minutes – District Manager's Reports

APPENDICES

Appendix 1: NCSD Service Area and Sphere of Influence

Figure 1-1 – Recommended Sphere of Influence



Appendix 2: Dana Reserve Land Use Plan

DANA RESERVE LAND USE & PUBLIC ROADS



GROSS LAND USE TOTALS

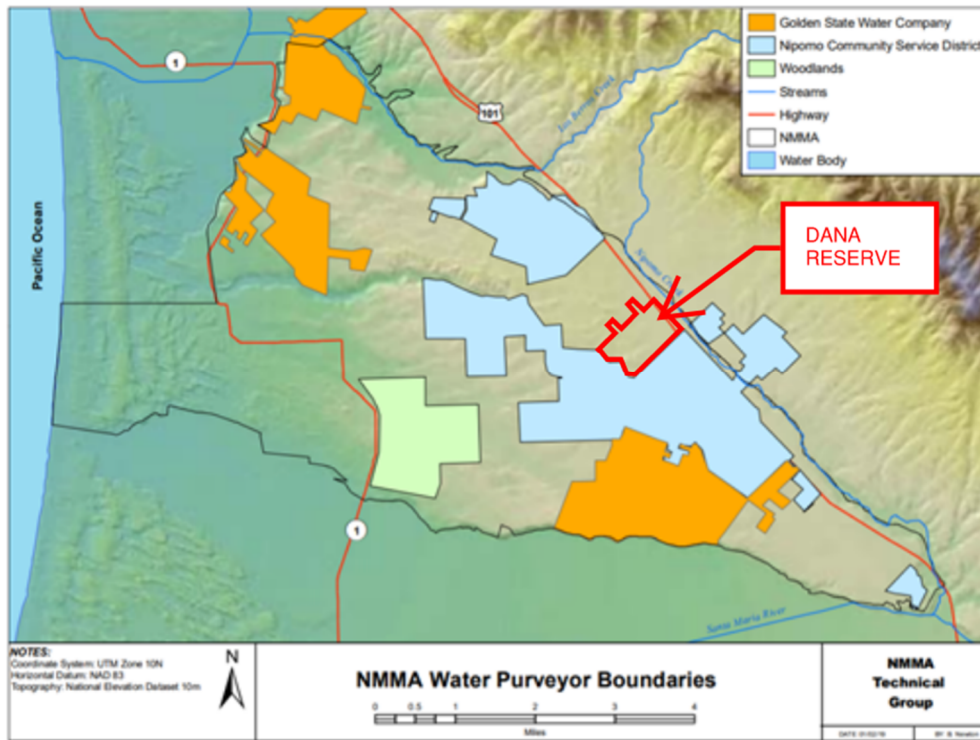
COLOR	LAND USE	ACRES	%
Light Tan	FEDERAL WETLANDS (DR-FF)	257	15%
Light Tan	WATER	10	0%
Light Tan	RESIDENTIAL SINGLE FAMILY (DR-SF1)	851	48%
Light Tan	RESIDENTIAL MEDIUM DENSITY (DR-MD)	10	0%
Light Tan	RESIDENTIAL HIGH DENSITY (DR-HD)	10	0%
Light Tan	INDUSTRIAL (DR-IND)	10	0%
Light Tan	COMMERCIAL (DR-COM)	10	0%
Light Tan	OFFICE (DR-OFF)	10	0%
Light Tan	RECREATION (DR-REC)	224	13%
Light Tan	OPEN SPACE (DR-OS)	10	0%
Light Tan	WOODLAND (DR-WO)	10	0%
Light Tan	AGRICULTURE (DR-AG)	10	0%
Light Tan	UNDEVELOPED (DR-UD)	10	0%
Light Tan	ROADS (DR-RO)	10	0%
Light Tan	UTILITIES (DR-UT)	10	0%
Light Tan	OTHER (DR-OT)	10	0%
Light Tan	TOTAL	2114	100%

GROSS TOTAL ACRES: 2114 ACRES
 *ALL UNDEVELOPED AREAS ARE UNDEVELOPED

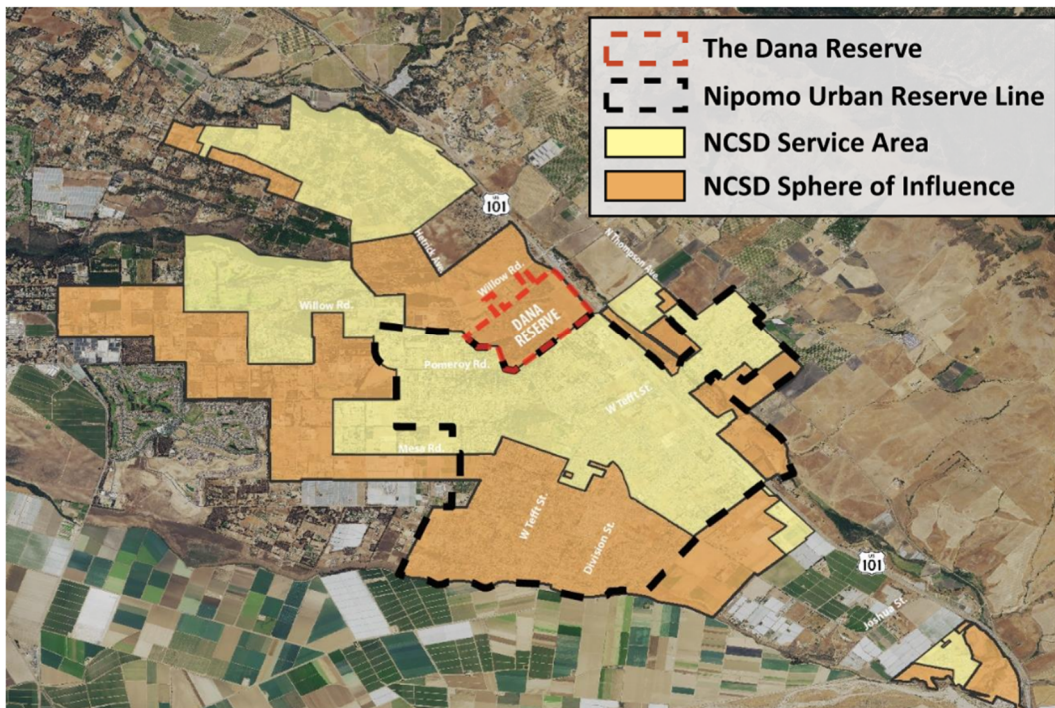
Scale: 0 50 100 Feet
 0 50 100 Meters

irm design group
 Staff 12 - November 2002

Appendix 3: Dana Reserve location relative to NCSA Service Area and other local water suppliers



Community Location



Appendix 4: Appendix 4: Santa Maria Valley Water Conservation District vs City of Santa Maria et al; Stipulation (June 2005)

Exhibit 1

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SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF SANTA CLARA

SANTA MARIA VALLEY WATER
CONSERVATION DISTRICT,

Plaintiff,

v.

CITY OF SANTA MARIA, et al.,

Defendants.

) SANTA MARIA GROUNDWATER
) LITIGATION
) Lead Case No. CV 770214
) (CONSOLIDATED FOR ALL PURPOSES)

) [Consolidated With Case Numbers:
) CV 784900; CV 785509; CV 785522;
) CV 787150; CV 784921; CV 785511;
) CV 785936; CV 787151; CV 784926;
) CV 785515; CV 786791; CV 787152;
) CV 036410]

AND RELATED CROSS-ACTIONS AND
ACTIONS CONSOLIDATED FOR ALL
PURPOSES

) San Luis Obispo County Superior Court Case
) Nos. 990738 and 990739

) [Assigned to Judge Jack Komar for All
) Purposes]

STIPULATION (JUNE 30, 2005 VERSION)

TABLE OF CONTENTS

	<u>Page</u>
1	
2	
3	I. INTRODUCTION – ALL MANAGEMENT AREAS 1
4	A. Parties and Jurisdiction 1
5	B. Further Trial 2
6	C. Definitions 2
7	II. EXHIBITS 6
8	III. DECLARATION OF RIGHTS -- ALL MANAGEMENT AREAS 6
9	A. Recognition of Priority of Overlying Rights 7
10	B. Prescriptive Rights 7
11	C. Appropriative Rights 7
12	D. Developed Water Rights 7
13	E. Rights to Storage Space 7
14	F. Other Surface Water Rights 7
15	IV. PHYSICAL SOLUTION – ALL MANAGEMENT AREAS 8
16	A. Authority 8
17	B. Purposes and Objectives 8
18	C. Basin Management Areas 8
19	D. Groundwater Monitoring 9
20	E. New Developed Water 10
21	F. Severe Water Shortage Response 11
22	V. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO SANTA MARIA VALLEY MANAGEMENT AREA 11
23	A. Water Rights to Sources of Supply 11
24	B. Monitoring and Management 14
25	C. Response to Varying Conditions 15
26	D. Management and Administration of the Twitchell Project 17
27	E. New Urban Uses – Santa Maria Valley Management Area 20
28	VI. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NIPOMO MESA MANAGEMENT AREA 21
29	A. Supplemental Water 21
30	B. Rights to Use Groundwater 23
31	C. NMMA Technical Group 24
32	D. Potentially Severe and Severe Water Shortage Conditions 25
33	E. New Urban Uses 27
34	VII. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NORTHERN CITIES MANAGEMENT AREA 28
35	VIII. INJUNCTION – ALL MANAGEMENT AREAS 29
36	A. Use Only Pursuant to Stipulation 29
37	B. Injunction Against Transportation From the Basin 29

1	C.	No Third Party Beneficiaries	29
2	IX.	RESERVED JURISDICTION – ALL MANAGEMENT AREAS	30
3	A.	Reserved Jurisdiction; Modifications, Cancellations, Amendments.....	30
4	B.	Noticed Motion	31
5	C.	<i>De Novo</i> Nature of Proceeding	31
6	D.	Filing and Notice.....	31
7	X.	MISCELLANEOUS PROVISIONS – ALL MANAGEMENT AREAS	31
8	A.	Unenforceable Terms	31
9	B.	Water Quality	32
10	C.	Duty to Cooperate	32
11	D.	Stipulating Parties Under Public Utilities Commission Regulation	32
12	E.	Designation of Address, for Notice and Service	33
13	F.	No Loss of Rights	33
14	G.	Intervention After Judgment	33
15	H.	Stipulation and Judgment Binding on Successors, Assigns, etc.	34
16	I.	Costs.....	34
17	J.	Non-Stipulating Parties	34
18	K.	Counterparts	35
19	L.	Effective Date.....	35

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1 **I. INTRODUCTION -- ALL MANAGEMENT AREAS**

2 The Stipulating Parties hereby stipulate and agree to entry of judgment containing the
3 terms and conditions of this Stipulation.

4 **A. Parties and Jurisdiction**

5 1. Plaintiff and Cross-Defendant Santa Maria Valley Water Conservation District
6 (“District”) is a water conservation district organized under California Water Code section 74000,
7 *et seq.* The District does not pump Groundwater from the Basin.

8 2. Defendants, Cross-Complainants and Cross-Defendants the City of Santa Maria
9 (“Santa Maria”), City of Guadalupe (“Guadalupe”), Southern California Water Company
10 (“SCWC”), Nipomo Community Services District (“NCSD”), Rural Water Company (“RWC”),
11 City of Arroyo Grande (“Arroyo Grande”), City of Pismo Beach (“Pismo Beach”), City of Grover
12 Beach (“Grover Beach”) and Oceano Community Services District (“Oceano”) rely, in part, on
13 Groundwater to provide public water service to customers within the Basin.

14 3. Cross-Defendant County of San Luis Obispo (“San Luis Obispo”) is a subdivision
15 of the State of California. Cross-Defendant San Luis Obispo County Flood Control and Water
16 Conservation District (“SLO District”) is a public entity organized pursuant to the laws of the
17 State of California. Neither San Luis Obispo nor SLO District pumps Groundwater from the
18 Basin.

19 4. Cross-Defendant County of Santa Barbara (“Santa Barbara”) is a subdivision of
20 the State of California. Santa Barbara does not pump Groundwater from the Basin.

21 5. Numerous other Cross-Defendants and Cross-Complainants are Overlying
22 Owners. Many of these Overlying Owners pump Groundwater from the Basin, while others do
23 not currently exercise their Overlying Rights. Those Overlying Owners who are Stipulating
24 Parties are identified on Exhibit “A”.

25 6. This action presents an *inter se* adjudication of the claims alleged between and
26 among all Parties. This Court has jurisdiction over the subject matter of this action and over the
27 Parties herein.

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1 **B. Further Trial**

2 The Stipulating Parties recognize that not all Parties have entered into this Stipulation and
3 that a trial will be necessary as to all non-Stipulating Parties. No Stipulating Party shall interfere
4 or oppose the effort of any other Stipulating Party in the preparation and conduct of any such
5 trial. All Stipulating Parties agree to cooperate and coordinate their efforts in any trial or hearing
6 necessary to obtain entry of a judgment containing the terms and conditions of this Stipulation.
7 No Stipulating Party shall have any obligation to contribute financially to any future trial.

8 **C. Definitions**

9 As used in this Stipulation, the following terms shall have the meanings herein set forth:

- 10 1. Annual or Year – That period beginning January 1 and ending December
11 31.
- 12 2. Annual Report – The report prepared and filed with the Court annually for
13 each Management Area.
- 14 3. Appropriative Rights – The right to use surplus Native Groundwater for
15 reasonable and beneficial use.
- 16 4. Available State Water Project Water – The amount of SWP Water an
17 Importer is entitled to receive in a given Year based upon the California Department of Water
18 Resources final Table A allocation.
- 19 5. Basin - The groundwater basin described in the Phase I and II orders of the
20 Court, as modified, and presented in Exhibit “B”.
- 21 6. Developed Water – Groundwater derived from human intervention as of
22 the date of this Stipulation, which shall be limited to Twitchell Yield, Lopez Water, Return
23 Flows, and recharge resulting from storm water percolation ponds.
- 24 7. Groundwater – Twitchell Yield, Lopez Water, Return Flows, storm water
25 percolation, Native Groundwater and all other recharge percolating within the Basin.
- 26 8. Importer(s) – Any Party who brings Imported Water into the Basin. At the
27 date of this Stipulation, the Importers are Santa Maria, SCWC, Guadalupe, Pismo Beach, and
28 Oceano.

1 9. Imported Water – Water within the Basin, originating outside the Basin
2 that absent human intervention would not recharge or be used in the Basin.

3 10. Lopez Project – Lopez Dam and Reservoir located on Arroyo Grande
4 Creek, together with the associated water treatment plant, delivery pipeline and all associated
5 facilities, pursuant to State Water Resources Control Board permit No. 12814 (A-18375) and
6 pending application No. A-30826.

7 11. Lopez Water – Groundwater within the Basin derived from the operation of
8 the Lopez Project.

9 12. Management Areas – The three areas within the Basin that have sufficient
10 distinguishing characteristics to permit the water resources and facilities of each area to be
11 individually managed. The Management Areas are: the Northern Cities Management Area, the
12 Nipomo Mesa Management Area, and the Santa Maria Valley Management Area, as shown on
13 Exhibit "C".

14 13. Management Area Engineer -- The individual(s) or consulting firm(s) that
15 are hired to prepare the Monitoring Plan(s) and Annual Report(s) for one or more of the
16 Management Areas.

17 14. Monitoring Parties – Those Parties responsible for conducting and funding
18 each Monitoring Program.

19 15. Monitoring Program – The data collection and analysis program to be con-
20 ducted within each Management Area sufficient to allow the preparation of the Annual Report.

21 16. Native Groundwater – Groundwater within the Basin, not derived from
22 human intervention, that replenishes the Basin through precipitation, stream channel infiltration,
23 tributary runoff, or other natural processes.

24 17. New Developed Water – Groundwater derived from human intervention
25 through programs or projects implemented after the date of this Stipulation.

26 18. New Urban Uses – Municipal and industrial use which may occur on land
27 that, as of January 1, 2005, was located: 1) within the boundaries of a municipality or its sphere of
28 influence, or within the process of inclusion in its sphere of influence; or 2) within the certificated

1 service area of a publicly regulated utility. The New Urban Use areas are identified in Exhibit
2 "D". New Urban Uses does not include the current DJ Farms development within Guadalupe
3 City limits (including Santa Barbara County APN 113-080-18, 113-080-24).

4 19. Nipomo Mesa Management Area or NMMA – That Management Area
5 shown on Exhibit "C".

6 20. Nipomo Mesa Management Area Technical Group – The committee
7 formed to administer the relevant provisions of the Stipulation regarding the Nipomo Mesa
8 Management Area.

9 21. Northern Cities Management Area – That Management Area which is part
10 of Zone #3 of the San Luis Obispo County Flood Control and Water Conservation District as
11 shown on Exhibit "C".

12 22. Northern Cities – Arroyo Grande, Pismo Beach, Grover Beach and
13 Oceano.

14 23. Northern Parties – The Northern Cities, the Overlying Owners within the
15 Northern Cities Management Area, San Luis Obispo and the SLO District.

16 24. Overlying Right – The appurtenant right of an Overlying Owner to use
17 Native Groundwater for overlying, reasonable and beneficial use.

18 25. Overlying Owner(s) – Owners of land overlying the Basin who hold an
19 Overlying Right.

20 26. Party – Each Person in this consolidated action, whether a Stipulating
21 Party or a non-Stipulating Party.

22 27. Person – Any natural person, firm, association, organization, joint venture,
23 partnership, business, trust, corporation, or public entity.

24 28. Public Hearing – A hearing after notice to all Parties and to any other
25 person legally entitled to notice.

26 29. Return Flows – Groundwater derived from use and recharge within the
27 Basin of water delivered through State Water Project facilities.

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1 30. Santa Maria Valley Management Area – That Management Area shown on
2 Exhibit “C”.

3 31. Severe Water Shortage Conditions – Those conditions, as separately
4 defined in a Severe Water Shortage Response Plan for each Management Area, that trigger
5 certain discretionary and mandatory responses by the Stipulating Parties upon order of the Court.

6 32. Severe Water Shortage Response Plan – The discretionary and mandatory
7 responses for each Management Area that are to be implemented when Severe Water Shortage
8 Conditions exist.

9 33. State Water Project Water or SWP Water – Water imported through the
10 State of California State Water Resources Development System pursuant to Division 6, Part 6,
11 Chapter 8, of the California Water Code.

12 34. Stipulating Party – A Party that has signed this Stipulation, as listed in
13 Exhibit “A”, or its heirs, executors, administrators, trustees, successors, assigns, and agents.

14 35. Storage Space – The portion of the Basin capable of holding water for sub-
15 sequent reasonable and beneficial uses.

16 36. SWP Contract(s) – Those series of contracts that entitle the Importers to
17 use SWP facilities to bring Imported Water into the Basin.

18 37. Twitchell Management Authority or TMA – The committee formed to
19 administer the relevant provisions of the Stipulation regarding the Santa Maria Valley Manage-
20 ment Area.

21 38. Twitchell Participants – Those Stipulating Parties holding rights to
22 Twitchell Yield.

23 39. Twitchell Project – Dam and reservoir authorized by Congress as the
24 “Santa Maria Project” on September 3, 1954 (Public Law 774, 83d Congress, ch. 1258, 2d
25 session, 68 Stat. 1190) and located on the Cuyama River, approximately six miles upstream from
26 its junction with the Sisquoc River, pursuant to that certain License For Diversion And Use of
27 Water, License No. 10416, issued by the State Water Resources Control Board.

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1 40. Twitchell Water – Groundwater derived from operation of the Twitchell
2 Project.

3 41. Twitchell Yield – The total amount of Groundwater allocated annually to
4 the Twitchell Participants.

5 **II. EXHIBITS**

6 The following Exhibits are attached to this Stipulation and incorporated herein:

7 1. *Exhibit "A"*, list identifying the Stipulating Parties and the parcels of land
8 bound by the terms of this Stipulation.

9 2. *Exhibit "B"*, Phase I and II Orders, as modified, and the attached map
10 depicting the Santa Maria Basin.

11 3. *Exhibit "C"*, map of the Basin and boundaries of the three Management
12 Areas.

13 4. *Exhibit "D"*, map identifying those lands as of January 1, 2005: 1) within
14 the boundaries of a municipality or its sphere of influence, or within the process of inclusion in its
15 sphere of influence; or 2) within the certificated service area of a publicly regulated utility; and a
16 list of selected parcels that are nearby these boundaries which are excluded from within these
17 areas.

18 5. *Exhibit "E"*, 2002 Settlement Agreement between the Northern Cities and
19 Northern Landowners.

20 6. *Exhibit "F"*, the agreement among Santa Maria, SCWC and Guadalupe
21 regarding the Twitchell Project and the TMA.

22 7. *Exhibit "G"*, the Court's Order Concerning Electronic Service of Pleadings
23 and Electronic Posting of Discovery Documents dated June 27, 2000.

24 8. *Exhibit "H"*, the form of memorandum of agreement to be recorded.

25 **III. DECLARATION OF RIGHTS -- ALL MANAGEMENT AREAS**

26 The terms and conditions of this Stipulation set forth a physical solution concerning
27 Groundwater, SWP Water and Storage Space, consistent with common law water rights priorities.

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1 **A. Recognition of Priority of Overlying Rights**

2 Except as expressly modified by the settlement agreement among the Northern Parties
3 (Exhibit "E"), all Overlying Owners that are also Stipulating Parties have a prior and paramount
4 Overlying Right, whether or not yet exercised.

5 **B. Prescriptive Rights**

6 As to the Stipulating Parties, no Party has proved prescriptive rights to any Native
7 Groundwater. Future use by the Stipulating Parties will not be adverse and will not ripen into a
8 prescriptive right as between the Stipulating Parties.

9 **C. Appropriative Rights**

10 Consistent with the specific provisions governing each Management Area, the Stipulating
11 Parties owning and exercising Appropriative Rights have the right to the reasonable and bene-
12 ficial use of Native Groundwater that is surplus to the reasonable and beneficial uses of the
13 Stipulating Parties that are Overlying Owners. New appropriative uses shall be subordinate to
14 existing appropriations and shall be prioritized on a first in time, first in right basis.

15 **D. Developed Water Rights**

16 The Stipulating Parties owning Developed Water or New Developed Water have the right
17 to its reasonable and beneficial use, consistent with the specific provisions governing each
18 Management Area. The right to use Developed Water is a right to use commingled Groundwater
19 and is not limited to the corpus of that water.

20 **E. Rights to Storage Space**

21 The Court shall reserve jurisdiction over the use of the Storage Space, and any Party may
22 apply to the Court for the approval of a project using Storage Space. The Court must approve any
23 project using Storage Space before any Party can claim a right to stored water from that project.
24 The Stipulating Parties agree that Groundwater derived from Developed Water is exempt from
25 the Court approval requirements of this Paragraph.

26 **F. Other Surface Water Rights**

27 Nothing in this Stipulation affects or otherwise alters common law riparian rights or any
28 surface water rights, unless expressly provided in this Stipulation.

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IV. PHYSICAL SOLUTION – ALL MANAGEMENT AREAS

A. Authority

Pursuant to Article X, section 2 of the California Constitution, the Stipulating Parties agree that the Court has the authority to enter a judgment and physical solution containing the terms and conditions of this Stipulation. Unless the Court imposes this physical solution, potential changes in water use could affect Basin adequacy and integrity. The Declaration of Rights is a component of this physical solution.

B. Purposes and Objectives

The terms and conditions of this Stipulation are intended to impose a physical solution establishing a legal and practical means for ensuring the Basin's long-term sustainability. This physical solution governs Groundwater, SWP Water and Storage Space, and is intended to ensure that the Basin continues to be capable of supporting all existing and future reasonable and beneficial uses. This physical solution is: 1) a fair and equitable basis for the allocation of water rights in the Basin; 2) in furtherance of the mandates of the State Constitution and the water policy of the State of California; and 3) a remedy that gives due consideration to applicable common law rights and priorities to use Groundwater and Storage Space, without substantially impairing any such right.

C. Basin Management Areas

Development and use of Groundwater, SWP Water and Storage Space have historically been financed and managed separately in three Management Areas. For example, only the Northern Parties have paid for, managed, and benefited from the Lopez Project; whereas only Santa Maria Valley parties have paid for, managed, and benefited from the Twitchell Project. In contrast, the Nipomo Mesa parties have not been involved in the funding or management of either the Twitchell or Lopez Projects.

The Stipulating Parties agree that Groundwater, SWP Water and Storage Space can be more efficiently allocated and managed in three Management Areas, given the physical, geographical, political, economic, and historic conditions. The three Management Areas, as shown on Exhibit "C," are as follows: Northern Cities Management Area; Nipomo Mesa Management

1 Area; and Santa Maria Valley Management Area. The Stipulating Parties intend that manage-
2 ment through three Management Areas will preserve the Basin's integrity.

3 **D. Groundwater Monitoring**

4 1. Monitoring Program. A Monitoring Program shall be established in each
5 of the three Management Areas to collect and analyze data regarding water supply and demand
6 conditions. Data collection and monitoring shall be sufficient to determine land and water uses in
7 the Basin, sources of supply to meet those uses, groundwater conditions including groundwater
8 levels and quality, the amount and disposition of Developed Water supplies, and the amount and
9 disposition of any other sources of water supply in the Basin. The Northern Cities Management
10 Area shall not be required to include in its Monitoring Program or Annual Reports quantification
11 of groundwater recharge from the Lopez Project or storm water percolation ponds, unless the
12 Court orders inclusion of this information.

13 Within one hundred and eighty days after entry of judgment, representatives of the Moni-
14 toring Parties from each Management Area will present to the Court for its approval their
15 proposed Monitoring Program. The Management Area Engineers shall freely share available well
16 data, groundwater models, and other products and tools utilized in monitoring and analysis of
17 conditions in the three Management Areas, consistent with the confidentiality provisions of this
18 Stipulation.

19 Absent a Court order to the contrary, all Stipulating Parties shall make available relevant
20 information regarding groundwater elevations and water quality data necessary to implement the
21 Monitoring Program approved for their respective Management Area. The Monitoring Parties
22 shall coordinate with the Stipulating Parties to obtain any needed data on reasonable terms and
23 conditions. Metering may only be imposed on Stipulating Parties upon a Court order following a
24 showing that such data is necessary to monitor groundwater conditions in the Basin, and in the
25 case of an Overlying Owner, that Overlying Owner has failed to provide information comparable
26 to that provided by other Overlying Owners. The confidentiality of well data from individual
27 owners and operators will be preserved, absent a Court order or written consent.

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2. Monitoring Parties. The Monitoring Parties are as follows:

(a) Santa Maria Valley Management Area – The Twitchell Management Authority.

(b) Northern Cities Management Area – The Northern Cities.

(c) Nipomo Mesa Management Area – The NMMA Technical Group.

3. Annual Reports. Within one hundred and twenty days after each Year, the Management Area Engineers will file an Annual Report with the Court. The Annual Report will summarize the results of the Monitoring Program, changes in groundwater supplies, and any threats to Groundwater supplies. The Annual Report shall also include a tabulation of Management Area water use, including Imported Water availability and use, Return Flow entitlement and use, other Developed Water availability and use, and Groundwater use. Any Stipulating Party may object to the Monitoring Program, the reported results, or the Annual Report by motion.

4. Management Area Engineer. The Monitoring Parties may hire individuals or consulting firms to assist in the preparation of the Monitoring Programs and the Annual Reports. Except as provided below for the Santa Maria Valley Management Area, the Monitoring Parties, in their sole discretion, shall select, retain and replace the Management Area Engineer.

E. New Developed Water

1. Stipulating Parties in each Management Area may prepare and implement plans to develop, salvage or import additional water supplies.

2. The Stipulating Parties that pay, or otherwise provide consideration, for New Developed Water are entitled to use it to the extent the New Developed Water augments the water supplies in that Management Area. If more than one Stipulating Party finances or participates in generating New Developed Water, rights to the supply of New Developed Water shall be proportional to each Stipulating Party's financial contribution or other consideration, or as otherwise mutually agreed to by the participating Stipulating Parties. This paragraph does not apply to Return Flows.

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1 3. The Stipulating Parties who desire to claim New Developed Water supplies
2 must bring a motion, and obtain an order from the Court, quantifying and allocating the rights to
3 the New Developed Water, before they have the prior right to the New Developed Water.

4 **F. Severe Water Shortage Response**

5 This physical solution sets forth a Severe Water Shortage Plan for each Management Area
6 which is intended to provide an effective response to Severe Water Shortage Conditions that may
7 develop within each or all of the Management Areas. The specific Severe Water Shortage Plans
8 for each Management Area are incorporated herein and made a part of the physical solution.

9 **V. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO SANTA MARIA VALLEY**
10 **MANAGEMENT AREA**

11 As supplemented by the provisions of this Stipulation that apply to all Management Areas,
12 the following terms govern rights to Groundwater, SWP Water and Storage Space in the Santa
13 Maria Valley Management Area.

14 **A. Water Rights to Sources of Supply**

15 1. Overlying Rights. The Stipulating Parties who are Overlying Owners
16 within the Santa Maria Valley Management Area each have the prior and paramount right to use
17 Native Groundwater. Subject to Paragraph V(C)(2)(b)(vi), all Overlying Rights are appurtenant
18 to the overlying land and cannot be assigned or conveyed separate or apart from those lands.

19 2. Appropriative Rights. The Parties listed in Exhibit "A" are the owners of
20 Appropriative Rights exercised in the Santa Maria Valley Management Area. Each Appropriative
21 Right is limited to Native Groundwater that is surplus to reasonable and beneficial uses of the
22 Stipulating Parties that are Overlying Owners in the Santa Maria Valley Management Area. New
23 appropriative uses shall be subordinate to existing Appropriative Rights and shall be prioritized
24 on a first in time, first in right basis.

25 3. Developed Water. The Stipulating Parties owning Developed Water have
26 the right to its reasonable and beneficial use, subject only to the Severe Water Shortage Plan. On
27 an annual basis, the Stipulating Parties shall have the right to the reasonable and beneficial use of
28 Developed Water that is surplus to the reasonable and beneficial uses of the owners of that

1 Developed Water. The right to use Developed Water is a right to use commingled Groundwater
2 and is not limited to the corpus of that water.

3 (a) New Developed Water. The ownership and use of New Developed
4 Water shall be subject to Court order.

5 (b) Twitchell Water.

6 (i) *Amount*. The Twitchell Project annually provides a variable
7 amount of Developed Water that augments the Groundwater in the Santa Maria Valley Manage-
8 ment Area. Twitchell Yield is thirty-two thousand acre-feet per year (“afy”).

9 (ii) *Division of Twitchell Yield*. Twitchell Yield shall be
10 divided as follows: 80% to Santa Maria, SCWC and Guadalupe, and 20% to the Overlying
11 Owners within the District who are Stipulating Parties.

12 a. The Twitchell Yield allocated to Santa Maria,
13 SCWC and Guadalupe is suballocated pursuant to the agreement among Santa Maria, SCWC and
14 Guadalupe, as attached and incorporated herein as Exhibit “F”.

15 b. The Twitchell Yield allocated to the Overlying
16 Owners who are Stipulating Parties within the District shall be equally allocated to each acre of
17 land within the District owned by these Stipulating Parties. Concurrently with the execution of
18 this Stipulation, each of these Stipulating Parties shall report their acreage of overlying land
19 within the District on a parcel specific basis. Within one hundred and twenty days of the effec-
20 tive date of this Stipulation, the Management Area Engineer shall create a list of all the Stipu-
21 lating Parties and their respective allocation of the Twitchell Yield.

22 (iii) *Recapture of Twitchell Yield*. The right to use Twitchell
23 Yield is a right to use commingled Groundwater and is not limited to the corpus of that water.

24 (iv) *Transfer of Twitchell Yield*. Twitchell Yield may be trans-
25 ferred, temporarily or permanently, only between Stipulating Parties and the transfer market shall
26 be as open and competitive as practical. A memorandum of agreement summarizing each transfer
27 shall be filed with the Court and provided to the TMA. Any such memorandum of agreement
28 shall state the Parties to the transfer, the amount of Twitchell Yield transferred, the price per acre-

1 foot, and the Party responsible for the financial obligation associated with the Twitchell Yield.

2 (v) *Carryover*. Any portion of Twitchell Yield that is not used
3 in a given Year shall not be carried over into the following Year,

4 (c) State Water Project Water.

5 (i) *Import and Use of State Water Project Water*. Santa Maria,
6 SCWC and Guadalupe all have SWP Contracts. Santa Maria will import and use within the Santa
7 Maria Valley Management Area not less than 10,000 acre-feet each Year of Available SWP
8 Water, or the full amount of Available SWP Water if the amount physically available is less than
9 10,000 acre-feet in a given Year under Santa Maria's SWP Contract. Guadalupe will import and
10 use within the Santa Maria Valley Management Area a minimum of 75% of its Available SWP
11 Water. SCWC will import and use within the Basin all its Available SWP Water. Santa Maria,
12 SCWC and Guadalupe will not voluntarily relinquish or terminate their current SWP Contracts,
13 and shall seek renewal of these SWP Contracts.

14 (ii) *Return Flows*.

15 a. *Fixed Amount*. The Return Flows available to each
16 Importer is fixed based on a percentage of the annual amount of SWP Water the Importer uses
17 within the Basin. The fixed percentage for each importer is as follows: (a) Santa Maria 65%; (b)
18 SCWC 45%; and (c) Guadalupe 45%. The percentage provided to SCWC and Guadalupe shall
19 be adjusted through a Court order if: a) either entity increases its use of water imported into the
20 Basin, b) the applicable method of wastewater treatment and discharge to the Basin is altered, or
21 c) good cause is shown.

22 b. *Recapture*. The right to use Return Flows does not
23 attach to the corpus of SWP water deliveries or the treated SWP wastewater discharged into the
24 Basin but is a right to use the commingled Groundwater. The Importer's right to Return Flows is
25 assignable in whole or in part, subject to necessary accounting.

26 c. *Quantification of Return Flows*. Return Flows equal
27 the total amount of SWP Water used by the Importer in the prior five Years, divided by five, and
28 then multiplied by the Importer's percentage as provided in Paragraph V(A)(3)(c)(ii)(a) above.

1 d. Carryover. Any portion of Return Flows that is not
2 used in a given Year shall not be carried over into the following Year.

3 **B. Monitoring and Management**

4 1. Status of Management Area. Current Groundwater and SWP Water sup-
5 plies are sustaining existing water uses. Changes in land and water use and demographic con-
6 ditions can be expected to occur, possibly resulting in changes in water supply or demand
7 requirements.

8 2. Need for Monitoring. Monitoring and reporting of changes in land and
9 water use and demographic conditions are necessary to ensure that water supplies continue to be
10 sufficient to support water uses.

11 3. Monitoring Program.

12 (a) Annual Report: Content and Processing.

13 The Annual Report shall include an analysis of the relationship between projected water demands
14 and projected water supplies.

15 (i) The Annual Report shall be prepared and signed by the
16 Management Area Engineer, and shall be simultaneously submitted to the Court and the TMA.

17 (ii) Within forty-five days of submission, the TMA shall hold a
18 noticed public hearing to take comments on and consider for adoption the Annual Report. No
19 later than forty-five days from the date of the public hearing, the TMA shall submit to the Court
20 its recommendations regarding the Annual Report.

21 (iii) Within one hundred and twenty days of the date of the
22 submission of the Annual Report to the Court, it shall conduct a noticed hearing on the Annual
23 Report. Any Party may submit comments on the Annual Report. After the hearing, the Court
24 shall accept the Annual Report or direct its modification.

25 (b) Management Area Engineer

26 (i) Absent the unanimous consent of the TMA, the Manage-
27 ment Area Engineer shall not concurrently be employed by any Party holding rights to use
28 Groundwater in the Santa Maria Valley Management Area.

1 (ii) The Management Area Engineer shall initially be the engin-
2 eering firm of Luhdorff & Scalmanini. Luhdorff & Scalmanini shall be the Management Area
3 Engineer for a minimum of the shorter of five years from the date of this Stipulation or the date
4 upon which Mr. Joseph Scalmanini discontinues full time work for that firm.

5 (iii) The TMA shall employ the following process to replace the
6 Management Area Engineer:

7 a. The TMA shall solicit candidates for Management
8 Area Engineer through a public process. All submissions and candidate materials shall be avail-
9 able to any Party upon request. The TMA shall conduct its interview through a public process to
10 the extent practical, and include District and Overlying Owner representatives in the candidate
11 review process.

12 b. Once a short list of candidates (less than five) for
13 Management Area Engineer is obtained, the TMA shall hold a noticed public hearing to take
14 comments on and consider the candidates for Management Area Engineer. The TMA shall make
15 a reasonable effort to select the Management Area Engineer with a unanimous vote. If the TMA
16 unanimously endorses a candidate, that nominee shall be recommended to the Court. Otherwise,
17 the short list of candidates shall be submitted.

18 c. The Court shall appoint the Management Area
19 Engineer following a noticed hearing.

20 4. Funding. The TMA shall pay for the Monitoring Program for the Santa
21 Maria Valley Management Area, which includes the cost of the Management Area Engineer and
22 the Annual Report. The cost of the Monitoring Program shall be divided among the Twitchell
23 Participants on the same basis as the allocation of their Twitchell Yield.

24 **C. Response to Varying Conditions**

25 1. Early Response to Avoid Severe Water Shortage Conditions. If the Man-
26 agement Area Engineer determines that projected demands are expected to materially exceed
27 projected water supplies, then the Management Area Engineer may recommend programs and
28 projects to augment the Management Area's water supplies. The Stipulating Parties will collabo-

1 rate on a response based upon current conditions, but absent Severe Water Shortage Conditions,
2 implementation of programs and projects will not be mandated.

3 The Stipulating Parties may voluntarily participate in any recommended program or
4 project, either through financial or other contributions. The Stipulating Parties that contribute to
5 such a program or project shall have a priority to the water supplies generated by that program or
6 project with Court approval. The Stipulating Parties agree to aggressively pursue New
7 Developed Water sources, including necessary funding.

8 2. Severe Water Shortage Conditions and Response.

9 (a) Determination. Severe Water Shortage Conditions shall be found
10 to exist when the Management Area Engineer, based on the results of the ongoing Monitoring
11 Program, finds the following: 1) groundwater levels in the Management Area are in a condition of
12 chronic decline over a period of not less than five Years; 2) the groundwater decline has not been
13 caused by drought; 3) there has been a material increase in Groundwater use during the five-Year
14 period; and 4) monitoring wells indicate that groundwater levels in the Santa Maria Valley
15 Management Area are below the lowest recorded levels.

16 (b) Response.

17 (i) If the Management Area Engineer determines that Severe
18 Water Shortage Conditions exist within the Santa Maria Valley Management Area, the Manage-
19 ment Area Engineer shall file and serve, as part of its Annual Report, findings and recommen-
20 dations to alleviate such shortage conditions or the adverse effects caused by such water shortage.

21 (ii) Upon the filing of the Annual Report, the Court shall hold a
22 noticed hearing regarding the existence and appropriate response to the Severe Water Shortage
23 Conditions. If, after that hearing, the Court finds that Severe Water Shortage Conditions exist in
24 the Santa Maria Valley Management Area, the Court shall first order all use of Groundwater to be
25 limited to: (a) for Guadalupe, Santa Maria and SCWC, their Developed Water; (b) entitled
26 Stipulating Parties to their New Developed Water; and (c) for the Overlying Owners, the Native
27 Groundwater plus any Developed Water to which individual Overlying Owners are entitled.

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1 (iii) The Court may also order Stipulating Parties to address
2 specific adverse effects caused by the Severe Water Shortage Conditions. The responses may
3 include, but are not limited to: (a) measures recommended in the Annual Report and the related
4 Court proceedings; and (b) other measures intended to address localized problems in the Santa
5 Maria Valley Management Area directly related to the Severe Water Shortage Conditions.

6 (iv) The Court may adjust the Groundwater use limitations
7 imposed on any Stipulating Party(ies) who implement programs or projects providing additional
8 water supplies within the Santa Maria Valley Management Area.

9 (v) If the Court finds that Management Area conditions have
10 deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further
11 limitations on Groundwater use. If the Court imposes further limitations on Groundwater use, a
12 Stipulating Party shall be exempt from those limitations to the extent: (a) the Stipulating Party can
13 demonstrate that it has already implemented limitations in its Groundwater use, equivalent to
14 those ordered by the Court; or (b) the Stipulating Party can demonstrate that further limitations
15 would not avoid or reduce the deteriorating conditions.

16 (vi) During Severe Water Shortage Conditions, the Stipulating
17 Parties may make agreements for temporary transfer of rights to pump Native Groundwater,
18 voluntary fallowing, or the implementation of extraordinary conservation measures. Transfers of
19 Native Groundwater must benefit the Management Area and be approved by the Court.

20 **D. Management and Administration of the Twitchell Project**

21 1. Operational Parameters. All Twitchell Project operations (operation and
22 maintenance and capital projects) will be performed consistent with the following parameters
23 (Operational Parameters):

24 (a) Maximize recharge of the Santa Maria Valley Management Area
25 from Twitchell Water, including without limitation, the avoidance of impacts on recharge
26 resulting from ongoing accumulation of silt to the maximum extent practical.

27 (b) Operate the Twitchell Project in accordance with the requirements
28 of applicable law including, without limitation, the requirements of the Bureau of Reclamation

1 and Army Corps of Engineers.

2 (c) Operate the Twitchell Project in accordance with industry standards
3 and best management practices.

4 2. Twitchell Project Manual.

5 (a) The TMA will hire and pay for a professional engineering con-
6 sulting firm with expertise in dam and reservoir operations and maintenance, acceptable to the
7 District and the TMA, to develop an integrated operation and maintenance procedure manual
8 ("Twitchell Project Manual") and provide recommendations for capital and maintenance projects
9 that are consistent with the Operational Parameters.

10 (b) The District shall hold one or more public hearings to solicit input
11 regarding the content of the Twitchell Project Manual.

12 (c) Within eighteen months of entry of the judgment, the TMA and the
13 District shall adopt a final Twitchell Project Manual.

14 (d) Any disagreement between the District and the TMA regarding the
15 content of the final Twitchell Project Manual shall be presented for Court review and determina-
16 tion pursuant to the judicial review provisions provided in this Stipulation.

17 (e) The District will exercise its discretionary authority to conduct all
18 its operation and maintenance activities for the Twitchell Project in accordance with the Twitchell
19 Project Manual.

20 3. Twitchell Project Funding.

21 (a) District will maintain its current operation and maintenance (O&M)
22 assessments. These funds will be used for District staff salaries, property, equipment, rent,
23 expenses, and other day-to-day operations, and will be expended consistent with the Twitchell
24 Project Manual to the extent it is applicable.

25 (b) The TMA will separately fund, administer, construct and manage
26 any additional Twitchell Project expenses or projects, including Capital Improvement Projects
27 (see below) and O&M, (Extraordinary Project Operations) consistent with the Twitchell Project
28 Manual. The TMA and the District will make reasonable efforts to work cooperatively to imple-

1 ment Extraordinary Project Operations.

2 (c) Consistent with the provisions of this Paragraph V(D), the District
3 and the TMA shall be responsible for ensuring the ongoing operational integrity of the Twitchell
4 Project and the maintenance of the Twitchell Yield. The Stipulating Parties expect that this
5 ongoing responsibility may involve significant expenditures. Within 120 days of the effective
6 date of this Stipulation, and annually thereafter, the Twitchell Participants shall establish an
7 operating budget for the TMA to fund its responsibilities set forth in this Stipulation. For the first
8 five years following the PUC approval as provided below, the TMA's annual budget shall be
9 established at an amount between \$500,000 to \$700,000. Following the initial budgeting period,
10 the TMA shall set its budget in three- to five-year increments, as it deems necessary to meet its
11 obligations to preserve the Twitchell Yield. Any unused revenues shall be segregated into a
12 reserve account, for future funding needs of the Twitchell Project. The Stipulating Parties agree
13 to cooperate and coordinate their efforts to enable the TMA to fulfill its responsibilities as pro-
14 vided in this Stipulation.

15 4. Twitchell Management Authority.

16 (a) The TMA shall be comprised of one representative of each of the
17 following parties: Santa Maria, Guadalupe, Southern California Water Company, the District, and
18 Overlying Landowners holding rights to Twitchell Yield.

19 (b) Only those parties holding an allocation of Twitchell Yield shall be
20 voting members of the TMA. Voting shall be based on each party's proportionate allocation of
21 Twitchell Yield.

22 (c) The TMA shall be responsible for all the Extraordinary Project
23 Operations.

24 (d) The TMA shall be responsible for developing proposals for Capital
25 Improvement Projects relating to the Twitchell Project. Capital Improvement Projects shall mean
26 projects involving the expenditure of funds for the improvement or enhancement of the Twitchell
27 Project, but shall not include normal operation, maintenance or repair activities.

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1 (e) Upon the development of a proposal for a Capital Improvement
2 Project, the TMA shall, in cooperation with the District, hold one or more public hearings to
3 solicit input.

4 (f) Following the public hearing process, the TMA may vote on
5 whether to implement the Capital Improvement Project.

6 (g) The cost of TMA-sponsored Extraordinary Project Operations and
7 Capital Improvement Projects shall be divided among Twitchell Participants on the same basis as
8 the allocation of their Twitchell Yield.

9 (h) The District shall assume operation and maintenance responsibility
10 for any TMA sponsored Capital Improvement Project to the extent practical within the District's
11 day-to-day operations.

12 5. Regulatory Compliance. The TMA or the District shall provide advance
13 notice to the Court and all Parties of the initiation of any regulatory proceeding relating to the
14 Twitchell Project.

15 6. Existing Contracts. The Twitchell Reservoir Project will continue to be
16 governed by and subject to the terms and conditions of the December 1955 agreement between
17 the District and the Santa Barbara County Water Agency and nothing in this Stipulation is
18 intended to modify the rights or obligations provided in that agreement. To the extent that the
19 approval of Santa Barbara County Water Agency or the United States Bureau of Reclamation is
20 required in connection with the implementation of this Stipulation, the Stipulating Parties agree to
21 work cooperatively to obtain such approval(s).

22 **E. New Urban Uses – Santa Maria Valley Management Area**

23 1. New Urban Uses shall obtain water service from the local public water
24 supplier. The local public water supplier shall provide water service on a reasonable and non-
25 discriminatory basis.

26 2. New municipal and industrial uses on land adjacent to or within one-
27 quarter mile of the boundary line depicted in Exhibit D shall comply with any applicable Cor-
28 porations Code provisions and negotiate in good faith to obtain water service from the local

1 public water supplier, before forming a mutual water company to provide water service.

2 3. No modification of land use authority. This Stipulation does not modify
3 the authority of the entity holding land use approval authority over the proposed New Urban
4 Uses.

5 4. New Urban Uses shall provide a source of supplemental water to offset the
6 water demand associated with that development. For the purposes of this section, supplemental
7 water shall include all sources of Developed Water, except: i) Twitchell Water, ii) storm water
8 percolation ponds existing as of the date of entry of the judgment, or iii) Overlying Owners' right
9 to use of surplus Developed Water.

10 **VI. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NIPOMO MESA MAN-**
11 **AGEMENT AREA**

12 As supplemented by the provisions of this Stipulation that apply to all Management Areas,
13 the following terms shall apply to the Nipomo Mesa Management Area.

14 **A. Supplemental Water**

15 1. MOU. NCS D has entered into a Memorandum of Understanding
16 ("MOU") with Santa Maria which contemplates the wholesale purchase and transmission from
17 Santa Maria to the NMMA of a certain amount of water each Year (the "Nipomo Supplemental
18 Water"). All water delivered pursuant to the MOU for delivery by NCS D to its ratepayers shall
19 be applied within the NCS D or the NCS D's sphere of influence as it exists at the time of the
20 transmission of that water.

21 2. The NCS D agrees to purchase and transmit to the NMMA a minimum of
22 2,500 acre-feet of Nipomo Supplemental Water each Year. However, the NMMA Technical
23 Group may require NCS D in any given Year to purchase and transmit to the NMMA an amount
24 in excess of 2,500 acre-feet and up to the maximum amount of Nipomo Supplemental Water
25 which the NCS D is entitled to receive under the MOU if the Technical Group concludes that such
26 an amount is necessary to protect or sustain Groundwater supplies in the NMMA. The NMMA
27 Technical Group also may periodically reduce the required amount of Nipomo Supplemental
28 Water used in the NMMA so long as it finds that groundwater supplies in the NMMA are not

1 endangered in any way or to any degree whatsoever by such a reduction.

2 3. The Stipulating Parties agree to support (and, conversely, not to oppose in
3 any way or to encourage or assist any other Person or party in opposing or challenging) the imple-
4 mentation of the MOU, which includes environmental and regulatory permits and approvals, the
5 approval of a wholesale water supply agreement between Santa Maria and NCS D, and the
6 alignment and construction of a pipeline and related infrastructure necessary to deliver the
7 Nipomo Supplemental Water from Santa Maria to the NMMA (“Nipomo Supplemental Water
8 Project”). ConocoPhillips retains the right to object to or provide input on the alignment of any
9 pipelines associated with the Nipomo Supplemental Water Project if they might interfere with the
10 location of existing ConocoPhillips pipelines. The Stipulating Parties retain their rights to be
11 compensated for any interest or property acquired in implementing the Nipomo Supplemental
12 Water Project.

13 4. NCS D and Santa Maria shall employ their best efforts to timely implement
14 the Nipomo Supplemental Water Project, subject to their quasi-judicial obligations specified for
15 administrative actions and in the California Environmental Quality Act.

16 5. The enforcement of the provisions of Paragraph VI(D) below is condi-
17 tioned upon the full implementation of the Nipomo Supplemental Water Project, including the
18 Yearly use of at least 2,500 acre-feet of Nipomo Supplemental Water (subject to the provisions of
19 Paragraph VI(A)(2) above) within the NMMA. In the event that Potentially Severe Water
20 Shortage Conditions or Severe Water Shortage Conditions are triggered as referenced in Para-
21 graph VI(D) before Nipomo Supplemental Water is used in the NMMA, NCS D, SCWC,
22 Woodlands and RWC agree to develop a well management plan that is acceptable to the NMMA
23 Technical Group, and which may include such steps as imposing conservation measures, seeking
24 sources of supplemental water to serve new customers; and declaring or obtaining approval to
25 declare a moratorium on the granting of further intent to serve or will serve letters. In the event
26 that it becomes apparent that the Nipomo Supplemental Water will not be fully capable of being
27 delivered, any Stipulating Party may apply to the Court, pursuant to a noticed motion, for appro-
28 priate modifications to this portion of the Stipulation and the judgment entered based upon the

1 terms and conditions of this Stipulation, including declaring this Paragraph VI to be null and void,
2 and of no legal or binding effect.

3 6. Once the Nipomo Supplemental Water is capable of being delivered, those
4 certain Stipulating Parties listed below shall purchase the following portions of the Nipomo
5 Supplemental Water Yearly:

6 NCS D - 66.68%

7 Woodlands Mutual Water Company - 16.66%

8 SCWC - 8.33%

9 RWC - 8.33%

10 **B. Rights to Use Groundwater**

11 1. ConocoPhillips and its successors-in-interest shall have the right to the
12 reasonable and beneficial use of Groundwater on the property it owns as of the date of this Stipu-
13 lation located in the NMMA ("ConocoPhillips Property") without limitation, except in the event
14 the mandatory action trigger point (Severe Water Shortage conditions) described in Paragraph
15 VI(D) (2) below is reached. Further, any public water supplier which provides water service to
16 the ConocoPhillips Property may exercise that right subject to the limitation described in Para-
17 graph VI(D)(2).

18 2. Overlying Owners that are Stipulating Parties that own land located in the
19 NMMA as of the date of this Stipulation shall have the right to the reasonable and beneficial use
20 of Groundwater on their property within the NMMA without limitation, except in the event the
21 mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph
22 VI(D)(2) below is reached.

23 3. The Woodlands Mutual Water Company shall not be subject to restriction
24 in its reasonable and beneficial use of Groundwater, provided it is concurrently using or has made
25 arrangements for other NMMA parties to use within the NMMA, the Nipomo Supplemental
26 Water allocated to the Woodlands in Paragraph VI(A)(5). Otherwise, the Woodlands Mutual
27 Water Company shall be subject to reductions equivalent to those imposed on NCS D, RWC and
28 SCWC, as provided in Paragraph VI(D)(1-2).

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2 C. NMMA Technical Group

3 1. The NMMA Technical Group shall include representatives appointed by
4 NCSD, SCWC, ConocoPhillips, Woodlands Mutual Water Company and an agricultural Over-
5 lying Owner who is also a Stipulating Party.

6 2. The NMMA Technical Group shall develop a Monitoring Program for the
7 NMMA ("NMMA Monitoring Program"), which shall be consistent with the Monitoring
8 Program described in Paragraph IV(D). The NMMA Monitoring Program shall also include the
9 setting of well elevation and water quality criteria that trigger the responses set forth in Paragraph
10 D below. The Stipulating Parties shall provide monitoring and other production data to the
11 NMMA Technical Group at no charge, to the extent that such data has been generated and is
12 readily available. The NMMA Technical Group shall adopt rules and regulations concerning
13 measuring devices and production reports that are, to the extent feasible, consistent with the
14 Monitoring Programs for other Management Areas. If the NMMA Technical Group is unable to
15 agree on any aspect of the NMMA Monitoring Program, the matter may be resolved by the Court
16 pursuant to a noticed motion.

17 3. The NMMA Technical Group meetings shall be open to any Stipulating
18 Party. NMMA Technical Group files and records shall be available to any Stipulating Party upon
19 written request. Notices of the NMMA Technical Group meetings, as well as all its final work
20 product (documents) shall be posted to groups.yahoo.com/group/NipomoCommunity/

21 4. The NMMA Technical Group functions shall be funded by contribution
22 levels to be negotiated by NCSD, SCWC, RWC, ConocoPhillips, and Woodlands Mutual Water
23 Company. In-lieu contributions through engineering services may be provided, subject to agree-
24 ment by those parties. The budget of the NMMA Technical Group shall not exceed \$75,000 per
25 year without prior approval of the Court pursuant to a noticed motion.

26 5. Any final NMMA Technical Group actions shall be subject to *de novo*
27 Court review by motion.

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2 **D. Potentially Severe and Severe Water Shortage Conditions**

3 1. Caution trigger point (Potentially Severe Water Shortage Conditions)

4 (a) Characteristics. The NMMA Technical Group shall develop
5 criteria for declaring the existence of Potentially Severe Water Shortage Conditions. These
6 criteria shall be approved by the Court and entered as a modification to this Stipulation or the
7 judgment to be entered based upon this Stipulation. Such criteria shall be designed to reflect that
8 water levels beneath the NMMA as a whole are at a point at which voluntary conservation
9 measures, augmentation of supply, or other steps may be desirable or necessary to avoid further
10 declines in water levels.

11 (b) Responses. If the NMMA Technical Group determines that Poten-
12 tially Severe Water Shortage Conditions have been reached, the Stipulating Parties shall coordi-
13 nate their efforts to implement voluntary conservation measures, adopt programs to increase the
14 supply of Nipomo Supplemental Water if available, use within the NMMA other sources of
15 Developed Water or New Developed Water, or implement other measures to reduce Groundwater
16 use.

17 2. Mandatory action trigger point (Severe Water Shortage Conditions)

18 (a) Characteristics. The NMMA Technical Group shall develop the
19 criteria for declaring that the lowest historic water levels beneath the NMMA as a whole have
20 been reached or that conditions constituting seawater intrusion have been reached. These criteria
21 shall be approved by the Court and entered as a modification to this Stipulation or the judgment to
22 be entered based upon this Stipulation.

23 (b) Responses. As a first response, subparagraphs (i) through (iii) shall
24 be imposed concurrently upon order of the Court. The Court may also order the Stipulating
25 Parties to implement all or some portion of the additional responses provided in subparagraph (iv)
26 below.

27 (i) For Overlying Owners other than Woodlands Mutual Water
28 Company and ConocoPhillips, a reduction in the use of Groundwater to no more than 110% of

1 the highest pooled amount previously collectively used by those Stipulating Parties in a Year,
2 prorated for any partial Year in which implementation shall occur, unless one or more of those
3 Stipulating Parties agrees to forego production for consideration received. Such forbearance shall
4 cause an equivalent reduction in the pooled allowance. The base Year from which the calculation
5 of any reduction is to be made may include any prior single Year up to the Year in which the
6 Nipomo Supplemental Water is transmitted. The method of reducing pooled production to 110%
7 is to be prescribed by the NMMA Technical Group and approved by the Court. The quantifica-
8 tion of the pooled amount pursuant to this subsection shall be determined at the time the manda-
9 tory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is
10 reached. The NMMA Technical Group shall determine a technically responsible and consistent
11 method to determine the pooled amount and any individual's contribution to the pooled amount.
12 If the NMMA Technical Group cannot agree upon a technically responsible and consistent
13 method to determine the pooled amount, the matter may be determined by the Court pursuant to a
14 noticed motion.

15 (ii) ConocoPhillips shall reduce its Yearly Groundwater use to
16 no more than 110% of the highest amount it previously used in a single Year, unless it agrees in
17 writing to use less Groundwater for consideration received. The base Year from which the calcu-
18 lation of any reduction is to be made may include any prior single Year up to the Year in which
19 the Nipomo Supplemental Water is transmitted. ConocoPhillips shall have discretion in deter-
20 mining how reduction of its Groundwater use is achieved.

21 (iii) NCSD, RWC, SCWC, and Woodlands (if applicable as
22 provided in Paragraph VI(B)(3) above) shall implement those mandatory conservation measures
23 prescribed by the NMMA Technical Group and approved by the Court.

24 (iv) If the Court finds that Management Area conditions have
25 deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further
26 mandatory limitations on Groundwater use by NCSD, SCWC, RWC and the Woodlands. Manda-
27 tory measures designed to reduce water consumption, such as water reductions, water restrictions,
28 and rate increases for the purveyors, shall be considered.

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2 (v) During Severe Water Shortage Conditions, the Stipulating
3 Parties may make agreements for temporary transfer of rights to pump Native Groundwater,
4 voluntary fallowing, or the implementation of extraordinary conservation measures. Transfer of
5 Native Groundwater must benefit the Management Area and be approved by the Court.

6 **E. New Urban Uses**

7 1. Within the sphere of influence or service area. New Urban Uses shall
8 obtain water service from the local public water supplier. The local public water supplier shall
9 provide water service on a reasonable and non-discriminatory basis.

10 2. Outside the sphere of influence or service area. New municipal and indus-
11 trial uses on land adjacent to or within one quarter mile of the boundary line depicted in Exhibit D
12 shall comply with any applicable Corporations Code provisions, including good faith negotiations
13 with the local water purveyor(s), prior to forming a mutual water company to provide water
14 service.

15 3. The ConocoPhillips property, owned as of the date of this Stipulation and
16 located within the NMMA, is not in the sphere of influence or service area, nor is it in the process
17 of being included in the sphere of influence, of a municipality or within the certificated service
18 area of a publicly regulated utility as of the date of this Stipulation, nor is it adjacent to or in close
19 proximity to the sphere of influence of a municipality or the certificated service area of a publicly
20 regulated utility as of the date of this Stipulation, as those terms are used in Paragraphs VI(E)(1
21 and 2).

22 4. No modification of land use authority. This Stipulation does not modify the
23 authority of the entity holding land use approval authority over the proposed New Urban Uses.

24 5. New Urban Uses as provided in Paragraph VI(E)(1) above and new muni-
25 cipal and industrial uses as provided in Paragraph VI(E)(2) above shall provide a source of
26 supplemental water, or a water resource development fee, to offset the water demand associated
27 with that development. For the purposes of this Paragraph, supplemental water shall include all
28 sources of Developed Water or New Developed Water.

1 **VII. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NORTHERN CITIES**
2 **MANAGEMENT AREA**

3 These terms, supplemented by the provisions of this Stipulation that apply to all
4 Management Areas, govern water rights and resources in the Northern Cities Management Area.

5 1. Groundwater Monitoring. Groundwater monitoring in the Northern Cities
6 Management Area will be conducted by the Northern Cities in the manner described above.

7 2. Lopez Project. The Lopez Project will continue to be managed by the SLO
8 District. The Northern Cities and Landowners will continue to bear costs of the Lopez Reservoir
9 and no costs of the Twitchell Reservoir.

10 3. Independent Management Per Settlement Agreement.

11 (a) Existing Groundwater, SWP Water and Storage Space in the
12 Northern Cities Management Area will continue to be allocated and independently managed by
13 the Northern Parties in accordance with the Northern Cities and Northern Landowners' 2002
14 Settlement Agreement (Exhibit "E") for the purpose of preserving the long-term integrity of water
15 supplies in the Northern Cities Management Area. That Settlement Agreement initially allocates
16 57% of the safe yield of groundwater in Zone 3 to the farmers and 43% to the cities; and it
17 provides *inter alia* that any increase or decrease in the safe yield will be shared by the cities and
18 landowners on a pro rata basis. That Settlement Agreement is reaffirmed as part of this Stipula-
19 tion and its terms are incorporated into this Stipulation, except that the provisions regarding con-
20 tinuing jurisdiction (§ 4), groundwater monitoring, reporting, and the Technical Oversight
21 Committee (§§ 7-20) are canceled and superseded by the provisions of this Stipulation dealing
22 with those issues.

23 (b) Without the written agreement of each of the Northern Cities, no
24 party other than Northern Parties shall have any right to:

25 (i) pump, store, or use Groundwater or surface water within the
26 Northern Cities Management Area; or

27 (ii) limit or interfere with the pumping, storage, management or
28 usage of Groundwater or surface water by the Northern Parties within the Northern Cities

1 Management Area.

2 (c) For drought protection, conservation, or other management pur-
3 poses, the Northern Parties may engage in contractual transfers, leases, licenses, or sales of any of
4 their water rights, including voluntary fallowing programs. However, no Groundwater produced
5 within the Northern Cities Management Area may be transported outside of the Northern Cities
6 Management Area without the written agreement of each of the Northern Cities.

7 4. Current and future deliveries of water within the spheres of influence of the
8 Northern Cities as they exist on January 1, 2005 shall be considered existing uses and within the
9 Northern Cities Management Area.

10 **VIII. INJUNCTION – ALL MANAGEMENT AREAS**

11 **A. Use Only Pursuant to Stipulation**

12 Each and every Stipulating Party, their officers, agents, employees, successors and
13 assigns, are enjoined and restrained from exercising the rights and obligations provided through
14 this Stipulation in a manner inconsistent with the express provisions of this Stipulation.

15 **B. Injunction Against Transportation From the Basin**

16 Except upon further order of the Court, each and every Stipulating Party and its officers,
17 agents, employees, successors and assigns, is enjoined and restrained from transporting Ground-
18 water to areas outside the Basin, except for those uses in existence as of the date of this Stipula-
19 tion; provided, however, that Groundwater may be delivered for use outside the Basin as long as
20 the wastewater generated by that use of water is discharged within the Basin, or agricultural
21 return flows resulting from that use return to the Basin.

22 **C. No Third Party Beneficiaries**

23 This Stipulation is intended to benefit the Stipulating Parties and no other Parties. Only a
24 Stipulating Party may enforce the terms of this Stipulation or assert a right to any benefits of, or
25 enforce any obligations contained in this Stipulation.

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1 **IX. RESERVED JURISDICTION – ALL MANAGEMENT AREAS**

2 **A. Reserved Jurisdiction; Modifications, Cancellations, Amendments**

3 Jurisdiction, power and authority are retained by and reserved to the Court as set forth in
4 this Paragraph. Nothing in the Court's reserved jurisdiction shall authorize modification, cancel-
5 lation or amendment of the rights provided under Paragraphs III; V(A, E); VI(A, B, D); VII(2, 3);
6 VIII(A); IX(A, C); and X(A, D) of this Stipulation. Subject to this limitation, the Court shall
7 make such further or supplemental orders as may be necessary or appropriate regarding the
8 following:

- 9 1. enforcement of this Stipulation;
- 10 2. claims regarding waste/unreasonable use of water;
- 11 3. disputes between Stipulating Parties across Management Area boundaries;
- 12 4. interpretation and enforcement of the judgment;
- 13 5. consider the content or implementation of a Monitoring Program;
- 14 6. consider the content, conclusions, or recommendations contained in an
15 Annual Report;
- 16 7. consider Twitchell Project operations, including, but not limited to: i) the
17 content of the Twitchell Project Manual; ii) TMA or District compliance
18 with the Twitchell Project Manual; iii) decisions to implement Extraor-
19 dinary Project Operations; or iv) the maintenance of Twitchell Yield;
- 20 8. claims of localized physical interference between the Stipulating Parties in
21 exercising their rights pursuant to this Stipulation; provided, however,
22 rights to use Groundwater under this Stipulation shall have equal status;
23 and
- 24 9. modify, clarify, amend or amplify the judgment and the Northern Parties
25 Settlement Agreement; Provided, however, that all of the foregoing shall
26 be consistent with the spirit and intent of this Stipulation.

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B. Noticed Motion

Any party that seeks the Court's exercise of reserved jurisdiction shall file a noticed motion with the Court. Any noticed motion shall be made pursuant to the Court's Order Concerning Electronic Service of Pleadings and Electronic Posting of Discovery Documents dated June 27, 2000, attached and incorporated as Exhibit "G". Any request for judicial review shall be filed within sixty days of the act or omission giving rise to the claim. Upon a showing of good cause, the Court may extend the sixty-day time limitation.

C. De Novo Nature of Proceeding

The Court shall exercise *de novo* review in all proceedings. The actions or decisions of any Party, the Monitoring Parties, the TMA, or the Management Area Engineer shall have no heightened evidentiary weight in any proceedings before the Court.

D. Filing and Notice

As long as the Court's electronic filing system remains available, all Court filings shall be made pursuant to Exhibit "G". If the Court's electronic filing system is eliminated and not replaced, the Stipulating Parties shall promptly establish a substitute electronic filing system and abide by the same rules as contained in the Court's Order.

X. MISCELLANEOUS PROVISIONS – ALL MANAGEMENT AREAS

A. Unenforceable Terms

The Stipulating Parties agree that if any provision of this Stipulation or the judgment entered based on this Stipulation is held to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force and effect; provided, however, any order which invalidates, voids, deems unenforceable, or materially alters those Paragraphs enumerated in Paragraph IX(A) or any of them, shall render the entirety of the Stipulation and the judgment entered based on this Stipulation voidable and unenforceable, as to any Stipulating Party who files and serves a motion to be released from the Stipulation and the judgment based upon the Stipulation within sixty days of entry of that order, and whose motion is granted upon a showing of good cause.

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B. Water Quality

Nothing in the Stipulation shall be interpreted as relieving any Stipulating Party of its responsibilities to comply with state or federal laws for the protection of water quality or the provisions of any permits, standards, requirements, or orders promulgated thereunder.

C. Duty to Cooperate

The Stipulating Parties agree not to oppose, or in any way encourage or assist any other party in opposing or challenging, any action, approval, or proceeding necessary to obtain approval of or make effective this Stipulation or the judgment to be entered on terms consistent with this Stipulation.

D. Stipulating Parties Under Public Utilities Commission Regulation

1. To the extent allowed by law, SCWC and RWC shall comply with this Stipulation, prior to obtaining California Public Utilities Commission ("PUC") approval. If the PUC fails to approve SCWC's and RWC's participation or fails to provide approval of the necessary rate adjustments so that SCWC and RWC may meet their respective financial obligations, including the participation in Developed Water projects, Monitoring Programs, TMA and as otherwise provided in this Stipulation, shall render the entirety of the Stipulation and those terms of any judgment based on this Stipulation invalid, void and unenforceable, as to any Stipulating Party who files and serves a notice of rescission within sixty days of notice by SCWC or RWC of a final PUC Order.

2. Any Party, or its successors or assigns, agreeing to become a new customer of SCWC or RWC, or an existing customer proposing to increase its water use through a change in land use requiring a discretionary land use permit or other form of land use entitlement, that has not executed reservation contracts for supplemental water as specified in Exhibit F will provide the following, once approved by the PUC:

(a) If in the Santa Maria Valley Management Area, a water resource development fee as specified in Exhibit F or a source of supplemental water sufficient to offset the consumptive demand associated with the new use as provided in Paragraph V(E); or

///

1 (b) If in the NMMA, a water resource development fee, or a source of
2 supplemental water sufficient to offset the consumptive demand associated with the new use.

3 3. Any Person who is not engaged in a New Urban Use and who agrees to
4 become a customer of SCWC or RWC shall retain its right to contest the applicable water
5 resource development fee, should that fee ever become applicable to that Person.

6 **E. Designation of Address, for Notice and Service**

7 Each Stipulating Party shall designate the name, address and e-mail address, if any, to be
8 used for purposes of all subsequent notices and service, either by its endorsement on the Stipula-
9 tion for entry of judgment or by a separate designation to be filed within thirty days after execu-
10 tion of this Stipulation. This designation may be changed from time to time by filing a written
11 notice with the Court. Any Stipulating Party desiring to be relieved of receiving notices may file
12 a waiver of notice on a form approved by the Court. The Court shall maintain at all times a
13 current list of Parties to whom notices are to be sent and their addresses for purposes of service.
14 The Court shall also maintain a full current list of names, addresses, and e-mail addresses of all
15 Parties or their successors, as filed herein. Copies of such lists shall be available to any Person.
16 If no designation is made, a Stipulating Party's designee shall be deemed to be, in order of
17 priority: i) the Party's attorney of record; ii) if the Party does not have an attorney of record, the
18 Party itself at the address specified.

19 **F. No Loss of Rights**

20 Nothing in this Stipulation shall be interpreted to require or encourage any Stipulating
21 Party to use more water in any Year than is actually required. As between the Stipulating Parties,
22 failure to use all of the water to which a Stipulating Party is entitled hereunder shall not, no matter
23 how long continued, be deemed or constitute an abandonment or forfeiture of such Stipulating
24 Party's rights, in whole or in part.

25 **G. Intervention After Judgment**

26 Any Person who is not a Party or successor to a Party, who proposes to use Groundwater
27 or Storage Space, may seek to become a Party to the judgment through a petition for intervention.
28 The Court will consider an order confirming intervention following thirty days notice to the

1 Parties. Thereafter, if approved by the Court, such intervenor shall then be a Party bound by the
2 judgment as provided by the Court.

3 **H. Stipulation and Judgment Binding on Successors, Assigns, etc.**

4 The Stipulating Parties agree that all property owned by them within the Basin is subject
5 to this Stipulation and the judgment to be entered based upon the terms and conditions of this
6 Stipulation. This Stipulation and the judgment will be binding upon and inure to the benefit of
7 each Stipulating Party and their respective heirs, executors, administrators, trustees, successors,
8 assigns, and agents. This Stipulation and the judgment to be entered based the terms and condi-
9 tions of this Stipulation shall not bind the Stipulating Parties that cease to own property within the
10 Basin, or cease to use Groundwater. As soon as practical after the effective date of this Stipula-
11 tion, a memorandum of agreement referencing this Stipulation shall be recorded in Santa Barbara
12 and San Luis Obispo Counties by Santa Maria, in cooperation with the Northern Cities and
13 SCWC. The document to be recorded shall be in the format provided in Exhibit "H".

14 **I. Costs**

15 No Stipulating Party shall recover any costs or attorneys fees from another Stipulating
16 Party incurred prior to the entry of a judgment based on this Stipulation.

17 **J. Non-Stipulating Parties**

18 It is anticipated that the Court will enter a single judgment governing the rights of all
19 Parties in this matter. The Stipulating Parties enter into this Stipulation with the expectation that
20 the Court will enter, as a part of the judgment, the terms and conditions of this Stipulation. This
21 Stipulation shall not compromise, in any way, the Court's legal and equitable powers to enter a
22 single judgment that includes provisions applicable to the non-Stipulating Parties that may
23 impose differing rights and obligations than those applicable to the Stipulating Parties. As against
24 non-Stipulating Parties, each Stipulating Party expressly reserves and does not waive its right to
25 appeal any prior or subsequent ruling or order of the Court, and assert any and all claims and
26 defenses, including prescriptive claims. The Stipulating Parties agree they will not voluntarily
27 enter into a further settlement or stipulation with non-Stipulating Parties that provides those non-
28 Stipulating Parties with terms and conditions more beneficial than those provided to similarly

1 situated Stipulating Parties.

2 **K. Counterparts**

3 This Stipulation may be signed in any number of counterparts, including counterparts by
4 facsimile signature, each of which shall be deemed an original, but all of which shall together
5 constitute one and the same instrument. The original signature pages shall be filed with Court.

6 **L. Effective Date**

7 This Stipulation shall be effective when signed by the Stipulating Parties listed on Exhibit
8 "A" and accepted by the Court.

9

Party	Signature, title, and date	Parcels Subject to Stipulation
Attorney of Record	Approved as to form: By: _____ Date: _____	

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PROOF OF SERVICE

I am a resident of the State of California, over the age of eighteen years, and not a party to the within action. My business address is HATCH & PARENT, 21 E. Carrillo Street, Santa Barbara, California 93101.

Pursuant to the Court's Order dated June 28, 2000, I, Gina Lane, did the following:

- Posted the following document at approximately 4:30 p.m. on June 30, 2005.

STIPULATION (JUNE 30, 2005 VERSION)

- Mailed a Notice of Availability to all parties (designating or defaulting to mail service) on the current website's service list.

I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

Executed on June 30, 2005, at Santa Barbara, California.



GINA M. LANE

EXHIBIT A

**Stipulating Parties and Parcels of Land
Bound by Terms of Stipulation**

Santa Maria Valley Water Conservation District v. City of Santa Maria
Santa Clara County Superior Court Case No. CV 770214

Awaiting complete list of Stipulating Parties

EXHIBIT B

**Phase I and II Orders (as modified)
and Santa Maria Basin Map**

Santa Maria Valley Water Conservation District v. City of Santa Maria
Santa Clara County Superior Court Case No. CV 770214

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
IN AND FOR THE COUNTY OF SANTA CLARA
DEPARTMENT 17

SANTA MARIA VALLEY WATER	)	Case No. CV 770214
CONSERVATION DISTRICTS, A PUBLIC)	
ENTITY,	)	ORDER AFTER HEARING GRANTING
) NIPOMO COMMUNITY SERVICES)	
Plaintiff,	)	DISTRICT'S MOTION FOR SUMMARY
	)	ADJUDICATION
vs.)	
)	
CITY OF SANTA MARIA, A MUNICIPAL)	
CORPORATION, ET AL.)	
)	
_____)	
AND RELATED CROSS-ACTIONS.)	
)	
_____)	

The above-entitled matter came on regularly for hearing on January 8, 2001, at 1:30 p.m., the Honorable Conrad L. Rushing presiding. Counsel Robert Dougherty appeared on behalf of the Land Owner Group Parties and Steven Saxton, appeared on behalf of Plaintiffs and James Markman appeared on behalf of Nipomo Community Services District, Henry Weinstock appeared on behalf of Northern Cities and Ryan Bezzera appeared on behalf of Rancho Maria, et al. The Court, having read and considered the supporting and opposing papers, and having heard and considered the arguments of counsel, and good cause appearing therefor, makes the following order:

IT IS ORDERED THAT:

Nipomo Community Services District's Motion for Summary Adjudication is GRANTED. The Court grants all joinders. Based on the Land Owner Group's concession that the adoption of the "Foreman Line" is appropriate, as well as the concession offered by Mr. Slade that he does not disagree with Mr. Foreman on the "outermost" basin boundary, the Court finds that there is no triable issue of material fact as to the "outermost" basin boundary as articulated in the Declaration of Terry Foreman, dated December 8, 2000, and as depicted on Exhibit 1 thereto¹. (See Nipomo's Statement of Material Fact #3, evidence in support and in opposition thereto.) Therefore, the moving parties are entitled to judgment on all affirmative defenses dealing with uncertainty of the basin boundaries.

The Court finds that the outermost lateral boundary of the Santa Maria Valley Groundwater Basin ("the Basin") lies along a type of material that does not readily transmit water, that is, for the purposes of this case, it is impermeable (impermeable is used here to mean only that the rocks, sediments and other materials do not readily transmit water). Thus, material (rock, sediments, sand, etc.) that do readily transmit water are within the basin.

Those that do not readily store and transmit water are the Foxen Formation or older, including the Franciscan Formation, the Knoxville Formation, the Monterey Formation, the Obispo Formation, and the Sisquoc Formation; and those that do readily store and transmit water are the Careaga Sandstone or younger, including the Careaga Formation, the Pismo Formation, the Paso Robles Formation, time-

¹The boundary described herein is shown on that certain map marked Exhibit 1, by a black dash double dot line and said Exhibit is in evidence and a part of this Order.

equivalent Paso Robles Formation, Orcutt Formation, terrace deposits, young and old alluvium, and dune and sand deposits, with the following three exceptions:

- a. The southern boundary along the Solomon Hills is located on the axis of antic lines where the Careaga Sandstone and Paso Robles Formation dip in the Basin on the north side of the axis and dip into a separate basin, the San Antonio Basin, on the south side of the axis;
- b. Where the Basin boundary crosses tributary streams, the boundary is located across the mouth of each such stream to directly connect the closest bedrock contacts on each side of that stream; and,
- c. The western boundary of the Basin is the Pacific Ocean.

The vertical boundary of the Basin is located at the contact between those rocks and sediments that readily store and transmit water (generally, the Careaga Formation and younger) and those rocks and sediments that do not readily store and transmit water (generally, the Foxen Formation and older) as described above in reference to the lateral boundary of the Basin, except that in the northeast portion of the area north of the Santa Maria River, the vertical Basin boundary extends to the base of the Obispo tuffs of the Obispo Formation. The Obispo tuffs underlie the alluvium of the Nipomo Valley, and extend beneath the Paso Robles Formation northerly to the Arroyo Grande Valley.

SO ORDERED.

Dated: January 9, 2001

[ORIGINAL SIGNED]
CONRAD L. RUSHING

FILED
DEC 21 2001
KIRI TORRE
Clerk of the Court
Santa Clara County, California
Clerk

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SUPERIOR COURT OF CALIFORNIA
COUNTY OF SANTA CLARA
DEPARTMENT 17C

SANTA MARIA VALLEY WATER
CONSERVATION DISTRICTS, a
public entity,

Plaintiff,

vs.

CITY OF SANTA MARIA, a municipal
corporation, et al.,

Defendants,

Case No. CV 770214

ORDER AFTER HEARING RE:
TRIAL (PHASE II)

Hearing Date: October 9, 2001
Time: 8:45 a.m.
Dept.: 17C

Judge: Hon. Conrad L. Rushing

AND RELATED CROSS-ACTIONS

Trial of Phase II of the above-entitled matter came on regularly on October 9, 2001, at 10:00 a.m., the Honorable Conrad L. Rushing presiding. The Court, having considered the testimony, declarations and exhibits, and good cause appearing therefor, issues the following decision and order:

Plaintiff's motion for an order establishing the geographic area constituting the Santa Maria Groundwater Basin (hereinafter "Basin"), for the purposes of this case, is hereby GRANTED.

The Court finds that the boundary of the Basin is that described on the map filed as Exhibit 5 with the Declaration of Robert C. Wagner dated November 20, 2001 (which can be found currently at <http://www.secomplex.org/docfiles/QD0CB28E05D5.pdf>), hereinafter referred to as the

1 "Boundary Line." Each of the parties to the Phase II proceedings on October 9, 2001, stipulated to
2 the Court's determining the Boundary Line of the Basin. The Basin shall also include for purposes
3 of adjudication herein all those parcels of land, which are shown on the said Exhibit 5 and listed on
4 Exhibit 6 to the said Declaration of Robert C. Wagner, which either touch or are intersected by the
5 Boundary Line, to the full extent of the perimeter of such parcels. The Court has not at this time
6 received full briefing as to whether there are legal issues as to such parcels which touch or are
7 intersected by the Boundary Line, concerning whether owners of such parcels may appropriate water
8 from the Basin for the use of the remainder of the subject parcels, whether the owners of such parcels
9 are considered to be landowners or purveyors, or whether their rights to extract or export water are
10 affected by their parcels not being fully within the Basin. Thus, at this time, until further order, the
11 Court orders that those parcels are to be considered within the Basin.

12 The Court finds on the basis of the evidence presented that the Boundary Line demarcates
13 the boundary of the Basin, and that the Basin constitutes the area beneath which groundwater exists
14 in sufficient quantities to be meaningfully included in this lawsuit. The Court also finds that the
15 area previously included in the "outermost basin boundary," but excluded by the Boundary Line,
16 contains potentially water-bearing materials, but nevertheless lacks actual groundwater in amounts
17 sufficient to justify including that area in this case for purposes of adjudicating the various claims
18 to groundwater in the Basin. Owners of lands beneath which no significant groundwater supply
19 exists do not have property right claims concerning such water that present a justiciable issue.
20 Similarly, owners of lands beneath which no significant groundwater supply exists should not be
21 permitted to assert, by virtue of their ownership of such lands, claims respecting groundwater
22 supplies underlying adjacent or nearby lands.

23 The Court further finds that the Declaration of Robert C. Wagner dated November 20, 2001,
24 attached to this Order, along with Mr. Wagner's map and table of parcels, attached as Exhibits 5 and
25 6, set forth sufficient detail regarding the specific parcels traversed by the Basin Boundary Line so
26 as to apprise potentially affected landowners and other interested parties of the location of the Basin
27 and Boundary Line fixed by this Order. A digital rendition of the map prepared by Mr. Wagner to
28 depict affected parcels is posted for inspection on the Court's website.

2 The Court determines that only the lands, groundwater extraction claims and claims to
3 groundwater storage rights within the Boundary Line shall be subject to claims in this lawsuit. The
4 Court has considered the possibility that ground water charging and storage might extend the
5 boundaries of the basin but finds at this point that there is insufficient evidence of that affecting the
6 prospective orders to be made by this Court.

7 The motion of the Northern Cities (joined by other parties) that the Northern Cities Area be
8 conditionally severed from this litigation, is denied. The Northern Cities Area is also shown on the
9 map which is attached as Exhibit 5 to the Declaration of Wagner. That area shall remain within the
10 Basin and Boundary Line fixed in this Order. The Court finds that a comprehensive judgment in this
11 litigation is advisable and necessary, in that only such a comprehensive judgment would prevent later
12 litigation of the same issues, prevent the risk of rulings which are inconsistent, and prevent erroneous
13 rulings which may be affected by facts which would be adduced if the interests of all parties who
14 may be affected by these rulings were represented and involved throughout this litigation. Cases
15 cited by the proponents of severance can also be read as indicating that retaining the Northern Cities
16 Area in the litigation is necessary to render an effective judgment. Orange County Water District
17 v. City of Riverside (1959) 173 Cal.App.2d 137, 173 ("Undoubtedly the preferable course is, so
18 far at least as is practicable, to have all owners of lands on the watershed and all appropriators who
19 use water in court at the same time"); City of Chino v. Superior Court (1967) 255 Cal.App.2d
20 747, 752 ("Because of the failure of OCWD in that earlier suit to join as defendants all claimants to
21 prescriptive rights to water from the Upper and Middle Basins, many questions were left
22 unanswered").

23 The Court has listened to the testimony and read the exhibits submitted, and additionally the
24 supplemental memorandum of Richard C. Slade and supplemental declaration of Terry L. Foreman.
25 The Court finds that there is no substantial controversy that the Northern Cities Area, the Nipomo
26 Mesa and the Santa Maria Valley area all overlie one large groundwater basin. Each area is subject
27 to the same general climatologic and hydrologic conditions. The Court concludes there are no
28 geologic or hydrologic features that separate the Northern Cities Area from the remainder of the
Basin encompassed by this litigation. The Court must consider that the water rights to be

1 determined in this litigation will apply to situations that might occur in other than a "best case"
2 scenario. Future conditions could produce adverse impacts, such as drought, earthquake, failure of
3 the Lopez Reservoir, or failure of the Northern Cities for other reasons to adhere to the so-called
4 'gentlemen's agreement' governing groundwater pumping in the Northern Cities Area.
5 Representatives of the Northern Cities failed to stipulate to quieting title in other parties who have
6 sued the Northern Cities for whatever rights they may possess, and failed to stipulate that they would
7 desist from claiming water rights in the remainder of the Basin in such an eventuality. Indeed, it
8 appears from the testimony that groundwater pumping in the Northern Cities area can potentially
9 increase the flow of water to it from other parts of the Basin.

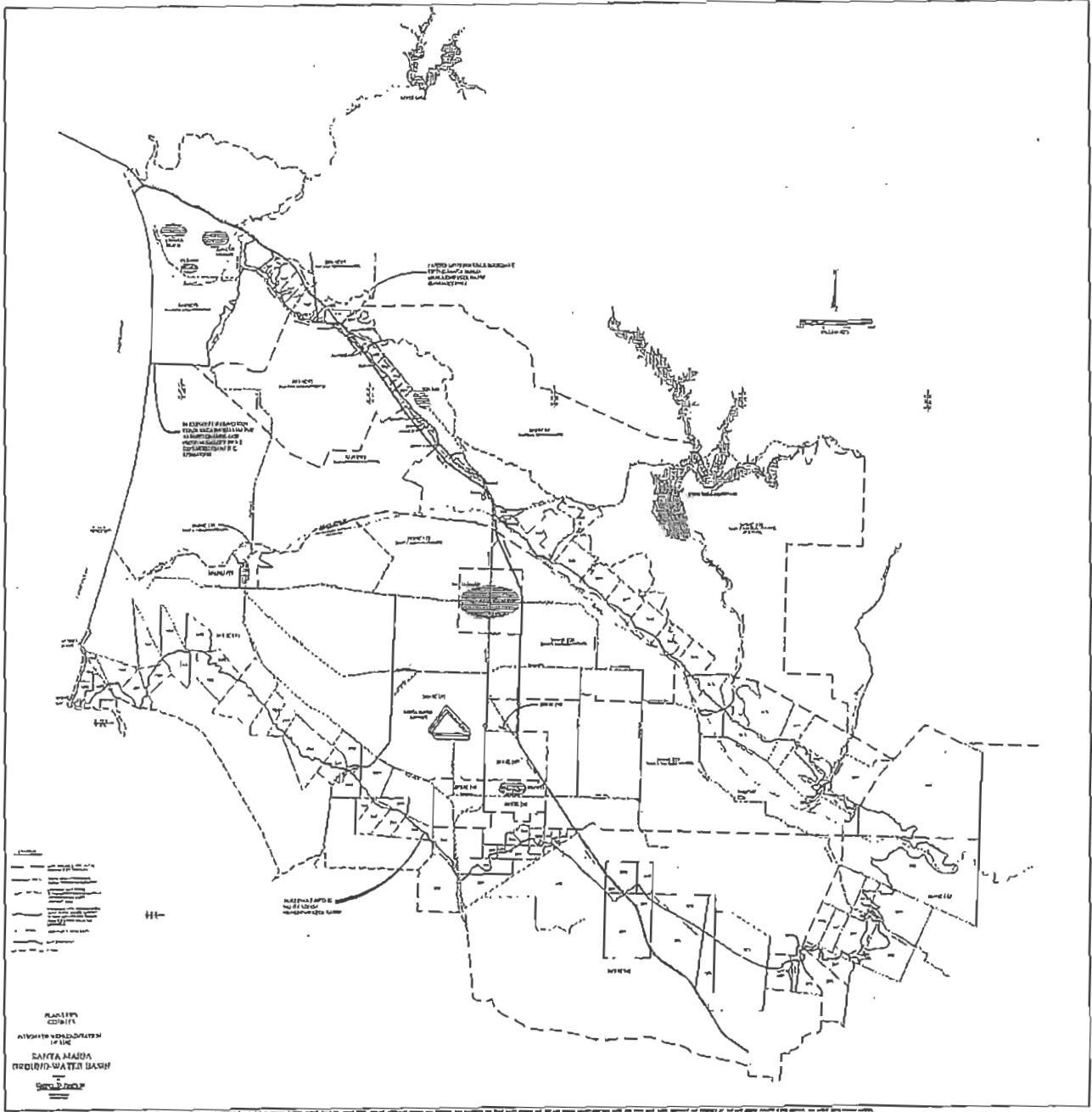
10 The parties reluctance to retain the Northern Cities area in the litigation appears to stem from
11 the prospect of joining and serving all landowners in the Northern Cities area whose rights may
12 potentially be affected. It may be possible, however, to obtain effective representation and due
13 process for such landowners by means of a class action, after due notice is provided, in which such
14 landowners are a defendant class. United States v. Truckee-Carson Irrigation District (D.Nev. 1975)
15 71 F.R.D. 10. The Court would entertain a motion to amend the cross-complaints or other pleadings
16 to join the landowners in that area as a defendant class, represented by a handful of interested
17 landowners who are similarly situated, in lieu of joinder of each owner. The Court would also
18 entertain a motion, briefing and argument as to why it may be inappropriate or inconvenient to
19 adjudicate the matter by means of a defendant class.

20 Any litigant now in the action who is asserting a quiet title claim concerning property outside
21 of the Boundary Line must move for severance of that claim from this action and must file such a
22 motion on or before thirty (30) days following service of this Order. Any such claims for which no
23 motion to sever is filed will be dismissed without prejudice on motion of any party or by the Court
24 on its own motion.

25 SO ORDERED.

26
27 Dated DEC 21 2001

28 
CONRAD L. RUSHING
Judge of the Superior Court



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FILED

JAN 25 2002

IGRITCRFE
Clerk of the Superior Court
Superior Court of California County of Santa Clara
BY ELVIEGA MALABER *cmvtr*

SUPERIOR COURT OF CALIFORNIA
COUNTY OF SANTA CLARA
DEPARTMENT 17C

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SANTA MARIA VALLEY WATER
CONSERVATION DISTRICTS, a
public entity,

Plaintiff,

vs.

CITY OF SANTA MARIA, a municipal
corporation, et al.,

Defendants,

Case No. CV 770214

ORDER WITH RESPECT TO BRIEF OF
CONOCO, INC., NUEVO ENERGY
COMPANY, AERA ENERGY LLC,
TEXACO EXPLORATION AND
PRODUCTION, INC. AND CHEVRON
USA, INC.

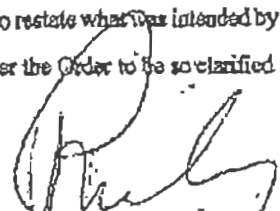
AND RELATED CROSS-ACTIONS

IT IS HEREBY ORDERED:

The Court shall not be holding a hearing with respect to the brief of Conoco, Inc., Nuevo Energy Company, Aera Energy LLC, Texaco Exploration And Production Inc., and Chevron USA Inc., or request for clarification requested therein. The Court finds that the request for clarification found in the Conclusion section of the said Brief appears to restate what was intended by the Court's Order filed December 21, 2002. The parties may consider the Order to be so clarified if it aids in further proceedings in this matter.

SO ORDERED.

Dated: JAN 25 2002



CONRAD L. RUSHING
Judge of the Superior Court

TOTAL P. 01

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Young Wooldridge, LLP

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4 LAW OFFICES OF YOUNG WOOLDRIDGE
5 1800 30th Street, Fourth Floor
6 Bakersfield, California 93301
7 (661) 327-9661

8 Attorneys for Cross-Defendants, Conoco Inc.,
9 Nuevo Energy Company, Aera Energy LLC
10 and ChevronTexaco

FILED
JAN 17 2002
BY _____

11 SUPERIOR COURT OF THE STATE OF CALIFORNIA
12 IN AND FOR THE COUNTY OF SANTA CLARA

13 SANTA MARIA VALLEY WATER) SANTA MARIA GROUNDWATER
14 CONSERVATION DISTRICT, a public) LITIGATION
15 entity,)
16 Plaintiff,) Lead Case No. CV 770214
17 vs.) Judge Conrad L. Rushing
18 CITY OF SANTA MARIA, et al)
19 Defendants.)
20 AND RELATED CROSS-ACTIONS)

21 BRIEF OF CONOCO, INC., NUEVO ENERGY COMPANY,
22 AERA ENERGY LLC, TEXACO EXPLORATION AND
23 PRODUCTION INC., AND CHEVRON USA INC.

24 I.
25 INTRODUCTION

26 This Brief is filed on behalf of Defendants/Cross-Complainants Conoco Inc., Nuevo Energy
27 Company, Aera Energy LLC and Texaco Exploration and Production Inc. and Chevron USA Inc.

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(recently merged and hereinafter known as ChevronTexaco), (collectively referred to as "Oil Group") parties.

On January 8, 2001, this Court entered its order after hearing granting the Santa Maria Valley Water Conservation District and Nipomo Community Service District's motion for summary judgment. The Oil Group joined in that motion as a moving party. The Court ruled that "the moving parties are entitled to judgment on all affirmative defenses dealing with uncertainty of the basin boundaries." (Summary Judgment Order, page 2.) More particularly, this Court adjudged, declared and decreed in its January 9, 2001 Order that the "outermost lateral boundary of the Santa Maria Valley Groundwater Basin ("Basin") lies along a type of material that does not readily transmit water . . . [and that] material (rock, sediments, sand, etc.) that do readily transmit water are within the basin". (Id.) Further, that there was "no triable issue of material fact as to the 'outermost' basin boundary as articulated in the Declaration of Terry Foreman, dated December 8, 2000, and as depicted on Exhibit 1 thereto".² (Id.)

The Court's Case Management Order No. 6, dated January 9, 2001, provided that "this Court ordered that the hydrogeological boundaries of the . . . Basin . . . be adjudicated separately as the Phase I; of this action. The Court now finds that there is need to determine the boundaries of the area to be adjudicated in this case in order to determine which parties should be excluded from or included in it." (Case Management Order No. 6, page 1) Further, that "Phase II, will decide the limits of the area that will be included in this groundwater adjudication and the areas . . . that may be excluded from this case . . .". (Id.)

¹ The Oil Group parties alleged as a affirmative defense, as against each cross-complainant, that the Santa Maria Basin boundary as alleged in the cross-complaints were insufficiently described and were therefore insufficient on grounds of uncertainty. The Oil Group requests this Court to take judicial notice of such affirmative defenses alleged in each answer to the cross-complaints on file with this Court pursuant to Evidence Code Section 452(d).

1 This Court has now rendered its decision and order, in part providing, that the Santa Maria
2 Valley Conservation District's motion for an order "establishing the geographic area constituting
3 the . . . Basin . . . for the purposes of this case, is hereby GRANTED." (Order, page 2) In sum,
4 the Court stated that it "finds the boundary of the Basin is that described on the map field as
5 Exhibit 5 with the Declaration of Robert C. Wagner, dated November 20, 2001." (Id.)
6

7 This brief is prepared pursuant to this Court's December 21, 2001 Order After Hearing Re:
8 Trial (Phase II) ("Order") requesting receipt of full briefing as to whether there are legal issues
9 raised with regard to parcels which touch or are intersected by the Boundary Line adjudicated as
10 part of the Phase II proceedings. No other provision or issue addressed in the Order is addressed
11 in this Brief.
12

13 Without waiving further objections, the Oil Group parties request this Court to reevaluate and
14 correct its Decision and Order as stated in this Brief. California Code of Civil Procedure Section
15 128(a)(8); Darling, Hall & Rae v. Kritt (1999) 75 Cal.App. 4th 1148, 1156; Berstein v.
16 Consolidated American Ins. Co. (1995) 37 Cal.App. 4th 763, 774; and Nave v. Taggart (1995) 34
17 Cal.App. 4th 1173, 1177.
18

19 II.

20 BRIEFING

21 With regard to that portion of the Court's Order determining the boundary of the Basin, the
22 Court addressed two (2) separate and distinct issues. First, a determination of the boundary line
23 of the Basin. Second, a conditional provision for potential further adjudication of certain parcels
24 identified to be proximate to the boundary line of the Basin.
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² The summary judgment order incorporated the map depicting the "outermost" boundary as part of that January 8, 2001 Order.

1 Fundamentally, the Order finds and specifically determines that the boundary of the Basin is
2 that line described in Mr. Wagner's Declaration and depicted as the solid magenta line on the
3 incorporated map, Exhibit 5. In Mr. Wagner's Declaration he declared that,

4
5 "The line identified as the boundary of the Santa Maria Ground-Water basin is
6 based on geologic and hydrologic considerations and represents the extent of the
7 aquifers comprising the groundwater basin. This line was developed in part
8 during the meetings of the Technical Committee and to the extent that the
9 boundary encompasses the water bearing sediments with the basin, represents the
10 view of the Technical Committee and its members. This is the same line that was
11 presented to the Court on October 9, 2001 on maps prepared by Mr. Joseph
12 Scalmanini." (Emphasis added.)

13
14 Specifically, the Court has stated that it "... finds that the boundary of the Basin is that
15 described on the map filed as Exhibit 5 . . . hereinafter referred to as the Boundary Line.".

16 (Order, page 2) (Emphasis added.) More particularly, the "... Court finds on the basis of the
17 evidence presented that the Boundary Line demarcates the boundary of the Basin, and that the
18 Basin constitutes the area beneath which groundwater exists in sufficient quantities to be
19 meaningfully included in this lawsuit." (Order, page 2.) "The Court determines that only the
20 lands, groundwater extraction claims and claims to groundwater storage rights within the
21 Boundary Line shall be subject to claims in this lawsuit" (Order, page 3.) (Emphasis added.)

22
23 Finally with regard to issues of notice and due process the Court decreed that it "... finds that
24 the Declaration of Robert C. Wagner . . . map and table to parcels, attached as Exhibits 5 and 6,
25 set forth sufficient detail regarding the specific parcels traversed by the Basin Boundary Line so
26 as to apprise potentially affected landowners and other interested parties of the location of the
27 Basin and Boundary Line fixed by this Order." (Order, page 3.) (Emphasis added.) Based on
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these specific findings and determinations, the Court has clearly held that the Basin boundary is that area interior to the solid magenta line depicted on Exhibit 5.

However, in that portion of the Order addressing those parcels which are touched or intersected by the adjudicated Boundary Line, the Court utilizes a significantly different definition. For example, the Order provides that the "Basin shall also include for purposes of adjudication herein all those parcels of land, which are shown on Exhibit 5 and listed on Exhibit 6 . . . to the full extent of the perimeter of such parcels." (Order, page 2). (Emphasis added.)

"Thus, at this time, until further order, the Court orders that those parcels are to be considered within the Basin." (Order, page 2). (Emphasis added.) Under this definition, the Basin boundary could be construed to be that area interior to the solid orange line representative of the several Assessors' Parcel Lines depicted on the Exhibit 5 and not the solid magenta identified by Mr. Wagner and Mr. Scalmanini. Such a construction is directly contradicted by the Court's specific findings and determinations regarding the Basin Boundary and this Court's earlier order adjudicating the "outermost lateral boundary" of the Basin. (Summary Judgment Order, page 2.)

Further, such a construction is not consistent with the Court's stated rationale for conditionally including the entirety of such parcels in this adjudication. Specifically, the Court's Order provides that, at this time and pending further briefing and order from the Court, that such parcels should be included in the area adjudicated by this groundwater litigation. Importantly, the Court has indicated that, while not deciding any such matters, such parcels may raise further legal issues regarding the use of water from the Basin. Therefore, while the Court has held that the full extent of the perimeter of such parcels should, at this time, be included in the area the subject of this groundwater adjudication, not all such lands have been found by the Court to be within the limits of the adjudged Basin Boundary as depicted on Exhibit 5. Importantly, the

1 Court has made no determination with regard to the rights of such parcels and landowners to the
2 use of water from the Basin.

3
4 This Court has the ability, on its own motion, to reevaluate its own interim rulings, or to
5 correct an erroneous ruling. Darling, Hall & Rae v. Kritt (1999) 75 Cal.App. 4th 1148, 1156;
6 Berstein v. Consolidated American Ins. Co. (1995) 37 Cal.App. 4th 763, 774; California Code of
7 Civil Procedure Section 128(a)(8). "Until entry of judgment, the court retains complete power to
8 change its decision as the court may determine; it may change its conclusions of law or findings
9 of fact". Nave v. Taggart (1995) 34 Cal.App. 4th 1173, 1177.

10
11 **III.**
12 **CONCLUSION**

13 In light of this Court's prior orders and decrees, the provisions of the Order, and the above-
14 cited authorities, the Oil Group parties respectfully request confirmation from the Court that the
15 December 21, 2001 order and decision provides, with regard to the issues raised in this Brief, as
16 follows:

17
18 (1) That the boundary of the Basin is as depicted on the Exhibit 5 to the Declaration of
19 Robert C. Wagner, dated November 20, 2001. Specifically, the boundary of the Basin is that line
20 identified on the legend to the map as "boundary of the Santa Maria Ground-Water Basin"
21 depicted on the map as a solid magenta colored line;

22
23 (2) That the Basin boundary is not that line identified on the legend to the map as the
24 "Assessors' Parcel Lines" depicted on the map as a solid orange colored line;

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26 (3) that those parcels identified on Exhibit 5, which either touch or are intersected by the
27 Boundary Line, are until further order of this Court, provisionally included for purposes of
28 adjudication in this case; and

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(4) that any further order of this Court regarding the adjudication of the rights and duties of such parcels will be determined in subsequent proceedings of this litigation following presentation of evidence and legal briefing on any such issues.

Dated: December 31, 2001

THE LAW OFFICES OF YOUNG WOOLDRIDGE LLP


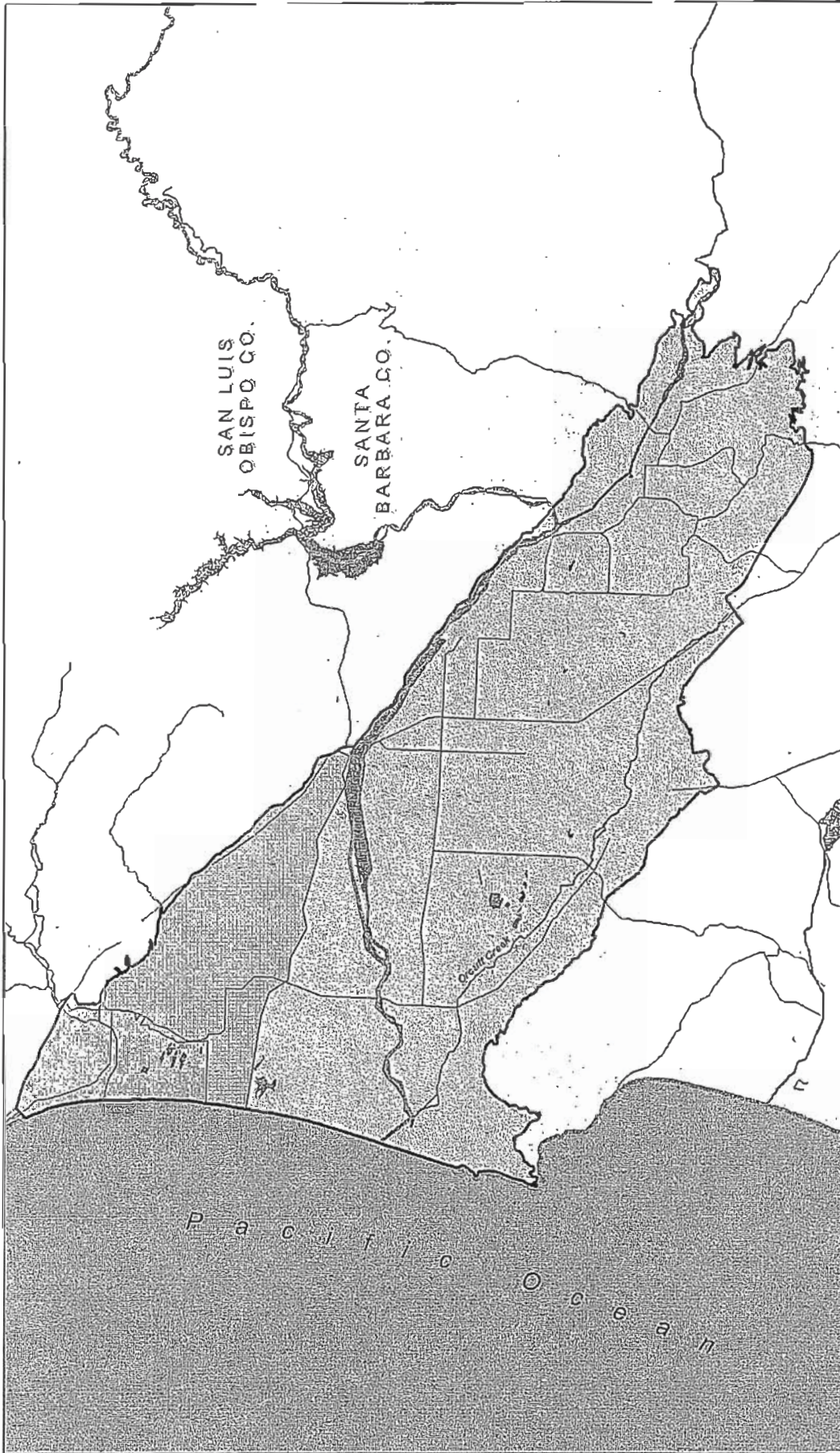
By: 
SCOTT K. KUNEY, Esq.,
Attorneys for Cross-Defendants, Conoco, Inc.,
ChevronTexaco, Nuevo Energy Company, and
Aera Energy LLC

EXHIBIT C

**Map of the Basin and Boundaries
of the Three Management Areas**

Santa Maria Valley Water Conservation District v. City of Santa Maria
Santa Clara County Superior Court Case No. CV 770214



Legend
 [Stippled Box] Santa Maria Groundwater Basin
 [Cross-hatched Box] Nipomo Mesa Management Area
 [Diagonal Lines Box] Santa Maria Valley Management Area
 [Horizontal Lines Box] Northern Cliffs Management Area
 Note: Management Area boundaries are approximate.

Management Areas
Santa Maria Groundwater Basin

EXHIBIT D



Santa Maria Valley Water Conservation District v. City of Santa Maria
Santa Clara County Superior Court Case No. CV 770214

- I. Maps Identifying Those Lands as of January 1, 2005:
 - a. within the boundaries of a municipality or its sphere of influence, or within the process of inclusion in its sphere of influence; or
 - b. within the certificated service area of a publicly regulated utility.
- II. List of selected parcels that are nearby the boundaries identified on the incorporated maps, which in addition to more distant parcels, are excluded from these new urban use areas.

CURRENT PLANNED CITY SERVICE AREA

**CITY OF SANTA MARIA
EXHIBIT "D"**



-  = SERVICE AREA PROVIDED BY THE CITY
-  = CURRENT PLANNED CITY SERVICE AREA

107-150-001	111-014-001	117-191-010
107-150-002	111-014-002	117-191-013
107-150-007	111-014-003	117-820-001
107-150-013	111-014-004	117-820-002
107-150-015	111-014-005	117-820-024
107-150-016	111-014-006	117-820-025
107-150-018	111-014-007	
107-150-019	111-014-008	128-078-004
	111-014-009	128-078-005
	111-014-010	128-078-013
107-240-005	111-014-011	
107-240-006	111-014-012	128-091-001
107-240-008	111-014-013	128-091-005
107-240-027	111-014-014	128-091-006
107-240-028		128-091-007
107-240-029	111-015-001	
	111-015-002	128-094-012
	111-015-003	128-094-014
	111-015-004	128-094-016
	111-015-005	128-094-042
	111-015-006	128-094-047
	111-015-007	
	111-015-008	129-010-001
		129-010-012
		129-010-013
		129-010-021
		129-010-022
		129-010-023
		129-010-024

CITY OF SANTA MARIA
WASTE WATER
TREATMENT PLANT
SANTA MARIA CITY LIMITS

111-012-001	111-020-002
111-012-002	111-020-003
111-012-003	111-020-009
111-012-004	111-020-041
111-012-005	111-020-013
111-012-006	111-020-014
	111-020-016
111-013-001	
111-013-002	
111-013-003	111-030-003
111-013-004	111-030-015
111-013-005	111-030-016
111-013-006	111-030-018
111-013-007	111-030-023
111-013-008	111-030-024
111-013-009	111-030-025
111-013-010	111-030-026
111-013-011	
111-013-012	
111-013-013	111-130-001
111-013-014	

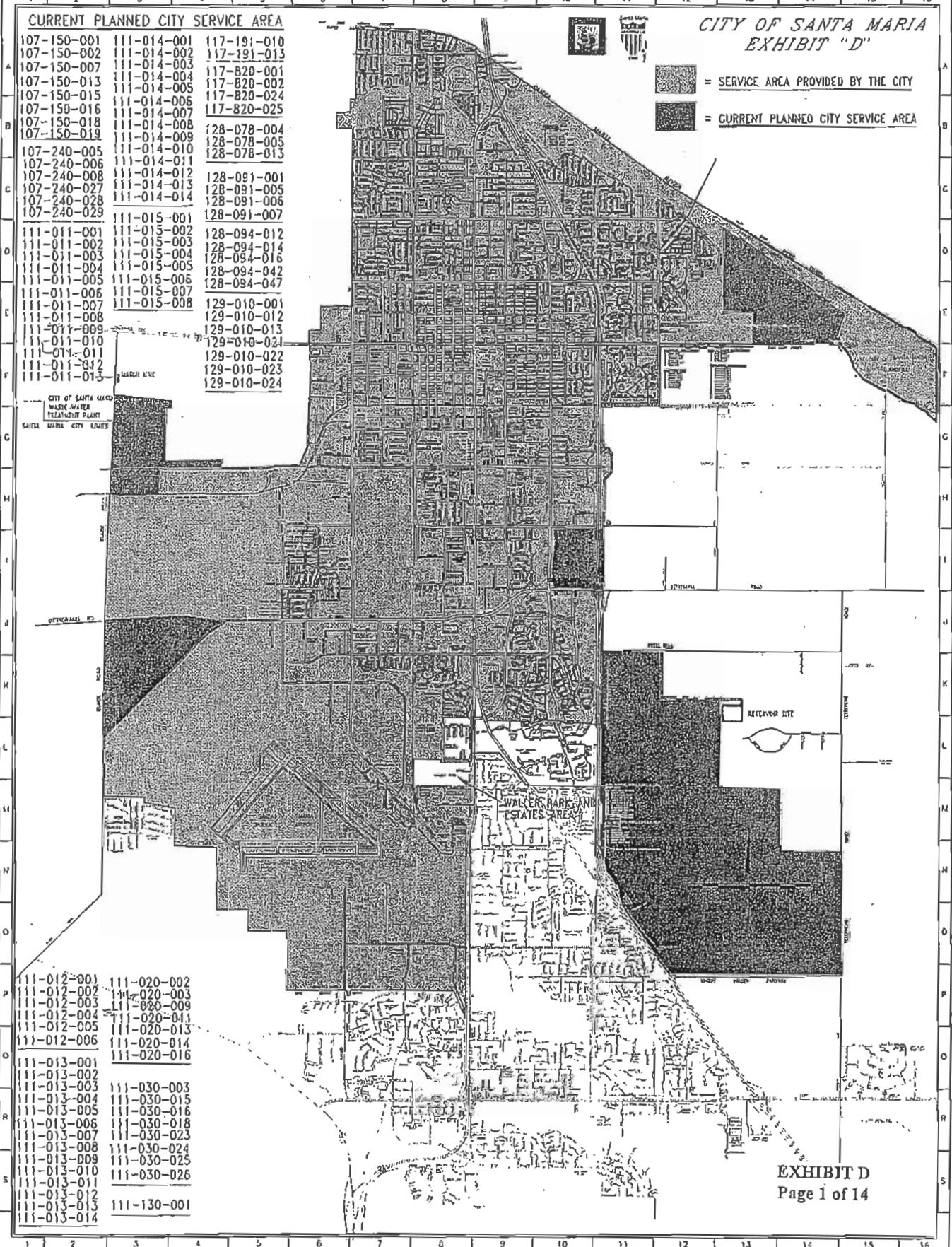
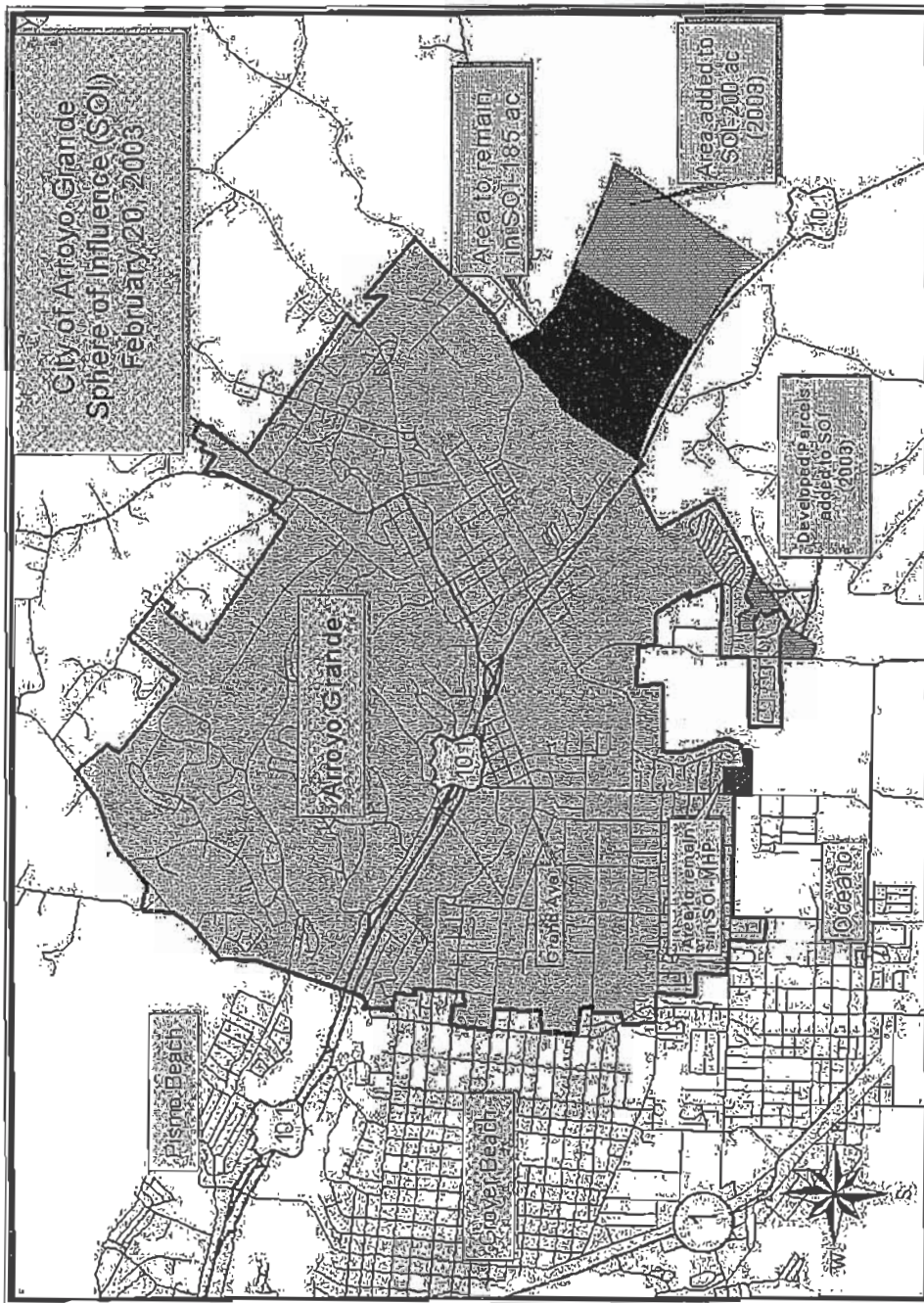
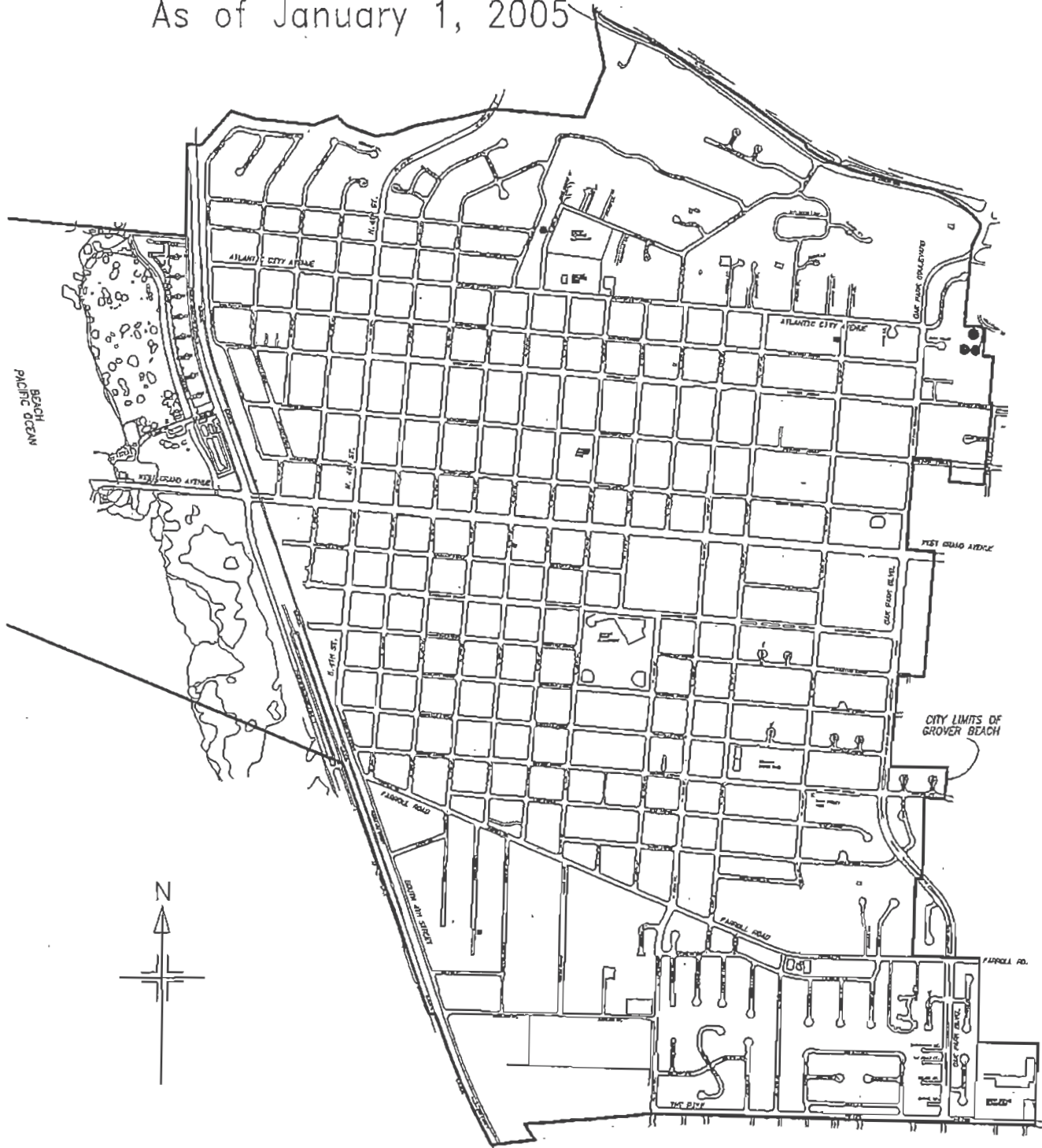


Figure 1 – Sphere of Influence
 City of Arroyo Grande



CITY OF GROVER BEACH
Sphere of Influence and City Boundary
As of January 1, 2005



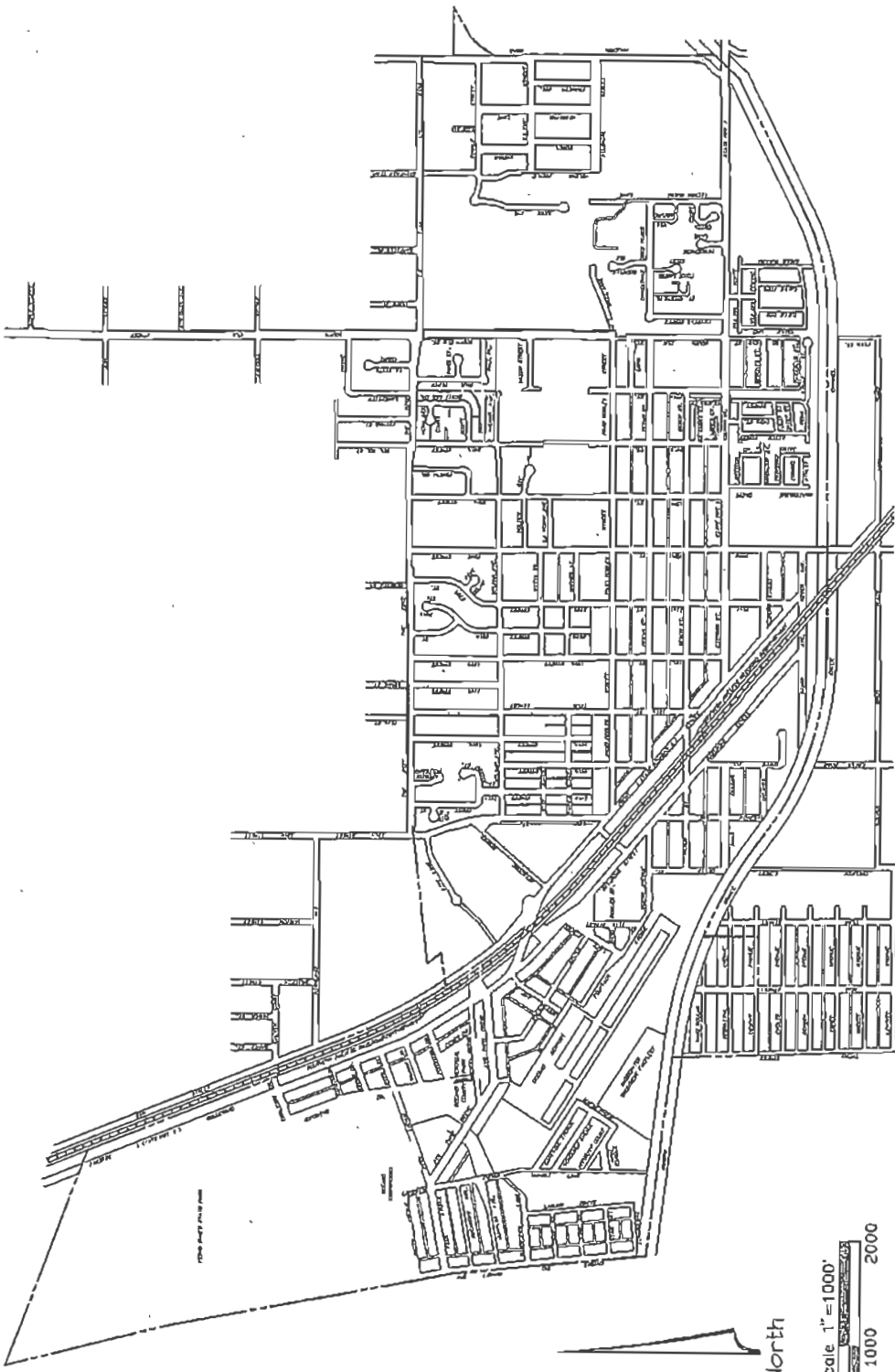


EXHIBIT D
Page 4 of 14

Scale: 1" = 1000'
 W.O. No. 0001-007
 File Name: OCSO_Boundary_and_501_01-01-2005.dwg
 Plot date: 5/20/2005

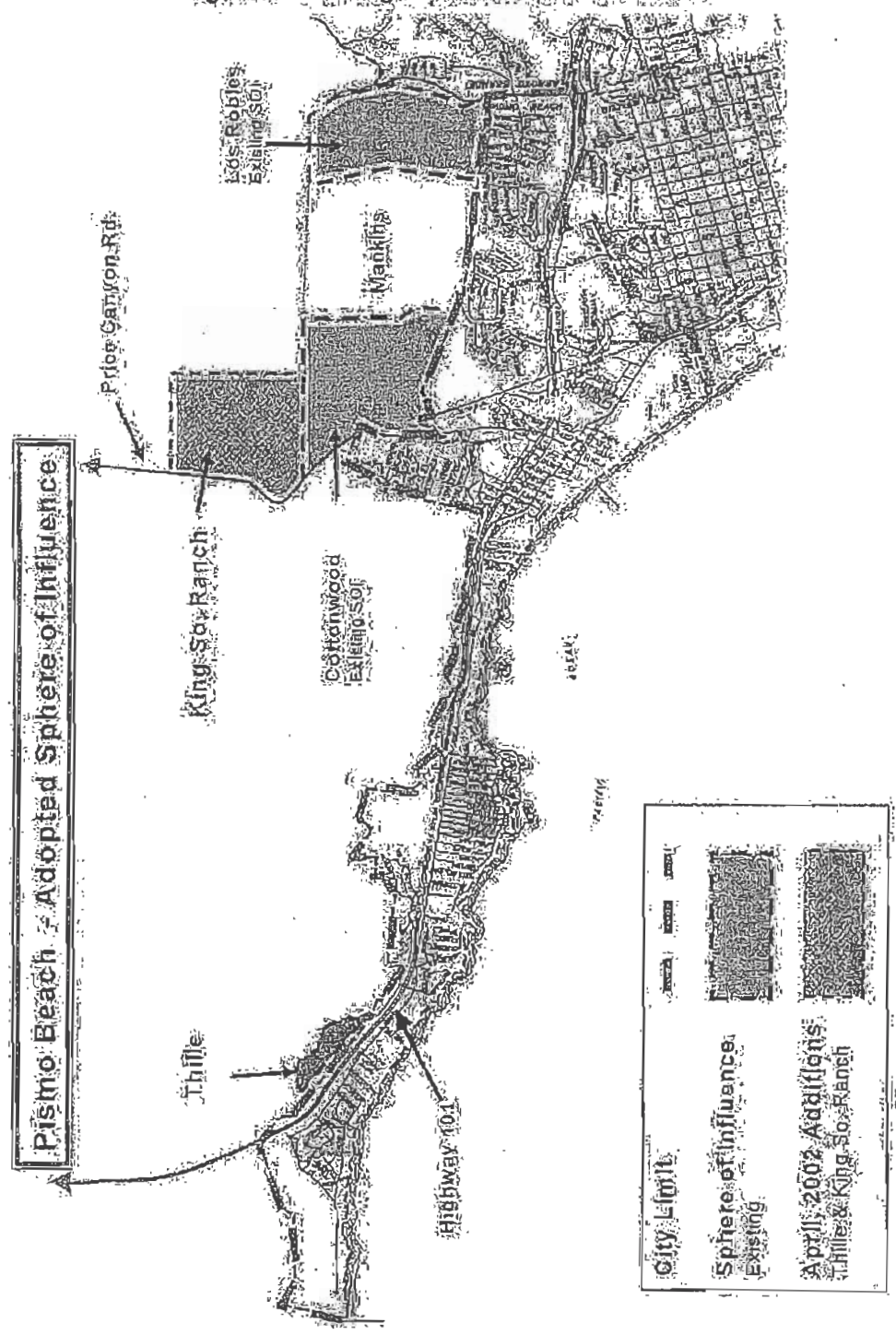
Civil Engineering
 Surveying
 Project Development
 141 South Elm Street
 Arroyo Grande, CA 93420
 805/489-1321

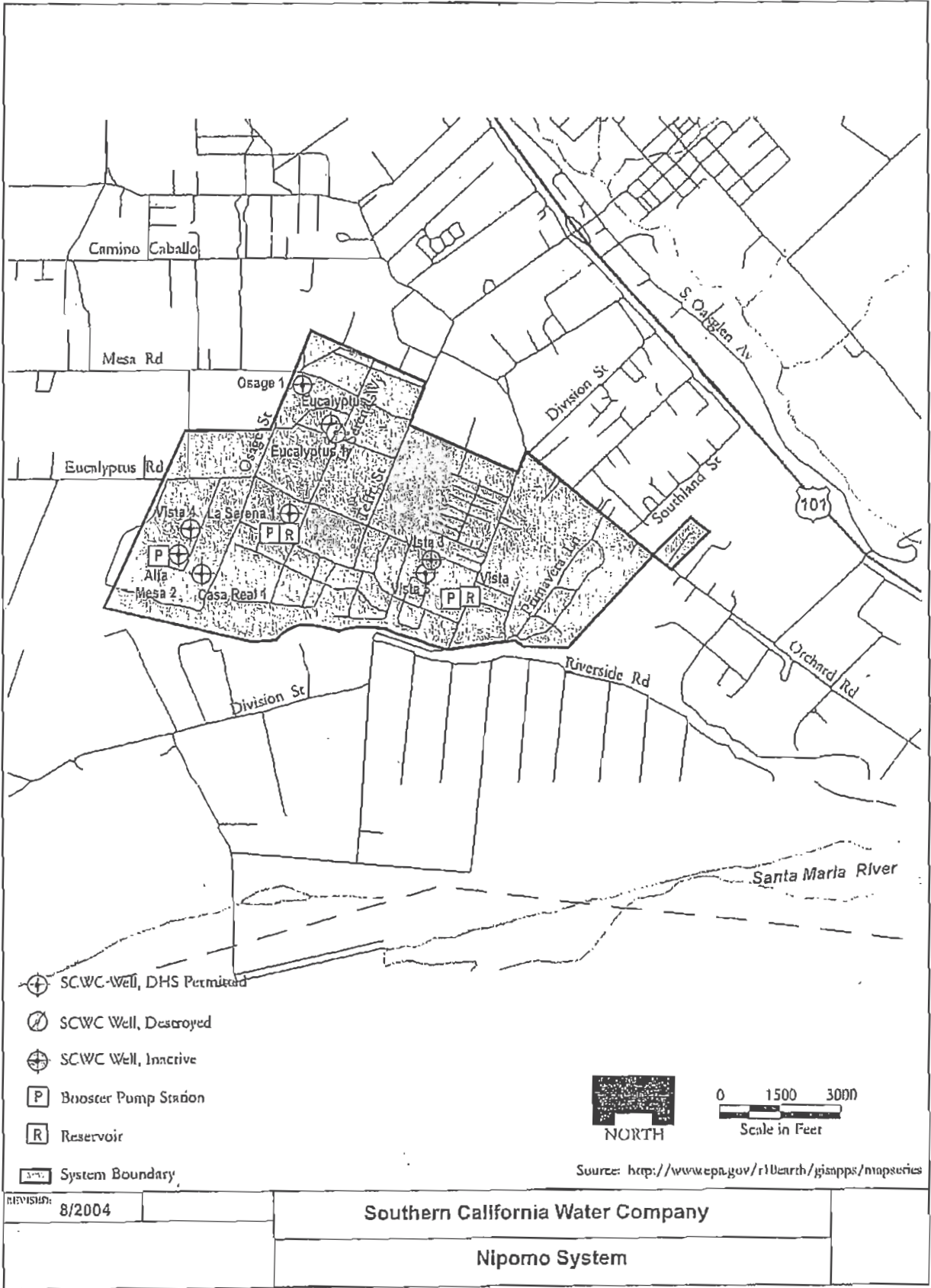


Service Area and Sphere of Influence January 1, 2005
OCEANO COMMUNITY SERVICES DISTRICT

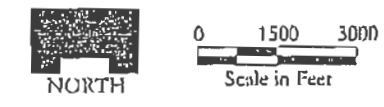
Oceano Community
 Services District
 P.O. Box 849
 1655 Front Street
 Oceano, CA 93445-0849
 tel: (805)481-6700

Figure 1 - Existing SOI and Proposed Additions





- ⊕ SCWC Well, DHS Permitted
- ⊗ SCWC Well, Destroyed
- ⊕ SCWC Well, Inactive
- [P] Booster Pump Station
- [R] Reservoir
- [] System Boundary

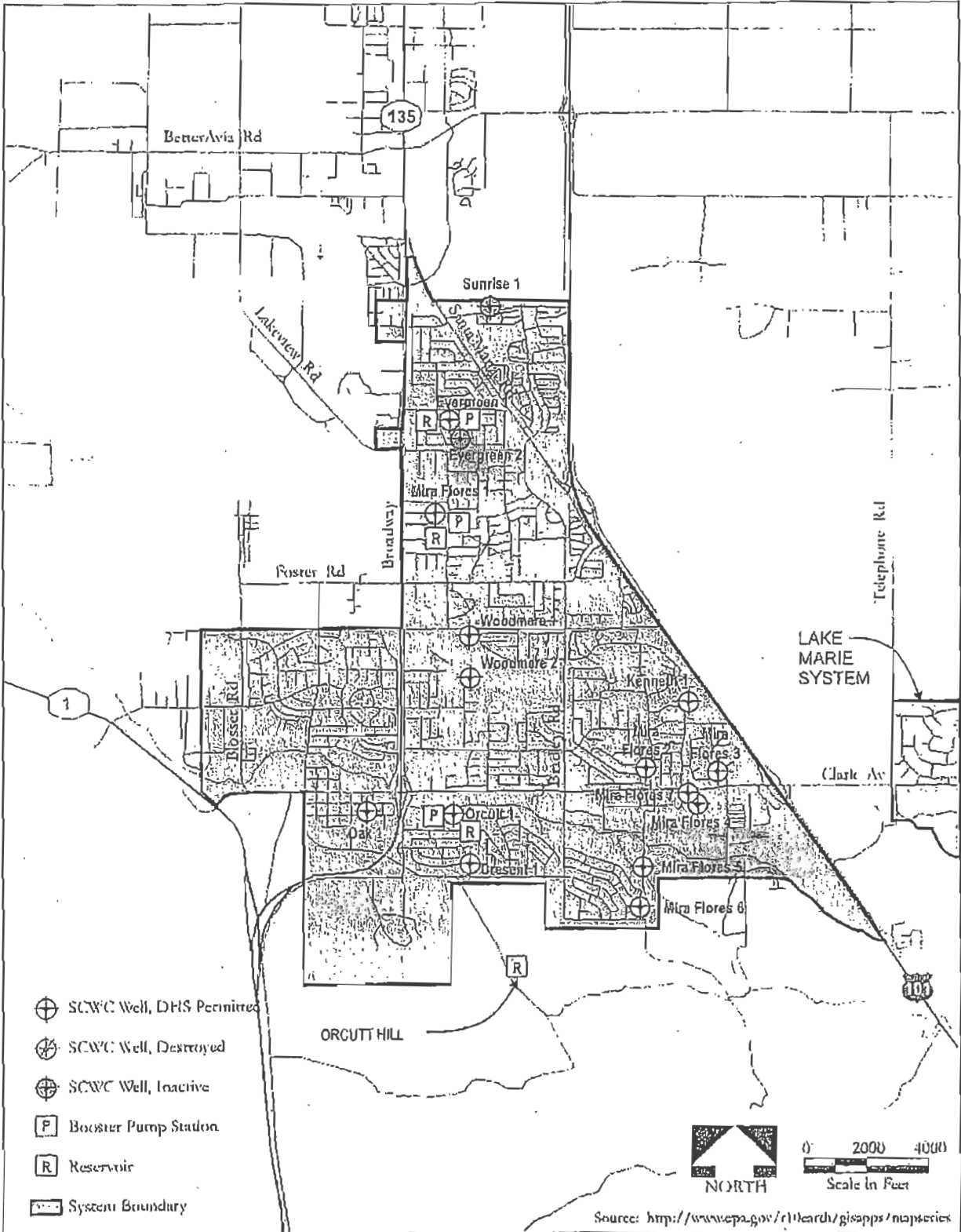


Source: <http://www.epa.gov/r10earth/gisapps/maps/series>

REVISION: 8/2004

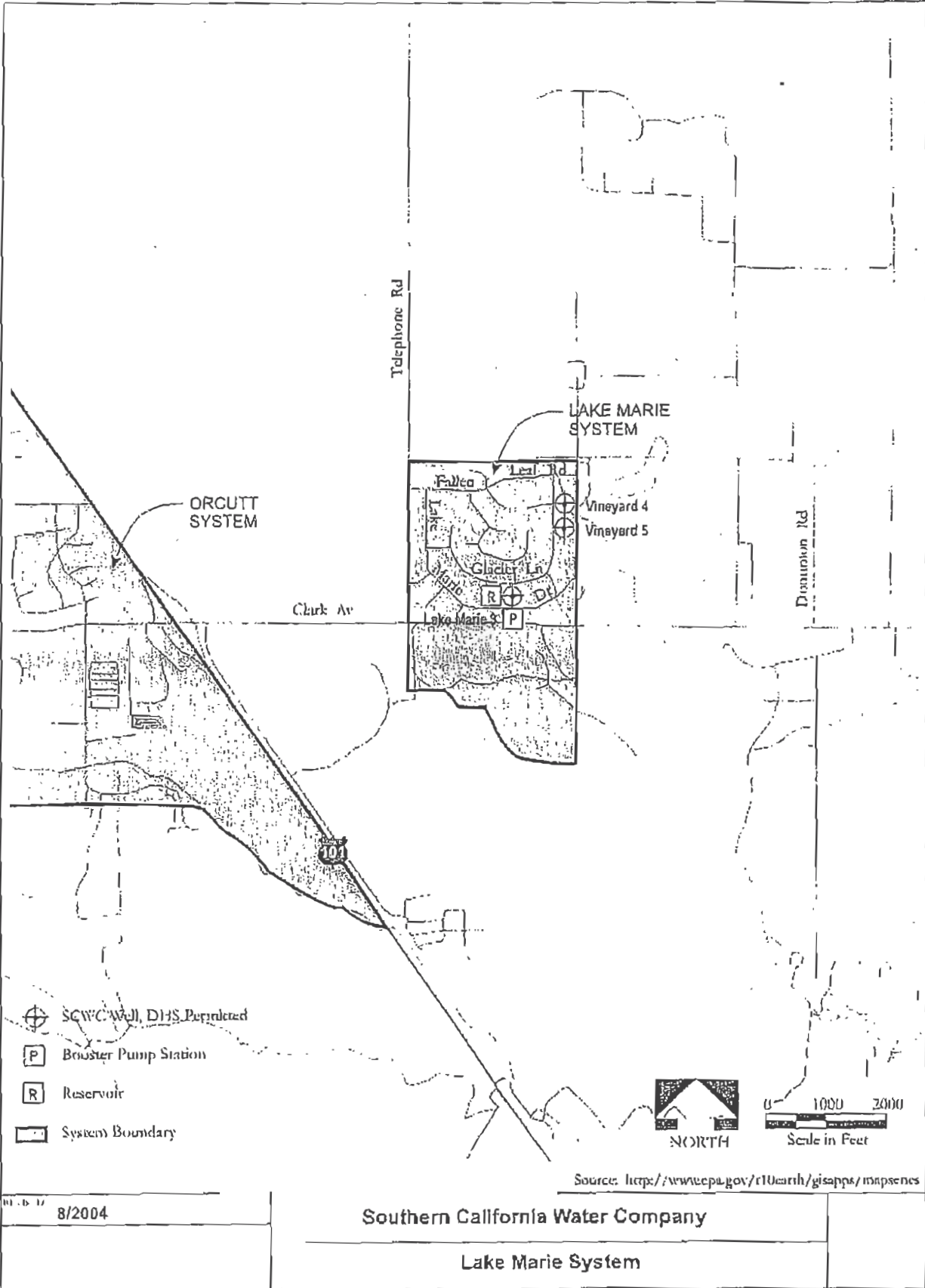
Southern California Water Company

Nipomo System



8/2004

Southern California Water Company
Orcutt System

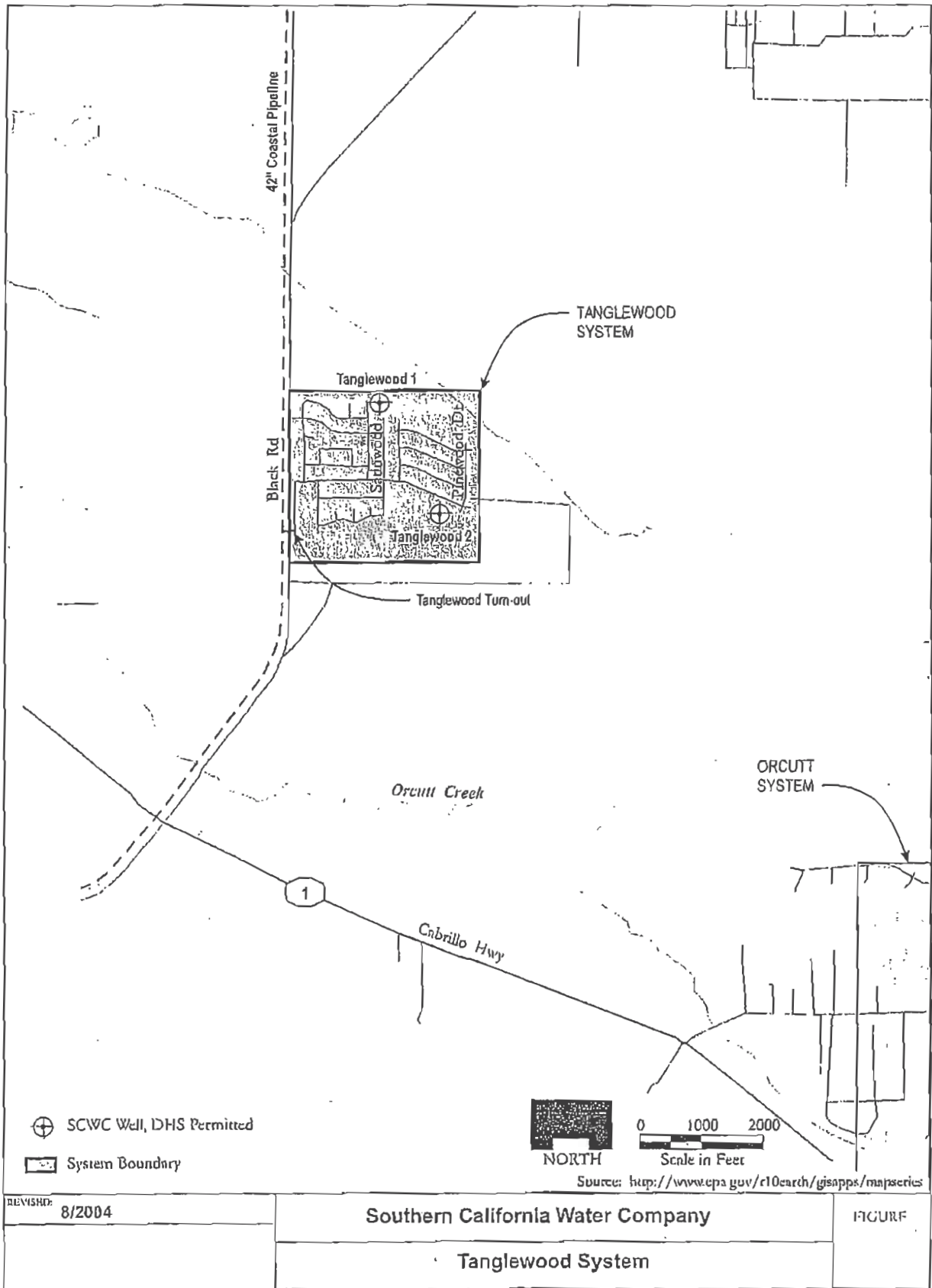


Source: <http://www.eipa.gov/r10earth/gisapps/mnpsenes>

8/2004

Southern California Water Company

Lake Marie System

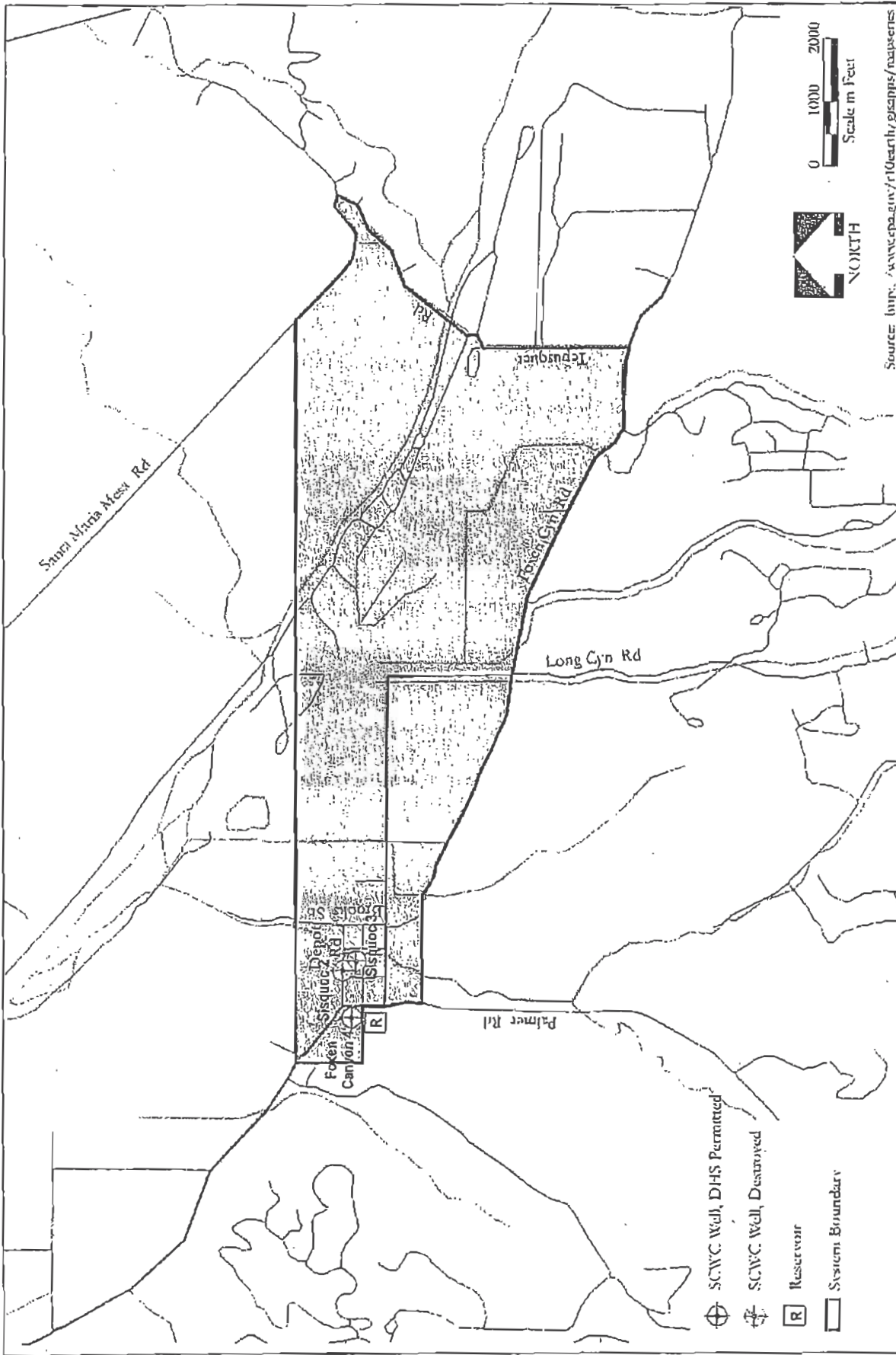


REVISED: 8/2004

Southern California Water Company

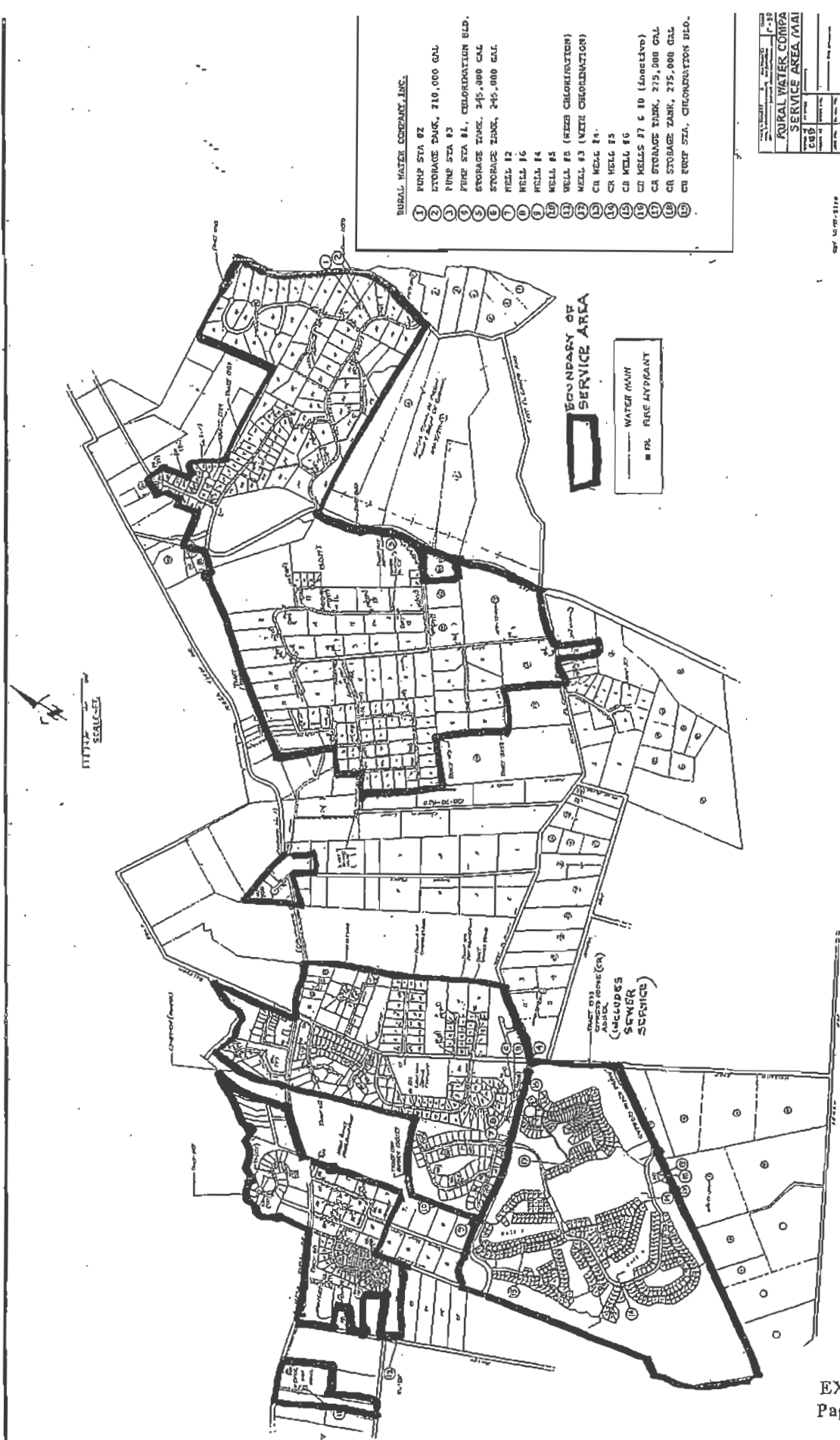
FIGURE

Tanglewood System



Southern California Water Company
Sisquoc System

REV. 0 8/2004



RURAL WATER COMPANY, INC.

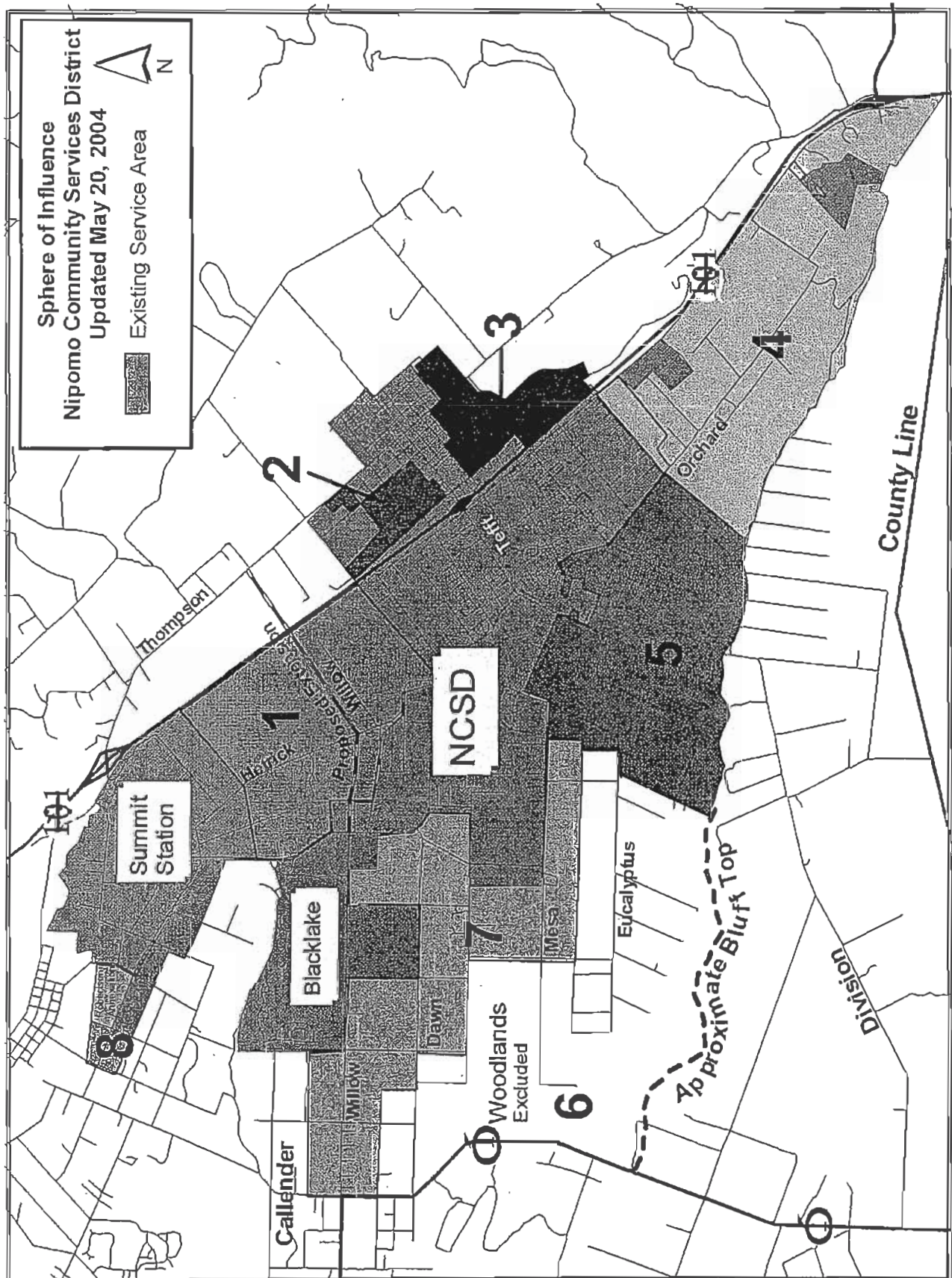
- 1 PUMP STA 82
- 2 STORAGE TANK, 210,000 GAL.
- 3 FIRE STA 93
- 4 FIRE STA 81, CHLORINATION BLD.
- 5 STORAGE TANK, 245,000 GAL.
- 6 STORAGE TANK, 245,000 GAL.
- 7 WELL 12
- 8 WELL 16
- 9 WELL 14
- 10 WELL 15
- 11 WELL 18 (NEED CHLORINATION)
- 12 WELL 13 (NEED CHLORINATION)
- 13 CR WELL 14
- 14 CR WELL 15
- 15 CR WELL 16
- 16 CR WELLS 17 & 18 (Inactive)
- 17 CR STORAGE TANK, 275,000 GAL.
- 18 CR STORAGE TANK, 275,000 GAL.
- 19 CR STORAGE TANK, 275,000 GAL.
- 20 CR PUMP STA, CHLORINATION BLD.

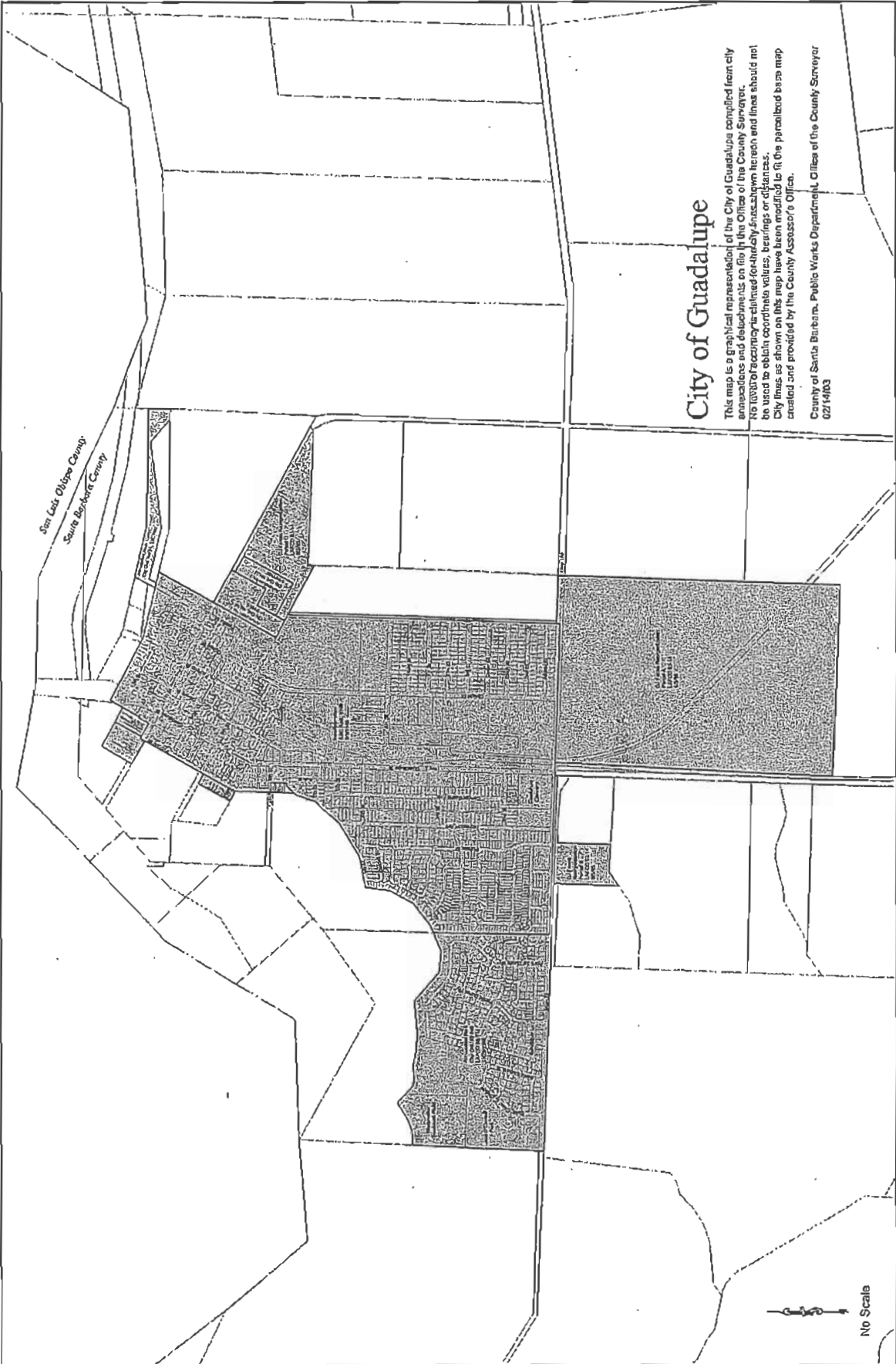
BOUNDARY OF SERVICE AREA

— WATER MAIN
 - - - - - FIRE HYDRANT

AREA 011 (includes SEWER SERVICE)

RURAL WATER COMPANY		PROJECT NO. 1-23	
SERVICE AREA (MA)		DATE: 11/1/58	
BY: [Signature]	CHECKED BY: [Signature]	DATE: 11/1/58	SCALE: AS SHOWN





Stipulation
Santa Maria Valley Water Conservation District v. City of Santa Maria

EXHIBIT D

List of Selected Excluded Parcels Nearby the Boundaries of New Urban Use Areas

103-070-004	128-099-001
107-300-007	128-100-001
107-300-008	128-100-003
107-300-012	128-100-020
128-056-024	128-100-021
128-094-018	128-100-022
128-094-019	128-100-027
128-094-020	128-100-028
128-094-021	128-100-029
128-094-023	128-100-030
128-094-024	128-100-031
128-094-029	128-101-010
128-094-031	128-101-012
128-095-001	129-100-008
128-095-002	129-110-020
128-095-003	129-120-001
128-095-004	129-120-023
128-095-006	129-151-029
128-095-008	129-151-031
128-096-001	129-151-032
128-096-002	129-151-033
128-096-003	129-180-010
128-096-004	129-180-011
128-096-006	129-210-017
128-096-009	
128-098-005	

EXHIBIT E

**2002 Settlement Agreement
between the Northern Cities and Northern Landowners**

Santa Maria Valley Water Conservation District v. City of Santa Maria
Santa Clara County Superior Court Case No. CV 770214

1 NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP
Frederic A. Fudacz, State Bar No. 50546
2 Henry S. Weinstock, State Bar No. 89765
Alfred E. Smith, State Bar No. 186257
3 445 South Figueroa Street, 31st Floor
Los Angeles, California 90071
4 Telephone: (213) 612-7800
Facsimile: (213) 612-7801

5 Attorneys for Defendants City of Arroyo Grande,
6 City of Grover Beach, City of Pismo Beach,
Oceano Community Services District
7

8 SUPERIOR COURT OF THE STATE OF CALIFORNIA

9 FOR THE COUNTY OF SANTA CLARA

10
11 SANTA MARIA VALLEY WATER
CONSERVATION DISTRICT, a public
12 entity,

13 Plaintiff,

14 v.

15 CITY OF SANTA MARIA, et al.,

16 Defendants.

SANTA MARIA GROUNDWATER
LITIGATION, LEAD CASE No. CV 770214
(Consolidated with CV 784900, 784921,
784926, 785509, 785511, 785515, 785522,
785936, 786971, 787150, 787151, 787152,
990738, 990739)

SETTLEMENT AGREEMENT BETWEEN
NORTHERN CITIES, NORTHERN
LANDOWNERS, AND OTHER PARTIES

17
18 AND ALL RELATED ACTIONS.
19

20 PARTIES AND EFFECTIVE DATE

21 This Agreement is entered into among the Cities of Arroyo Grande, Pismo
22 Beach, Grover Beach and the Oceano Community Services District (collectively "Northern
23 Cities"), owners/lessors of land located in the Northern Cities Area ("Northern Landowners"),
24 and other parties who execute this Agreement. This Agreement is entered into as of April 30,
25 2002.

26 STIPULATIONS OF FACT

27 A. In 1997, the Santa Maria Valley Water Conservation District initiated this
28 action, Santa Clara Superior Court Case Number CV 770214, consolidated with Case

1 Numbers 784900, 784921, 784926, 785509, 785511, 785515, 785522, 785936, 786971,
2 787150, 787151, 787152, 990738, and 990739 (the "Action"), to adjudicate groundwater rights
3 in the Santa Maria Groundwater Basin;

4 B. Numerous parties have filed complaints and/or cross-complaints in the
5 Action with respect to rights to produce water in the Santa Maria Groundwater Basin;

6 C. By Order dated December 21, 2001, the Court determined the geographic
7 area constituting the Santa Maria Groundwater Basin ("Basin") and ruled that the Northern
8 Cities Area (identified on the map attached hereto as Exhibit A) is within the Basin;

9 D. Under current water supply and demand conditions, the groundwater
10 basin in the Northern Cities Area is in rough equilibrium, and groundwater pumping in the
11 Northern Cities Area does not negatively affect water supplies in the remainder of the Basin;

12 E. For more than 30 years, there have been separate funding, management
13 and usage of groundwater in the Northern Cities Area from groundwater in the Santa Maria
14 Valley. For example, the Northern Cities and Northern Landowners have paid and are paying
15 tens of millions of dollars for the construction and retrofit of the Lopez Reservoir, which
16 benefits the Northern Cities Area; whereas the Twitchell Reservoir has been paid for by parties
17 in the Santa Maria Valley who benefit from it.

18 F. The Northern Cities and Northern Landowners have agreed among
19 themselves and do hereby reaffirm their agreement to cooperatively share and manage
20 groundwater resources in the Northern Cities Area in accordance with a "Gentlemen's
21 Agreement" that was originally developed in 1983 and amended thereafter. Said Agreement
22 confers no rights on any third parties;

23 G. It is in the interest of all of the parties to this litigation that the parties settle
24 their claims and potential claims on the basis of the continued separate funding, management,
25 and usage of the waters conserved by the Lopez Reservoir in the Northern Cities Area and by
26 the Twitchell Reservoir in the remainder of the Basin, to preserve and protect water resources
27 in those separate management areas.

28 H. This Settlement Agreement is also intended to provide the parties with

1 advance notice of changes in the groundwater conditions in the Northern Cities Area and
2 Nipomo Mesa, as water supplies and demands may change with time. (The Nipomo Mesa is
3 southeast of the Zone 3 Line, and north of the Santa Maria River.); and

4 I. The parties to this Settlement Agreement have agreed to settle and
5 resolve their cross-claims and potential cross-claims on the conditions set forth below:

6 **NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS**

7 1. Separate Management Areas. Subject to the conditions set forth below,
8 water resources and water production facilities in the Northern Cities Area shall continue to be
9 independently managed by the Northern Cities, the San Luis Obispo County Flood Control and
10 Water Conservation District, and the Northern Landowners, with the intention of preserving the
11 long-term integrity of water supplies in the Northern Cities Area. For example, the Northern
12 Cities and Northern Landowners will not be responsible to pay for any of the costs of the
13 Twitchell Reservoir; and the parties outside of the Northern Cities Area (Zone 3) shall not be
14 responsible to pay any of the costs relating to the Lopez Reservoir.

15 2. Effects on Litigation. Except as provided below, the parties in the
16 Northern Cities Area, on the one hand, and the other parties hereto, on the other hand, agree
17 not to pursue or assert any claims against one another relating to water rights in the Santa
18 Maria Groundwater Basin. Each of the Northern Landowners who execute this Agreement will
19 be deemed to have been served by each of the water purveyor parties in this action who have
20 signed this Agreement with cross-complaints seeking declaratory and other relief in the form of
21 the cross-complaints previously filed by the City of Santa Maria; and each of the Northern
22 Landowners who execute this Agreement shall be deemed to have served and filed answers to
23 said cross-complaints denying all of their material allegations and asserting all available
24 affirmative defenses. The Northern Cities and Landowners shall continue to be subject to
25 reasonable discovery requests that are relevant to the remaining issues in the case.

26 3. Court Approval. This Settlement Agreement shall be submitted to the
27 Court for approval. If approved, this Settlement Agreement shall be included in and attached
28 as an exhibit to the final judgment in this Action, and the Northern Cities Area shall be treated

1 separately under the judgment in accordance with the provisions set forth herein. Paragraphs
2 4 and 7-20 of this Agreement shall take effect only upon Court approval of this Agreement.

3 4. Consent to Continuing Jurisdiction. Prior to this Agreement, there has
4 been no adjudication of the water rights of the Northern Cities, Northern Landowners, or any
5 other party, other than the determination of the boundaries of the Basin. Except ¶ 5 below,
6 nothing in this Agreement authorizes the Court to restrict or affect the right of any party to
7 pump, divert, use, or store groundwater or surface water without first according that party all of
8 its substantive, procedural, and due process rights under constitutional, statutory, and common
9 law requirements. Subject to the above and to the limitations of paragraphs 5-6 below, the
10 parties hereto agree that the Court reserves and retains full jurisdiction, power, and authority
11 over the Northern Cities Area, the Northern Cities, and the Northern Landowners, to enable the
12 Court, upon motion of any party, to make such further orders or directions (1) to interpret,
13 enforce, amend, or amplify any of the provisions of this Agreement; (2) to enforce, protect, or
14 preserve the rights of the respective parties, consistent with the rights herein decreed; or (3) to
15 issue such additional orders and/or injunctions to prevent injury to any party that might result
16 from any material adverse change in the availability or quality of the water supplies in the
17 Northern Cities Area, or the Nipomo Mesa Area, or any part of the Basin.

18 5. Reaffirmation of Gentlemen's Agreement. The Northern Cities and
19 Northern Landowners hereby reaffirm their Agreement to cooperatively share and manage
20 groundwater resources in the Northern Cities' Area in accordance with their AGREEMENT
21 REGARDING MANAGEMENT OF THE ARROYO GRANDE GROUNDWATER BASIN, aka
22 the "Gentlemen's Agreement." (A copy of the current version of this Agreement is attached
23 hereto as Exhibit B.) In particular, the Northern Cities and the Northern Landowners agree
24 with each other to continue to divide the safe yield of groundwater in the Northern Cities' Area,
25 including any increases or decreases of the safe yield, in accordance with ¶ 1 of Exhibit B
26 hereto. Said water-sharing Agreement and this paragraph 5 shall only be binding on and
27 enforceable by the Northern Cities and Northern Landowners.

28 6. No Effect on Water Rights. Except as provided in ¶ 5 above, nothing in

1 this Agreement shall be construed to create, eliminate, increase, or reduce any substantive
2 right of any party to pump, divert, use, or store groundwater or surface water; and nothing in
3 this Agreement shall be construed to prove or disprove, directly or indirectly, any element of
4 prescriptive rights to groundwater.

5 **TECHNICAL OVERSIGHT COMMITTEE**

6 7. Formation. A Technical Oversight Committee (TOC) shall be established
7 to carry out the ongoing monitoring and analysis program ("MAP," see below).

8 8. Composition. The TOC shall be comprised of two voting representatives
9 of the Northern Cities and two voting representatives of parties providing public water service
10 on the Nipomo Mesa ("Mesa Parties," which include the Nipomo Community Services District,
11 Rural Water Company and Southern California Water Company, and their successors or
12 assigns). At least one of the two representatives from the Northern Cities and the Mesa
13 Parties shall be technically qualified to carry out the MAP duties described below. The other
14 TOC representatives may be technical, policy, managerial, or legal in nature. The voting
15 representatives shall attempt to operate by consensus. However, if consensus cannot be
16 achieved, TOC decisions may be made by majority vote of the voting representatives.

17 9. Responsibility. The TOC shall implement and carry out the MAP.

18 10. Meetings. The TOC shall meet at least semi-annually for the first five (5)
19 years of implementing the MAP, and at least annually thereafter.

20 11. Procedures of the TOC. The TOC shall establish procedures for the
21 fulfillment of its responsibilities under this Agreement.

22 **MONITORING AND ANALYSIS PROGRAM**

23 12. Purpose and Legal Effect. A monitoring and analysis program (MAP) shall
24 be established to provide ongoing data collection and analysis of water supplies and demands
25 in the Northern Cities Area and the Nipomo Mesa. The purpose of the MAP is to regularly
26 assess the potential impact on the water supplies on either side of the Zone 3 boundary line
27 resulting from changing conditions regarding the water supplies and demands in the Northern
28 Cities Area and the Nipomo Mesa, and the resulting changes in the surface and groundwater

1 flow conditions adjacent to and across the Zone 3 boundary line.

2 13. The Water Management Plans and the Annual Reports (collectively
3 "Plans") prepared pursuant to this Agreement are for information purposes only. They shall
4 not independently create in the party(ies) preparing them any affirmative obligation to act, or
5 implement any part of the Plans, nor shall they independently provide any other party or the
6 Court any right to compel Action or enforce any obligation. However, any party may challenge
7 the sufficiency of any Plan produced pursuant to this Agreement by showing that it has not
8 been completed in substantial compliance with the requirements of this Agreement, except that
9 any challenge to a Water Management Plan created pursuant to Paragraph 15 below may only
10 be undertaken in a proceeding and under the standards set forth under Water Code sections
11 10650, *et seq.*

12 14. The Parties shall be excused from the preparation of the Plans required in
13 this Agreement when the Court enters a final judgment in this litigation.

14 15. Water Supply Planning and Reports. Within two years after Court
15 approval of this Settlement, each of the Northern Cities and the Mesa Parties shall evaluate
16 their current and future water supplies and prepare a Water Management Plan. The Water
17 Management Plan shall generally include the content and analysis described in Water Code
18 sections 10630 through 10635, and shall also include an analysis of the ongoing availability of
19 groundwater in the Northern Cities Area given the changing urban and agricultural water
20 demands in the Northern Cities Area. Each of the Northern Cities and the Mesa Parties shall
21 update and revise their previously prepared Water Management Plans prior to December 31,
22 2006, and every five years thereafter; provided however, that this requirement to prepare a
23 Water Management Plan is not intended to expand or impose upon any party rights or
24 obligations with respect to such Water Management Plans, other than those specifically stated
25 in this Section. Copies of the Water Management Plans shall be provided to the Northern
26 Cities, the Mesa Parties, the Santa Maria Valley Water Conservation District and the City of
27 Santa Maria.

28 16. Monitoring and Data Collection. The TOC shall implement a MAP that

1 shall include the data collection and analysis elements described below, and any other
2 monitoring and analysis, if the TOC deems them appropriate and cost-effective to fulfill the
3 purpose of this Agreement. The data collection and database development shall be created so
4 that the data can be shared and transferred between the TOC members for review and
5 evaluation in electronic format. The MAP shall include the following elements.

6 a. Design. Within six months after Court approval of this Agreement,
7 the TOC shall review existing data to select existing wells to include in the MAP. The TOC
8 shall define the list of wells to be monitored and specific information to be obtained from each
9 well, such as groundwater levels and groundwater quality constituents. The MAP shall also
10 include data collection to provide for early detection of seawater intrusion and collection of
11 other related data (e.g., deliveries of supplemental water, precipitation, discharge of treated
12 waste water, etc.) as are necessary for preparation of the analyses and reports required by this
13 Agreement. To the extent practical to adequately meet the purpose of this Agreement, the
14 TOC shall use existing facilities, rather than new facilities, in the design of the MAP.

15 b. Data Collection. As soon as the design of the MAP is complete, the
16 TOC shall commence collection of groundwater monitoring data, with data collection to occur
17 at intervals determined by the TOC.

18 c. Changing Groundwater Use Patterns. The TOC may also monitor
19 the groundwater pumping patterns in the Northern Cities Area and the Nipomo Mesa. The
20 monitoring shall be based on either observed changes (municipal pumping) or estimated
21 changes (private or agricultural pumping). The TOC may review the changes in pumping to
22 assess the potential impacts on groundwater flow conditions along the Zone 3 boundary line
23 and include its findings in the Annual Report, described below.

24 d. MAP Assessment. Within two years of Court approval of this
25 Agreement, and annually thereafter, the TOC shall evaluate data from the monitoring program,
26 assess data gaps, and make recommendations to revise the monitoring program, including the
27 use of other wells or installation of new monitoring wells, as appropriate. The TOC may
28 recommend to the Northern Cities and the Mesa Parties or to the Court any additional

1 monitoring of hydrologic characteristics that may be prudent and cost-effective to meet the
2 goals of this Agreement, to provide a higher level of confidence in the data and analyses than
3 that which is based on existing wells, stream gages, etc.

4 17. Annual Report. Based upon the MAP and other relevant information, the
5 TOC shall annually prepare a Report on Water Supply and Groundwater Conditions (Annual
6 Report) for the Northern Cities Area and Nipomo Mesa. The Annual Report shall be filed with
7 the Court, posted on the Court's website, and served on the Northern Cities, the Mesa Parties,
8 the Santa Maria Valley Water Conservation District, and the City of Santa Marla. The first
9 Annual Report shall be completed, filed and served, as described in the previous sentence, on
10 or before the second (2nd) anniversary of this Court's approval of this Agreement, and
11 annually thereafter. The Annual Report shall assess the adequacy of the water supplies in
12 each area in comparison to the corresponding demands, and shall include an analysis and
13 discussion of the estimates of the volume of groundwater in storage, an updated water budget
14 assessment, and anticipated water supply constraints, if any.

15 18. Cost Sharing. Unless otherwise agreed, each of the Northern Cities and
16 the Mesa Parties shall bear their own costs in participating in the TOC, gathering and
17 analyzing data, and producing any written documents as may be required by this Agreement.
18 To the extent the construction of new facilities may be required to implement this Agreement,
19 the Northern Cities and the Mesa Parties shall develop an equitable cost sharing agreement.
20 The parties will use their best efforts to minimize the costs of compliance in undertaking the
21 obligations of this Agreement.

22 19. Cooperation of all Parties. All parties to this litigation and this Agreement
23 shall provide any documents, information, access to wells, and well data, and take any other
24 actions reasonably requested to implement the MAP, subject to prior protective orders and
25 reasonable confidentiality restrictions.

26 **ADVANCE NOTICE OF INCREASED WATER PRODUCTION**

27 20. The Mesa Parties, the Northern Cities, and the Northern Landowners shall
28 provide prior written notice to each other of their intent to drill new wells, materially increase

1 the production capacity of existing wells or take over the use of an existing well, if the well is to
2 be used for water production (not monitoring). The notice must be served prior to or
3 concurrent with the initiation of environmental review under the California Environmental
4 Quality Act (CEQA), if required, or at least ninety (90) days prior to the construction of a new
5 well or the takeover or increase in capacity of an existing well. This ninety (90) day notice
6 requirement shall not apply in the event of emergencies, such as replacement of a collapsed
7 well, in which case notice will be provided as promptly as possible. The notice should provide
8 a description of the location, intended capacity and use of the well.

9 **GENERAL PROVISIONS**

10 21. No Third Party Beneficiary. Nothing in this Agreement, whether express
11 or implied, shall confer any rights or remedies under this Agreement on any persons other than
12 the Parties to it and their respective successors and assigns. Nothing in this Agreement shall
13 relieve or discharge the obligation or liability of any third parties to any Party to this Agreement.

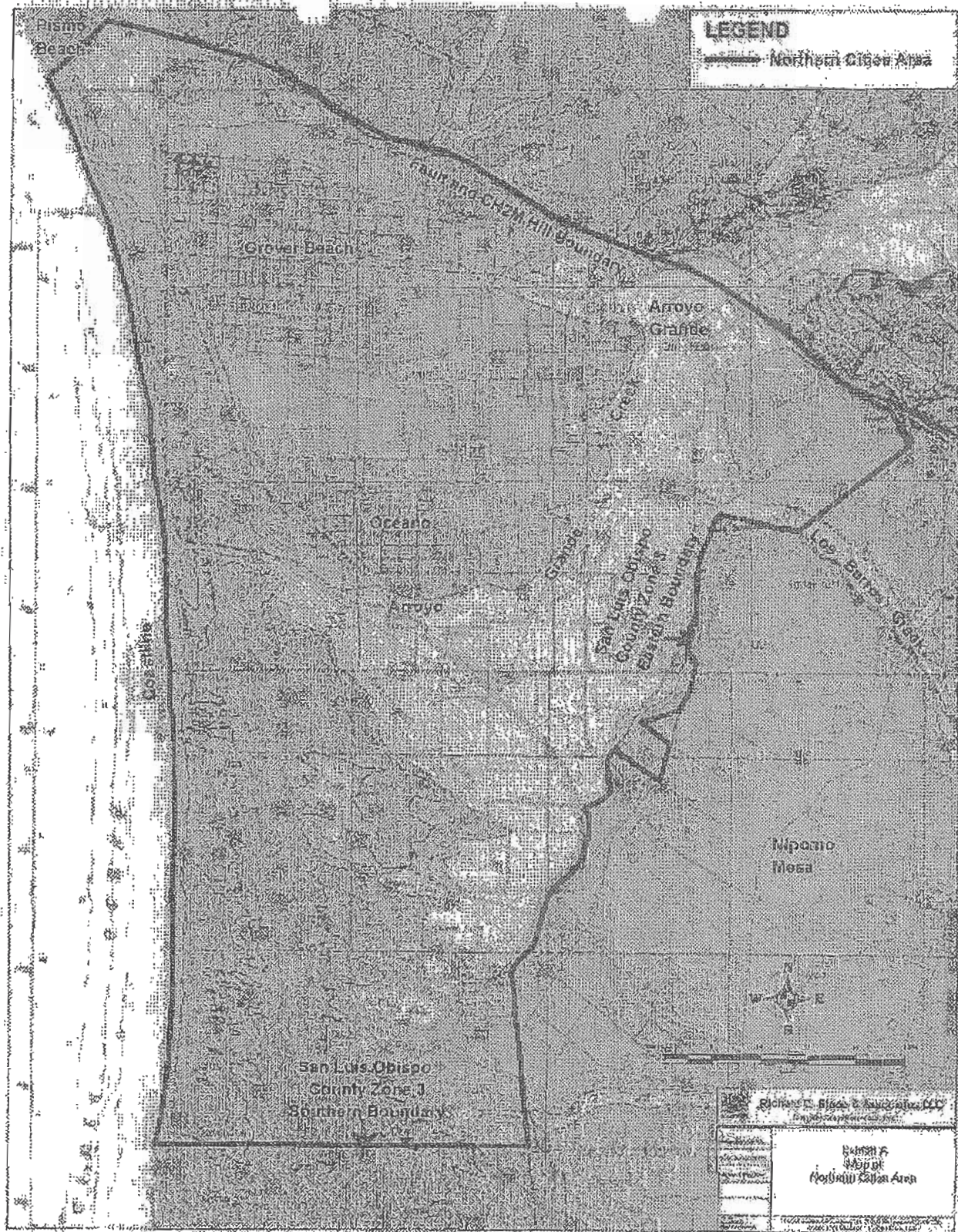
14 22. Legal Capacity. The Parties warrant that all necessary approvals and
15 authorizations have been obtained to bind them to all terms of this Agreement, and further
16 warrant that the persons signing have authority to sign on behalf of their respective Parties.

17 23. Amendment. No amendment to this Agreement will be binding unless it
18 is either signed by an authorized representative of all of the Parties or approved by the Court.

19 24. Governing Law. This Agreement will be construed in accordance with,
20 and governed by, the laws of the State of California as applied to contracts that are executed
21 and performed entirely in California.

22 25. Severability. If any provision of this Agreement is held invalid or
23 unenforceable by any court, it is the intent of the Parties that all other provisions of this
24 Agreement be construed so as to remain fully valid, enforceable, and binding on the Parties.

25 26. Counterparts. This Agreement may be executed in one or more
26 counterparts, each of which will be considered an original, but all of which together will
27 constitute one and the same instrument. Any party that is currently a party to this Action and
28 any Northern Landowner may become a party to this Agreement by agreeing in writing to be



**AGREEMENT REGARDING
MANAGEMENT OF THE
ARROYO GRANDE GROUNDWATER BASIN**

A. Parties

This Agreement is entered into among the Cities of Arroyo Grande, Pismo Beach, Grover Beach and the Oceano Community Services District (collectively referred to hereinafter as "Parties" or "Urban Parties").

B. Recitals

WHEREAS, in January 1983, a Technical Advisory Committee consisting of representatives of Arroyo Grande, Grover City, Pismo Beach, Oceano Community Services District, Port San Luis Harbor District, the Farm Bureau, Avila Beach County Water District and the County of San Luis Obispo ("Committee") determined in reliance on the 1979 Report of the Department of Water Resources entitled Ground Water in the Arroyo Grande Area that the safe yield of the Arroyo Grande Groundwater Basin ("Basin") is 9,500 acre feet per year;

WHEREAS, in or about February 1983, the Parties agreed to enter into a voluntary groundwater management plan to provide for effective management of groundwater resources in the Basin through which each party was given sufficient water to meet its needs as then projected; such needs being met in part by the City of Arroyo Grande foregoing 358 acre feet per year of its historical use and the City of Pismo Beach foregoing 20 acre feet per year of its historical use;

WHEREAS, this management plan provided a reasonable division of the safe yield of the Basin without court imposed groundwater basin adjudication;

WHEREAS, on February 9, 1983, the terms of the management plan were incorporated into Resolution No. 83-1 of the South San Luis Obispo County Water Association Approving the Recommendations of the Committee relating to the Basin (the "Resolution");

WHEREAS, each of the Parties have adopted individual resolutions endorsing the provisions of the Resolution;

WHEREAS, the Parties have generally complied with the terms and conditions of the Resolution; and

WHEREAS, general compliance with the Resolution has proven to be a fair and efficient means of managing and protecting groundwater resources in the Basin as confirmed by the revised final draft report prepared by the Department of Water Resources entitled, Water Resources of Arroyo Grande and Nipomo Mesa, January 2000.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Division of Safe Yield.

a. The Parties agree to a division of the safe yield of the Basin as follows:

Applied Irrigation	5,300 acre feet
Subsurface flow to ocean	200 acre feet
Urban Use:	
City of Arroyo Grande	1,202 acre feet
City of Grover Beach	1,198 acre feet
City of Pismo Beach	700 acre feet
Oceano Community Services District	900 acre feet

b. Any increase or decrease in the safe yield of the Basin attributable to changed operation of the Lopez Reservoir, or any other cause, shall first be divided between the Urban Parties and applied irrigation on a pro rata basis using the formula from the 1983 Gentlemen's Agreement, fifty-seven percent (57%) to applied irrigation and forty-three percent (43%) to the Urban Parties. Thereafter, the first 378 acre feet per year of any increase of safe yield allocated to the Urban Parties shall be divided between the City of Arroyo Grande and the City of Pismo Beach on a pro rata basis (95% to Arroyo Grande and 5% to Pismo Beach).

c. The entitlements of each respective Urban Party may be increased based upon the conversion of irrigated agricultural lands to urban use. An Urban Party to this Agreement may increase its entitlement for urban use by a factor of three (3) acre feet per acre per year minus the calculated urban usage per acre per year upon the conversion of irrigated agricultural land to urban usage. "Irrigated agricultural land" shall be that land within the corporate limits of the party that was identified as irrigated agricultural land in the 1979 Department of Water Resources Report entitled Ground Water in the Arroyo Grande Area. This agricultural conversion factor may be applied to all acreage converted to urban use from January 1, 1983, throughout the life of this Agreement. Such an agricultural conversion factor is in the best interests of the overall Basin in that it will not result in any decline in the groundwater service over time. The Parties agree that no water should be converted to urban use within the Basin without establishing that it was irrigated agricultural land as defined in the 1979 Department of Water Resources Report, Groundwater in the Arroyo Grande Area.

d. The Parties agree and understand that the safe yield figures utilized in this Agreement are a product of the 1979 Department of Water Resources Report regarding the Arroyo Grande Basin as adjusted by the 1983 ad hoc Technical Advisory Committee and that the division of the resources is based upon the historical use of each party and a practical accommodation of each Party's needs as they existed at the time of the adoption of the 1983

agreement. It is agreed that the Parties will meet and confer on issues related to safe yield and division of existing water resources upon the final adoption of the new Arroyo Grande Basin study performed by the Department of Water Resources, which is currently in draft.

2. Shared Information and Monitoring: The Urban Parties to this Agreement shall freely share information with each other regarding each of their respective uses of groundwater in the Basin, including all pumping data such as amounts of water extracted, well static water levels, and water quality. The Urban Parties to this Agreement shall meet on a quarterly basis to share this information and to discuss water usage and impacts upon the Basin. The Parties shall conduct a review of water usage and the impacts on Basin hydrology in 2010 and 2020.

3. Term:

a. This Agreement shall bind the Parties indefinitely absent a significant change of circumstances as to available water, water quality, or hydrogeology of the Arroyo Grande Basin. A significant change of circumstances shall allow any Party to opt out of this Agreement if the significant change of circumstances put that Party at risk of not being able to meet its potable water needs.

b. Significant changed circumstances shall include changes within the Basin or outside of the Basin, including but not restricted to, a change in the Lopez Reservoir safe yield or an increase in Lopez Reservoir discharges for conservation purposes that threatens the ability of the Urban Parties to obtain their contractual allotments under their Lopez agreements, or a significant change in groundwater yields or quality, or a reduction in foreign water imported by any Urban Party. The Parties recognize that rainfall within the watershed is the most significant factor affecting the yield of Lopez Reservoir and the Basin.

c. The Parties shall revisit the issue of the allocation of groundwater resources within the Arroyo Grande Basin in 2010 and 2020 in the context of the review provided for in section 2 of this Agreement. The Parties shall make new allocations of groundwater resources at that time if circumstances justify it and if no harm will result to other groundwater users. Priority shall be given to reallocation of historical use of groundwater to Arroyo Grande and Pismo Beach that those agencies chose not to pursue in the entering into of the original Gentlemen's Agreement in 1983 should such new allocations be made.

d. A Party may opt out of this Agreement if significant changed circumstances arise as defined in this section. Such a party shall give all other parties to the agreement not less than six months written notice of its intention to opt out. The written notice shall describe in detail the significant changed circumstances upon which the Party bases its election to opt out of the Agreement.

4. Mediation Agreement: The Parties agree to mediate any disputes that arise out of the Parties' performance under this Agreement, or the interpretation of the terms of this Agreement, prior to instituting any litigation against or between any other Party to this Agreement. Should a Party institute litigation without first offering in good faith to mediate any such dispute, any Party may move for an order compelling mediation and staying the proceedings in the litigation until

after mediation has been completed. The prevailing party on a motion to compel mediation shall be entitled to recover its attorney's fees against any resisting party or any party who filed litigation without first making a good faith attempt to mediate the dispute. This mediation requirement shall not apply where the health and safety of any of the Parties, or any of the Parties' residents, is threatened and they must seek, and have obtained, preliminary relief for the purposes of preserving health and safety.

5. No Third Party Beneficiaries: The Parties are entering into this Agreement in order to reasonably allocate existing groundwater resources between themselves and not to benefit any third parties. This agreement shall only be enforceable between the Parties themselves. This Agreement does not create any right enforceable by any person or entity that is not a party to this Agreement.

6. General Provisions:

a. The Parties warrant that all necessary approvals and authorizations have been obtained to bind them to all terms of this Agreement, and further warrant that the persons signing have authority to sign on behalf of their respective Parties.

b. Written notice under this Agreement shall be given by placing such notice in the first class mail, postage prepaid, or by hand delivery to the current address of the office of any Party to this Agreement.

c. No amendment to this Agreement will be binding on any of the Parties unless it is in writing and signed by an authorized representative of all of the Parties.

d. This Agreement will be construed in accordance with, and governed by, the laws of the State of California as applied to contracts that are executed and performed entirely in California.

e. If any provision of this Agreement is held invalid or unenforceable by any final judgment, it is the intent of the Parties that all other provisions of this Agreement be construed to remain fully valid, enforceable, and binding on the Parties.

f. This Agreement may be executed simultaneously in one or more counterparts, each of which will be considered an original, but all of which together will constitute one and the same instrument.

g. The Parties represent that prior to the execution of this Agreement, they consulted independent legal counsel of their own selection regarding the substance of this Agreement.

WHEREFORE, the Parties publicly consent to the terms and conditions of this Agreement by executing the same as set forth below.

Dated: _____, 2001. City of Arroyo Grande

By: _____

Print Name and Title: _____

Dated: _____, 2001. City of Pismo Beach

By: _____

Print Name and Title: _____

Dated: _____, 2001. City of Grover Beach

By: _____

Richard W. Neufeld, Mayor

Dated: _____, 2001. Oceano Community Services District

By: _____

Print Name and Title: _____

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**EXHIBIT C – NORTHERN LANDOWNER SIGNATURE PAGE FOR
SETTLEMENT AGREEMENT**

1. I am the owner and/or lessor (*circle one or both*) of at least ten acres of agricultural land in the Northern Cities Area (the area so designated on Exhibit A to this Settlement Agreement).

2. Describe the parcel(s) of agricultural land that you own or lease:
- (a) Address(es): _____
 - (b) Assessor's Parcel Number(s): _____
 - (c) Number of acres of agricultural land that you own or lease: _____
 - (d) Approximate number of acre-feet of water pumped annually: _____

3. I have read this Settlement Agreement. I have obtained such legal advice or other counsel regarding its terms as I deem appropriate. I understand and agree to its terms.

Dated: _____, 2002

Print Name of Owner/Lessor: _____

Title of Signer: _____

Signature: _____ *Signature Page Filed with Court*

1 **EXHIBIT D – SIGNATURE PAGE FOR OTHER PARTIES – WATER PURVEYORS**
2 **AND LANDOWNERS OUTSIDE NORTHERN CITIES AREA**

3 1. I am a party to the Santa Maria Groundwater Litigation, or the legal
4 representative of such a party.

5 2. I have read this Settlement Agreement. I have obtained such legal advice
6 or other counsel regarding its terms as I deem appropriate. I understand and agree to its
7 terms.
8

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10 Dated: _____, 2002

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12 Print Name of Party(ies): _____
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14 Title of Signer: _____
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16 Signature: *Signature Page Filed with Court*
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EXHIBIT F

**Agreement Among City of Santa Maria, Southern California
Water Company and City of Guadalupe
Regarding the Twitchell Project and the TMA**

Santa Maria Valley Water Conservation District v. City of Santa Maria
Santa Clara County Superior Court Case No. CV 770214

**SANTA MARIA VALLEY PUBLIC WATER PURVEYOR WATER MANAGEMENT
AGREEMENT**

The CITY OF SANTA MARIA ("Santa Maria"), the CITY OF GUADALUPE ("Guadalupe"), and SOUTHERN CALIFORNIA WATER COMPANY ("SCWC") enter into this SANTA MARIA VALLEY PUBLIC WATER PURVEYOR WATER MANAGEMENT AGREEMENT ("Agreement") on this ___ day of _____. Santa Maria, Guadalupe and SCWC are referred to individually as a "Party" and collectively as the "Parties".

RECITALS

A. Santa Maria is a Charter City, providing potable water service to customers within and adjacent to its municipal boundaries.

B. Guadalupe is a general law city, providing potable water service to customers.

C. SCWC is an investor-owned public utility within the meaning of Public Utilities Code section 2400 *et seq.* and operates pursuant to the California Public Utility Act, Public Utilities Code section 200 *et seq.* SCWC provides potable water service to customers within its certificated service area in Santa Barbara County, generally referred to as the "Santa Maria Customer Service Area," which includes four unincorporated areas of Santa Barbara County, commonly known as "Orcutt," "Tanglewood," "Lake Marie," and "Sisquoc," and one unincorporated area in San Luis Obispo County, commonly referred to as the "Nipomo Mesa."

D. On July 20, 2004, Santa Maria and SCWC entered into a Water Management Agreement ("2004 Agreement"), which formalized certain efforts to coordinate the provision of potable water service within their respective service areas. The 2004 Agreement is incorporated herein by reference and remains in full force and effect and is attached as Exhibit A.

E. The Parties have historically relied on local groundwater to provide potable water service to their respective customers and hold rights to pump groundwater ("Groundwater Rights") from the Santa Maria Groundwater Basin ("Basin").

F. The Parties also each hold contracts to receive water from the State Water Project ("SWP Entitlement," collectively, and "Santa Maria SWP Entitlement," "Guadalupe SWP Entitlement," or "SCWC SWP Entitlement," individually). Santa Maria's contract is for 17,800

acre feet, SCWC's contract is for 550 acre feet and Guadalupe's contract is for 610 acre feet. Collectively, the SWP Entitlement totals 18,960 acre-feet per year.

G. The Parties are also litigants in the Santa Maria groundwater basin (*Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*, Superior Court, County of Santa Clara, Lead Case No. CV 770214 ("Basin Adjudication")).

H. The Parties, along with a large number of other litigants, intend to enter into a stipulation ("Stipulation") which will settle the Basin Adjudication among the stipulating parties.

I. This Agreement is that agreement described as Exhibit F in the Stipulation.

NOW THEREFORE, in consideration of the foregoing recitals and the promises and covenants contained herein, the Parties agree as follows:

Section 1. Definitions. The terms used in this Agreement shall have the same definition as provided in the Stipulation, unless expressly provided otherwise in this Agreement.

Section 2. Purpose. The purpose of this Agreement is to provide the mechanism through which the Parties shall meet their obligations as intended in the Stipulation, through that certain agreement designated as Exhibit F.

Section 3. Term. This Agreement shall be effective concurrently with and on the same terms as the Stipulation, and shall remain in effect concurrent with the Stipulation.

Section 4. Twitchell Yield.

4.1 Division. The Parties agree that the 80% of the 32,000 acre-feet of Twitchell Yield shall be allocated as follows: Santa Maria 14,300 acre-feet; Guadalupe 1,300 acre-feet and SCWC 10,000 acre-feet. The Parties acknowledge that the remaining 20% of the Twitchell Yield (6,400 acre-feet) is allocated to the Overlying Owners within the District who are Stipulating Parties, subject to the terms of the Stipulation.

4.2 Transfer of Twitchell Yield. The Parties agree that any proposed transfer of Twitchell Yield to one of the Parties shall be made available to all Parties. Each Party shall be given 30 days advance notice to elect to participate in any proposed transfer. The amount of transferred Twitchell Yield shall be divided between the Parties participating in the transfer in proportion to those Parties' then existing Twitchell Yield. If only one Party participates in the transfer, that Party shall be entitled to the full amount of transferred Twitchell Yield.

Section 5. Twitchell Management Authority.

5.1 All decisionmaking of the TMA shall be conducted, to the extent reasonably practical, on a consensus basis. Provided, however, if consensus cannot be achieved, TMA decisions shall be made by majority vote. Unless otherwise specified, the weight of each Party's voting rights shall be equivalent to its then-existing Twitchell Yield.

5.2 The Parties will work with the other Twitchell Participants to develop rules and regulations governing the TMA.

5.3 Budget. Each Stipulating Party holding Twitchell Yield shall be obligated to fund the TMA in proportion to that Party's then existing Twitchell Yield.

5.3.1 The TMA shall establish its members' funding obligations through a duly adopted budget, which shall project the TMA funding needs in 3-5 year increments, as it deems necessary to meet its obligations to preserve Twitchell Yield. Any TMA budget shall be adopted at least 18 months in advance of its intended implementation to provide adequate time for SCWC to secure PUC approval to fulfill its financial obligations as a member of the TMA. The Parties will to work cooperatively to achieve consensus on the TMA operating budget. If Santa Maria and SCWC are unable to agree on the operating budget, SCWC shall grant Santa Maria a proxy for purposes of the TMA vote on the operating budget. If SCWC grants such a proxy and an operating budget is subsequently approved, SCWC retains the right to challenge any such operating budget through the Court's reserved jurisdiction provided in the Stipulation. SCWC's obligations with respect to any such operating budget is subject to final approval by the PUC.

5.3.2 Consistent with Section V(D)(3)(c) of the Stipulation, the TMA's annual budget for the first five years following PUC approval of the Stipulation shall be as provided in Exhibit B to this Agreement. As provided in Exhibit B, the TMA budget shall include anticipated costs necessary to fund:

5.3.2.1 The Management Area Engineer activities for the Valley Management Area, including the implementation of the Valley Management Area Monitoring Program and the associated preparation of the Annual Report; and

5.3.2.2 The preparation and implementation of the Twitchell Project Manual; and

5.3.2.3 The funding of Twitchell Project operations and capital funds that the TMA determines are necessary to preserve the Twitchell Yield. The requirements for the Twitchell operational fund shall take into account the amount collected by the District from its current operation and maintenance assessment. The Twitchell capital fund shall consist of any unused revenues from the Twitchell operating fund, plus other funds necessary to implement approved Capital Improvement Projects.

5.4 Capital Improvement Projects.

5.4.1 The Parties agree that if one Party proposes a TMA Capital Improvement Project, that Party shall make available to the other Parties the opportunity to participate in the funding of the TMA Capital Improvement Project in proportion to the Parties' share of Twitchell Yield.

5.4.1.1 If a Party chooses not to participate in the funding of the TMA Capital Improvement Project, and that Party's participation is required to implement the Project, the Parties may petition the Court to resolve the issue on an expedited basis.

5.4.1.2 If a Party chooses not to participate in the funding of the TMA Capital Improvement Project, and that Party's participation is not required to implement the Project, the Party or Parties choosing not to participate in the Project shall grant the Party proposing the Project a proxy for purposes of the TMA vote to approve the Project, so long as the proposed Project will not adversely affect a Party's share of Twitchell Yield or otherwise cause material injury to a Party.

5.4.1.3 If fewer than all Parties participate in the funding of a TMA Capital Improvement Project, the Parties who participate in the funding of the Project shall be entitled to the benefits received from the Project in proportion to their financial contribution.

5.4.2 If an emergency situation exists such that a TMA Capital Improvement Project is necessary to abate the emergency, the Parties may petition the Court for an order approving the Project on an expedited basis.

Section 6. New Urban Uses - SCWC. The 2004 Agreement is expressed modified only as follows:

6.1 All new customers of SCWC, or existing customers proposing to increase their water use through a change in land use requiring a discretionary land use permit or other form of land use entitlement, as specified in Section X(D)(2) of the Stipulation ("SCWC Project

Proponents”) shall provide Supplemental Water to offset the demand associated with that prospective use, through the protocol provided in the 2004 Agreement. The entities that have entered into the Reservation/Purchase Agreements identified on Exhibit C to this Agreement and Exhibit B to the 2004 Agreement are deemed to have satisfied the requirements of this Section and are exempt from the requirements of Section 6.2, below.

6.2 In addition to the fee paid to secure Supplemental Water pursuant to the 2004 Agreement, an additional 20% shall be charged to the SCWC Project Proponent by Santa Maria and shall be placed into either the Twitchell operational fund or the Twitchell capital fund. That incremental charge deposited in the applicable fund, shall be deemed a SCWC contribution to offset any SCWC TMA funding requirements.

Section 7. New Urban Uses – Guadalupe.

7.1 Guadalupe and Santa Maria agree that it is within their mutual interests to cooperate and coordinate their efforts to provide retail water service within their respective service areas.

7.2 Guadalupe and Santa Maria mutually acknowledge the benefits of importing SWP supplies to augment their use of local groundwater.

7.3 It is to the mutual advantage of Guadalupe and Santa Maria to have several alternatives for making use of their SWP Entitlements, Return Flows and Twitchell Yield to create flexibility, reliability, and cost effectiveness in their water supply systems. Santa Maria and Guadalupe shall each have the right to use the other’s unused Twitchell Yield in any given year if needed.

7.4 Guadalupe and Santa Maria agree to work cooperatively to provide a reliable and cost effective mechanism through which Santa Maria and Guadalupe can maximize the use of their respective SWP supplies and Return Flows within the Basin. Santa Maria agrees not to oppose any effort by Guadalupe that is based on reliable data to increase the fixed percentage of Guadalupe’s SWP Return Flow.

7.5 Santa Maria agrees to work cooperatively with Guadalupe to provide Guadalupe with additional SWP supplies. Guadalupe shall compensate Santa Maria through a specified dollar amount or through an exchange of water resources, as Guadalupe and Santa Maria deem appropriate. As further consideration, Santa Maria shall have a right of first refusal to purchase any SWP Return Flows that Guadalupe elects to sell from its existing SWP Entitle-

ment, and any future SWP Entitlement, that are not for use within or adjacent to Guadalupe's service area.

Section 8. Representations or Warranties of Guadalupe. Guadalupe makes the following representations, warranties and covenants to SCWC and Santa Maria:

8.1 Power and Authority to Execute and Perform this Agreement. Guadalupe has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

8.2 Enforceability. This Agreement constitutes a legal, valid and binding obligation of Guadalupe, and is enforceable against Guadalupe in accordance with its terms.

Section 9. Representations or Warranties of Santa Maria. Santa Maria makes the following representations, warranties and covenants to SCWC and Guadalupe:

9.1 Power and Authority to Execute and Perform this Agreement. Santa Maria has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

9.2 Enforceability. This Agreement constitutes a legal, valid and binding obligation of Santa Maria, and is enforceable against Santa Maria in accordance with its terms.

Section 10. Representations or Warranties of SCWC. SCWC makes the following representations, warranties and covenants to Santa Maria and Guadalupe:

10.1 Power and Authority to Execute and Perform this Agreement. SCWC is a corporation duly formed and in good standing in the State of California. Subject to California Public Utility Commission approval, expressly including the ability to recover the costs of implementing this agreement through its authorized regulated utility rates, SCWC has the corporate power and authority to enter into this Agreement and to perform its obligations and all necessary corporate approvals and authorizations have been obtained.

10.2 Enforceability. Subject to California Public Utility Commission approval as provided in section 10.1, this Agreement constitutes a legal, valid and binding obligation of SCWC, enforceable against SCWC in accordance with its terms.

Section 11. Remedies Not Exclusive. Remedies provided in this Agreement for enforcement of its terms are intended and shall be construed as cumulative rather than exclusive and shall not be deemed to deprive any Party from also using any other remedies provided by this Agreement or by law.

Section 12. Subject to Applicable Law. The Parties acknowledge and agree that this Agreement and the rights and obligations of the Parties shall be subject to the laws governing municipal corporations as they now exist and as they may be amended or codified by the Legislature of the State of California.

Section 13. Integration. This Agreement shall be integrated with, and interpreted in companion with the 2004 Agreement, the Stipulation, and the final judgment entered in the Basin Adjudication that is based upon the Stipulation. These set of agreements contain the entire understanding between SCWC, Santa Maria and Guadalupe with respect to the subject matter, and supersede all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between SCWC, Santa Maria and Guadalupe. This Agreement cannot be amended except in writing signed by all Parties.

Section 14. No Waiver. Any failure or delay on the part any Party to exercise any right under this Agreement shall not constitute a waiver of the right, and shall not preclude such Party from exercising or enforcing the right, or any other provision of this Agreement, on any subsequent occasion.

Section 15. Notices. All notices or other communications required or desired to be given pursuant to this Agreement shall be in writing and shall be hand-delivered, or mailed by certified mail, return receipt requested, or sent by a reputable overnight courier service providing delivery confirmation. Each such notice or communication shall be deemed to be duly given when hand-delivered, or three (3) days after being mailed in any depository maintained by the United States Postal Service, with prepaid postage, certified, return receipt requested or one (1) day after being deposited for next day delivery with Federal Express or other reputable overnight courier. Each such notice or communication shall be addressed to the Parties at their respective addresses set forth next to their signatures below, or such other address as a Party notifies the other in writing.

Section 16. Headings; Section References. Captions and headings appearing in this Agreement are inserted solely as reference aids for the ease and convenience; they shall not be deemed to define or limit the scope or substance of the provisions they introduce, nor shall they be used in construing the intent or effect of such provisions.

Section 17. Separability. If any provision of this Agreement is finally determined by a court to be invalid or unenforceable as written, the provision shall, if possible, be enforced to

the extent reasonable under the circumstances and otherwise shall be deemed deleted from this Agreement. The other provisions of this Agreement shall remain in full force and effect so long as the material purposes of the Agreement and understandings of the Parties are not impaired:

Section 18. Binding Effect Assignment. This Agreement shall only be binding on and inure to the benefit of the Parties, and their respective successors and permitted assigns. No Party shall assign this Agreement except with the prior written approval of the other Parties. Any unauthorized attempt to assign this Agreement shall be null and void. Notwithstanding the foregoing, SCWC shall have the right to assign this Agreement to any affiliate.

Section 19. Attorneys Fees. In the event that any action or proceeding is brought to enforce one or more of the terms of this Agreement, to restrain an alleged violation of this Agreement, or to determine the validity of this Agreement or any part, the prevailing Party in any such action or proceeding shall be entitled to recover from the other its reasonable costs and attorneys' fees, in addition to any other remedies available to it in law or equity. If all Parties are successful in one or more causes of action during any such proceeding, the costs and fees shall be apportioned as determined by the Court.

Section 20. Force Majeure. If by reason of acts of God, earthquakes, floods, storms, explosion, fires, labor troubles, strikes, insurrection, riots, acts of the public enemy, or federal, state, or local law, order, rule, or regulation, any Party is prevented from complying with any condition of this Agreement, then while so prevented the condition shall be suspended and the Party shall be relieved of the obligation of complying with such covenant and shall not be liable for damages for failure to comply with it. Any obligation of any Party shall be extended for as long as it is so prevented from complying with any condition or covenant in the Agreement.

Section 21. Dispute Resolution, Governing Law and Venue. This Agreement is a contract governed in accordance with the laws of the State of California. The Parties agree that if any dispute arises with respect to any provision of this Agreement, the Parties shall meet and confer in an attempt to resolve any such disputes. If, after 90 days, the meet and confer process is unsuccessful, the dispute shall be presented for Court review and determination pursuant to the Court's reserved jurisdiction and judicial review provisions provided in the Stipulation.

Section 22. Counterparts. This Agreement may be signed in any number of counterparts, including counterparts by facsimile signature, each of which shall be deemed an original,

but all of which shall together constitute one and the same instrument. The original signature pages shall be filed with the Court as Exhibit F to the Stipulation.

IN WITNESS WHEREOF, the parties have executed this agreement as of the date first written above.

CITY OF SANTA MARIA:

City of Santa Maria
a California municipal corporation

By: _____
Name: _____
Title: _____
Address: _____

Fax: _____
Phone: _____

SCWC:

Southern California Water Company,
a California corporation

By: _____
Name: Denise L. Kruger
Title: Senior Vice President of Operations
Address: 3035 Prospect Park, Suite 60
 Rancho Cordova, CA 95670
Fax: (916) 853-3674
Phone: (916) 853-3606

CITY OF GUADALUPE

City of Guadalupe,
a California municipal corporation

By: _____
Name: _____
Title: _____
Address: _____

Fax: _____
Phone: _____

APPROVED AS TO FORM:

By: _____
Guadalupe City Attorney

EXHIBIT A
to
STIPULATION EXHIBIT F

WATER MANAGEMENT AGREEMENT

This Water Management Agreement ("Agreement") is made and entered into this ~~10th~~ day of July 2004, by and between the CITY OF SANTA MARIA ("City"), a California municipal corporation, and SOUTHERN CALIFORNIA WATER COMPANY, a California corporation ("SCWC"). The City and SCWC are referred to individually as a "Party" and collectively as the "Parties".

RECITALS

A. The City is a Charter City. The City provides potable water service to customers within the greater Santa Maria area of Santa Barbara County.

B. SCWC is an investor-owned public utility within the meaning of Public Utilities Code Section 2400, *et seq.* and operates pursuant to the California Public Utility Act, Public Utilities Code Section 200, *et seq.* SCWC provides potable water service to customers within its certificated service area in Santa Barbara County, generally referred to as the "Santa Maria Customer Service Area", which includes four unincorporated areas of Northern Santa Barbara County, commonly known as "Orcutt," "Tanglewood," "Lake Marie," and "Sisquoc," and one unincorporated area in San Luis Obispo County, commonly referred to as the "Nipomo Mesa."

C. The City and SCWC have historically cooperated and coordinated their efforts to provide retail water service within their respective service areas.

D. Both the City and SCWC have historically relied on local groundwater to provide potable water service to their respective customers and both hold rights to pump groundwater ("Groundwater Rights") from the Santa Maria Groundwater Basin ("Basin").

E. The City and SCWC also each hold contracts to receive water from the State Water Project ("SWP Entitlement," collectively, and "City SWP Entitlement" or "SCWC SWP Entitlement," individually). Collectively, their contract entitlements total 18,350 acre-feet per year.

F. Both the City and SCWC are legally entitled to retain and recapture that portion of their respective SWP Entitlement that recharges the Basin after the consumptive use of the SWP Entitlement ("Return Flows").

G. The City and SCWC mutually acknowledge the benefits of importing SWP supplies to augment their use of local groundwater.

H. It is to the mutual advantage of the City and SCWC to have several alternatives for making use of their SWP Entitlements, Return Flows and Groundwater Rights, to create flexibility, reliability and cost-effective redundancy in their water supply systems.

I. The County of Santa Barbara ("County") regulates the land use activities within Orcutt. In 1997, the County adopted the Orcutt Community Plan ("OCP"), which establishes, among other things, certain policies regarding water supplies to be secured for new development projects in Orcutt ("Project" or "Projects"). The OCP was amended in 2001. In particular, the OCP requires that the water demand associated with Projects be offset by "supplemental" water supplies that do not result in further overdraft of the Basin ("OCP Water Policies").

J. As of the date of this Agreement, SCWC has fully reserved the SCWC SWP Entitlement for the benefit of Projects (See Section 3 below). In addition, without significant investment in and construction of additional capital facilities and/or the access to City facilities as provided in this Agreement, SCWC is unable to take delivery of the full extent of its SCWC SWP Entitlement.

K. Without the construction of additional capital facilities that extend the SCWC SWP turnout from Tanglewood to Orcutt, SCWC is unable to take delivery of any additional alternative sources of water that may comply with the OCP Water Policies, except as provided in this Agreement.

L. The City has elected to make available to certain Project proponents within Orcutt supplemental water supplies that will satisfy the OCP Water Policies applicable to Projects. (See City Resolution 2003-150, attached as Exhibit "A" ("Resolution 2003-150").)

M. SCWC and the City are also parties to litigation regarding water rights in the Santa Maria groundwater basin (*Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*, Superior Court, County of Santa Clara, Lead Case No. CV 770214 ("Basin Adjudication"))

N. The Parties intend that this Agreement provide a reliable and cost effective mechanism through which the City and SCWC can maximize the use of their respective SWP supplies within the Basin, while making the most efficient use of existing facilities to take delivery of the Parties' respective SWP supplies.

O. The Parties also intend that this Agreement establish a mechanism through which potential new SCWC customers in Orcutt may access supplemental water through the City, consistent with the OCP Water Policies.

NOW THEREFORE, in consideration of the foregoing recitals and the promises and covenants contained herein, the Parties agree as follows:

Section 1. Purpose. The purposes of this Agreement are to: (a) provide a reliable and cost effective mechanism through which the City and SCWC can maximize the use of their respective SWP supplies within the Basin, (b) make the most efficient use of existing facilities to take delivery of the Parties' respective SWP supplies, (c) secure a reliable means of accessing Supplemental Water (defined below), and (d) fairly allocate the costs of obtaining and using Supplemental Water within the Basin. Nothing in this Agreement shall be interpreted to impose on either Party any obligation that might arise out of the final judgment entered in the Basin Adjudication, other than as expressly provided in this Agreement.

Section 2. Term.

2.1 This Agreement shall be effective on the date first written above ("Effective Date") and shall continue to February 25, 2038, and thereafter shall remain in effect for so long as both the City and SCWC remain SWP contractors ("Term").

2.2 While the Parties contend PUC approval of this Agreement is not required, should the PUC rule that PUC approval is required and that approval of the Agreement as written is denied, the Parties shall make every reasonable effort to modify the Agreement in a manner that the PUC will approve and that also preserves its original, essential terms.

Section 3. Right to Acquire Water.

3.1 The Parties acknowledge that given the limits of existing facilities, SCWC is unable to take full delivery of the SCWC SWP Entitlement through its existing SWP facilities because the water demand in the area with direct access to the SCWC SWP Entitlement (Tanglewood) is significantly less than the full SCWC SWP Entitlement. Further, SCWC has fully committed to those Projects listed in Exhibit "B" ("Committed Projects") SCWC's SWP Entitlement and the use of SCWC's existing facilities to make use of the SCWC SWP Entitlement reserved to the benefit of the Committed Projects. To take delivery of the entirety of the SCWC SWP Entitlement, SCWC must either construct additional capital facilities to extend the

SWP turnout from Tanglewood to Orcutt, and/or obtain the rights to rely on the interconnection between the SCWC and City systems, as provided in this Agreement.

3.2 SCWC agrees that, given its geographic proximity to and existing interconnection with SCWC, the City provides the best, most cost effective, and logical source of Supplemental Water for the benefit of Projects in Orcutt to which SCWC would provide retail potable water service.

3.3 For the purpose of this Agreement, "Supplemental Water" shall mean a portion of the yield of the SWP Entitlement held by the City, or a portion of the historic groundwater rights to the Basin held by the City in accordance with the final judgment entered in the Basin Adjudication.

3.4 In working with Project proponents, SCWC agrees that prior to accepting any water that is intended to satisfy the OCP Water Policies, other than the SCWC SWP Entitlement, Supplemental Water and that obtained under Section 7.1, SCWC shall:

3.4.1 Refer to the City any Project proponent that requests water service from SCWC that is also subject to the OCP Water Policies; and

3.4.2 Allow sufficient time for the City and the Project proponent to attempt to make arrangements consistent with the OCP Water Policies, this Agreement and other applicable considerations.

3.5 The City shall make available Supplemental Water to Projects in Orcutt pursuant to Resolution 2003-150 or a substantially similar policy. The City shall not unreasonably withhold Supplemental Water from Projects in Orcutt.

3.6 If any portion of SCWC's SWP Entitlement becomes uncommitted (i.e., a Committed Project is not approved for development or if the County adjusts upward the reliability factor it applies to SCWC SWP Entitlement), SCWC shall use the uncommitted SCWC SWP Entitlement as specified in this Section 3.6 and the Parties shall undertake the following:

3.6.1 SCWC shall provide written notice to the City of the availability of the SCWC SWP Entitlement ("Notice of Availability"), specifying the quantity of SCWC SWP Entitlement that has become available. Within 45 days of the Notice of Availability, the City shall pay to SCWC \$22,000 per acre foot, adjusted annually based on the consumer price index Los Angeles-Riverside-Orange County), for the SCWC SWP Entitlement specified in the Notice of Availability. Upon provision of payment to SCWC, the City, at its sole discretion, may make

available to Project(s) in Orcutt, as otherwise provided in this Agreement, this SCWC SWP Entitlement as though it is Supplemental Water. SCWC shall continue to use the SCWC SWP Entitlement as though it is fully committed for the benefit of Projects in Orcutt.

3.7 SCWC shall be relieved of its obligation to refer the Project proponent to the City as provided in subsection 3.4, during any period which:

3.7.1 The City determines that the City has no additional Supplemental Water available for use in Orcutt, or the County determines that the City has no additional Supplemental Water available for use in Orcutt. If the Parties disagree with the County's determination, the Parties agree to use their reasonable best efforts to convince the County that the City does have available Supplemental Water.

3.8 After January 1, 2014, SCWC shall be relieved of its obligation to refer the Project Proponent to the City as provided in subsection 3.4, if one or more of the following conditions applies:

3.8.1 A source of water becomes available to SCWC for use in the Basin at a cost less than the cost of the City's Supplemental Water, on a per acre foot basis;

3.8.2 The Parties agree to meet and confer in good faith to attempt to resolve any issues that arise pursuant to this Section 3.8 prior to SCWC seeking an alternative source of water.

3.9 The Parties acknowledge and agree that this Agreement is not a mechanism through which SCWC may use the City's water distribution system to access alternative sources of water, either directly or indirectly, except as expressly provided in this Agreement.

Section 4. Interconnection. The Parties have previously established an interconnection between their respective water distribution facilities, consisting of a two-way meter, meter vault and appurtenances located inside the meter vault ("Interconnection"). The Interconnection is located at Miller Street and Santa Maria Way. The maintenance, repair and improvements to the Interconnection shall be managed as follows:

4.1 The Parties shall share equally the costs of all maintenance and repairs on the Interconnection. SCWC shall be responsible for physically implementing the ongoing maintenance and repair of the Interconnection, subject to the City's prior review of the maintenance and repair plans.

4.2 The Parties shall share the costs of any needed improvements to the Interconnection one-fourth ($\frac{1}{4}$) by the City and three-fourths ($\frac{3}{4}$) by SCWC. Unless otherwise arranged between the Parties, SCWC shall be responsible for physically implementing any improvements to the Interconnection. The City shall provide prior input and approval of any improvements to the Interconnection.

4.3 Both the City and SCWC shall have reasonable access to the meter at the Interconnection.

Section 5. Delivery of Water Through the Interconnection. Either Party may take delivery of water through the Interconnection subject to the following conditions (for the purpose of this Agreement, the Party taking delivery shall be referred to as the "Receiving Party" and the Party supplying the water shall be referred to as the "Supplying Party"):

5.1 As a Receiving Party, SCWC shall have a first priority right to use the Interconnection to take delivery each Year (defined below) of only that amount of SCWC SWP Entitlement that SCWC cannot take delivery of through SCWC's own facilities. In addition, each Year, SCWC's receipt of water through the Interconnection pursuant to this Section shall be limited to that quantity of SCWC's SWP Entitlement SCWC has made available for the City's receipt during that Year, at the City's SWP turnout within the City. The City may impose reasonable limitations on the rate of water SCWC takes through the Interconnection subject to this subsection 5.1.

5.2 Subject to SCWC's use of the Interconnection as provided in Section 5.1, either Party may use the Interconnection to take delivery of water by providing the Supplying Party at least 48 hours advance notice of the quantity and rate at which water will be taken.

5.3 Other than as provided in subsection 5.1, the Supplying Party may impose reasonable limitations on the rate and quantity of water to be taken through the Interconnection. Each Party is under an affirmative obligation to accommodate reasonable requests for use of the Interconnection, subject to SCWC's priority right provided in Section 5.1. Unless otherwise agreed between the Parties, the use of the Interconnection other than as provided in Section 5.1 shall be interim and temporary in nature.

5.4 Payment for receipt of water through the Interconnection shall be made in accordance with Section 6.

Section 6. Payments for Delivered Water. The Receiving Party shall pay to the Supplying Party for receipt of water through the Interconnection, as follows:

6.1 Section 5.1 deliveries. For use of the Interconnection as provided in Section 5.1, SCWC shall pay to the Central Coast Water Authority ("CCWA") all costs associated with making available to the City, at the City's SWP turnout within the City, that quantity of the SCWC SWP Entitlement equivalent to that amount of water SCWC intends to receive through the Interconnection. Payment shall be made in accordance with applicable CCWA policies.

6.2 Section 5.2 deliveries. For delivery of water obtained through the Interconnection pursuant to Section 5.2, the Receiving Party shall pay the Supplying Party a per acre-foot charge equivalent to the Supplying Party's cost of producing the water for that Year. The Supplying Party shall determine cost of producing water and shall provide the Receiving Party with an itemized statement summarizing those costs. The Parties agree to meet and confer in good faith regarding any dispute in determining the cost of producing water.

6.3 Neither Party shall be obligated to pay any charge, other than as provided in this Section.

6.4 For the purpose of this Agreement, a "Year" shall refer to a water year commencing on October 1 and ending in the subsequent year on September 30. The Payments required in Section 6.2 shall be made annually, on or before November 1 of each Year, based on actual metered receipt of water through the Interconnection.

Section 7. Additional Supplemental Water. In exchange for the commitments in Section 3 and as an element of consideration for those commitments, the City hereby provides to SCWC, upon the Effective Date, the right to take delivery of 20 acre-feet of Supplemental Water annually for the Term of this Agreement, at no cost to SCWC. The City provides these 20 acre-feet of Supplemental Water under the same terms and conditions provided in Resolution 2003-150. If the County determines that Supplemental Water provided pursuant to Resolution 2003-150 does not satisfy the OCP Water Policies, the City shall provide SCWC at no cost, 20 acre-feet per year of water through the Interconnection, in addition and subject to the same priority as that amount of water SCWC can obtain under Section 5.1. SCWC shall have the right to use 20 acre-feet of water provided in this Section 7 for the benefit of any residential Project.

Section 8. Service Area Integrity. Nothing in this Agreement is intended nor shall it be interpreted to waive either Party's rights to provide water service to current or future areas within or adjacent to their existing service areas. Should the City seek to acquire (by any means) any portion of, or all of the SCWC certificated service area in SCWC's Santa Maria Customer Service Area, the City shall pay as fair compensation, the greater of 10 times the SCWC rate base or the court-approved fair compensation.

Section 9. Representations or Warranties of City. The City makes the following representations, warranties and covenants to SCWC:

9.1 **Power and Authority to Execute and Perform this Agreement.** The City has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

9.2 **Enforceability.** This Agreement constitutes a legal, valid and binding obligation of the City, and is enforceable against the City in accordance with its terms.

Section 10. Representations or Warranties of SCWC. SCWC makes the following representations, warranties and covenants to City:

10.1 **Power and Authority to Execute and Perform this Agreement.** SCWC is a corporation duly formed and in good standing in the State of California. Subject to the conditions of Section 2.2, SCWC has the corporate power and authority to enter into this Agreement and to perform its obligations and all necessary corporate approvals and authorizations have been obtained. The City agrees that nothing in this representation, warranty or covenant shall be interpreted or applied to negate the City's indemnity obligations provided in Section 12.

10.2 **Enforceability.** This Agreement constitutes a legal, valid and binding obligation of SCWC, enforceable against SCWC in accordance with its terms.

Section 11. Termination. This Agreement shall terminate as described in Section 2. If this Agreement is terminated prior to the expiration of the Term, its termination shall not impact: (a) any other agreements regarding Supplemental Water between the City and Project proponents, and SCWC and Project proponents, (b) the provision of water to SCWC pursuant to Section 7 and (c) the payments and associated commitments, if any, regarding the SCWC SWP Entitlement between the City and SCWC made pursuant to Section 3.6.

Section 12. Indemnity.

12.1 The City shall hold harmless, defend and indemnify SCWC, its directors, employees, agents, successors and assigns (all of which are herein referred to as the "SCWC Indemnified Parties") from and against all liabilities, obligations, claims, damages, losses, actions, judgments, suits, costs and expenses, including but not limited to reasonable attorneys' fees (collectively, "Damages"), which may be imposed on, incurred by, or asserted against the SCWC Indemnified Parties as a result of or arising out of the restrictions placed on SCWC's access to Supplemental Water as provided in Section 3, and/or the implementation of this Agreement as of the Effective Date as provided in Section 2. This indemnification shall survive termination of the Agreement.

12.2 Promptly following notice of any claim for which SCWC is indemnified, SCWC shall notify the City of such claim in writing. The City shall thereafter defend against such claim, in consultation with SCWC, in a manner the Parties mutually deem appropriate, including settlement on such terms as SCWC and the City both approve. The City and SCWC shall mutually select counsel. SCWC may also elect to have separate representation at its sole discretion and cost. If the City fails to promptly defend such claim, SCWC may defend the claim in any manner it deems appropriate and with counsel of its choice, including without limitation, settlement of the claim on terms SCWC deems appropriate, and to pursue such remedies as may be available to SCWC against the City.

Section 13. Remedies Not Exclusive. Remedies provided in this Agreement for enforcement of its terms are intended and shall be construed as cumulative rather than exclusive and shall not be deemed to deprive either Party from also using any other remedies provided by this Agreement or by law.

Section 14. No Transfer of Water Rights or Contracts. The rights granted pursuant to this Agreement constitute the right to take delivery of water only and shall not be interpreted as a sale, transfer, or assignment of either Party's water rights or contract entitlements.

Section 15. Subject to Applicable Law. The Parties acknowledge and agree that this Agreement and the rights and obligations of the Parties shall be subject to the laws governing municipal corporations as they now exist and as they may be amended or codified by the Legislature of the State of California.

Section 16. **Entire Agreement.** This Agreement contain the entire understanding between SCWC and the City with respect to the subject matter, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between SCWC and the City. This Agreement cannot be amended except in writing signed by both Parties.

Section 17. **No Waiver.** Any failure or delay on the part either Party to exercise any right under this Agreement shall not constitute a waiver of the right, and shall not preclude such Party from exercising or enforcing the right, or any other provision of this Agreement, on any subsequent occasion.

Section 18. **Notices.** All notices or other communications required or desired to be given pursuant to this Agreement shall be in writing and shall be hand-delivered, or mailed by certified mail, return receipt requested, or sent by a reputable overnight courier service providing delivery confirmation. Each such notice or communication shall be deemed to be duly given when hand-delivered, or three (3) days after being mailed in any depository maintained by the United States Postal Service, with prepaid postage, certified, return receipt requested or one (1) day after being deposited for next day delivery with Federal Express or other reputable overnight courier. Each such notice or communication shall be addressed to the Parties at their respective addresses set forth next to their signatures below, or such other address as a Party notifies the other in writing.

Section 19. **Headings; Section References.** Captions and headings appearing in this Agreement are inserted solely as reference aids for the ease and convenience; they shall not be deemed to define or limit the scope or substance of the provisions they introduce, nor shall they be used in construing the intent or effect of such provisions.

Section 20. **Separability.** If any provision of this Agreement is finally determined by a court to be invalid or unenforceable as written, the provision shall, if possible, be enforced to the extent reasonable under the circumstances and otherwise shall be deemed deleted from this Agreement. The other provisions of this Agreement shall remain in full force and effect so long as the material purposes of the Agreement and understandings of the Parties are not impaired.

Section 21. **Binding Effect Assignment.** This Agreement shall be binding on and inure to the benefit of the Parties, and their respective successors and permitted assigns. Neither Party shall assign this Agreement except with the prior written approval of the other Party. Any

unauthorized attempt to assign this Agreement shall be null and void. Notwithstanding the foregoing, SCWC shall have the right to assign this Agreement to any affiliate.

Section 22. Attorneys Fees. In the event that any action or proceeding is brought to enforce one or more of the terms of this Agreement, to restrain an alleged violation of this Agreement, or to determine the validity of this Agreement or any part, the prevailing Party in any such action or proceeding shall be entitled to recover from the other its reasonable costs and attorneys' fees, in addition to any other remedies available to it in law or equity. If both Parties are successful in one or more causes of action during any such proceeding, the costs and fees shall be apportioned as determined by the court.

Section 23. Force Majeure. If by reason of acts of God, earthquakes, floods, storms, explosion, fires, labor troubles, strikes, insurrection, riots, acts of the public enemy, or federal, state, or local law, order, rule, or regulation, either Party is prevented from complying with any condition of this Agreement, then while so prevented the condition shall be suspended and the Party shall be relieved of the obligation of complying with such covenant and shall not be liable for damages for failure to comply with it. Any obligation of either Party shall be extended for as long as it is so prevented from complying with any condition or covenant in the Agreement.

Section 24. Governing Law and Venue. This Agreement is a contract governed in accordance with the laws of the State of California. THE PARTIES HEREBY AGREE THAT VENUE FOR ANY ACTION BROUGHT TO ENFORCE THE TERMS OF THIS AGREEMENT SHALL BE IN A COURT OF COMPETENT JURISDICTION IN THE COUNTY OF SANTA BARBARA, CALIFORNIA, AND CONSENT TO THE JURISDICTION THEREOF.


IN WITNESS WHEREOF, the parties have executed this agreement as of the date first written above.

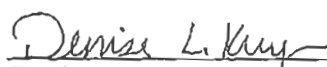
CITY:

SCWC:

City of Santa Maria
a California municipal corporation

Southern California Water Company,
a California corporation

By: 
Name: L. J. Lavagnino
Title: Mayor

By: 
Name: Denise L. Kruger
Title: Senior Vice President of Operations

Address: 110 E. Cook Street
Santa Maria, CA 93454


Fax: (805) 349-0657
Phone: (805) 925-0951, ext. 200

Address: 3035 Prospect Park, Suite 60
Rancho Cordova, CA 95670

Fax: (916) 853-3674
Phone: (916) 853-3606

APPROVED AS TO FORM:

Best Best & Krieger LLP

By: 
Eric Garner, Partner

ATTEST:

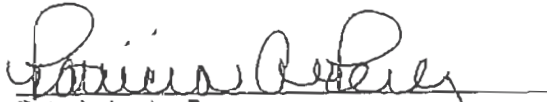

Patricia A. Perez
Chief Deputy City Clerk

EXHIBIT A

RESOLUTION NO. 2003 - 150

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
SANTA MARIA, CALIFORNIA APPROVING THE SALE OF UP
TO 400 ACRE-FEET ANNUALLY OF SUPPLEMENTAL STATE
WATER PROJECT YIELD AND AUTHORIZING THE CITY
MANAGER TO EXECUTE AGREEMENTS FOR THE SALE OF
UP TO 400 ACRE-FEET ANNUALLY OF SUPPLEMENTAL
STATE WATER PROJECT YIELD**

WHEREAS, the City of Santa Maria ("City") holds contracts to receive water from the State Water Project ("Project"), and can import up to 17,820 acre feet of water per year from the Project; and

WHEREAS, the City also holds rights to pump groundwater from the Santa Maria Valley Groundwater Basin ("Basin"); and

WHEREAS, the County of Santa Barbara ("County") regulates the land use activities within the Orcutt area. In 1997, the County adopted the Orcutt Community Plan ("OCP"), which establishes, among other things, certain policies regarding water supplies to be secured for new development projects in Orcutt. The OCP requires that the water demand associated with projects be offset by "supplemental" water supplies that do not result in further overdraft of the Basin; and

WHEREAS, the City has water available for use in the Orcutt area pursuant to the OCP, that is surplus to that needed to serve the City's current and long-term future anticipated demands; and

WHEREAS, "Supplemental Water" shall mean a portion of the yield of the SWP entitlement held by the City, or a portion of the historic groundwater rights to the Basin held by the City in accordance with the final judgment entered in *Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*, Superior Court, County of Santa Clara, Lead Case No. CV 770214; and

WHEREAS, the sale of up to 400 acre-feet of Project water will not change the existing setting and will not affect the net amount of water that will be extracted from the Basin; and

WHEREAS, the City is willing to enter into agreements to provide up to 400 acre-feet annually of supplemental water to individual property owners for the benefit of the individual property owners and their associated Projects.

NOW, THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Santa Maria as follows:

1. The City Council approves the sale of up to 400 acre-feet annually of Supplemental water.

2. The City Manager is authorized and directed to execute agreements substantially in the form provided for the sale of up to 400 acre-feet of Supplemental water per year for municipal use for the purpose of satisfying the Orcutt Community Plan's policies regarding water supplies.

3. City staff is hereby authorized to make minor changes to the final agreement and directed to file any and all notices that may be required by law.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Santa Maria held August 5, 2003.

/S/ L. J. LAVAGNINO

Mayor

ATTEST:

/s/PATRICIA A. PEREZ

City Clerk

APPROVED AS TO FORM:

BY: 
CITY ATTORNEY

CONTENTS:

BY: 
DEPARTMENT HEAD

BY: 
CITY MANAGER

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA) ss.
CITY OF SANTA MARIA)

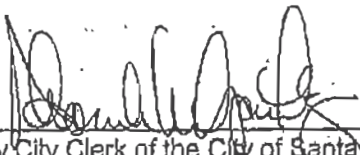
I, **RHONDA M. GARIETZ**, Deputy City Clerk of the City of Santa Maria and ex officio Clerk of the City Council DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of **Resolution No. 2003-150** which was duly and regularly introduced and adopted by said City Council at a regular meeting held August 5, 2003, by the following vote:

AYES: Councilmembers Mariscal, Orach, Patino, Trujillo and Mayor Lavagnino.

NOES: None.

ABSENT: None.

ABSTAIN: None.



Deputy City Clerk of the City of Santa Maria
and ex officio Clerk of the City Council

EXHIBIT B

SCWC SWP ENTITLEMENT: PROJECT LIST

PROJECT	TYPE	QUANTITY
Oak Knolls South	Residential	3.36 af
Mesa Verde	Residential	33 af
Orthodox Church	Commercial	1.6 af
Fundamental Baptist Church	Commercial	0.6 af
Orcutt Marketplace	Commercial	37 af
Rice Ranch	Residential	350 af
Estridge Lot Split	Residential	0.5 af
Diamante Estates	Residential	9 af
Hummel Village/Senior Housing	Commercial/Residential	3.5 af
TOTAL		438.6*af

* Because the County of Santa Barbara considers State Water Project water less than 100% reliable, the County applies a reliability factor to the SCWC SWP Entitlement. For the purposes of the projects on this Exhibit B, the County has adopted a 79% reliability factor for the SCWC SWP Entitlement. Based on this reliability factor, the County considers the entirety of the SCWC SWP Entitlement fully committed.

EXHIBIT B
to
STIPULATION EXHIBIT F

DRAFT: Subject to Ratification by the TMA

Exhibit B

**SANTA MARIA VALLEY PUBLIC WATER PURVEYOR WATER
MANAGEMENT AGREEMENT**

**Twitchell Management Authority
Annual Budget
Applicable for 2006-2011**

Item	Amount
Administration	\$50,000
Management Area Engineer	\$100,000
Twitchell Operation (including Twitchell Project Manual)	\$300,000
Monitoring Program/Annual Report	\$100,000
Reserves	\$100,000

EXHIBIT C
to
STIPULATION EXHIBIT F

SUPPLEMENTAL WATER PURCHASE AGREEMENTS

City of Santa Maria and OakGlen General Partnership dated July 31, 2003 – Project known as OakGlen – 22 afy.

City of Santa Maria and Ronald Chappell and Raymond Gonzales dated July 31, 2003 – Project known as 1374 Solomon – 1 afy.

City of Santa Maria and SB Clark LLC dated July 31, 2003 – Project known as Clark Ranch Estates – 200 afy.

City of Santa Maria and Wellmack dated August 18, 2003 – Project known as Jensen's Crossing/Cobblestone Creek – 59 afy.

City of Santa Maria and Harpstone Parntership LP dated August 18, 2003 – Project known as Harp Springs – 26.5 afy.

City of Santa Maria and Stonegate Development LP dated August 18, 2003 – Project StoneGate – 11 afy.

City of Santa Maria and Old Mill Orcutt Venture, LLC dated August 18, 2003 – Project known as Old Mill – 26 afy.

City of Santa Maria and Andy Fetyko dated January 15, 2004 – Project known as Keysite 10 – 10 afy.

City of Santa Maria and Steve LeBard and Debbie LeBard dated February 11, 2004 – Project known as LeBard Project – 2 afy.

City of Santa Maria and Knollwood Properties LP dated March 23, 2004 – Project known as Knollwood Meadows Phase II – 10 afy.

City of Santa Maria and Walter Mendoza dated May 19, 2003 – 1 afy.

City of Santa Maria and Darren Hulstine dated November 17, 2004 – Property located at 1430 Solomon Road – 1 afy.

City of Santa Maria and Cameron Realty Partners dated July 28, 2004 – Project known as Keysite 10 – 10 afy.

City of Santa Maria and David Daniels undated – Project known as 520 W. Rice Ranch Road – ½ afy.

City of Santa Maria and Chris Henderson dated November 30, 2004 – Project known as 295 Siles Lane -- +/- ½ afy.

City of Santa Maria and Simonsen & Associates dated March 1, 2005 – Project known as

Hummel Village II – 3.01 afy.

City of Santa Maria and East Clark Avenue Partnership undated but returned signed on May 9, 2005 – Project known as 250 E. Clark Avenue – 4 afy.

City of Santa Maria and Thor Gjerdrum dated May 12, 2005 – Project known as Rice Oak -- .75 afy

EXHIBIT G

**Court's Order Concerning Electronic Service of Pleadings
and Electronic Posting of Discovery Documents
dated June 27, 2000**

Santa Maria Valley Water Conservation District v. City of Santa Maria
Santa Clara County Superior Court Case No. CV 770214

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**ENDORSED
FILED**

**SUPERIOR COURT OF CALIFORNIA
COUNTY OF SANTA CLARA
DEPARTMENT 17**

JUN 28 2000
STEPHEN V. LOVE
Clerk, Superior Court of California
Superior Court of California, County of Santa Clara
By: *[Signature]* Dep. Clk.

SANTA MARIA VALLEY WATER CONSERVATION DISTRICT, a public entity,	)	SANTA MARIA GROUNDWATER LITIGATION
	)	Case No. CV770214
Plaintiff,	)	ORDER CONCERNING ELECTRONIC SERVICE OF PLEADINGS AND ELECTRONIC POSTING OF DISCOVERY DOCUMENTS
vs.	)	Consolidated Cases: CV784900; CV784921; CV784926; CV785509; CV785511; CV785515; CV785522; CV785936; CV786971; CV787150; CV787151; CV787152
CITY OF SANTA MARIA, et al.,	)	San Luis Obispo County Superior Court Cases: 990738 and 990739
Defendant)	
And Related Cross-Actions and Actions Consolidated For All Purposes		

I. INTRODUCTION

- A. The Court, through its Complex Civil Litigation Pilot Project, will host a Website to provide:
1. Electronic service on the parties of pleadings, discovery requests, discovery responses, and other documents to be served, and electronic access by the parties to all such pleadings, requests, responses, and other documents served;
 2. Electronic production of documents, and electronic access by the parties to all such documents produced; and
 3. A place for the electronic posting of deposition transcripts (as made available by

1 the attorneys) and transcripts of Court proceedings (when they are brief) and
2 access to such transcripts by the parties.

3 B. The Website address is <http://www.sccomplex.org>. A dedicated link to the Santa Maria
4 Groundwater Litigation is contained on the home page of this site.

5 C. The Court's Website will be maintained, and the tasks required of the Website will be
6 conducted by, the Court's outside Website Vendor:

7 Andy Jamieson
8 Global Transactions, Inc.
9 519 17th St., Oakland, CA 94612
10 Telephone: 510-548-9050
11 Email: ajam@glotans.com

12 D. This Order supercedes and entirely replaces parts VII ("Document Repository") and
13 VIII ("Filing and Service of Papers") of the Court's Case Management Order No. 4. All
14 other parts of Case Management Order No. 4 remain unaffected.

15 E. The term "Document Repository" as used in Case Management Order No. 4 shall mean
16 the Court's Website.

17 **II. SERVICE LISTS**

18 A. The firm of Hatch & Parent shall compile an initial service list consisting of the service
19 addresses of all parties to the case.

20 B. On or before July 7, 2000, all parties shall submit to Hatch & Parent the address at
21 which they wish to receive service. Service addresses may be submitted electronically
22 to: GLane@HatchParent.com, or by facsimile to Gina Lane, Hatch & Parent, 805-965-
23 4333.

24 Parties must elect one of the following three service options. All parties who are able
25 must opt for email service.

1. Parties receiving service electronically shall provide a current electronic mail
address, and a backup facsimile number.

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- 2. Parties without email who elect fax service shall provide a current facsimile number.
- 3. Other parties receiving service by U.S. Mail shall provide a current U.S. Mail address.

The court will notify email recipients that a document has been posted; parties must serve other parties by fax and mail.

- C. On or before July 10, 2000, Hatch & Parent shall transmit the initial electronic, facsimile and U.S. Mail service lists to the Website Vendor, based on the addresses submitted by the parties.
- D. All parties are obligated to check their email addresses on the website and notify the vendor immediately of any errors.
- E. New parties, upon making their first appearance in this case, will be required to elect their preferred method of service (i.e. electronic, facsimile, or U.S. Mail).
- F. Parties making any additions, corrections or changes to the electronic, facsimile, or U.S. Mail service lists after June 26, 2000, shall submit their changes directly to the Website Vendor. The Website Vendor shall post and keep current the electronic, facsimile, and U.S. Mail service lists on the Website.
- G. Once a party posts a document, the court, through its website, will make email service. The parties are under a continuing obligation to make fax and mail service of the notice of posting in the normal manner.

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1 III. PLEADING DOCUMENTS

2 A. POSTING OF PLEADING DOCUMENTS

- 3 1. Commencing on July 11, 2000, all parties, including parties who elect service
4 options two (2) and three (3), will be required to serve all Pleading Documents¹
5 by posting them on the Website. Parties without Internet access will have to
6 seek it out at the public library or at copy stores.
- 7 2. Instructions for posting will be provided on the Website itself. Documents
8 posted shall be catalogued according to the instructions provided. The posting
9 party shall provide: its name, the complete title of the document, and the date of
10 posting. All Pleading Documents will be posted to the Website in xml text
11 format (with a copy in PDF format being optional). All Adobe Acrobat
12 resources can be obtained from www.abode.com.
- 13 3. Once a Pleading Document has been posted to the Website, no change shall be
14 made to that document by any party. No Pleading Document posted to the
15 Website shall be removed from the Website except upon further Order of the
16 Court.
- 17 4. Exhibits attached to Pleading Documents shall be submitted as image file
18 attachments in .GIF or .JPG form.
- 19 5. For all Pleading Documents in this case served prior to July 11, 2000, the
20 serving party shall post a copy of that document to the Website no later than
21 August 10, 2000.

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23 _____
24 1 "Pleading Document" means: pleadings or any other documents produced in the course of this
25 action and required to be filed with the Court, including, but not limited to: (1) all
complaints, cross-complaints and answers, including amendments thereto; (2) all demurrers,
opposition to demurrers and replies; (3) all writ petitions and orders thereon; (4) all
motions, oppositions to motions and replies; (5) all proposed orders; (6) all expert
designations; and (7) all trial briefs.

1 6. Nothing in this Order modifies the manner of obtaining personal jurisdiction
2 (through service of process) over a party who has not appeared in these
3 consolidated actions. Service of process shall proceed in the regular manner
4 provided under California law.

5 B. ELECTRONIC SERVICE AND CONFIRMATION OF RECEIPT

- 6 1. The Website will be configured to transmit automatically an electronic "Notice
7 of Availability" to all parties on the electronic service list notifying them that a
8 Pleading Document has been served on them and is available for their review on
9 the Website.
- 10 2. Any party posting a Pleading Document on the Website who does not receive
11 electronic notice indicating that service of their document has been made shall,
12 within 12 hours of its posting, notify the Website Vendor of this problem.
- 13 3. All Parties electronically served shall confirm receipt of electronic service by
14 replying to the electronic mail "Notice of Availability" message received by no
15 later than 5:00 p.m. on the next business day following posting of the document
16 served, not including weekends and holidays. (For instance, an electronic
17 "Notice of Availability" transmitted at 4:59 p.m. on a Thursday must be
18 confirmed by 5:00 p.m. on Friday. Electronic Notice of Availability transmitted
19 at 5:01 p.m. on a Thursday must be confirmed by 5:00 p.m. on the following
20 Monday.) To confirm receipt, simply select "Reply" and then "Send."
- 21 4. Parties who fail to confirm receipt of electronic service within the time period
22 specified above will automatically receive a "Notice of Availability" by
23 facsimile from the Court's Website Vendor. A party's repeated failure to timely
24 confirm receipt of electronic service will be reported to the Court, and the court
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will require the party to personally appear to explain his failure to comply with the court's electronic service requirements.

C. FACSIMILE AND U.S. MAIL SERVICE

1. Commencing on July 11, 2000, in addition to posting all Pleading Documents on the Website, all parties shall serve, by facsimile and U.S. Mail as applicable, a "Notice of Availability" on all parties electing to receive service by facsimile or U.S. Mail shall be sufficient to constitute service of the Pleading Document itself.
2. The "Notice of Availability" shall contain; (1) the serving party's name and contact information; (2) the title of the document posted on the Website; and (3) the date of posting; and shall indicate that the document served is available for viewing on the Website.

D. PROOF OF SERVICE

3. All Pleading Documents posted to the Website shall contain a Proof of Service. The Proof of Service shall be sufficient if it indicates: (1) the title of the Pleading Document posted; (2) the date and time of posting; (3) that a "Notice of Availability" has been faxed to all parties on the Website's current facsimile service list; and (4) that a "Notice of Availability" has been mailed to all parties on the Website's current U.S. Mail service list.

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1 IV. DISCOVERY DOCUMENTS

2 A. POSTING OF DISCOVERY DOCUMENTS

3 1. Commencing on July 11, 2000, Discovery Documents² that are written requests
4 for discovery or written responses to those requests shall be posted to the
5 Website and served in the same manner as Pleading Documents. For all
6 Discovery Documents that are written requests for discovery or written
7 responses to those requests that are produced prior to July 11, 2000, the
8 producing party shall post a copy of that document to the Website no later than
9 August 10, 2000.

10 2. Commencing on July 11, 2000, Discovery Documents that are deposition
11 transcripts (including exhibits), whether party or non-party, shall be posted to the
12 Website and served by the noticing party in the same manner as Pleading
13 Documents. Deposition transcripts shall be posted promptly after receipt of the
14 transcript. For all Discovery Documents that are deposition transcripts
15 (including exhibits) that are produced prior to July 11, 2000, the noticing party
16 shall post a copy of that document to the Website no later than August 10, 2000.

17 3. Commencing on July 11, 2000, documents produced in response to a demand for
18 inspection and copying of documents shall be produced by the
19 producing/responding party as follows:

- 20 a. All parties are required to produce documents electronically.
21 b. To ensure quality control and uniformity of imaging and indexing, all
22 parties are required to utilize the Document Services Vendor approved
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25 ²"Discovery Documents" means: non-pleading, discovery documents, including, but limited to: (1) all written discovery requests; (2) all written responses to discovery requests; (3) documents produced in response to requests or demands for production of documents; (4) all deposition transcripts; (5) all privilege logs; and (6) all trial exhibits.

1 by the Court: APS, 3485 Sacramento Drive, Suite H, San Luis Obispo,
2 California 93401, (805) 545-9100. All parties shall contact APS directly
3 to establish their individual accounts with the Document Services
4 Vendor.

5 c. Documents produced by a party shall be provided to the Document
6 Services Vendor not later than 15 days after the date of service of the
7 written response (unless another time is set by agreement of the parties
8 or by Order of Court).

9 d. Upon production of document(s) to the Document Services Vendor, the
10 producing/responding party shall post on the Website a "Notice of
11 Submission of Discovery Documents to the Document Services Vendor"
12 indicating: (1) the name of the producing/responding party; (2) the name
13 of the propounding party; (3) the title of the document requesting the
14 production; and (4) the date of the production.

15 e. The Document Services Vendor will apply a standard indexing protocol
16 (including electronic "Bates" stamping and bibliographic fields).

17 f. The Document Services Vendor will transmit electronic images of the
18 documents produced directly to the Website Vendor. The Website
19 Vendor will then post those documents to the Website on behalf of the
20 producing/responding party, and will notify the producing/responding
21 party of this fact.

22 g. Documents previously produced shall be submitted to the Document
23 Services Vendor on or before July 17, 2000.

24 B. COSTS

25 1. Each party producing Discovery Documents shall be responsible for the
scanning/imaging and indexing costs charged by the Document Services Vendor

1 for those services, and any and all costs associated with transmitting these
2 documents to the Website Vendor, as described below.

- 3 2. A party utilizing the Document Services Vendor for any other services (e.g.,
4 obtaining electronic images of produced documents on CD Rom) shall be
5 responsible for all costs associated with those other services.
- 6 3. For non-party document productions, the requesting party shall be responsible
7 for posting the documents and for the costs charged by the Document Services
8 Vendor to scan/image and index the documents.

9 C. PROTECTIVE ORDERS

- 10 1. The Court's standard procedures shall apply to any party seeking to protect or
11 limit disclosure of information in a Discovery Document. In lieu of posting of
12 electronic images for documents subject to Court-ordered protection or
13 limitations on disclosure, the Website shall contain a listing of the document and
14 identifying information (including at least the title and description of the
15 document), information on the nature of the protection or limitation ordered by
16 the Court, and information on how to obtain the document.

17 V. FILING OF DOCUMENTS WITH THE COURT AND EFFECTIVE DATE OF
18 SERVICE

- 19 A. Notwithstanding the procedures for posting Pleading Documents on the Website
20 provide by this Order, no party is relieved of its responsibility to file any and all
21 documents required by law with this Court.
- 22 B. All Pleading Documents and any other documents required to be filed with the Court
23 may be filed with the Court by facsimile.
- 24 C. For purposes of a party's obligation to produce and/or serve upon another party a
25 document, that party shall be deemed to have produced/served the document on the date
on which the document was posted to the Website or submitted to the Document

1 Services Vendor (as applicable). Documents posted to the Website or submitted to the
2 Document Services Vendor after the close of a business day (5:00 p.m.) shall be
3 deemed to have been produced/served on the next business day.

4 D. For purposes of a party's obligation to respond to any document served on him, service
5 by electronic posting, facsimile and U.S. Mail in accordance with this Order shall be
6 deemed to be service by facsimile transmission in accordance with Code of Civil
7 Procedure section 1013(e), and the time obligations and duties of the parties shall be
8 governed as if such service had been made by facsimile transmission.

9 E. All parties are under a continuing obligation to post all Pleading Documents and
10 Discovery Documents to the Website, in the manner described in this Order.

11 VI. STAY

12 A. The stay on responsive pleadings imposed by the court at the May 12, 2000 hearing is
13 lifted. Responsive pleadings are due July 17, 2000 and shall be posted in accordance
14 with section III.A.2. of this order.

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16 Dated this 27th day of June, 2000


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19 _____
20 CONRAD L. RUSHING
21 Judge of the Superior Court
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EXHIBIT H

Form of Memorandum of Agreement to be Recorded

Santa Maria Valley Water Conservation District v. City of Santa Maria
Santa Clara County Superior Court Case No. CV 770214

Attached are two draft forms of Exhibit H. One form is intended to be used for recordation of notice of the Stipulation for properties located within Santa Barbara County, and the other form for properties located within San Luis Obispo County.

RECORDING REQUESTED BY:

XYZ CORPORATION

WHEN RECORDED MAIL TO:

**CITY OF SANTA MARIA
A California municipal corporation
110 E. Cook Street
Santa Maria, CA 903454**

**THIS SPACE RESERVED FOR RECORDER ONLY
(Gov. Code 27361.6)**

NOTICE OF AGREEMENT BY STIPULATION

THIS NOTICE ("Notice") is authorized and required to be recorded in Santa Barbara County by order of the Superior Court of the County of Santa Clara and Government Code Section 27201.

Effective _____, 2005 the Clerk of the Court for Santa Clara County has entered a written stipulation in the matter of *Santa Maria Valley Water Conservation District v. City of Santa Maria*, Santa Clara County Superior Court, Lead Case No. CV 770214 (hereinafter "Stipulation") affecting the use of water rights in the Santa Maria Groundwater Basin as more particularly described in the Stipulation. A copy of the Stipulation is on file with and may be viewed at the Santa Clara County Superior Court, City of Santa Maria, City of Guadalupe, and County of Santa Barbara. The below stated Stipulating Party and it's real property located in Santa Barbara County bound by the terms of the Stipulation is identified in Exhibit "A" attached hereto and incorporated herein.

**XYZ CORPORATION
A California corporation**

By:
Name:
Title:

EXHIBIT "A"

STIPULATING PARTY AND PROPERTY DESCRIPTION (Santa Barbara County)

<u>Stipulating Party</u>	<u>Property Description</u>
XYZ Corporation	(APN 101-040-014) NW ¼ of SW ¼, Section 1, R 29E, T 30S, MDB&M (APN 101-040-019) As described in that certain recorded instrument No. 123, Recorded June 29, 2001, Book 123, Page 111, Santa Barbara County Recorder.

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA BARBARA)

On the ____ day of _____, 2005, before me, the below-named Notary Public, personally appeared _____

_____ personally known to me or proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities and that by their signatures on the instrument the persons, or the entity upon behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

Notary Public

RECORDING REQUESTED BY:

XYZ CORPORATION

WHEN RECORDED MAIL TO:

NIPOMO COMMUNITY SERVICES
DISTRICT
A California CSD
148 South Wilson Street
Nipomo, CA 93444

**THIS SPACE RESERVED FOR RECORDER ONLY
(Gov. Code 27361.6)**

NOTICE OF AGREEMENT BY STIPULATION

THIS NOTICE ("Notice") is authorized and required to be recorded in San Luis Obispo County by order of the Superior Court of the County of Santa Clara and Government Code Section 27201.

Effective _____, 2005 the Clerk of the Court for Santa Clara County has entered a written stipulation in the matter of *Santa Maria Valley Water Conservation District v. City of Santa Maria*, Santa Clara County Superior Court, Lead Case No. CV 770214 (hereinafter "Stipulation") affecting the use of water rights in the Santa Maria Groundwater Basin as more particularly described in the Stipulation. A copy of the Stipulation is on file with and may be viewed at the Santa Clara County Superior Court, Nipomo Community Services District, Oceano Community Services District, City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, and County of San Luis Obispo. The below stated Stipulating Party and its real property located in San Luis Obispo County bound by the terms of the Stipulation are identified in Exhibit "A" attached hereto and incorporated herein.

XYZ CORPORATION
A California corporation

By:
Name:
Title:

EXHIBIT "A"

STIPULATING PARTY AND PROPERTY DESCRIPTION (San Luis Obispo County)

<u>Stipulating Party</u>	<u>Assessors Parcel Number</u>
XYZ Corporation	(APN 101-040-014) NW ¼ of SW ¼, Section 1, R 29E, T 30S, MDB&M (APN 101-040-019) As described in that certain recorded instrument No. 123, Recorded June 29, 2001, Book 123, Page 111, San Luis Obispo County Recorder.

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN LUIS OBISPO)

On the ___ day of _____, 2005, before me, the below-named Notary Public, personally appeared _____,

personally known to me or proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities and that by their signatures on the instrument the persons, or the entity upon behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

Notary Public

1 Scott S. Slater (State Bar No. 117317)
 Robert J. Saperstein (State Bar No. 166051)
 2 Stephanie Osler Hastings (State Bar No. 186716)
 HATCH & PARENT, A LAW CORPORATION
 3 21 E. Carrillo Street
 Santa Barbara, CA 93101
 4 Telephone No.: (805) 963-7000
 Facsimile No.: (805) 965-4333
 5

Attorneys for Defendants, Cross-Complainants and Cross-Defendants
 6 SOUTHERN CALIFORNIA WATER COMPANY, RURAL
 WATER COMPANY and OAK- GLEN PARTNERSHIP
 7

8
 9 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
 10 **COUNTY OF SANTA CLARA**

HATCH AND PARENT
 21 East Carrillo Street
 Santa Barbara, CA 93101

11	SANTA MARIA VALLEY WATER	)	SANTA MARIA GROUNDWATER
12	CONSERVATION DISTRICT, a public entity,	)	LITIGATION
13	Plaintiff,	)	LEAD CASE NO. CV 770214
14	v.	)	(CONSOLIDATED FOR ALL PURPOSES)
15	CITY OF SANTA MARIA, etc., et al.,	)	[Consolidated with Case Nos.:
16	Defendants.	)	CV 784900 CV 784921 CV 784926
17		)	CV 785509 CV 785511 CV 785515
18		)	CV 785522 CV 785936 CV 786971
19		)	CV 787150 CV 787151 CV 787152
20		)	CV 790597 CV 790599 CV 036410
21	AND RELATED CROSS-ACTIONS AND	)	San Luis Obispo County Superior Court Case
22	ACTIONS CONSOLIDATED FOR ALL	)	Nos. 990738 and 990739]
23	PURPOSES	)	[Assigned to Judge Jack Komar for All
24		)	Purposes]

21 **NOTICE OF AVAILABILITY**

22 Pursuant to the Court's Order dated June 28, 2000, the following documents were posted onto
 23 the complex litigation website of the Santa Clara County Superior Court (www.sccomplex.org):

- 24 • Stipulation (June 30, 2005 Version)
- 25 • Amendments to Stipulated Posted on June 23, 2005

26 The above-named documents were posted on June 30, 2005, at approximately 4:30 p.m. on
 27 behalf of Hatch & Parent, attorneys of record for Southern California Water Company, Rural Water
 28 Company and Oak-Glen Partnership in the above-referenced case. The documents are available for

1 viewing on the website at any time.

2 This Notice of Availability has been faxed or mailed, depending on each party's elected
3 method of service, to all parties on the Service List.

4 I declare under penalty of perjury under the laws of the State of California that the above is
5 true and correct. Executed on June 30, 2005, at Santa Barbara, California.

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Gina Lane

Gina Lane

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HATCH AND PARENT
21 East Carrillo Street
Santa Barbara, CA 93101

Exhibit 1A

Parties to Settlement Stipulation, Dated June 30, 2005

Note: Exhibit 1A lists all parties to the Settlement Stipulation, including parties whose rights in and to the Basin are not based on land ownership. The overlying parcels identified in the exhibit were provided by the signatories to the Settlement Stipulation at the date of signing, but may not include all parcels currently owned, or that may be owned, by the Stipulating Parties. The Settlement Stipulation states that all "Stipulating Parties" agree that all property owned by them within the Basin is subject to this Stipulation and the judgment to be entered based upon the terms and conditions of this Stipulation." (Stipulation, June 30, 2005, ¶ H.)

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
A. F. & C. A. Fugler, Inc., a corporation		101-040-017 129-020-030 129-170-006	Unable to locate Unable to locate 1931-010189 (SB)
Abel, Marilee	Franklin, Donna M. Franklin, Douglas Franklin, Paul Giacomini Ranch Weldon, Olga Weldon, Richard Weldon, Steve Weldon, Tony	117-121-026	Unable to locate
Acquistapace Ranches (owned by Robert E. and Wanda Acquistapace)		129-170-033	Unable to locate
Acquistapace, Carolyn	Acquistapace, Leo Easton, Linda	128-092-003 133-070-025	1996-019643 (SB) 1995-037341 (SB)

¹ Property in the County of Santa Barbara is indicated by "(SB)"; property in the County of San Luis Obispo is indicated by "(SLO)". Deed reference numbers that include the letter "I" are internal unpublished San Luis Obispo county documents.

December 21, 2007

Exhibit 1A
Page 1 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Acquistapace, James S.		113-100-017 113-100-024 129-020-031 129-020-032	1994-089679 (SB) 1994-089679 (SB) 1988-070219 (SB) 1988-070219 (SB)
Acquistapace, James S.		129-170-033	2001-0009719 (SB)
Acquistapace, Leo	Acquistapace, Carolyn Easton, Linda	128-092-003 133-070-025	1996-019643 (SB) 1995-037341 (SB)
Adam, Andrew M.		117-160-008 117-160-023	1997-027880 (SB) 1997-027880 (SB)
Adam, Charles W.	Adam, Cindy	117-160-024	2005-064116 (SB)
Adam, Cindy	Adam, Charles	117-160-024	2005-064116 (SB)
Adam, John M.	Adam, Sandra L.	129-240-005	99-016766 (SB)
Adam, Sandra L.	Adam, John M.	129-240-005	99-016766 (SB)
Adam, William P., III		113-120-007 113-120-009	1991-003946 (SB) 1991-003946 (SB)
Adamo, Goetano David, Trust		129-151-045	2002-113936 (SB)
Adamo, Goetano David, Trust		129-151-042	2005-044203 (SB)
Adcock, Lawrence	Siepiela, Dianne Chan, Foo Kheong Chan, Terry Kwan Yu	091-161-051	2002-019093 (SLO)
Adcock, Lawrence	Siepiela, Dianne Chan, Fook Kheong Chan, Terry Kwan Yu	091-161-049	2002-019094 (SLO)
Aera Energy LLC		101-040-006 (undivided 2.38% interest only)	2006-0050572 (SB)

December 21, 2007

Exhibit 1A
Page 2 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Aera Energy LLC		101-040-005 (undivided 50% interest only) 101-040-011 (undivided 50% interest only) 101-040-012	1999-028094 (SB) 1999-028094 (SB) 2002-030515 (SB)
Aera Energy LLC		101-040-013 (undivided 75.72% interest only) 101-040-014 101-040-019 101-040-020 101-050-013 101-070-007	1986-017045 (SB) 1986-017045 (SB) 1985-067788 (SB) 1985-067788 (SB) 1985-067788 (SB) 1985-067788 (SB)
Aera Energy LLC		101-050-042	1986-017040 (SB)
Aera Energy LLC		101-050-014 129-210-017	Unable to locate 2005-020701 (SB)
Aerostar Properties		111-231-001	2005-0068330 (SB)
Agland Venture Cap Group, Inc.		113-210-013 113-210-004	1998-054349 (SB) 1998-054349 (SB)
Alexi Realty, Inc. as successor in interest to Greka AM, Inc., Saba Petroleum, Inc., and Saba Realty, Inc.		129-170-034 129-180-005 129-170-022 129-180-003 129-180-004 113-150-019 113-150-020	2002-067774 (SB) 2002-067775 (SB) 2002-067776 (SB) 2002-067778 (SB) 2002-067782 (SB) 2002-067783 (SB) 2002-067783 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Alexi Realty, Inc. as successor in interest to Greka AM, Inc., Saba Petroleum, Inc., and Saba Realty, Inc.		101-030-016 101-040-007 101-040-008 101-060-046 101-060-052 117-310-002	2006-029525 (SB) 2006-029525 (SB) 2006-029525 (SB) 2006-029525 (SB) 2006-029525 (SB) Unable to locate
Allen, Carol	Lanini, Stella Lanini, Roland Hart, Arletta Lanini, Peggy Vreeland, Kathleen	113-040-003	2006-0083748 (SB)
Allen, Carol	Lanini, Stella Lanini, Roland Hart, Arletta Lanini, Peggy Vreeland, Kathleen	113-949-003	Unable to locate
Amarillas, Ernest		091-181-001	1991-011267 (SLO)
Amon, Jack R.		129-151-043	98-087188 (SLO)
Anderson, Martha, Trustee		091-261-014	2007021455 (SLO)
Anderson, Richard P.	Shell, Sharon	090-321-033	1994-058614 (SLO)
Andrews, George H.	Andrews, Susan L. Andrews, George and Susan Family Trust	075-271-014	2006-035527 (SLO)
Andrews, George and Susan, Family Trust	Andrews, Susan L. Andrews, George H.	075-271-014	2006-035527 (SLO)
Andrews, Susan L.	Andrews, George H. Andrews, George and Susan Family Trust	075-271-014	2006-035527 (SLO)
Apodaca, Mary	Apodaca, David	075-291-028 075-291-029	2004-I-002328 (SLO) 2004-I-002328 (SLO)
Apodaca, David	Apodaca, Mary E.	075-291-002	1998-070797 (SLO)

December 21, 2007

Exhibit 1A
Page 4 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Apodaca, David	Apodaca, Mary	075-291-028 075-291-029	2004-I-002328 (SLO) 2004-I-002328 (SLO)
Apodaca, Johnny E.		075-251-018	2000-R-018797 (SLO)
Apodaca, Mary E.	Apodaca, David M.	075-291-002	1998-070797 (SLO)
Apple, Mannelta R., Tre		092-154-026	1989-56123 (SLO)
Arco Environmental Remediation, LLC		113-250-008 113-280-005 113-280-006 113-250-007 113-280-002 113-280-003	97-031687 (SB) 97-031687 (SB) 97-031687 (SB) 97-031687 (SB) 97-031687 (SB) 97-031687 (SB)
Ardantz Properties		113-090-012	2003-0011803 (SB)
Ardantz Properties		113-090-011 113-090-012 113-110-008 113-110-009 113-110-010 113-110-011	Unable to locate 2006-0015419 (SB) 2002-067783 (SB) 1991-003946 (SB) Unable to locate Unable to locate
Arroyo Grande District Cemetery		077-111-065	1980-33480 (SLO)
Arroyo Grande District Cemetery		075-051-006	1999-025463 (SLO)
Arroyo Grande, City of		007-492-007 006-085-023 006-085-024 006-085-025 006-085-026 006-095-013 006-153-011 006-161-020	065222 (SLO) 1974-24393 (SLO) 1973-27271 (SLO) 1973-27271 (SLO) 1973-27271 (SLO) 1970-31275 (SLO) 1989-I-002971 (SLO) 1989-I-002970 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		006-391-033	1974-37341 (SLO)
		006-442-021	1960-16969 (SLO)
		006-444-011	1975-09448 (SLO)
		006-445-026	1975-12493 (SLO)
		007-011-003	1937-931 (SLO)
		007-011-044	1991-7845 (SLO)
		007-014-053	1988-I-003767 (SLO)
		007-031-002	1984-I-001072 (SLO)
		007-041-007	1984-I-001073 (SLO)
		007-041-020	1984-I-001074 (SLO)
		007-061-010	1984-I-001075 (SLO)
		007-181-002	1960-16970 (SLO)
		007-182-001	1984-I-001076 (SLO)
		007-183-008	1973-24987 (SLO)
		007-183-009	1973-24987 (SLO)
		007-183-010	1973-24987 (SLO)
		007-191-041	1984-I-001077 (SLO)
		007-191-042	1984-I-001078 (SLO)
		007-192-026	1984-I-001079 (SLO)
		007-192-062	1968-4121 (SLO)
		007-192-065	1984-I-001080 (SLO)
		007-211-009	1984-I-001081 (SLO)
		007-211-041	1980-54349 (SLO)
		007-263-031	1940-03293 (SLO)
		007-483-034	1991-I-000336 (SLO)
		007-491-013	1980-23060 (SLO)
		007-491-024	1975-39951 (SLO)
		007-491-040	1980-R-C23060 (SLO)
		007-491-041	1980-R-C23060 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		007-491-042	1980-R-C23060 (SLO)
		007-491-048	1983-19441 (SLO)
		007-492-004	1968-23987 (SLO)
		007-492-008	1985-061092 (SLO)
		007-492-009	1985-R-061092 (SLO)
		007-492-010	1979-56966 (SLO)
		007-492-012	1986-R-024576 (SLO)
		007-492-014	1985-056149 (SLO)
		007-492-015	1985-056149 (SLO)
		007-501-024	1972-38916 (SLO)
		007-501-033	1984-I-001084 (SLO)
		007-511-026	1984-I-001086 (SLO)
		007-571-010	1984-I-001093 (SLO)
		007-595-006	1966-20801 (SLO)
		007-611-016	1982-R-C08080 (SLO)
		007-761-025	1984-I-001096 (SLO)
		007-762-024	1976-42344 (SLO)
		007-771-059	1990-67354 (SLO)
		007-784-069	2003-I-0000 90 (SLO)
		007-786-039	1994-057326 (SLO)
		007-787-012	2001-I-000360 (SLO)
		007-791-003	1970-03773 (SLO)
		007-821-068	1984-I-001098 (SLO)
		007-821-069	1984-I-001099 (SLO)
		007-861-001	1984-I-001100 (SLO)
		007-890-043	2001-I-000361 (SLO)
		077-061-016	1946-12297 (SLO)
		077-121-004	1984-I-004593 (SLO)
		077-122-030	2000-I-000423 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		077-131-018 077-252-084	1970-06317 (SLO) 1989-I-003878 (SLO)
Askeland, Clark		075-241-022 075-241-023	1986-079592 (SLO) 1986-079592 (SLO)
Avelino, Francis	Avelino, James	091-053-020	1994-I-000692 (SLO)
Avelino, James	Avelino, Francis	091-053-020	1994-I-000692 (SLO)
Aviation Way, LLC		111-292-021	1998-012728 (SB)
Avila, Randy		091-131-038 091-131-037 091-131-042	2002-070298 (SLO) 2001-055280 (SLO) 2001-000907 (SLO)
Banke, Barbara R.	Jackson, Jess S.	133-070-032	1999-0061496 (SB)
Banks, Estate of Edward F.		090-281-002 090-281-005	79512 (SLO) 79512 (SLO)
Barr, James L.		092-161-026	2007-R-012625
Barr, Susan K.		092-161-026	2007-R-012625
Bartelotte Gardner, Patricia		Not provided	
Bartleson Family Trust Dated 9-12-79		091-011-013	1993-038978 (SLO)
Bartleson Family Trust Dated 9-12-79		075-102-001	2004113336 (SLO)
Bartleson Family Trust Dated 9-12-79		047-311-008 075-091-002 075-101-001 075-102-003 091-020-001 091-053-017	1996-058036 (SLO) 1996-058036 (SLO) 1996-058036 (SLO) 2004-I-000285 (SLO) 1996-058036 (SLO) 1996-058035 (SLO)

December 21, 2007

Exhibit 1A
Page 8 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Basin Investments, LLC		129-120-004 129-120-014 129-120-015 129-170-025	2004-069624 (SB) 2004-069624 (SB) 2004-069624 (SB) 2004-069624 (SB)
Basin Investments, LLC		129-170-028 129-170-027	2007-0011710 (SB) 2007-0011710 (SB)
Basin Investments, LLC		129-120-026	2007-0011710 (SB)
Battles, Glenn E.	Battles, James G. Battles, Myron G. Jordan, Barbara J.	128-092-006 128-092-007 128-093-011	2005-059182 (SB) 2006-049978 (SB) 2006-049978 (SB)
Battles, James G.	Battles, Glenn E. Battles, Myron G. Jordan, Barbara J.	128-092-006 128-092-007 128-093-011	2005-059182 (SB) 2006-049978 (SB) 2006-049978 (SB)
Battles, Myron G.	Battles, James G. Battles, Glenn E. Jordan, Barbara J.	128-092-006 128-092-007 128-093-011	2005-059182 (SB) 2006-049978 (SB) 2006-049978 (SB)
Battles, Thelma Louise		128-093-010	2006-049978 (SB)
BC Systems, Inc.		092-051-022	2006-I-002572 (SLO)
Beazer Materials & Services, Inc. aka Beazer East, Inc.		129-110-016	1989-018298 (SB)
Beazer Materials & Services, Inc. aka Beazer East, Inc.		129-011-013 129-011-014 129-011-015 129-011-016 129-011-017 129-011-018 129-011-024 129-021-026	1981-3727 (SB) 2001-0002246 (SB) 2001-0002246 (SB) 1989-018298 (SB) 1989-018295 (SB) 1989-018298 (SB) 1992-079347 (SB) 1992-079347 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Bello, Gail, individually and as Trustee of the Bello Family Trust		Not provided	
Ben, Penelope	Ben, Philip	075-221-005	67178 (SLO)
Ben, Philip	Ben, Penelope	075-221-005	67178 (SLO)
Berry, Cheri A.	Berry, Michael	091-261-015	1986-034383 (SLO)
Berry, Michael	Berry, Cheri A.	091-261-015	1986-034383 (SLO)
Bettencourt, Catherine	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-079	2005-032962 (SLO))
Bettencourt, Catherine	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)
Bettencourt, Catherine	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-064	2005-016471 (SLO) 2004-R-096188 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Bettencourt, Catherine	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO)
Bettencourt, Catrina	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catherine Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-079	2005-032962 (SLO)
Bettencourt, Catrina	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catherine Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Bettencourt, Catrina	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catherine Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-064	2005-016471 (SLO) 2004-R-096188 (SLO)
Bettencourt, Catrina	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catherine Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO) 2004-R-096188 (SLO)
Bettencourt, James III	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, Catherine Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Bettencourt, James III	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, Catherine Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-064	2005-016471 (SLO) 2004-R-096188 (SLO)
Bettencourt, James III	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, Catherine Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO) 2004-R-096188 (SLO)
Bettencourt, James III	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, Catherine Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-079	2005-032962 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Bettencourt, James Jr.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, Catherine Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)
Bettencourt, James Jr.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, Catherine Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-064	2005-16471 (SLO) 2004-R-096188 (SLO)
Bettencourt, James Jr.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, Catherine Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO) 2004-R-096188 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Bettencourt, James Jr.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, Catherine Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-079	2005-032962 (SLO)
Betteravia Farms		117-820-018 113-100-014	2004-117758 (SB) 2004-117759 (SB)
Betteravia Properties		113-250-001	2004-037276 (SB)
Betteravia Properties		113-100-020 113-120-019 113-130-007 113-140-004 113-250-005 113-240-002 113-240-009 128-101-013 128-101-014 129-080-007 129-080-011	1995-017981 (SB) 1995-017981 (SB) 1995-017981 (SB) 1995-017981 (SB) 1995-017981 (SB) 1995-017981 (SB) 1995-017981 (SB) 1999-055318 (SB) 1999-055318 (SB) 1995-017981 (SB) 1995-017981 (SB)
Bibles, Mrs.	Bibles, Ben	129-240-001	2002-067768 (SB)
Bibles, Ben	Bibles, Mrs.	129-240-001	2002-067768 (SB)
Biely, Carla L.	Biely, Charles S.	129-240-030	2002-020652 (SB)
Biely, Charles S.	Biely, Carla L.	129-240-030	2002-020652 (SB)
Biorn, Geraldine M.		090-301-058	1996-024440 (SLO) 2006-R-021956 (SLO)

December 21, 2007

Exhibit 1A
Page 15 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		090-341-033	2006-R-021956 (SLO)
Black Lake Canyon Water		091-101-029	1997-R-006683 (SLO)
Black Lake Management Association		091-243-044	2002024450 (SLO)
			2002-R-024450 (SLO)
		091-244-020	1999-058797 (SLO)
		091-411-022	1999-058797 (SLO)
		091-411-023	1999-058797 (SLO)
		091-411-024	1999-058797 (SLO)
		091-411-025	1985-013808 (SLO)
		091-412-022	1985-013808 (SLO)
		091-413-050	1985-013808 (SLO)
		091-414-032	1996-045890 (SLO)
		091-440-014	1996-045890 (SLO)
		091-441-025	1996-045890 (SLO)
		091-443-018	1999-058797 (SLO)
		091-445-033	1999-058797 (SLO)
		091-445-034	Unable to locate
		091-446-032	Unable to locate
Black Road Investments		117-190-018	1981-041630 (SB)
		117-190-019	1981-041630 (SB)
		117-190-020	1981-041630 (SB)
Black Road Investments		117-820-023	1981-041630 (SB)
		117-820-024	1981-041630 (SB)
		117-820-025	1981-041630 (SB)
Blake, Robert	Miller, Carol	091-063-026	2007-002859 (SLO)
Blakey, Ronald J.	Blakey, Sylvia L.	091-131-027	1992-087688 (SLO)
Blakey, Ronald J.	Blakey, Sylvia L.	091-131-026	1990-033249 (SLO)
			1992-087687 (SLO)
Blakey, Sylvia L.	Blakey, Ronald J.	091-131-027	1992-087688 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Blakey, Sylvia L.	Blakey, Ronald J.	091-131-026	1990-033249 (SLO) 1992-087687 (SLO)
Bognuda, Billy D.	Bognuda, Livio	117-820-012 117-820-013	2002-135890 (SB) 2002-135890 (SB)
Bognuda, Billy D.	Bognuda, Livio	113-250-011 113-280-004 117-820-009 117-820-011	1976-005694 (SB) 1976-005694 (SB) Unable to locate Unable to locate
Bognuda, Billy D.	Bognuda, Livio	117-820-010	2005-0095197 (SB)
Bognuda, Geraldine	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Dutra, Maria C.	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Bognuda, Lisa Souza	Bognuda, Ray Alan	129-151-035	2000-0032018 (SB)

December 21, 2007

Exhibit 1A
Page 17 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Bognuda, Livio	Bognuda, Billy D.	117-820-012 117-820-013	2002-135890 (SB) 2002-135890 (SB)
Bognuda, Livio	Bognuda, Billy D.	117-820-010	2005-0095197 (SB)
Bognuda, Livio	Bognuda, Billy D.	113-250-011 113-280-004 117-820-009 117-820-011	1976-005694 (SB) 1976-005694 (SB) Unable to locate Unable to locate
Bognuda, Ray Alan	Bognuda, Lisa Souza	129-151-035	2000-0032018 (SB)
Bolton Family Trust		Not provided	
Bonetti, Richard	Bonetti-Arellanes Properties	111-240-001 113-240-006	2004-0113773 (SB)
Bonetti-Arellanes Properties	Bonetti, Richard	111-240-001 113-240-006	2004-0113773 (SB) 2004-0113773 (SB)
Bonney, Beverly L.	Bonney, Timothy D. and Bonney, Beverly L.	101-020-076	98-088433 (SB)
Bonney, Timothy D.	Bonney, Timothy D. and Bonney, Beverly L..	101-020-076	98-088433 (SB)
Borel Private Bank & Trust Co., as Trustee for the Jean LeRoy Trust		092-051-007 092-051-010	2006-024587 (SLO) 2006-R-024588 (SLO)
Borel Private Bank & Trust Co., as Trustee for the Jean LeRoy Trust		113-050-006 113-050-059 113-050-060 113-090-001 113-090-002	1997-065687 (SB) 1997-065687 (SB) 1997-065687 (SB) 065691 (SB) 065691 (SB)
Borel Private Bank & Trust Co., as Trustee for the Jean LeRoy Trust		091-061-001 092-031-013	Unable to locate Unable to locate
Borel Private Bank & Trust Co., as Trustee for the Jean LeRoy Trust		113-030-003	2006-0094759 (SB) 2006-024588 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Boster, DeEtta, Trustee		117-020-056 117-160-043 117-160-045	2005-013857 (SB) 2005-013857 (SB) 2005-013857 (SB)
Bouma, John		091-073-005	2000-054207 (SLO) 1999-I-002773 (SLO) 2000-054208 (SLO)
Bove, Robert A.	Dahmen, Doug	129-240-032	1990-046565 (SB)
Bowser Investments	Cossa Family Ltd. Partnership, a limited partnership Bowser, Marian	090-401-033 090-401-034	1995-019848 (SLO) 2004-078219 (SLO) 2004-078219 (SLO) 1995-019847 (SLO)
Bowser Investments	Cossa Family Ltd. Partnership, a limited partnership Bowser, Marian	090-401-033	1995-019848 (SLO)
Bowser, Marian	Cossa Family Ltd. Partnership, a limited partnership Bowser Investments	090-401-033 090-401-034	1995-019848 (SLO) 2004-078219 (SLO) 1995-019847 (SLO)
Bowser, Marian	Cossa Family Ltd. Partnership, a limited partnership Bowser Investments	090-401-033	1995-019848 (SLO)
Bowser, Marian	Cossa Family Ltd. Partnership, a limited partnership Bowser Investments	090-401-034	2004-078219 (SLO) 1995-019847 (SLO)
Boyd, Patricia Jean		128-100-002 128-100-004	2006-0039019 (SB) 2006-0039019 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Brackett, Ruth and Jack, Co-Trustees of the Brackett Family Trust		091-341-049	7726 (SLO)
Bradley Land Company		117-020-016	2003-079651 (SB)
Bradley Land Company		128-091-001 128-128-002 129-010-001 129-010-008 129-010-011 129-010-012 129-010-013 129-020-015	Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate
Bradshaw, Herman and Shirley Family Trust Dated 10/16/87		091-063-027	2000-I-002014 (SLO)
Brandt, Diane E.		091-054-025	2001-027867 (SLO)
Brandt, Marcus C.		091-054-025	2001-027867 (SLO)
Brenner, Merritt	Perez, Shirley A. Brenner, Nancy Bryden, James Pinoli, Mary S.	117-180-021 117-180-002 117-170-013 117-170-014	2002-076787 (SB) 2002-076787 (SB) 2002-076787 (SB) 2002-076787 (SB)
Brenner, Nancy	Perez, Shirley A. Brenner, Merritt Bryden, James Pinoli, Mary S.	117-180-021 117-180-002 117-170-013 117-170-014	2002-076787 (SB) 2002-076787 (SB) 2002-076787 (SB) 2002-076787 (SB)
Brown, Audrey		091-201-056 091-201-058	1996-011406 (SLO) Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Bryden, James	Perez, Shirley A. Brenner, Merritt Brenner, Nancy Pinoli, Mary S.	117-180-021 117-180-002 117-170-013 117-170-014	2002-0076787 (SB) 2002-0076787 (SB) 2002-0076787 (SB) 2002-0076787 (SB)
Bryden, James M.	Pinoli, Mary S.	091-053-021	2005-026215 (SLO)
Buckley, Patrick D.	Buckley, Rachel	115-020-036	2006-0075642 (SB)
Buckley, Rachel	Buckley, Patrick D.	115-020-036	2006-0075642 (SB)
Bunk, John E., Trustee of the John E. and JoAnne Bunk Revocable Trust		128-100-007	2005-0094203
Burinda, Gus Joseph		128-002-020	2001-0057265 (SB)
Burinda, Gus Joseph		129-151-040	94-019554 (SB)
Burke, Mary	Burke, Ronald B. Espinola, Robert J.	129-020-005	91-079104 (SB)
Burke, Ronald B.	Burke, Mary Espinola, Robert J.	129-020-005	91-079104 (SB)
C. Sanchez & Son, Inc.		090-341-030 090-401-001 090-401-020 090-401-021	1986-067446 (SLO) 1986-067446 (SLO) 1986-067446 (SLO) 1986-067446 (SLO)
C. Sanchez & Son, Inc.		128-002-021	2007-0033025 (SB)
Calderon, Douglas F.		128-099-006	2001-0030360 (SB)
Callender Water Company		091-153-012	2005-065121 (SLO)
Callender Water Company		091-153-005	2005-061586 (SLO)
Callender Water Company		091-153-018	2005-071233 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Callender Water Company		091-153-006 091-153-011 091-153-013 091-153-014 091-153-015 091-153-016	2005-R-059824 (SLO) 2005-R-065117 (SLO) 2005-R-056396 (SLO) 2005-R-071622 (SLO) 2005-R-057921 (SLO) 2005-R-062380 (SLO)
Callender Water Company		091-153-019	2005076025 (SLO)
Cambero, Victor M.		090-321-018	1986-053004 (SLO)
Cameroni Moretti, Paola	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Cameroni Moretti, Paola	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea	113-110-001	1991-009647 (SB) 2007-038481 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina		
Cameroni Moretti, Paola	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-240-001 113-240-010 117-240-006	2007-038481 (SB) 2007-038481 (SB) Unable to locate
Campobasso, Laura A.	Dragna, James Joseph	101-070-050	2000-0060801 (SB)
Canada, Richard, Trustee	Neill, Michael Hobbs, William, Trustee Hobbs, Wilma, Trustee	091-301-004 091-301-017 091-301-041	1994-R-030904 (SLO) 1968-13700 (SLO) 1994-033232 (SLO) 2004-108562 (SLO) 2005-I-003788 (SLO)
Canada, Richard, Trustee	Neill, Michael Hobbs, William, Trustee Hobbs, Wilma, Trustee	092-221-002	2004-R-099014 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Canada, Richard, Trustee	Neill, Michael Hobbs, William, Trustee Hobbs, Wilma, Trustee	092-221-003	2004-R-070893 (SLO)
Cantin Land & Oil Development Company		129-180-015	2004-005106 (SB)
Cantor, Nick	Cantor, Veronica	129-240-008	2006-0036340 (SB)
Cantor, Veronica	Cantor, Nick	129-240-008	2006-0036340 (SB)
Cardenas, Alberto, individually and as Trustee of the Alberto and Delfina Cardenas Trust	Cardenas, Delfina, individually and as Trustee of the Alberto and Delfina Cardenas Trust	090-321-023	26871 (SLO)
Cardenas, Alberto, individually and as Trustee of the Alberto and Delfina Cardenas Trust	Cardenas, Delfina, individually and as Trustee of the Alberto and Delfina Cardenas Trust	090-283-029	2003-142270 (SLO)
Cardenas, Alberto, individually and as Trustee of the Alberto and Delfina Cardenas Trust	Cardenas, Joaquin Cardenas, Luz Elena	091-181-024	2004-101529 (SLO)
Cardenas, Delfina, individually and as Trustee of the Alberto and Delfina Cardenas Trust	Cardenas, Alberto, individually and as Trustee of the Alberto and Delfina Cardenas Trust	090-321-023	26871 (SLO)
Cardenas, Delfina, individually and as Trustee of the Alberto and Delfina Cardenas Trust	Cardenas, Alberto, individually and as Trustee of the Alberto and Delfina Cardenas Trust	090-283-029	2003-142270 (SLO)
Cardenas, Graciela, individually and as Trustee of the Juan and Graciela Cardenas Trust	Cardenas, Juan, individually and as Trustee of the Juan and Graciela Cardenas Trust	090-321-016 090-321-021	2001-012621 (SLO) 50302 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Cardenas, Joaquin	Cardenas, Alberto, individually and as Trustee of the Alberto and Delfina Cardenas Trust Cardenas, Luz Elena	091-181-024	2004-101529 (SLO)
Cardenas, Juan, individually and as Trustee of the Juan and Graciela Cardenas Trust	Cardenas, Graciela, individually and as Trustee of the Juan and Graciela Cardenas Trust	090-321-016 090-321-021	2001-012621 (SLO) 50302 (SLO)
Cardenas, Luz Elena	Cardenas, Alberto, individually and as Trustee of the Alberto and Delfina Cardenas Trust Cardenas, Joaquin	091-181-024	2004-101529 (SLO)
Cardoza, Pat L.	Cardoza, Victoria L.	061-161-008	2001-010805 (SLO)
Cardoza, Victoria L.	Cardoza, Pat L.	061-161-008	2001-010805 (SLO)
Caritas Corp.		075-032-008	2001-020377 (SLO)
Caroni, Donald J.	Caroni, Shella L.	091-111-015	74211 (SLO)
Caroni, Shella L.	Caroni, Donald J.	091-111-015	74211 (SLO)
Carroll, Betty A.		075-291-005	2003-127622 (SLO)
Carroll, Betty A.		075-241-003	2001-030848 (SLO)
Carter, Barbara J.	Carter, Bruce T.	129-010-027	81-14010 (SB)
Carter, Bruce T.	Carter, Barbara J.	129-010-027	81-14010 (SB)
Central California Conference Association of Seventh-Day Adventists		128-015-080	99-011960 (SB)
Central California Conference Association of Seventh-Day Adventists		090-281-024 117-330-055	1988-23484 (SLO) 1965-040534 (SB)
Central California Conference Association of Seventh-Day		107-022-007	95-057025 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Adventists			
Central Coast Water Authority		N/A	N/A
Chadwick, William H.		075-181-034	1988-I-001069 (SLO)
Chambers, Clara M.	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Dutra, Maria C. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Chan, Fook Kheong	Siepiela, Dianne Adcock, Lawrence David Chan, Terry Kwan Yu	091-161-051	2002-019093 (SLO)
Chan, Fook Kheong	Adcock, Lawrence Siepiela, Dianne	091-161-049	2002-019094 (SLO)

December 21, 2007

Exhibit 1A
Page 26 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Chan, Fook Kheong	Adcock, Lawrence Siepiela, Dianne Chan, Terry Kwan Yu 128-090-056 co-owned with Chan, Terry Kwanyu	128-090-056	1995-034057 (SB)
Chan, Terry Kwan Yu	Siepiela, Dianne Chan, Fook Kheong Adcock, Lawrence David	091-161-051	2002-019093 (SLO)
Chan, Terry Kwan Yu	Adcock, Lawrence Siepiela, Dianne Chan, Fook Kheong 128-090-056 co-owned with Chan, Fook Kheong	128-090-056	1995-034057 (SB)
Chan, Terry Kwan Yu	Adcock, Lawrence Siepiela, Dianne	091-161-049	2002-019094 (SLO)
Chavez Trust	Chavez, Consuelo Chavez, Luis Gutierrez, Angelica Gutierrez, Victor	090-281-018	1999-085391 (SLO)
Chavez, Alicia	Chavez, Miguel	090-281-022	1999-026844
Chavez, Consuelo	Chavez, Luis Chavez Trust Gutierrez, Angelica Gutierrez, Victor	090-281-018	1999-085391 (SLO)
Chavez, Luis	Chavez, Consuelo Chavez Trust Gutierrez, Angelica Gutierrez, Victor	090-281-018	1999-085391 (SLO)
Chavez, Miguel	Chavez, Alicia	090-281-022	1999-026844
Chevron U.S.A. Inc.		101-040-009 101-070-003 101-070-001	2004-0021297 (SB) 2004-0021297 (SB) 2004-0021297 (SB)

December 21, 2007

Exhibit 1A
Page 27 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Chevron U.S.A. Inc.		101-030-003	2005-0101710 (SB)
		101-030-012	2005-0101710 (SB)
		101-060-048	2005-0101710 (SB)
		101-080-032	2005-0101710 (SB)
		101-080-033	2005-0101710 (SB)
		101-080-040	2005-0101710 (SB)
		101-080-041	2005-0101710 (SB)
		101-080-014	2005-0101710 (SB)
		101-030-010	2006-0036407 (SB) 2005-0101710 (SB)
		101-030-013	2006-0036407 (SB) 2005-0101710 (SB)
		101-030-014	2006-0036407 (SB) 2005-0101710 (SB)
		101-060-002	2006-0036407 (SB) 2005-0101710 (SB)
		129-170-012 129-170-015	2005-0101710 (SB) 2005-0101710 (SB)
Chevron U.S.A. Inc.		101-070-002	1996-032224 (SB)
		101-060-054	1998-027011 (SB)
		101-060-057	1998-027012 (SB)
Chevron U.S.A. Inc.		101-040-018	2005-101710 (SB)
		101-060-053	1984-010866 (SB)
Cisneros, Juan		129-010-035	2006-016298 (SB)

December 21, 2007

Exhibit 1A
Page 28 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Clancy, Bette L.	Clancy, Tammra Clancy, Robert Madden, Keith	090-321-014	2006-020981 (SLO)
Clancy, Robert	Clancy, Bette L. Clancy, Tammra Madden, Keith	090-321-014	2006-020981 (SLO)
Clancy, Tammra	Clancy, Bette L. Clancy, Robert Madden, Keith	090-321-014	2006-020981 (SLO)
Clarence Minetti Partnership	Minetti & Maretti Ranch Company	092-041-009 092-041-010 113-020-016 113-020-018 113-020-019	1975-14282 (SLO) 1989-57797 (SLO) 1975-014596 (SB) 1975-014596 (SB) 1975-014596 (SB)
Clendenen, James A.		129-210-001	2006-0000639 (SB)
Clyatt, Rose Marie	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Souza, Ronald Karleskint Family Trust Dated 1992 Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Souza, Lucille Gabel, Mary Jo	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)
Coastal Phoenix, Inc.		075-011-023 075-011-028	Unable to locate Unable to locate
Cochran, Burt	Cochran, Carmonde	075-221-006	2000-034311 (SLO)
Cochran, Carmonde	Cochran, Burt	075-221-006	2000-034311 (SLO)
Cole, Oliver, Trustee		075-203-023	Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Colli, Dean, Trustee		128-100-015 128-100-019 126-100-016	2003-171682 (SB) 2003-171682 (SB) 2003-171682 (SB)
ConocoPhillips, Successor by Merger to the Interests of the Phillips Petroleum Company, Conoco Inc. and Tosco Corporation		128-098-005 092-411-005	2002-032600 (SB) 2004-I-002946 (SLO)
ConocoPhillips, Successor by Merger to the Interests of the Phillips Petroleum Company, Conoco Inc. and Tosco Corporation		091-192-034 092-391-020 092-391-021 092-391-025 092-391-034 092-401-005 092-401-011 092-401-012 092-401-013 101-070-021 128-098-005 (undivided 50% interest only) 091-141-062	2004-I-002946 (SLO) 2004-I-002946 (SLO) 2004-I-002946 (SLO) 2004-I-00066 (SLO) 2004-I-002946 (SLO) 2004-I-002946 (SLO) 2004-I-002946 (SLO) 2004-I-00066 (SLO) 2004-I-002946 (SLO) Unable to locate 2002-032600 (SB) Unable to locate
Conventual Franciscans, Inc.		091-053-031 091-053-032	1994-I-000705 (SLO) 1994-I-000706 (SLO)
Conway, Bruce E.		101-030-019	2002-0042092 (SB)
Conway, Bruce E.		101-030-006	1981-7668 (SB)
Cooper, Gail K.	Cooper, Howard L.	129-240-003	1975-019476 (SB)
Cooper, Howard L.	Cooper, Gail K.	129-240-003	1975-019476 (SB)
Cooper, Janice F.	Wineman, Dean A.	128-092-002 128-092-001	2003-071627 (SB) 2003-071627 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Cooper, Janice F. Trustees of the Frances Cooper Trust		090-181-001 090-051-040 090-211-001	Unable to locate Unable to locate Unable to locate
Cossa Family Ltd. Partnership, a limited partnership	Bowser, Marian Bowser Investments	090-401-031	72691 (SLO)
Cossa Family Ltd. Partnership, a limited partnership		090-401-002	1995-030640 (SB)
Cossa Family Ltd. Partnership, a limited partnership	Bowser, Marian Bowser Investments	090-401-011	1993-036121 (SLO) 1995-019846 (SLO)
Cossa Family Ltd. Partnership, a limited partnership	Bowser, Marian Bowser Investments	090-401-033	1995-019848 (SLO) 2004-R-078219 (SLO) 1993-R-036121 (SLO) 2005-R-057759 (SLO) 1996-R-009398 (SLO)
Cossa Family Ltd. Partnership, a limited partnership	Bowser, Marian Bowser Investments	090-401-032 090-401-034	2004-R-078219 (SLO) 1993-R-036121 (SLO) 2005-R-057759 (SLO) 1996-R-009398 (SLO) 1996-R-003069 (SLO) 2004-R-078219 (SLO) 1993-R-036121 (SLO) 1996-R-009398 (SLO) 2005-R-057759 (SLO) 1996-R-009398 (SLO)
Cossa, Anthony W., Trustee, T.A. Cossa Family Trust		117-020-077	1982-034815 (SB)
Costa, May		101-050-005 101-050-046	2002-046313 (SB) 1998-094663 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Cotti, Nicola	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Cotti, Nicola	Moretti, Peter M. Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Cotti, Rossella	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Cotti, Rossella	Moretti, Peter M. Cotti, Nicola Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate
Cottonwood Canyon Vineyard		129-020-012	95-068430 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Cox, Charles E.	Rikalo, May J. Coy, Jean Cox, Richard	129-010-019	2000-0050936 (SB)
Cox, Richard	Rikalo, May J. Coy, Jean Cox, Charles E.	129-010-019	2000-0050936 (SB)
Coy, Billy	Rikalo, May J. Coy, Jean Cox, Charles E. Cox, Richard	129-010-019	2000-0050936 (SB)
Coy, Jean	Rikalo, May J. Coy, Billy Cox, Charles E. Cox, Richard	129-010-019	2000-0050936 (SB)
Craig, Kenneth M., Family Trust		091-181-052	2007-008206 (SLO)
Craig, Kenneth M., Family Trust		091-181-031	1999-038382 (SLO)
Craig, Kenneth M., Family Trust		075-232-032	2000-I-002218 (SLO)
Credit Suisse Leasing 92A, L.P.		Not provided	
Crettenand Moretti, Isabella	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Favre Moretti, Christina	113-080-006	1991-009647 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Crettenand Moretti, Isabella	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Favre Moretti, Christina	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate
Criswell, Donald R., individually and as Trustee of the Criswell Trust dated 5-3-96	Criswell, Jane W., individually and as trustee	091-311-020	1996-025421 (SLO)
Criswell, Jane W. individually and as Trustee of the Criswell Trust dated 5-3-96	Criswell, Donald R., individually and as trustee	091-311-020	1996-025421 (SLO)
Cullivan, Janet	Sutti, Emilio Edward, Trust	113-210-008 113-210-014 113-210-016 113-240-014	1998-054348 (SB) 1998-054348 (SB) 1998-054348 (SB) 1998-054348 (SB)
Cullivan, Janet	Sutti, Emilio Edward, Trust	111-240-029	1998-028024 (SB)
Curtiss-Johnson Properties, LLC		092-221-004 092-221-005 092-221-006 092-221-007	2000-024434 (SLO) 2000-024434 (SLO) 2000-024434 (SLO) 2000-024434 (SLO)
Cypress Ridge Golf Course, LLC		075-351-022	2003-034314 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Cypress Ridge Golf Course, LLC		075-400-001	2000-044200 (SLO)
		075-400-002	2000-044200 (SLO)
		075-400-003	2000-044200 (SLO)
		075-400-004	2000-044200 (SLO)
		075-400-005	2000-044200 (SLO)
		075-400-006	2000-044200 (SLO)
		075-400-007	2000-044200 (SLO)
		075-400-008	2000-044200 (SLO)
		075-400-009	2000-044200 (SLO)
		075-400-010	2000-044200 (SLO)
		075-400-011	2000-044200 (SLO)
		075-400-012	2000-044200 (SLO)
		075-400-013	2000-044200 (SLO)
		075-400-014	2000-044200 (SLO)
		075-401-001	2000-044200 (SLO)
		075-401-005	2000-044200 (SLO)
		075-402-001	2000-044200 (SLO)
		075-402-002	2000-044200 (SLO)
		075-403-035	2000-044200 (SLO)
		075-403-037	2000-044200 (SLO)
		075-353-024	2000-044200 (SLO)
		075-351-028	2000-044200 (SLO)
		075-353-011	2000-044200 (SLO)
		075-353-012	2000-044200 (SLO)
		075-353-013	2000-044200 (SLO)
		075-353-014	2000-044200 (SLO)
		075-353-015	2000-044200 (SLO)
		075-353-016	2000-044200 (SLO)
		075-353-017	2000-044200 (SLO)
		075-353-018	2000-044200 (SLO)
075-353-019	2000-044200 (SLO)		
075-353-020	2000-044200 (SLO)		
075-353-021	2000-044200 (SLO)		
075-353-022	2000-044200 (SLO)		
075-353-023	2000-044200 (SLO)		

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Cypress Ridge, L.P.		075-351-028	2003-045836 (SLO)
Dahmen, Doug	Bove, Robert A.	129-240-032	2003-0086511 (SB)
Dale, Marcia J., individually and as Trustee of the Marcia Dale Trust		091-081-023 091-240-041	2001-045739 (SLO) 2001-045737 (SLO)
Dalton, George	Dalton, Iva	091-351-007	2005-091036 (SLO)
Dalton, Iva	Dalton, George	091-351-007	2005-091036 (SLO)
Dana Properties	Dana, W.G., Trust Dana, Earl, Trust Dana, Ernest, Trust Martin, Gwendolyn Marsalek, Velma Ruiz, Eileen and Doty, Maurice, Trustees	090-051-012 090-051-013 090-111-003 090-151-005 090-151-009 090-151-013	1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO)
Dana Properties	various	090-031-003 090-031-004 092-191-001	50412 (SLO) 50412 (SLO) 1997-R-063108 (SLO)
Dana, Earl, Trust	Dana Properties Dana, W.G., Trust Dana, Ernest, Trust Martin, Gwendolyn Marsalek, Velma Ruiz, Eileen and Doty, Maurice, Trustees	090-051-012 090-051-013 090-111-003 090-151-005 090-151-009 090-151-013	1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO)
Dana, Earl, Trust	various	090-031-003 090-031-004 092-191-001	50412 (SLO) 50412 (SLO) 1997-R-063108 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Dana, Ernest, Trust	Dana Properties Dana, W.G., Trust Dana, Earl, Trust Martin, Gwendolyn Marsalek, Velma Ruiz, Eileen and Doty, Maurice, Trustees	090-051-012 090-051-013 090-111-003 090-151-005 090-151-009 090-151-013	1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO)
Dana, Ernest, Trust	various	090-031-003 090-031-004 092-191-001	50412 (SLO) 50412 (SLO) 1997-R-063108 (SLO)
Dana, W.G., Trust	Dana Properties Dana, Earl, Trust Dana, Ernest, Trust Martin, Gwendolyn Marsalek, Velma Ruiz, Eileen and Doty, Maurice, Trustees	090-051-012 090-051-013 090-111-003 090-151-005 090-151-009 090-151-013	1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO)
Dana, W.G., Trust	Dana Properties Dana, Earl, Trust Dana, Ernest, Trust Martin, Gwendolyn Marsalek, Velma Ruiz, Eileen and Doty, Maurice, Trustees	090-031-003 090-031-004 092-191-001	50412 (SLO) 50412 (SLO) 1997-R-063108 (SLO)
Daniels, Dennis		Not provided	
Daniels, Shirley		Not provided	
Daniels, Mark E.		Not provided	
DeBernardi Family	DeBernardi, Edward DeBernardi, Robert Rose, Helen	128-094-012 128-094-045 128-094-047	2006-074155 (SB) 2005-009460 (SB) 2001-089893 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
DeBernardi, Edward	DeBernardi Family DeBernardi, Robert Rose, Helen	128-094-042	2003-029362 (SB) 2005-0009460 (SB)
		128-094-048	2003-029362 (SB) 2005-0009460 (SB)
DeBernardi, Edward	DeBernardi, Robert DeBernardi Family Rose, Helen	128-094-012	2006-074155 (SB)
		128-094-045	2005-009460 (SB)
		128-094-047	2001-089893 (SB)
DeBernardi, Robert	DeBernardi Family DeBernardi, Edward	128-094-042	2003-029362 (SB) 2005-0009460 (SB)
		128-094-048	2003-029362 (SB) 2005-0009460 (SB)
DeBernardi, Robert	DeBernardi Family DeBernardi, Edward Rose, Helen	128-094-012	2006-074155 (SB)
		128-094-045	2005-009460 (SB)
		128-094-047	2001-089893 (SB)
			2006-074155 (SB)
Dechert, Dennis L.	Dechert, Louise Gr	075-101-002	35565 (SLO)
Dechert, Louise Gr	Dechert, Dennis L.	075-101-002	35565 (SLO)
Deeds, John		091-181-050	2001-R-039058 (SLO)
DeGasparis, Ernest, Trustee	Grisinger, Elaine, as Successor Trustee	115-020-011	Unable to locate
Degroot, Henri		075-041-004	1998-083660 (SLO)
Deputy, Kathryn J.	Deputy, William J.	101-070-029	1990-023698 (SB)
Deputy, William J.	Deputy, Kathryn J.	101-070-029	1990-023698 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Deutsche Bank National Trust Company (formerly known as Bankers Trust Company of California, N.A.), as successor Trustee under Declaration of Trust of Eugene Rene LeRoy dated October 30, 1981, as amended March 9, 1984 and clarified by Agreement dated May 3, 1984		113-060-001 (undivided 50% interest only)	1994-019658 (SB)
		113-060-002 (undivided 50% interest only)	1994-019658 (SB)
		113-060-003 (undivided 50% interest only)	1994-019658 (SB)
		113-060-004 (undivided 50% interest only)	1994-019658 (SB)
		113-060-005 (undivided 50% interest only)	1994-019658 (SB)
		113-060-006 (undivided 50% interest only)	1994-019658 (SB)
		113-060-007 (undivided 50% interest only)	1994-019658 (SB)
		113-060-008 (undivided 50% interest only)	1994-019658 (SB)
		113-060-009 (undivided 50% interest only)	1994-019658 (SB)
		113-060-010 (undivided 50% interest only)	1994-019658 (SB)
		December 21, 2007	
		113-160-001 (undivided 50%	

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Deutsche Bank National Trust Company (formerly known as Bankers Trust Company of California, N.A.), as successor Trustee under Declaration of Trust of Eugene Rene LeRoy dated October 30, 1981, as amended March 9, 1984 and clarified by Agreement dated May 3, 1984		092-051-007 092-051-010 113-160-001 (undivided 50% interest only) 113-160-002 (undivided 50% interest only) 113-160-003 (undivided 50% interest only)	2006-024587 (SLO) 2006-R-024588 (SLO) 1994-019658 (SB) 94-019658 94-019658
Deutsche Bank National Trust Company (formerly known as Bankers Trust Company of California, N.A.), as successor Trustee under Declaration of Trust of Eugene Rene LeRoy dated October 30, 1981, as amended March 9, 1984 and clarified by Agreement dated May 3, 1984		113-020-007 (undivided 50% interest only) 113-020-008 (undivided 50% interest only) 113-170-001 (undivided 50% interest only) 113-170-002 (undivided 50% interest only)	1994-019658 (SB) 1994-019658 (SB) 1994-019658 (SB) 1994-019658 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Deutsche Bank National Trust Company (formerly known as Bankers Trust Company of California, N.A.), as successor Trustee under Declaration of Trust of Eugene Rene LeRoy dated October 30, 1981, as amended March 9, 1984 and clarified by Agreement dated May 3, 1984		092-021-013 092-031-007 092-051-012 092-061-008	1994-R-014922 (SLO) 1994-R-014922 (SLO) 1994-R-014922 (SLO) 2006-R-024590 (SLO)
Deutsche Bank National Trust Company (formerly known as Bankers Trust Company of California, N.A.), as successor Trustee under Declaration of Trust of Eugene Rene LeRoy dated October 30, 1981, as amended March 9, 1984 and clarified by Agreement dated May 3, 1984		113-020-001 113-120-008 112-030-003	2002-0064280 (SB) 2002-0064280 (SB) 2002-0064280 (SB)
Deutsche Bank National Trust Company (formerly known as Bankers Trust Company of California, N.A.), as successor Trustee under Declaration of Trust of Eugene Rene LeRoy dated October 30, 1981, as amended March 9, 1984 and clarified by Agreement dated May 3, 1984		113-040-015 113-050-037 113-050-038 113-050-049 113-050-050 113-050-062 113-050-063 113-110-002	1994-019654 (SB) 1994-019654 (SB) 1994-019654 (SB) 1994-019654 (SB) 1994-019654 (SB) 1994-019654 (SB) 1995-010550 (SB) 1994-019657 (SB)
Diamond, Rose Mary	Diamond, Victor A.	129-020-008 129-020-009	1989-031848 (SB) 2004-005533 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Diamond, Victor A.	Diamond, Rose Mary	129-020-008 129-020-009	1989-031848 (SB) 2004-005533 (SB)
Diani, A.J. Family Trust		117-191-012	2005-0105201 (SB)
Dias, Mabel L.		092-211-003 092-211-010	1981-52366 (SLO) 1981-53950 (SLO)
Dierberg Four Ltd. Ptnsp.		129-180-034	1996-032648 (SB)
Dierberg Four Ltd. Ptnsp.		129-180-023	1997-027733 (SB)
DMA Investments Ltd Ptp		091-131-004	1998-015000 (SLO)
Donner, Marianne, Donne, Trustee of the Tunnell Trust	Tunnell, Arthur Tunnell Ranch Reed, William Jr., Trustee of the E. Tunnell Trust Tunnell, Cecilia Marsalek, Joseph F.	129-100-019	2007-008204 (SB)
Donner, Marianne, Donne, Trustee of the Tunnell Trust	various	129-100-014 129-100-021	2006-0063723 (SB) 2006-0063723 (SB)
Donovan, Danny	Donovan, Marnie Donovan, Kathryn C. Donovan, John P.	129-260-030	2004-075986 (SB)
Donovan, Danny	Donovan, Marnie Donovan, Kathryn C. Donovan, John P.	129-250-004	1999-073812 (SB)
Donovan, John P.	Donovan, Marnie Donovan, Kathryn C. Donovan, Danny	129-260-030	2004-075986 (SB)
Donovan, John P.	Donovan, Marnie Donovan, Kathryn C. Donovan, Danny	129-250-004	1999-073812 (SB)
Donovan, John Jr.	Donovan, Tiffany	129-260-028	2005-078528 (SB)
Donovan, John Jr.	Donovan, Tiffany	129-260-027	1998-086464 (SB)
Donovan, Kathryn C.	Donovan, Danny Donovan, Marnie	129-260-030	2004-075986 (SB)

December 21, 2007

Exhibit 1A
Page 43 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
	Donovan, John P.		
Donovan, Kathryn C.	Donovan, Danny Donovan, Marnie Donovan, John P.	129-250-004	1999-073812 (SB)
Donovan, Kathryn W.		113-070-012 113-070-013 113-100-003 113-100-004	2003-025318 (SB) 2003-025318 (SB) 2003-025318 (SB) 2003-025318 (SB)
Donovan, Kathryn W.		113-070-007 113-070-008 113-070-009	1962-006961 (SB) 1962-006961 (SB) 1962-006961 (SB)
Donovan, Kathryn W.		113-100-001	1996-060610 (SB)
Donovan, Marnie	Donovan, Danny Donovan, Kathryn C. Donovan, John P.	129-260-030	2004-075986 (SB)
Donovan, Marnie	Donovan, Danny Donovan, Kathryn C. Donovan, John P.	129-250-004	1999-073812 (SB)
Donovan, Michael		129-260-009	2005-078528 (SB)
Donovan, Tiffany	Donovan, John Jr.	129-260-028	2005-078528 (SB)
Donovan, Tiffany	Donovan, John Jr.	129-260-027	1998-086464 (SB)
Donovan, Virginia, Trust		117-030-021 117-030-060	2003-150209 (SB) 2003-150209 (SB)
Dore, LP	Wickenden Family Trust	101-050-017 101-050-016	2006-0054837 (SB) 2006-0054838 (SB)
Dore, LP	Wickenden Family Trust	133-070-030 133-070-031	2006-054839 (SB) Unable to locate
Dorris, Heidi Ann, Trustee		117-020-066 117-160-027 117-160-039	1985-017098 (SB) 1985-017098 (SB) 1985-017098 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Dragna, James Joseph	Campobasso, Laura A.	101-070-050	2000-0060801 (SB)
Duke, David	Duke, Janet	Not provided	
Duke, Janet	Duke, David	Not provided	
Duna Vista Mobile Home Park, LLC		062-151-002	19601 (SLO)
Duncan Group	Rio Vista Associates	113-030-055	2002-015812 (SB)
Dune Lakes, Ltd.		075-281-016	1977-R-C18040 (SLO)
Dune Lakes, Ltd.		075-121-002 075-121-011 075-141-001 075-141-002 075-261-001 075-261-003 075-261-005 075-281-001 075-281-037	1936-R-C03046 (SLO) 1997-I-00008 (SLO) 1936-R-C03046 (SLO) 1936-R-C03046 (SLO) 1984-I-000758 (SLO) 1984-I-000759 (SLO) 1997-I-00044 (SLO) 1955-09422 (SLO) 1993-I-001840 (SLO)
Durley, UNKNOWN FIRST NAME	Durley, Odette Durley, Katherine McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	117-030-061	2007-0037815 (SB)
Durley, Katherine P., individually and as Trustee of the Annie E. Preisker Life Estate	Durley, Odette Durley, Katherine McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	090-331-005 090-331-008 090-341-019 117-020-045 117-020-064 117-030-061	1974-09502 (SLO) 1974-09502 (SLO) 1974-09502 (SLO) 1962-022220 (SB) 1962-022220 (SB) 2007-0037815 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Durley, Katherine P., individually and as Trustee of the Annie E. Preisker Life Estate	Durley, Odette Durley, Katherine McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	117-170-050	2004-086837 (SB)
Durley, Odette	Durley, First Name Unknown Durley, Katherine McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	090-331-005 090-331-008 090-341-019 117-020-045 117-020-064	1974-09502 (SLO) 1974-09502 (SLO) 1974-09502 (SLO) 1962-022220 (SB) 1962-022220 (SB)
Durley, Odette	Durley, First Name Unknown Durley, Katherine McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	117-170-050	2004-086837 (SB)
Durley, Odette	Durley, First Name Unknown Durley, Katherine McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	117-030-061	2007-0037815 (SB)
Durocher, Francis		129-240-013	2006-045217 (SB)
Dutra Trust A & B		129-210-002 129-110-019	2001-0062971 (SB) 2001-0062970 (SB)
Dutra, Maria C.	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn	092-211-006	2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Exhibit 1A
Page 46 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-007	2005-048328 (SLO) 1992-37112 (SLO)
E & M Limited Partnership		075-181-032 075-181-035 075-181-036	2007-001757 (SLO) 2007-001757 (SLO) 2007-001757 (SLO) 1993-012584 (SLO)
E & M Limited Partnership		075-051-007 075-181-003	1993-012584 (SLO) 1993-012584 (SLO)
Eames, Donald, Trustee	Eames, Sharon, Trustee	128-100-011	2000-018353 (SB)
Eames, Sharon, Trustee	Eames, Donald, Trustee	128-100-011	2000-018353 (SB)
East Valley Farms Mutual Water Company		129-240-018	23677 (SB)
Easton, Linda	Acquistapace, Leo Acquistapace, Carolyn	128-092-003 133-070-025	1996-019643 (SB) 1995-037341 (SB)
Ed & Ida Simas LLC	Simas, Robert E. Hicks, Carolyn	128-101-015 128-101-016	2001-0001439 (SB) 2001-0001439 (SB)

December 21, 2007

Exhibit 1A
Page 47 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		128-101-017 092-061-005 092-211-002 092-211-011 092-371-001	2001-0001439 (SB) 2000-075709 (SLO) 2000-075709 (SLO) 2000-075709 (SLO) 2000-075709 (SLO)
Ed & Ida Simas LLC	Simas, Robert E. Hicks, Carolyn	117-170-022 117-170-023	2003-018943 (SB) 2003-018943 (SB)
Edwards, Doug		128-100-033	2002-0084952 (SB)
El Capitan Investments		117-490-051	1986-088497 (SB)
Ealand, Jason W.	Ealand, Tara A.	101-070-063	2005-0021694 (SB)
Ealand, Tara A.	Ealand, Jason W.	101-070-063	2005-0021694 (SB)
Eckles Lorenz, Valerie	Sarad, John Gabbert, Sean, Administrator for the Estate of John S. Gabbert Gabbert, Steve Gabbert, Thomas Minnies, Nora	101-010-005 101-020-006	2006-0012214 (SB) 2006-0012214 (SB)
Elias, Cynthia	Elias, Wayne	129-240-016	2007-0008218 (SB)
Elias, Wayne	Elias, Cynthia	129-240-016	2007-0008218 (SB)
Elks Recreation of Santa Maria, Elks Lodge #1538		107-240-005 107-240-006	1995-017033 (SB) 1995-017033 (SB)
Enos Ranches, LLC		090-401-010	1998-070279 (SLO)
Enos Ranches, LLC		128-078-004 128-078-005 128-078-013	1995-012886 (SB) 1995-012886 (SB) Unable to locate
Erwin, Morris H. and Shirley H., Trustees of the Morris H. Erwin Family Trust Dated December 22, 1987		091-121-068	1998-006778 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Espinola, Robert J.	Burke, Ronald B. Burke, Mary	129-020-005	1991-079104 (SB)
Farao, Kerry	Manderscheid, Marcia Manderscheid, Richard T. Montgomery, Jody Manderscheid, Loren Manderscheid, Wendy	075-032-007	2002-064563 (SLO) 1999-R-028575 (SLO) 2003-027399 (SLO) 2000-R-019501 (SLO) 2004-019816 (SLO) 2000-R-028723 (SLO) 2000-R-012008 (SLO) 2001-R-038295 (SLO) 2000-R-027364 (SLO) 2004-019816 (SLO) 2004-R-017088 (SLO) 1994-R-069488 (SLO)
Favre Moretti, Christina	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella	113-080-006	1991-009647 (SB)

December 21, 2007

Exhibit 1A
Page 49 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Favre Moretti, Christina	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate
Ferini & Associates		111-020-011 111-030-016	1991-082227 (SB) 1991-082227 (SB)
Ferini Ranch, Inc.		113-080-023	1953-000116 (SB)
Ferini, Andre	Lenger, Jeanette F. Wineman, Ernest, Jr. Wineman, Chris	113-040-011	2007-0021952 (SB)
Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92	Ferrari, Roy Ferrari, Carol Jones, Jeanette F.	113-020-005	2005-0122629 (SB)
Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92	Ferrari, Roy Ferrari, Carol Jones, Jeanette F.	092-031-011	1993-019672 (SLO)
Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92	Ferrari, Roy Ferrari, Carol Jones, Jeanette F.	092-031-042	Unable to locate
Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92	Ferrari, Roy Ferrari, Carol Jones, Jeanette F.	101-050-031	1992-054487 (SB)

December 21, 2007

Exhibit 1A
Page 50 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Ferrari, Carol	Ferrari, Roy Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F.	092-031-011	1993-019672 (SLO)
Ferrari, Carol	Ferrari, Roy Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F.	092-031-042	Unable to locate
Ferrari, Carol	Ferrari, Roy Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F.	101-050-031	1992-054487 (SB)
Ferrari, Carol	Ferrari, Roy Morganti, June Morganti, Ellen W.	113-020-005	2005-0122629 (SB)
Ferrari, Glenda Rae	Ferrari, Ronald Joseph	129-240-021	2005-0081836 (SB)
Ferrari, Oscar, Trust		101-050-032	2002-110323 (SB)
Ferrari, Ronald Joseph	Ferrari, Glenda Rae	129-240-021	2005-081836 (SB)
Ferrari, Roy	Ferrari, Carol Morganti, June Morganti, Ellen W.	113-020-005	2005-0122629 (SB)
Ferrari, Roy	Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F.	092-031-011	1993-019672 (SLO)

December 21, 2007

Exhibit 1A
Page 51 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Ferrari, Roy	Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F.	092-031-042 101-050-031	Unable to locate 1992-054487 (SB)
Fesler, Leta Mae, Individually and as Trustee of Family Trust		129-260-004	2000-004113 (SB)
First Assembly of God		109-200-020	1965-031174 (SB)
First Christian Church of Santa Maria		128-066-050	Unable to locate
Five Cø Ranch, Inc.		117-020-069 117-020-078	2002-0059104 (SB) 2002-0059104 (SB)
Fleming, Cindy	Ruffoni, Jacqueline Ruffoni, Michael Ruffoni, Todd	111-240-018 111-240-027	2003-079323 (SB) 2003-079323 (SB)
Fletcher, Lon	Fletcher, Ruth	129-240-012	1992-063520 (SB)
Fletcher, Ruth	Fletcher, Lon	129-240-012	1992-063520 (SB)
Flood Ranch Company		133-010-014 101-050-008 129-220-049 133-010-015 133-040-011 133-070-027	1980-38957 (SB) 1980-38957 (SB) 1980-38957 (SB) 1980-38957 (SB) 1980-38957 (SB) 1980-08957 (SB)
Foat, Steven J.		075-291-024	1987-R-002328 (SLO)
Ford, Lois A.		090-281-014	1999-012889 (SLO)
Fossaceca, Bethleen	Fossaceca, Samuel A.	075-241-013	1997-020249 (SLO)
Fossaceca, Samuel A.	Fossaceca, Bethleen	075-241-013	1997-020249 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Fox, Homer J. and Dorlace R., Trustees of the Homer J. Fox and Dorlace R. Fox Revocable Living Trust dated 9-21-1999		090-341-039	2001-050751 (SLO)
Franklin, Donna M.	Abel, Marilee Franklin, Douglas Franklin, Paul Giacomini Ranch Weldon, Olga Weldon, Richard Weldon, Steve Weldon, Tony	117-121-026	Unable to locate
Franklin, Douglas	Abel, Marilee Franklin, Donna M. Franklin, Paul Giacomini Ranch Weldon, Olga Weldon, Richard Weldon, Steve Weldon, Tony	117-121-026	Unable to locate
Franklin, Paul	Abel, Marilee Franklin, Donna M. Franklin, Douglas Giacomini Ranch Weldon, Olga Weldon, Richard Weldon, Steve Weldon, Tony	117-121-026	Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Fratello, Frances, Trustee of the Fratello Family Trust	Wilson, Susan M. Bettencourt, Catherine Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-079	2005-032962 (SLO)
Fratello, Frances, Trustee of the Fratello Family Trust	Wilson, Susan M. Bettencourt, Catherine Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)
Fratello, Frances, Trustee of the Fratello Family Trust	Wilson, Susan M. Bettencourt, Catherine Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO) 2004-R-096188 (SLO)
Fratello, Frances, Trustee of the Fratello Family Trust	Wilson, Susan M. Bettencourt, Catherine Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-064	2005-016471 (SLO) 2004-R-096188 (SLO)
Frederick, Jacqueline	Frederick, W. Gary	090-031-026	2005-007861 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Frederick, W. Gary	Frederick, Jacqueline	090-031-026	2005-007861 (SLO)
Friedl, Marianne		113-270-017	2002-080674 (SB)
Friedl, Marianne		101-030-004	1999-096583 (SB)
Fugate Trust		090-051-034	266 (SLO)
Fukuhara Farms, Inc.		075-031-016	1956-15614 (SLO)
Fulton, Robert E. Jr.		101-300-001 101-300-002 101-300-003 101-300-004	2004-065628 (SB) 2004-065628 (SB) 2004-065628 (SB) 2004-065628 (SB)
Furber, Scott	Furber, Victoria	129-151-050	2007-0044381 (SB)
Furber, Victoria	Furber, Scott	129-151-050	2007-0044381 (SB)
G Manni Ranch, LLC		113-120-024	2002-0126656 (SB)
Gabbert, Sean, Administrator for the Estate of John S. Gabbert	Sarad, John Eckles Lorenz, Valerie Gabbert, Steve Gabbert, Thomas Minnies, Nora	101-010-005 101-020-006	2006-0012214 (SB) 2006-0012214 (SB)
Gabbert, Steve	Sarad, John Eckles Lorenz, Valerie Gabbert, Sean, Administrator for the Estate of John S. Gabbert Gabbert, Thomas Minnies, Nora	101-010-005 101-020-006	2006-0012214 (SB) 2006-0012214 (SB)
Gabbert, Thomas	Sarad, John Eckles Lorenz, Valerie Gabbert, Steve Gabbert, Sean, Administrator for the Estate of John S. Gabbert Minnies, Nora	101-010-005 101-020-006	2006-0012214 (SB) 2006-0012214 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Gabel, Mary Jo	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Souza, Lucille Karleskint Family Trust Dated 1992 Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Souza, Ronald	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)
Gallo, Dana A.		128-100-009	1994-012036 (SB)
Gamble, Ruthanne	Maretti, Mark Maretti, R. Charles	117-240-028	2007-0048952 (SB)
Gamble, Ruthanne	Maretti, Mark Maretti, R. Charles	113-030-001 117-330-018	1995-006618 (SB) Unable to locate
Gar Bar, Inc.		075-031-002 075-031-003 075-031-006	1993-056289 (SLO) 1993-056289 (SLO) 1993-056289 (SLO)
Gar Bar, Inc.		075-071-004 075-071-005 075-071-006 075-071-007 075-071-008 075-071-009 075-071-010 075-071-011 075-071-012 075-071-013 075-071-014	1993-056289 (SLO) 1993-056289 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		075-071-015 075-071-016 075-071-017 075-141-003 091-053-023 091-053-024 091-053-025	2000-I-000732 (SLO) 2000-I-000732 (SLO) 2000-I-000732 (SLO) 1990-002595 (SLO) 2000-I-000732 (SLO) 1994-I-000697 (SLO) 1994-I-000698 (SLO) 1994-I-000699 (SLO)
Garcia, Delfina	Garcia, Jesse	101-050-037	2002-0036887 (SB)
Garcia, Jesse	Garcia, Delfina	101-050-037	2002-0036887 (SB)
Gardner, James		129-100-035	1992-094556 (SB)
Gardner, James and Cleta Trust		129-100-034	1992-094556 (SB)
Garvin, Jack		129-010-022	2002-094630 (SB)
Gascho, Gale E. and Della, Trustees of the Gascho Family Trust		091-011-055	2001-039270 (SLO)
George, Wallace and Audrey E., Trustees		077-223-043 077-181-048 090-131-002 090-141-003 062-123-031 077-201-013 077-204-028	77533 (SLO) Unable to locate Unable to locate Unable to locate 1996-066268 (SLO) 1998-084745 (SLO) Unable to locate
Giacomini Ranch	Abel, Marilee Franklin, Donna M. Franklin, Douglas Franklin, Paul Weldon, Olga Weldon, Richard Weldon, Steve Weldon, Tony	117-121-026	Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Gibbons, Christina	Serpa Ranch Machado, Manuel Dutra, Maria C. Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Gilder, Dolores	Gilder, James, Trust Lanini, Eloise Lanini, Roland Ware, Roxanne	091-201-054 091-201-055	2003-144070 (SLO) 1996-046106 (SLO)
Gilder, James, individually and as trustee	Gilder, Dolores Lanini, Eloise Lanini, Roland Ware, Roxanne	091-201-054 091-201-055	2003-144070 (SLO) 1996-046106 (SLO)
Gin, Marvin S.	Gin, May Y.	090-281-013	2006-010044 (SLO)
Gin, May Y.	Gin, Marvin S.	090-281-013	2006-010044 (SLO)
Goldberg, Joseph S.		092-371-019 092-371-013	Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		117-020-074	2003-0151286 (SB)
Golden State Water Company (formerly appearing as "Southern California Water Company")		092-111-023	1984-I-005637 (SLO)
		092-111-025	1984-I-005638 (SLO)
		092-111-026	1984-I-005639 (SLO)
		092-473-008	1995-I-000134 (SLO)
		092-561-034	1988-R-03351 (SLO)
		101-010-012	78-37939 (SB)
		103-021-008	78-37929 (SB)
		103-041-002	78-37929 (SB)
		103-164-009	78-37929 (SB)
		103-200-045	78-37929 (SB)
		103-231-017	78-37929 (SB)
		103-311-009	78-37929 (SB)
		103-361-012	78-37929 (SB)
		103-660-065	78-37929 (SB)
		107-110-029	78-37929 (SB)
		109-153-017	Unable to locate
		109-153-018	Unable to locate
		109-182-010	Unable to locate
		111-153-001	1978-037929 (SB)
		111-220-016	1978-037929 (SB)
	129-201-033	1978-037929 (SB)	
Goodchild Vineyard, LLP	Lewellen, Royce, Individually and as Trustee of the Royce Lewellen Living Trust	129-021-018	1999-060260 (SB)
		129-210-038	2000-0022830 (SB)
Goodchild, Helen	Stubblefield, Pauline T. Toy, Yolanda	105-380-033	2004-123514 (SB)
Gordon, Bruce N.	Gordon, Julie Ann	129-170-030	2003-139578 (SB)
Gordon, Julie Ann	Gordon, Bruce N.	129-170-030	2003-139578 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Gowing, Rebecca		101-070-061 101-070-057 101-070-058	2005-0118692 (SB) 2005-0118692 (SB) 2005-0118692 (SB)
Gowing, Rebecca		101-070-060	Unable to locate
Green Canyon LLC		092-031-002 113-100-026	1998-083014 (SLO) Unable to locate
Green Canyon LLC		113-100-015	1997-014753 (SB)
Greenheart Farms, Inc.		075-351-031 075-351-033 900-000-190	2000-045314 (SLO) 2000-045314 (SLO) Unable to locate
Greg Leonard Produce, Inc.		129-240-022	2005-000748 (SB)
Grisingher, Donald W.		090-171-023	1997-035028 (SLO)
Grisingher, Elaine, as Successor Trustee of the Donald Grisingher Trust	various	113-030-008 113-030-011 113-030-012 115-020-002 115-091-011 115-020-001	2004-055449 (SB) 2004-055449 (SB) 2004-055449 (SB) 2004-055449 (SB) 2004-055449 (SB) Unable to locate
Grisingher, Elaine, as Successor Trustee of the Donald Grisingher Trust	various	090-251-001 090-251-002	1997-035028 (SLO) 2001-053331 (SLO) 1997-035028 (SLO) 2001-053331 (SLO)
Grisingher, Elaine, as Successor Trustee of the Donald Grisingher Trust	various	092-153-032	1997-035028 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Grisinger, Elaine, as Successor Trustee of the Donald Grisingher Trust	various	092-153-047 092-153-048 092-171-023 113-030-008 113-030-011 113-030-012 115-020-002 115-020-011 115-091-011	Unable to locate 2006-I-002999 (SLO) 2001-053331 (SLO) 2006-I-002999 (SLO) 2000-I-000039 (SLO) Unable to locate 2004-055449 (SB) Unable to locate 2004-055449 (SB)
Grisinger, Elaine, as Successor Trustee of the Donald Grisingher Trust		113-050-012 113-050-013 113-050-046 113-050-047 113-050-054	2007-003082 (SB) 2007-003082 (SB) 2007-003082 (SB) 2007-003082 (SB) 2007-003082 (SB)
Gross, Erich		129-240-031	2003-0082051 (SB)
Grover Beach, City of		060-651-055	1997-061781 (SLO)
Grover Beach, City of		060-011-048 060-121-008 060-121-038 060-162-020 060-162-023 060-162-025 060-193-022 060-206-025 060-206-027 060-225-014 060-242-045 060-253-016 060-352-018	1989-011471 (SLO) 1987-I-002704 (SLO) 1987-I-002705 (SLO) 1997-058469 (SLO) 1997-006131 (SLO) 1997-006131 (SLO) 1995-029104 (SLO) 1996-021490 (SLO) 1996-026106 (SLO) 1998-039780 (SLO) 1990-015609 (SLO) 1984-068706 (SLO) 1997-034559 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		060-561-068 060-563-027 060-563-052 060-565-041 060-573-061	1994-I-002294 (SLO) 1997-I-000175 (SLO) 1997-I-000175 (SLO) 1998-I-000068 (SLO) 1998-I-000274 (SLO)
Gruber Family Trust		133-070-004	1998-002046 (SLO)
Guadalupe Cooling Company		092-021-046	1995-053339 (SLO)
Guadalupe, City of		115-101-011 115-113-001 115-092-012 115-101-001	2002-091077 (SB) 1993-016308 (SB) 1993-016308 (SB) 2001-0003339 (SB)
Guadalupe, City of		113-351-018 113-351-019	1985-048351 (SB) 1985-048351 (SB)
Guadalupe, City of		113-330-012	1983-044423 (SB)
Guadalupe, City of		113-030-021 113-030-051 113-330-068 115-010-019 115-020-007 115-051-007 115-061-016 115-081-005 115-081-014 115-083-002 115-101-016 115-152-013 115-180-026	1951-017397 (SB) 1999-085137 (SB) 1984-049242 (SB) 1997-068866 (SB) 1994-092833 (SB) 1994-092834 (SB) 1985-016777 (SB) Unable to locate 1967-013425 (SB) 1982-19154 (SB) 2001-0037044 (SB) 1966-035817 (SB) 1989-035732 (SB)
Guardian in Chief, Temple of the People		062-311-006 062-311-007	1988-77783 (SLO) 1988-77784 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		062-311-008 062-311-013 062-311-016 062-311-017 062-311-026 062-311-028 062-311-031 062-311-037	1988-77783 (SLO) 1988-77783 (SLO) 1988-77783 (SLO) 1988-77783 (SLO) 1988-77783 (SLO) 1988-77783 (SLO) 1988-77783 (SLO) 1988-77783 (SLO)
Guardian in Chief, Temple of the People		062-311-001	1999-007019 (SLO)
Guardian in Chief, Temple of the People		062-311-005 062-311-011 062-311-024 062-311-029 062-311-030 062-311-032 062-311-033 062-311-036 062-321-002 062-321-003 062-321-016 062-321-019 062-321-020 062-321-021 062-321-022 062-321-023 062-321-024 062-321-025 062-321-027	29251 (SLO) (SLO) 77784 (SLO) 52735 (SLO) (SLO) 77784 (SLO) 1988-3814 (SLO) (SLO) 77784 (SLO) (SLO) 77784 (SLO) (SLO) 77784 (SLO) 22716 (SLO) 1985-11142 (SLO) 2004-I-000553 (SLO) 22717 (SLO) Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		062-321-032 062-321-045 075-032-002 075-032-013 062-321-001	Unable to locate Unable to locate 22717 (SLO) 22717 (SLO) Unable to locate
Guggia Family Properties	Guggia, James	128-094-014 128-094-016 128-099-007	2004-0092457 (SB) 2004-0092457 (SB) 2004-0092457 (SB)
Guggia, James	Guggia Family Properties	128-094-014 128-094-016 128-099-007	2004-0092457 (SB) 2004-0092457 (SB) 2004-0092457 (SB)
Guiton, Glenda, owner and as ōHeirs of Harold E. Guitonō		061-161-010 061-161-011 061-161-013	Unable to locate Unable to locate Unable to locate
Gutierrez, Angelica	various	090-281-018	1999-085391 (SLO)
Gutierrez, Ramon		075-232-031	Unable to locate
Gutierrez, Victor	various	090-281-018	1999-085391 (SLO)
Halstead, Mary	Halstead, Stanley	Not provided	
Halstead, Stanley	Halstead, Mary	Not provided	
Hanson Aggregates West, Inc., successor by merger to Southern Pacific Milling Company		129-011-024 129-021-026	1992-079347 (SB) 1992-079347 (SB)
Hanson Aggregates West, Inc., successor by merger to Southern Pacific Milling Company		129-011-014 129-011-015	2001-0002246 (SB) 2001-0002246 (SB)
Hanson Aggregates West, Inc., successor by merger to Southern Pacific Milling Company		129-011-013	1981-3727 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Hanson Aggregates West, Inc., successor by merger to Southern Pacific Milling Company		129-011-016	1989-018298 (SB)
Hanson Aggregates West, Inc., successor by merger to Southern Pacific Milling Company		129-011-017	1989-018295 (SB)
Hanson Aggregates West, Inc., successor by merger to Southern Pacific Milling Company		129-011-018	1989-018298 (SB)
Harlem, Joan Thorton	Hunter, Judith	101-070-020	1992-063468 (SB)
Harney, Sally	Sutti, Lillian	111-240-028	1989-079508 (SB)
Harpstone Partnership		103-200-026	2005-0119446 (SB)
Harton, Christine	Koyama, Eiko Koyama, Steven Koyama, Wesley Gilmer, Elaine	092-031-010	1995-005296 (SLO)
Hart, Arletta	Lanini, Stella Lanini, Roland Lanini, Peggy Allen, Carol Vreeland, Kathleen	113-040-003	2006-0083748 (SB)
Hart, Arletta	Lanini, Stella Lanini, Roland Lanini, Peggy Allen, Carol Vreeland, Kathleen	113-949-003	Unable to locate
Hartnell, Penelope		101-020-018 101-020-003	2003-0119941 2004-0106748 2003-0119941 2004-0106748

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Hartnell, Penelope		101-020-047 101-020-048 105-140-027	2003-163556 (SB) 2002-136956 (SB) 2002-136956 (SB)
Hartnell, Penelope		105-140-086	2006-054556 (SB)
Hartnell, Penelope		101-020-002	2004-0106748
Hayashi, Haruo		075-031-004 047-161-005	21985 (SLO) Unable to locate
Hayashi, John		Not provided	
Hayashi, Robert	Pismo Oceano Vegetable Packing Exchange (POVE)	075-032-006	1993-R-034975 (SLO)
Hayashi, Robert		047-161-019 047-151-010	Unable to locate Unable to locate
Hayashi, Rose		075-031-004 047-161-005	21985 (SLO) Unable to locate
Hermreck, Andrew, Successor Trustee of the Wilma V. Hermreck Trust and Executor of the Estate of Wilma V. Hermreck, deceased	Hermreck, Susan undivided 50% interest	091-301-045	2007-005089 (SLO)
Hermreck, Karen L.	Hermreck, Randall P.	091-111-004	Unable to locate
Hermreck, Randall P.	Hermreck, Karen L.	091-111-004	Unable to locate
Hermreck, Susan	Hermreck, Andrew C.	091-301-043	2003-R-080505 (SLO)
Hernandez, Aurelio M., individually and as Trustee of the Aurelio M. and Rosa Hernandez Trust	Hernandez, Rosa Marie, individually and as Trustee of the Aurelio M. and Rosa Hernandez Trust	091-192-022	2002-020728 (SLO)
Hernandez, Jeannie		Not provided	
Hernandez, Raul		Not provided	
Hernandez, Rosa Marie,	Hernandez, Aurelio M., individually and as Trustee	091-192-022	2002-020728 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
individually and as Trustee of the Aurelio M. and Rosa Hernandez Trust	of the Aurelio M. and Rosa Hernandez Trust		
Hero, Heirs of Einar		075-291-005	2003-127622 (SLO)
Herold, George	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Herold, George	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti,	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
	Isabella Favre Moretti, Christina		
Herold, Maria	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Herold, Maria	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Herrera Farming Co., Inc.		128-098-036	2002-0019109 (SB)
Herrera, Elva	Herrera, Gilbert, Trustee Herrera, Gilbert	091-281-073	2000-017337 (SLO)
Herrera, Gilbert C, Trustee	Herrera, Gilbert Herrera, Elva	091-281-073	2000-R-017337 (SLO)
Herrera, Gilbert C.	Herrera, Gilbert, Trustee Herrera, Elva	091-281-073	2000-R-017337 (SLO)
Herrera, Joseph (Jose)	Herrera, Marina	091-081-060	2005-023511 (SLO)
Herrera, Marina	Herrera, Joseph (Jose)	091-081-060	2005-023511 (SLO)
Heupel, Marvin		129-210-021	Unable to locate
Hicks, Carolyn	Simas, Robert E. Ed & Ida Simas LLC	117-170-022 117-170-023	2003-018943 (SB) 2003-018943 (SB)
Hicks, Carolyn	Simas, Robert E. Ed & Ida Simas LLC	092-061-005 092-211-002 092-211-011 092-371-001	2000-075709 (SLO) 2000-075709 (SLO) 2000-075709 (SLO) 2000-075709 (SLO)
Hicks, Carolyn	Simas, Robert E. Ed & Ida Simas LLC	128-101-015 128-101-016 128-101-017	2001-0001439 (SB) 2001-0001439 (SB) 2001-0001439 (SB)
Hilliard, Don	Westphal, Carol	091-073-048	2000-007753 (SLO)
Hilton, Cora L.	Hilton, Frank D.	Not provided	
Hilton, Frank D.	Hilton, Cora L.	Not provided	
Hilton, Franklin and Cora Family Trust		075-241-029 075-241-037	2003-026445 (SLO) 2001-014363 (SLO)
Hobbs, William, Trustee	Canada, Richard, Trustee Neill, Michael Hobbs, Wilma, Trustee	092-221-003	2004-070893 (SLO)
Hobbs, William, Trustee	Canada, Richard, Trustee Neill, Michael Hobbs, Wilma, Trustee	092-221-002	2004-099014 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Hobbs, William, Trustee	Canada, Richard, Trustee Neill, Michael Hobbs, Wilma, Trustee	091-301-004 091-301-017 091-301-041	1994-030904 (SLO) 1968-R-C13700 (SLO) 1994-R-033232 (SLO) 2004-108562 (SLO) 2005-I-003788 (SLO)
Hobbs, Wilma, Trustee	Canada, Richard, Trustee Neill, Michael Hobbs, William, Trustee	092-221-003	2004-070893 (SLO)
Hobbs, Wilma, Trustee	Canada, Richard, Trustee Neill, Michael Hobbs, William, Trustee	091-301-004 091-301-017 091-301-041	1994-R-030904 (SLO) 1968-R-C13700 (SLO) 1994-R-033232 (SLO) 2004-108562 (SLO) 2005-I-003788 (SLO)
Hobbs, Wilma, Trustee	Canada, Richard, Trustee Neill, Michael Hobbs, William, Trustee	092-221-002	2004-099014 (SLO)
Holloway, Carl R.	Holloway, Debra L.	092-153-001 092-153-002 092-301-012	2007-008280 (SLO) 2007-008280 (SLO) 2007-008280 (SLO)
Holloway, Carl R.	Holloway, Debra L.	090-171-005	2007-006475 (SLO)
Holloway, Carl R.	Holloway, Debra L.	090-171-027 090-171-028 090-171-029	2007-008277 (SLO) 2007-008278 (SLO) 2007-008278 (SLO)
Holloway, Debra L.	Holloway, Carl R.	092-153-001 092-153-002 092-301-012	2007-008280 (SLO) 2007-008280 (SLO) 2007-008280 (SLO)
Holloway, Debra L.		090-171-005	2007-006475 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Holloway, Debra L.	Holloway, Carl R.	090-171-027 090-171-028 090-171-029	2007-008277 (SLO) 2007-008277 (SLO) 2007-008277 (SLO)
Hollywood, Walter, individually and as Trustee	Hollywood, Walter, Trustee	075-011-045	52021 (SLO)
Houchin, Shirley		075-251-020 075-165-036	1997-020209 (SLO) 2003-105697 (SLO)
Houston, Anthony	Smith, Elizabeth H.	105-140-084	2002-136956 (SB)
Huber Ranch Associates		075-021-013 075-021-047 075-041-022	21420 (SLO) 1997-I-003414 (SLO) Unable to locate
Hunter, Judith R.	Harlem, Joan Thorton	101-070-020	1992-063468 (SB)
Hutcherson, Carolyn		128-096-007	2003-153555 (SB)
Ibsen, Robert, individually and as President of Den-mart, Inc.		128-052-014	1995-055690 (SB)
Ikeda Brothers		075-121-006 075-131-002 075-131-003	1979-30969 (SLO) 1989-59343 (SLO) 1979-R-C30969 (SLO)
Iliff, Dale		090-021-008	2000-004493 (SLO)
Iriyama, Dan and Toshiko, Trustees of the Residual Trust of Yataro Minami	Minami, Isamu Minami, Isamu, as Trustee of the Yataro Minami Trust and executor of will of Grace Minami	113-040-001	2005-0026820 (SB)
Iriyama, Dan and Toshiko, Trustees of the Residual Trust of Yataro Minami	Minami, Isamu Minami, Isamu, as Trustee of the Yataro Minami Trust and executor of will of Grace Minami	115-020-015 115-043-002	2004-0061214 (SLO) 2004-0061214 (SLO)

December 21, 2007

Exhibit 1A
Page 71 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Iversen, Darlene		129-151-017	1991-041388 (SB)
Jackson Family Investments, LLC		129-110-006 129-110-007	2002-0031424 (SB) 2002-0031424 (SB)
Jackson Family Investments II, LLC		129-110-003 129-220-025 129-220-026 129-220-039 129-220-040 129-220-045 129-220-051 129-220-054	1999-0100402 (SB) 1999-0100399 (SB) 1999-0100399 (SB) 1999-0100399 (SB) 1999-0100399 (SB) 1999-0100399 (SB) 1999-0100399 (SB) 1999-0100399 (SB)
Jackson Family Investments III, LLC		129-220-018 129-220-029 129-220-031 129-220-032 129-220-052 129-220-053 129-220-055	2006-0071939 (SB) 2006-0071939 (SB) 2006-0071939 (SB) 2006-0071939 (SB) 2006-0071939 (SB) 2006-0071939 (SB) 2006-0071939 (SB)
Jackson, Jess S.		129-260-007	1988-051591 (SB)
Jackson, Jess S.	Banke, Barbara R.	133-070-032	1999-0061496 (SB)
Jackson, Jess S., as Lessee		129-110-025 129-050-014	2001-0114470 (SB) 2001-0114470 (SB)
Jantz, Atha, Trustee of the Jantz Family Trust dated 31 July 1986		107-240-027 107-240-028 107-249-029	1986-080195 (SB) 1986-080196 (SB) 1986-080197 (SB)
Jantzan, Eleanor, Trustee	Sellers, Robert D., Trust	091-240-044	2000-032776 (SLO) 1993-R-047368 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
JLSA Limited Partnership		129-180-011 129-180-020 129-110-020	1992-004508 (SB) 1992-004508 (SB) 1992-004508 (SB)
Johnson, Agnes A.	Johnson, Agnes, Trustee	121-101-001	1986-013022 (SB)
Johnson, Agnes A.	Johnson, Agnes, Trustee (all but 128-101-001)	128-101-001 128-094-005 128-101-020	2000-0010093 (SB) 2000-0010093 (SB) 1991-030694 (SB)
Johnson, Agnes A.	Johnson, Agnes, Trustee (all but 128-101-001)	128-094-007 128-101-021	2000-0007801 (SB) 2000-0007801 (SB)
Johnson, Agnes, Trustee of the Mortensen Trust	Johnson, Agnes A.	121-101-001	1986-013022 (SB)
Johnson, Agnes, Trustee of the Mortensen Trust		128-094-005 128-094-007 128-101-020 128-101-021	2000-010093 (SB) 1988-030441 (SB) 1991-030694 (SB) 2000-007801 (SB)
Jones, Jeanette F.	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92	092-031-011	1993-019672 (SLO)
Jones, Jeanette F.	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92	092-031-042 101-050-031	Unable to locate 1992-054487 (SB)
Jones, Jeanette F.	Ferrari, Roy Ferrari, Carol Morganti, June Morganti, Ellen W.	113-020-005	2005-0122629 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Jones, John	Roemer, Robert R. Roemer, Vard A. Jones, JoAnn Roemer	128-002-04-00-13 128-002-04-00-14 128-002-04-00-15	Unable to locate Unable to locate Unable to locate
Jordan, Barbara J.	Battles, James G. Battles, Glenn E. Battles, Myron G.	128-092-006 128-092-007 128-093-011	2005-059182 (SB) 2006-049978 (SB) 2006-049978 (SB)
Kaiser Sand & Gravel Company nka Hanson Aggregates Mid- Pacific, Inc.		129-011-014	2001-0002246 (SB)
Kaiser Sand & Gravel Company nka Hanson Aggregates Mid- Pacific, Inc.		129-011-016 129-011-013 129-011-015 129-011-017 129-011-018 129-011-024 129-021-026	1989-018298 (SB) 1981-3727 (SB) 2001-0002246 (SB) 1989-018295 (SB) 1989-018298 (SB) 1992-079347 (SB) 1992-079347 (SB)
Kaminaka, Ayako	Kaminaka, Hideo, Successor Trustee to Mikazu Kaminaka Trust Kanda, Helen, Trustee of the Kanda Trust Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Kaminaka, Joseph Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Murata, Shizuko	091-232-036	2006-042536 (SLO) 2006-042533 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Kanda, Helen, Trustee of the Kanda Trust	Kaminaka, Ayako Kanda, Helen, Trustee of the Kanda Trust Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Kaminaka, Joseph Kanda, Harry K. Murata, Shizuko Kaminaka, Hideo, Successor Trustee to Mikazu Kaminaka Trust	091-232-036	2006-042536 (SLO) 2006-042533 (SLO)
Kaminaka, Hideo, Successor Trustee to Mikazu Kaminaka Trust	Kaminaka, Ayako Kanda, Helen, Trustee of the Kanda Trust Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Kaminaka, Joseph Kanda, Harry K. Murata, Shizuko	091-232-036	2006-042536 (SLO) 2006-042533 (SLO)
Kaminaka, Joseph	Kaminaka, Ayako Kanda, Helen, Trustee of the Kanda Trust Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Kaminaka, Joseph Kanda, Harry K. Murata, Shizuko Kaminaka, Hideo, Successor Trustee to Mikazu Kaminaka Trust	091-232-036	2006-042536 (SLO) 2006-042533 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust	Kaminaka, Ayako Kanda, Helen, Trustee of the Kanda Trust Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Kaminaka, Joseph Kanda, Harry K. Murata, Shizuko	091-232-036	2006-042536 (SLO) 2006-042533 (SLO)
Kanda, Harry K.	Kaminaka, Ayako Kanda, Helen, Trustee of the Kanda Trust Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Kaminaka, Joseph Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Murata, Shizuko	091-232-036	2006-042536 (SLO) 2006-042533 (SLO)
Karleskint Family Trust Dated 1992	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Souza, Lucille Souza, Ronald Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Karleskint, Elizabeth Anne, Trust	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Souza, Lucille Souza, Ronald Signorelli, Bernice, Trust Karleskint Family Trust Dated 1992 Souza, Ronald Clyatt, Rose Marie Gabel, Mary Jo	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)
Killgore, Christina A.	Killgore, Roy E.	092-231-003	1973-26674 (SLO)
Killgore, Roy E.	Killgore, Christina A.	092-231-003	1973-26674 (SLO)
King, Christina		075-181-025	1998-033914 (SLO)
King, Robert M.		075-181-025	1998-033914 (SLO)
King, Robert M.		075-211-014	2002-070853 (SLO)
Kirchoff, Margaret		129-151-046 129-151-048	2006-0080050 (SB) 2002-0035251 (SB)
Knollwood Properties		107-150-017 107-240-024	2000-0001031 (SB) 2000-0001031 (SB)
Kobara, Ken and Marci Family Trust		075-031-007	25781 (SLO)
Koyama, Eiko	Koyama, Steven Koyama, Wesley Harton, Christine Gilmer, Elaine	092-031-010	1995-005296 (SLO)
Koyama, Steven	Koyama, Eiko Koyama, Wesley Harton, Christine Gilmer, Elaine	092-031-010	1995-005296 (SLO)
Koyama, Wesley	Koyama, Eiko	092-031-010	1995-005296 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Koyama, Steven Harton, Christine Gilmer, Elaine		
Kreps, Roy		091-011-008	1987-84884 (SLO)
Krouse, Darlene Virginia	Lefler, Alberta	111-030-018	2004-063635 (SB)
Krouse, Darlene Virginia	Lefler, Alberta	075-131-001	2006-091684 (SLO) 1988-005048 (SLO) 1979-R-C59712 (SLO) 1988-5047 (SLO)
Laguna County Sanitation District		103-200-024 105-060-022 113-100-026 113-200-013 113-210-015 113-240-005 113-240-011 113-240-013	1962-015011 (SB) 1962-039463 (SB) Unable to locate 1988-023697 (SB) 1988-023697 (SB) 1959-035853 (SB) 1992-070573 (SB) 1988-023697 (SB)
Laguna Negra Mutual Water Company		091-391-002	2000-058770 (SLO)
Laguna Negra Mutual Water Company		091-391-003	2006-011849 (SLO)
Laguna Negra Mutual Water Company		091-391-006	2003-082758 (SLO)
Laguna Negra Mutual Water Company		091-391-010	2003-021937 (SLO)
Laguna Negra Mutual Water Company		091-391-009	2007-013371 (SLO)
Laguna Negra Mutual Water Company		091-391-008	2003-104999 (SLO)

December 21, 2007

Exhibit 1A
Page 78 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Laguna Negra Mutual Water Company		091-391-007	2005-079679 (SLO)
Laguna Negra Mutual Water Company		091-391-017	2000-053780 (SLO)
Laguna Negra Mutual Water Company		091-391-015	2006-025250 (SLO)
Laguna Negra Mutual Water Company		091-391-022	2007-0306835 (SLO)
Laguna Negra Mutual Water Company		091-391-029	1999-03006 (SLO)
Laguna Negra Mutual Water Company		091-391-027	2004-021792 (SLO)
Laguna Negra Mutual Water Company		091-391-024	2007-016048 (SLO)
Laguna Negra Mutual Water Company		091-391-025	2006-058726 (SLO)
Laguna Negra Mutual Water Company		091-391-013	2003-122583 (SLO)
Laguna Negra Mutual Water Company		091-391-018	2003-073566 (SLO)
Laguna Negra Mutual Water Company		091-391-019	2006-026176 (SLO)
Laguna Negra Mutual Water Company		091-391-020	2007-027551 (SLO)
Laguna Negra Mutual Water Company		091-391-021	2006-053707 (SLO)
Laguna Negra Mutual Water Company		091-391-026	2005-094301 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Laguna Negra Mutual Water Company		091-391-028	2003-025900 (SLO)
Laguna Negra Mutual Water Company		091-391-012	2007-009791 (SLO)
Laguna Negra Mutual Water Company		091-391-016	2002-015015 (SLO)
Laguna Negra Mutual Water Company		091-391-001 091-391-004 091-391-005 091-391-011 091-391-014 091-391-023	Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate
Laine, Dorothy		128-064-002 128-064-005	1997-060499 (SB) 1997-060500 (SB)
Lake Marie Valley Club		129-120-025	1988-025732 (SB)
Lakota Resources		092-021-030 092-051-018 092-051-014	1991-46202 (SLO) 1991-46202 (SLO) 1991-46202 (SLO)
Lakota Resources		115-020-003 092-051-025 092-051-026 113-030-010 115-020-021	1990-080330 (SB) 2004-I-001114 (SLO) 2004-I-001114 (SLO) 1990-080330 (SB) 1990-080330 (SB)
Lan-Vest Limited	Saruwatari, Ayako Trust	075-001-022 006-311-076 006-311-074 006-341-017	Unable to locate Unable to locate Unable to locate Unable to locate
Land Conservancy		075-351-018	2002-113316 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		090-101-001	2003-062028 (SLO)
Land Conservancy		091-101-003	2002-099651 (SLO)
Land Conservancy		090-101-003 091-151-004 091-162-005 091-173-011 092-391-012 092-391-033 075-261-006 075-301-013 091-141-013	2006-R-002980 (SLO) 1996-048208 (SLO) 1990-054308 (SLO) 1990-077405 (SLO) 2000-007366 (SLO) 2000-007366 (SLO) 2000-007366 (SLO) 1996-048208 (SLO) 2000-007366 (SLO)
Landolt, Lea	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Landolt, Lea	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria	113-110-001 113-240-001 113-240-010 117-240-006	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
	Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	128-071-002	Unable to locate
Landolt-Ritter, Claudine	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Landolt-Ritter, Claudine	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Landolt, Lea Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina		
Landon Family Trust dated Oct. 19, 1992, Cass O. Landon and Marilyn Landon, Trustor(s) and Trustee(s)		091-261-027 091-261-028 091-126-929 091-261-005	Unable to locate Unable to locate Unable to locate 1994-043679 (SLO)
Landon Family Trust dated Oct. 19, 1992, Cass O. Landon and Marilyn Landon, Trustor(s) and Trustee(s)		091-261-026	2005-067222 (SLO)
Lanini, Eloise	Gilder, James, Trust Gilder, James Gilder, Dolores Lanini, Roland Ware, Roxanne	091-201-054 091-201-055	2003-144070 (SLO) 1996-046106 (SLO)
Lanini, Peggy	Lanini, Stella Lanini, Roland Hart, Arletta Allen, Carol Vreeland, Kathleen	113-949-003	Unable to locate
Lanini, Peggy	Lanini, Stella Lanini, Roland Hart, Arletta Allen, Carol Vreeland, Kathleen	113-040-003	2007-0054038 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Lanini, Roland	Lanini, Stella Hart, Arletta Lanini, Peggy Allen, Carol Vreeland, Kathleen	113-040-003	2007-0054038 (SB)
Lanini, Roland	Gilder, James, Trust Gilder, James Gilder, Dolores Lanini, Eloise Ware, Roxanne	091-201-054 091-201-055	2003144070 (SLO) 1996-046106 (SLO)
Lanini, Roland	Lanini, Stella Hart, Arletta Lanini, Peggy Allen, Carol Vreeland, Kathleen	113-949-003	Unable to locate
Lanini, Stella	Lanini, Roland Hart, Arletta Lanini, Peggy Allen, Carol Vreeland, Kathleen	113-949-003	Unable to locate
Lanini, Stella	Lanini, Roland Hart, Arletta Lanini, Peggy Allen, Carol Vreeland, Kathleen	113-040-003	2007-0054038 (SB)
Lasseter, James A.		129-240-007	1997-024176 (SB)
Lauer, Doris	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Exhibit 1A
Page 84 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
	Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine		
Lauer, James		Not provided	
Laursen, Dolorita, Individually and as Trustee for Earl and Dolorita Laursen Revocable Trust		091-240-017	1997-063784 (SLO)
Laursen, Dolorita, Individually and as Trustee for Earl and Dolorita Laursen Revocable Trust		091-011-058	2003-005535 (SLO)
Laursen, Earl and Dolorita, Revocable Trust	Laursen, Dolorita	091-240-017	1997-063784 (SLO)
Laursen, Earl and Dolorita, Revocable Trust	Laursen, Dolorita	091-011-058	2003-005535 (SLO)
Laverty, Ben W. III		101-070-005	2000-0052452 (SB)
Le Sage Enterprises, Inc.		060-381-012 060-381-013 910-003-997 910-004-108 910-004-305	1998-I-001296 (SLO) 1998-I-001296 (SLO) Unable to locate Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		910-004-798	Unable to locate
Lefler, Alberta	Krouse, Darlene Virginia	075-131-001	2006-091684 (SLO) 1988-5048 (SLO) 1979-R-C59712 (SLO) 1988-5047 (SLO)
Lemos, A. Michael		075-041-003	1993-031459 (SLO) 1993-033891 (SLO)
Lenger, Jeanette F.	Wineman, Ernest, Jr. Wineman, Chris Ferini, Andre	113-040-011	2007-0021952 (SB)
Lewellen, Royce, Individually and as Trustee of the Royce Lewellen Living Trust, and as President of Goodchild Vineyard, LLP	Goodchild Vineyard, LLP	129-021-018 129-210-038	1999-060260 (SB) 2000-0022830 (SB)
Linda Vista Farms, Inc.		090-291-039 090-291-040 090-291-041 090-291-042 090-291-043 090-291-044 090-291-045	2000-I-000387 (SLO) 2000-I-000387 (SLO) 2000-I-000387 (SLO) 2000-I-000387 (SLO) 2000-I-000387 (SLO) 2000-I-000387 (SLO) 2000-I-000387 (SLO)
Lindsey Ice Company, Inc.		Not provided	
LNA-LP, A Nevada Limited Partnership		101-070-069 101-050-021 101-050-027 101-050-028	2001-0086692 (SB) 2001-0086691 (SB) 2001-0086691 (SB) 2001-0086691 (SB)
Loma Verde, LLC		202-060-060	Unable to locate
Longest, Claude F.	Longest, Ruth E.	128-100-013	2005-071579 (SB)
Longest, Ruth E.	Longest, Claude F.	128-100-013	2005-071579 (SB)

December 21, 2007

Exhibit 1A
Page 86 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Lowery, Monica	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Dutra, Maria C. Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Lucia Mar Unified School District		077-111-051	1961-27561 (SLO)
Lucia Mar Unified School District		006-095-001	1965-R-C06102 (SLO)
Lucia Mar Unified School District		060-443-011	1960-5026 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Lucia Mar Unified School District		060-652-032 075-161-012 090-081-050 090-151-013 090-151-017 092-122-059 092-162-032 060-052-032	2001-I-002051 (SLO) 1984-I-003938 (SLO) 1987-044032 (SLO) 1999-020012 (SLO) 1991-I-008228 (SLO) 2001-I-002051 (SLO) 1985-I-000914 (SLO)
Lucia Mar Unified School District		075-311-037	9468 (SLO)
Machado, Edward	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Dutra, Maria C. Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Machado, M.A. Jr.	Serpa Ranch Machado, Manuel	092-211-006	2005-048328 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
	Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Dutra, Maria C.. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-007	1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Machado, Manuel	Serpa Ranch Dutra, Maria C. Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine		
Madden, Keith	Clancy, Bette L. Clancy, Tammra Clancy, Robert	090-321-014	2006-020981 (SLO)
Madden, Virginia		129-010-034	1982-017018 (SB)
Maddux, Cheryl	Maddux, Edward	129-240-038	2001-0112381 (SB)
Maddux, Edward	Maddux, Cheryl	129-240-038	2001-0112381 (SB)
Magoria Landolt, Floridita	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Magoria Landolt, Floridita	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George	113-110-001 113-240-001 113-240-010 117-240-006	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	128-071-002	Unable to locate
Mahoney & Stewart	Stewart, Robert R. Stewart, Annette K.	092-211-009	1987-067486 (SLO)
Mahoney & Stewart	Stewart, Robert R. Stewart, Annette K.	128-093-001 128-093-021	2006-052973 (SB) 1998-071138 (SB)
Mahoney, Glenna, Trustee of the Eugene and Glenna Mahoney Trust	Mahoney, Patricia, Trust	111-030-010	1971-000185 (SB)
Mahoney, Glenna, Trustee of the Eugene and Glenna Mahoney Trust	Mahoney, Patricia, Trust	111-020-002 111-020-003 111-020-009 111-020-015 111-020-016 111-130-006 111-140-007 111-220-022	1955-009855 (SB) 1993-004481 (SB) 2006-052973 (SB) 1993-004481 (SB) 1993-004481 (SB) 1993-004481 (SB) 1993-004481 (SB) 1993-004481 (SB) 1993-004481 (SB)
Mahoney, Patricia, Trust	Mahoney, Glenna, Trustee	111-030-010	1971-000185 (SB)
Mahoney, Patricia, Trust	Mahoney, Glenna, Trustee (all but 111-020-008)	111-020-008 111-020-002 111-020-003 111-020-009 111-020-015 111-020-016	1955-009855 (SB) 1955-009855 (SB) 1993-004481 (SB) 2006-052973 (SB) 1993-004481 (SB) 1993-004481 (SB)

December 21, 2007

Exhibit 1A
Page 91 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		111-130-006 111-140-007 111-220-022	1993-004481 (SB) 1993-004481 (SB) 1993-004481 (SB)
Mallory, Douglas Cornell	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Mallory, Philip J.	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn	092-211-006	2005-048328 (SLO) 1992-37112 (SLO)
	Mallory, Douglas Cornell Lauer, Doris Dutra, Maria C. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-007	2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Mallory, Steven G.	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn	092-211-006	2005-048328 (SLO) 1992-37112 (SLO)
	Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-007	2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Manderscheid, Loren	Manderscheid, Marcia Manderscheid, Richard T. Manderscheid, Wendy Montgomery, Jody Farao, Kerry	075-032-007	2002-064563 (SLO) 1999-R-028575 (SLO) 2003-027399 (SLO) 2000-R-019501 (SLO) 2004-019816 (SLO) 2000-R-028723 (SLO) 2000-R-012008 (SLO) 2001-R-038295 (SLO) 2000-R-027364 (SLO) 2004-019816 (SLO) 2004-R-017088 (SLO) 1994-R-069488 (SLO)
Manderscheid, Marcia	Manderscheid, Richard T. Manderscheid, Wendy Montgomery, Jody Manderscheid, Loren Farao, Kerry	075-032-007	2002-064563 (SLO) 1999-R-028575 (SLO) 2003-027399 (SLO) 2000-R-019501 (SLO) 2004-019816 (SLO) 2000-R-028723 (SLO) 2000-R-012008 (SLO) 2001-R-038295 (SLO) 2000-R-027364 (SLO) 2004-019816 (SLO) 2004-R-017088 (SLO) 1994-R-069488 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Manderscheid, Richard T.	Manderscheid, Marcia Manderscheid, Wendy Montgomery, Jody Manderscheid, Loren Farao, Kerry	075-032-007	2002-064563 (SLO) 1999-R-028575 (SLO) 2003-027399 (SLO) 2000-R-019501 (SLO) 2004-019816 (SLO) 2000-R-028723 (SLO) 2000-R-012008 (SLO) 2001-R-038295 (SLO) 2000-R-027364 (SLO) 2004-019816 (SLO) 2004-R-017088 (SLO) 1994-R-069488 (SLO)
Manderscheid, Wendy	Manderscheid, Marcia Manderscheid, Richard T. Montgomery, Jody Manderscheid, Loren Farao, Kerry	075-032-007	2002-064563 (SLO) 1999-R-028575 (SLO) 2003-027399 (SLO) 2000-R-019501 (SLO) 2004-019816 (SLO) 2000-R-028723 (SLO) 2000-R-012008 (SLO) 2001-R-038295 (SLO) 2000-R-027364 (SLO) 2004-019816 (SLO) 2004-R-017088 (SLO) 1994-R-069488 (SLO)
Marcella Vineyards		129-010-010	2003-0081390 (SB)
Maretti & Minetti Ranch Co.	Clarence Minetti Partnership	113-020-016 113-020-018 113-020-019	1975-014596 (SB) 1975-014596 (SB) 1975-014596 (SB)
Maretti & Minetti Ranch Co.		092-041-010	1989-57797 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
		092-041-009	1975-14282 (SLO)
Maretti, Mark	Gamble, Ruthanne Maretti, R. Charles	117-240-028	2007-0048952 (SB)
Maretti, Mark	Gamble, Ruthanne Maretti, R. Charles	113-030-001 117-330-018	1995-006618 (SB) Unable to locate
Maretti, R. Charles	Gamble, Ruthanne Maretti, Mark	117-240-028	2007-0048952 (SB)
Maretti, R. Charles	Gamble, Ruthanne Maretti, Mark	113-030-001 117-330-018	1995-006618 (SB) Unable to locate
Marian Medical Center		128-120-018	1987-032432 (SB)
Mariposa Real Limited Partnership		107-570-055 107-580-027 107-590-001	1998-082994 (SB) 1998-082994 (SB) 1998-082994 (SB)
Marques, Carlos, Trustee for the Marques Living Trust		091-073-022	Unable to locate
Marsalek, Bill	Marsalek, Robert and Janet Trustees of Family Trust, March 17, 2005	091-301-044	2005-024365 (SLO)
Marsalek, Cliff		091-301-044	2005-024365 (SLO)
Marsalek, Joseph F.	Tunnell, Arthur Donner, Marianne, Donne, Trustee of the Tunnell Trust Tunnell Ranch Reed, William Jr., Trustee of the E. Tunnell Trust Tunnell, Cecilia Marsalek, Joseph F.	129-100-014 129-100-021	2006-0063723 (SB) 2006-0063723 (SB)

December 21, 2007

Exhibit 1A
Page 97 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Marsalek, Joseph F.	Tunnell, Arthur Donner, Marianne, Donne, Trustee of the Tunnell Trust Tunnell Ranch Reed, William Jr., Trustee of the E. Tunnell Trust Tunnell, Cecilia Marsalek, Joseph F.	129-100-019	2007-008204 (SB)
Marsalek, Paul	Marsalek, Robert Marsalek, Bill Marsalek, Cliff	091-301-044	2005-R-024365 (SLO)
Marsalek, Robert	Marsalek, Paul Marsalek, Bill Marsalek, Cliff	091-301-044	2005-R-024365 (SLO)
Marsalek, Velma	Dana Properties Dana, W.G., Trust Dana, Earl, Trust Dana, Ernest, Trust Martin, Gwendolyn Ruiz, Eileen Ruiz and Maurice Doty, Trustees	090-051-012 090-051-013 090-111-003 090-151-005 090-151-009 090-151-013	2003-019858 (SLO) 2003-019858 (SLO) 2003-019858 (SLO) 2003-019858 (SLO) 2003-019858 (SLO) 2003-019858 (SLO)
Marsalek, Velma	various	090-031-003 090-031-004 092-191-001	50412 (SLO) 50412 (SLO) 1997-063108 (SLO)
Martin, Gwendolyn	various	090-031-003 090-031-004 092-191-001	50412 (SLO) 50412 (SLO) 1997-R-063108 (SLO)

December 21, 2007

Exhibit 1A
Page 98 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Martin, Gwendolyn	Dana Properties	090-051-012	1979-024591 (SLO)
	Dana, W.G., Trust	090-051-013	1979-024591 (SLO)
	Dana, Earl, Trust	090-111-003	1979-024591 (SLO)
	Dana, Ernest, Trust	090-151-005	1979-024591 (SLO)
	Marsalek, Velma	090-151-009	1979-024591 (SLO)
	Ruiz, Eileen and Maurice Doty, Trustees	090-151-013	1979-024591 (SLO)
Martinez, Vincent T., Trustee of the Haslam Trust		117-020-072	1990-068735 (SB)
		113-050-057	1990-068735 (SB)
Martorano, Donald	Martorano, Shirley	091-063-040	40941 (SLO)
Martorano, Shirley	Martorano, Donald	091-063-040	40941 (SLO)
Massa Trust (õ1994 William D. Massa Revocable Trustõ)		113-080-018	2005-0085104 (SB)
Matsushita, Mrs.	Matsushita, Sam	129-240-006	1999-001215 (SB)
Matsushita, Sam	Matsushita, Mrs.	129-240-006	1999-001215 (SB)
Maulhardt Family Trust		092-211-012	1994-051884 (SLO)
Maulhardt Family Trust		092-211-013	1994-R-051884 (SLO)
McCosh, Bonnie L.		105-010-022	2002-002100 (SB)
McGee, Janice	McGee, Jerry	091-240-070	1997-069193 (SLO)
McGee, Jerry	McGee, Janice	091-240-070	1997-069193 (SLO)
McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	Durley, Odette Durley, Katherine Durley, First Name Unknown	117-030-061	2007-0037815 (SB)
McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	Durley, Odette Durley, Katherine Durley, First Name Unknown	090-331-005	1974-09502 (SLO)
		090-331-008	1974-09502 (SLO)
		090-341-019	1974-09502 (SLO)
		117-020-045	1962-022220 (SB)
		117-020-064	1962-022220 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
McLanahan, Patricia P., individually and as Trustee of the Annie E. Preisker Life Estate Trust	Durley, Odette Durley, Katherine Durley, First Name Unknown	117-170-050	2004-086837 (SB)
McPherson, Mary	McPherson, Roger D.	091-283-046	1998-060841 (SLO)
McPherson, Roger D.	McPherson, Mary	091-283-046	1998-060841 (SLO)
Mees, Ronald		129-151-039	1997-058160 (SB)
Mehlschau, Charles and Janice, Trustees of the Mehlschau Family Trust		091-251-017 091-251-018	2005-021013 (SLO) 2004-089534 (SLO)
Mehlschau, Catherine H., Heirs of		091-251-009 091-301-018 091-301-034	1997-I-002044 (SLO) 1997-I-002044 (SLO) 1997-I-002044 (SLO)
Mehlschau, Cavaletto & Marsch, LP (aka MCM, a partnership of Mehlschau, Cavaletto & Marsh)		092-061-004	2004-054135 (SLO)
Mehlschau, Cavaletto & Marsch, LP (aka MCM, a partnership of Mehlschau, Cavaletto & Marsh)		092-061-004	2004-054136 (SLO)
Mehlschau, Charles A.	Mehlschau, Janice C.	091-301-019	1971-14621 (SLO)
Mehlschau, Janice C.	Mehlschau, Charles A.	091-301-019	1971-14621 (SLO)
Melendez, Aurelia	Melendez, Luis	129-240-004	2003-168232 (SB)
Melendez, Luis	Melendez, Aurelia	129-240-004	2003-168232 (SB)
Mendonsa, Emily		092-202-001 092-211-008	1994-046005 (SLO) 1994-046005 (SLO)
Mendonsa, Emily, Trust - Mary Adams Successor Trustee		117-170-016	1994-048823 (SB)
Mendonsa, Emily, Trust - Mary Adams Successor Trustee		113-050-031	2001-0002818 (SB)

December 21, 2007

Exhibit 1A
Page 100 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Mesa Dunes Mobile Home Park		075-161-027	2001-048669 (SLO)
Metz, Joan	Metz, Myron	129-240-014	1985-031399 (SB)
Metz, Myron	Metz, Joan	129-240-014	1985-031399 (SB)
Michael, Claudia		101-040-027 129-180-016 129-180-013 129-180-021 101-040-026	2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB)
Michael, Lawrence R.		101-040-027 129-180-016 129-180-013 129-180-021 101-040-026	2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB)
Michael, Ophelia		101-040-027 129-180-016 129-180-013 129-180-021 101-040-026	2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB)
Michael, Richard		101-040-027 129-180-016 129-180-013 129-180-021 101-040-026	2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB) 2003-0139732 (SB)
Middleton, Janet		091-111-042	2004-018939 (SLO)
Miller, Carol	Blake, Robert	091-063-026	2007-002859 (SLO)
Miller, Jerry, Revocable Living Trust		075-291-004 075-291-014	1993-015406 (SLO) 1993-R-015404 (SLO)
Miller, Roland	Miller, Sally	129-240-015	2002-053587 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Miller, Sally	Miller, Roland	129-240-015	2002-053587 (SB)
Mills, Brenda	Mills, Michael	091-081-010	1996-033994 (SLO)
Mills, Brenda	Mills, Delbert Mills, Florence Mills, Michael	092-071-002 092-011-004	1999-001318 (SLO) 1999-001318 (SLO)
Mills, Delbert	Mills, Brenda Mills, Florence Mills, Michael	092-071-002 092-011-004	1999-001318 (SLO) 1999-001318 (SLO)
Mills, Florence	Mills, Delbert Mills, Brenda Mills, Michael	092-071-002 092-011-004	1999-001318 (SLO) 1999-001318 (SLO)
Mills, Michael	Mills, Delbert Mills, Florence Mills, Brenda	092-071-002 092-011-004	1999-001318 (SLO) 1999-001318 (SLO)
Mills, Michael	Mills, Brenda	091-081-010	1996-033994 (SLO)
Minami, Isamu	Various	115-020-015 115-043-002 113-040-001	2004-0061214 (SLO) 2004-0061214 (SLO) 2005-0026820 (SB)
Minami, Isamu, as Trustee of the Yataro Minami Trust and executor of will of Grace Minami	Iriyama, Dan and Toshiko, Trustees of the Residual Trust of Yataro Minami Minami, Isamu	115-020-015 115-043-002 113-040-001	2004-0061214 (SLO) 2004-0061214 (SLO) 2005-0026820 (SB)
Minetti, Clarence	Roffoni, John	113-070-031 113-070-032	1999-052464 (SB) 1999-052464 (SB)
Minnies, Nora A.	Sarad, John Gabbert, Sean, Administrator for the Estate of John S. Gabbert Gabbert, Steve Gabbert, Thomas Eckles Lorenz, Valerie	101-010-005 101-020-006	2006-0012214 (SB) 2006-0012214 (SB)
Minor, Oma		129-170-032	2000-0080495 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Miranda, Jean	Miranda, Mike	129-240-009	2006-059831 (SB)
Miranda, Jean	Miranda, Mike	091-063-039	2004-053657 (SLO)
Miranda, Mike	Miranda, Jean	129-240-009	2006-059831 (SB)
Miranda, Mike	Miranda, Jean	091-063-039	2004-053657 (SLO)
Mitchell, Carolyn	Serpa Ranch Machado, Manuel Gibbons, Christina Dutra, Maria C. Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Montgomery, Jody	Manderscheid, Marcia Manderscheid, Richard T. Manderscheid, Wendy Manderscheid, Loren Farao, Kerry	075-032-007	2002-064563 (SLO) 1999-R-028575 (SLO) 2003-027399 (SLO) 2000-R-019501 (SLO) 2004-019816 (SLO) 2000-R-028723 (SLO) 2000-R-012008 (SLO) 2001-R-038295 (SLO) 2000-R-027364 (SLO) 2004-019816 (SLO) 2004-R-017088 (SLO) 1994-R-069488 (SLO)
Morales, Heladio	Morales, Ofelia	091-063-031	2000-I-002018 (SLO)
Morales, Ofelia	Morales, Heladio	091-063-031	2000-I-002018 (SLO)
Morganti, Ellen W.	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F. Morganti, June	113-020-005	2005-0122629 (SB)
Morganti, Ellen W.	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F. Morganti, June	113-020-005	2005-0122629 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Morganti, Ellen W.	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F. Morganti, June	092-031-011	1993-019672 (SLO)
Morganti, Ellen W.	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F. Morganti, June	092-031-042 101-050-031	Unable to locate 1992-054487 (SB)
Morganti, June	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F. Morganti, Ellen W.	113-020-005	2005-0122629 (SB)
Morganti, June	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F. Morganti, Ellen W.	092-031-011	1993-019672 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Morganti, June	Ferrari, Roy Ferrari, Carol Ferrari, Adelaide, Successor Trustee to the Ferrari Family Trust 6/22/92 Jones, Jeanette F. Morganti, Ellen W.	092-031-042 101-050-031	Unable to locate 1992-054487 (SB)
Moretti Cotti, Liliana	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Moretti Cotti, Liliana	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate
Moretti, Michele	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Moretti, Michele	Moretti, Peter M. Cotti, Nicola Cotti, Rossella	113-110-001 113-240-001	1991-009647 (SB) 2007-038481 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Crettenand Moretti, Isabella Favre Moretti, Christina	113-240-010 117-240-006 128-071-002	2007-038481 (SB) Unable to locate Unable to locate
Moretti, Peter M.	Wineman, Ernest C. Wineman, Peggie Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Moretti, Peter M.	Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita	113-110-001 113-240-001 113-240-010 117-240-006 128-071-002	1991-009647 (SB) 2007-038481 (SB) 2007-038481 (SB) Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina		
Murata, Shizuko	Kaminaka, Ayako Kanda, Helen, Trustee of the Kanda Trust Kaminaka, Wayne, Trustee for the Mikazu and Ayako Kaminaka Trust Kanda, Harry K. Kaminaka, Joseph	091-232-036	2006-042536 (SLO) 2006-042533 (SLO)
Murphy, John	Murphy, Patricia M.	129-240-002	2002-125881 (SB)
Murphy, Patricia M.	Murphy, John	129-240-002	2002-125881 (SB)
Mussell, Steve		101-050-030	1991-013513 (SB)
Mussell, Steve		129-151-020	2006-0093544 (SB)
Mutual Water Association		091-361-019	2001-007727 (SLO)
Nasholm & Sausa Kiwi		091-121-051	1976-R-C43735 (SLO)
Neill, Michael	Canada, Richard, Trustee Hobbs, William, Trustee Hobbs, Wilma, Trustee	092-221-003	2004-070893 (SLO)
Neill, Michael	Canada, Richard, Trustee Hobbs, William, Trustee Hobbs, Wilma, Trustee	092-221-002	2004-R-099014 (SLO)

December 21, 2007

Exhibit 1A
Page 109 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Neill, Michael	Canada, Richard, Trustee 13700 Guardian's Deed Hobbs, William, Trustee Hobbs, Wilma, Trustee	091-301-004	1994-R-030904 (SLO)
		091-301-017	13700 (SLO)
		091-301-041	1994-R-033232 (SLO) 2004-108562 (SLO) 2005-I-003788 (SLO)
Nelson, Kenneth D.		090-301-057	2003-014672 (SLO)
Nelson, Rita J.		090-301-057	2003-014672 (SLO)
Nester, Greg		091-232-014	2004-015454 (SLO)
		091-296-052	2000-I-003890 (SLO)
Newman, Bill J.		128-097-001	2005-097318 (SB)
Newman, Bill J.		128-097-002	Unable to locate
Newman, George		Not provided	
NHC-CA3, LP, dba Pacific Dunes Ranch		061-261-007	1999-011771 (SLO)
		061-261-012	1999-011771 (SLO)
		061-261-013	1999-011771 (SLO)
Nipomo Community Services District		090-271-025	1986-057045 (SLO)
		090-271-026	1997-R-049538 (SLO)
Nodlew, Inc.		129-170-029	2000-0080495 (SB)
		129-170-031	2000-0080495 (SB)
North Preisker Ranch		117-030-055	2006-0082200 (SB)
		117-030-056	2006-0082200 (SB)
		117-030-058	2006-0082200 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
North Preisker Ranch		117-030-053 117-030-055 117-030-056 117-030-058 117-030-059 118-001-077 118-002-095	1996-054909 (SB) 1996-054909 (SB) 1996-054909 (SB) 1996-054909 (SB) 1996-054909 (SB) Unable to locate Unable to locate
NRG Enterprises LP	Santa Maria Potato, Inc. OSR Ranch LP	128-096-001 (62.50% interest) 128-096-004 (62.50% interest) 128-096-005 (62.50% interest)	2002-036342 (SB) 2002-0036342 (SB) 2002-0036342 (SB)
NRG Enterprises LP		128-096-010 (25% interest) 128-096-003 (25% interest) 128-100-028 128-100-030 128-100-031 128-094-031	2002-056749 (SB) 1989-0068135 (SB) 1993-0083640 (SB) 1993-0083640 (SB) 1993-0083640 (SB) 1993-0083640 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
NRG Enterprises LP	Santa Maria Potato, Inc. OSR Ranch LP	128-095-008 25% interest)	1985-002572 (SB)
		128-096-009 (25% interest)	1989-068135 (SB)
		128-100-001 (25% interest)	1989-068137 (SB)
		128-100-003	1989-068137 (SB)
		128-095-006 (25% interest)	89-068135 (SB)
Nunes Water Company		075-162-058	2000-I-003521 (SLO)
		075-162-059	2000-I-003521 (SLO)
O.J. Portwood, et al., LLC		129-170-004	2006-043758 (SB)
Oakview Development, a California corporation		091-181-033	2004-086123 (SLO)
Oceano Community Services District		062-051-021	21030 (SLO)
		062-051-022	2000-001833 (SLO)
		062-261-022	1985-I-001562 (SLO)
		062-261-079	1995-35395 (SLO)
		062-271-001	1986-55306 (SLO)
		062-271-003	1986-55306 (SLO)
		062-271-006	1986-55306 (SLO)
		062-271-023	6825 (SLO)
		062-271-024	2000-041813 (SLO)
		062-271-026	22791 (SLO)
Okui Farms	various	060-591-017	1992-078335 (SLO)
		092-231-014	1990-R-081123 (SLO) 2002-R-057958 (SLO)
Okui Farms	various	060-591-016	1993-004408 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Okui, Hironobu		060-591-016	1993-004408 (SLO)
Okui, Hironobu	various	092-231-014	1992-078335 (SLO) 1990-R-081123 (SLO) 2002-R-057958 (SLO)
Old Rio Bravo, LLC		113-250-015 113-250-016 113-250-017	2004-137005 (SB) 2004-137005 (SB) 2004-137005 (SB)
Olson, Marion K.		101-070-047	2006-0005117 (SB)
O'Neil, John	O'Neil, Marilyn	091-073-004	2003-035792 (SLO)
O'Neil, Marilyn	O'Neil, John	091-073-004	2003-035792 (SLO)
Ontiveros, Louise D.	Ontiveros, Mark A.	129-180-017 101-030-009	2004-006958 (SB) 2004-006959 (SB)
Ontiveros, Mark A.	Ontiveros, Louise D.	129-180-017 101-030-009	2004-006958 (SB) 2004-006959 (SB)
Orcutt Union High School		101-010-014 103-070-016 103-080-047 105-330-009 105-330-010 107-040-002 107-101-006 109-110-003	Unable to locate 1961-029434 (SB) 1962-036379 (SB) 1961-019349 (SB) 1961-019349 (SB) 1963-040214 (SB) 1960-034875 (SB) 1957-019855 (SB)
Osburn Trust		117-820-016	1973-047004 (SB)
OSR Enterprises, Inc.		125-095-001 128-094-029 128-095-002 128-099-001 128-100-022	Unable to locate 93-0083641 (SB) 1993-0083639 (SB) 1993-0083640 (SB) 2002-036342 (SB)

December 21, 2007

Exhibit 1A
Page 113 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
		128-096-001 (16.67% interest) 128-096-004 (16.67% interest) 128-096-005 (16.67% interest)	2002-0036342 (SB) 2002-0036342 (SB) 2002-0036342 (SB)
OSR Ranch Limited Partn.	Santa Maria Potato, Inc. OSR Enterprises LP	128-096-001 (20.83% interest) 128-096-004 (20.83% interest) 128-096-005 (20.83% interest) 128-095-006 (25% interest)	2002-036342 (SB) 2002-0036342 (SB) 2002-0036342 (SB) 89-068135 (SB)
OSR Ranch Limited Partn.	various	128-096-010 (25% interest)	2002-056749 (SB)
OSR Ranch Limited Partn.	various	129-180-010	1972-030115 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
OSR Ranch Limited Partn.	various	128-101-010 (25% interest) 128-101-012 128-095-008 (25% interest) 128-096-003 (25% interest) 128-096-009 (25% interest) 128-100-001 (25% interest) 128-100-003 (25% interest) 128-096-002 (50% interest) 128-096-006 (25% interest)	1993-0083641 (SB) 1993-0083641 (SB) 1993-083639 (SB) 1985-002572 (SB) 1989-068135 (SB) 1989-068135 (SB) 1989-068137 (SB) 1989-068137 (SB) 1989-0068136 (SB)
OSR Ranch Limited Partn.	various	129-100-008	1993-0063641 (SB)
Overholtzer, Charles	Overholtzer, Julie	129-020-027	2003-005939 (SB)
Overholtzer, Julie	Overholtzer, Charles	129-020-027	2003-005939 (SB)
Overley, Lyle, individually and as Trustee		091-201-019	1996-016659 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Owen, Christina M.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Bettencourt, Catherine Owen, Stephanie S. Wilson, Gary M.	091-121-079	2005-032962 (SLO)
Owen, Christina M.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Bettencourt, Catherine Owen, Stephanie S. Wilson, Gary M.	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)
Owen, Christina M.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Bettencourt, Catherine Owen, Stephanie S. Wilson, Gary M.	091-121-064	2005-016471 (SLO) 2004-R-096188 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Owen, Christina M.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Bettencourt, Catherine Owen, Stephanie S. Wilson, Gary M.	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO) 2004-R-096188 (SLO)
Owen, Stephanie S.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Bettencourt, Catherine Wilson, Gary M.	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)
Owen, Stephanie S.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Bettencourt, Catherine Wilson, Gary M.	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO) 2004-R-096188 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Owen, Stephanie S.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Bettencourt, Catherine Wilson, Gary M.	091-121-064	2005-016471 (SLO) 2004-R-096188 (SLO)
Owen, Stephanie S.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Bettencourt, Catherine Wilson, Gary M.	091-121-079	2005-032962 (SLO)
Owens, Jana R.	Owens, Michael S.	075-301-005	1996-055200 (SLO)
Owens, Michael S.	Owens, Jana R.	075-301-005	1996-055200 (SLO)
Owens, Jana R.	Owens, Michael S.	075-301-006	1998-039254 (SLO)
Owens, Michael S.	Owens, Jana R.	075-301-006	1998-039254 (SLO)
Quail Meadows East		109-200-029	Unable to locate
Pacific Christian Center		Not provided	
Paniagua, Rogelio	Paniagua, Rosa	117-820-020	Unable to locate
Paniagua, Rosa	Paniagua, Rogelio	117-820-020	Unable to locate
Parker, Ishmael		129-151-021	1971-006743 (SB)
Pasquini, Charles		075-404-029	2002015795 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Pasquini, Charles		117-040-022 117-040-023 117-040-024 117-040-025 115-113-005 128-062-013 115-020-005 115-020-032 128-013-022 115-113-006 117-030-063 117-030-073 092-051-023 092-051-024 113-030-009 113-030-027	2005-0063466 (SB) 2005-0063466 (SB) 2005-0063466 (SB) 2005-0063466 (SB) 2005-0063467 (SB) 2005-0063468 (SB) 2005-0063469 (SB) 2005-0063469 (SB) 2005-0063470 (SB) 2005-0063471 (SB) 2005-0063472 (SB) 2005-0063473 (SB) 2005-045096 (SLO) 2005-045096 (SLO) 2005-045096 (SB) 2005-045096 (SB)
Pasquini, Charles		090-271-010 090-301-010 090-301-039 090-301-043 090-311-001	2005-045092 (SLO) 2005-045094 (SLO) 2005-045094 (SLO) 2005-045094 (SLO) 2005-R-045096 (SLO) 2005-R-045096 (SLO) 2001-R-070130 (SLO) 2005-069189 (SB) 2005-069189 (SB) 2005-063466 (SB)
Pasquini, Charles		090-291-019	2005-082138 (SLO)
Pennisi, Salvatore, Trustee		091-131-001	1996-050399 (SLO)
Pereira Trust, Judy Rogers, Trustee	Rogers, Judy A.	129-010-024	2002-06771 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Pereira Trust, Judy Rogers, Trustee	Rogers, Judy A.	129-010-023	1997-067420 (SB)
Pereira, Jeffrey, Trustee of the Pereira Living Trust	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Dutra, Maria C. Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006	2005-048328 (SLO) 1992-37112 (SLO)
		092-211-007	2005-048328 (SLO) 1992-37112 (SLO)
Perez, Shirley A.	Brenner, Merritt Brenner, Nancy Bryden, James Pinoli, Mary S.	117-180-021	2002-076787 (SB)
		117-180-002	2002-076787 (SB)
		117-170-013	2002-0076787 (SB)
		117-170-014	2002-0076787 (SB)
Perez, Shirley A.	Brenner, Merritt Brenner, Nancy Bryden, James Pinoli, Mary S.	117-180-021	2002-0076787 (SB)
		117-180-002	2002-0076787 (SB)
		117-170-013	2002-0076787 (SB)
		117-170-014	2002-0076787 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Perrett, Carol M.	Perrett, H.D.	090-401-019 090-424-001 090-424-002 090-424-004 090-424-005 090-424-006 090-425-002 090-425-003 128-002-029 128-101-003 129-030-012	1999-086875 (SLO) 2001-I-000812 (SLO) 2001-I-000812 (SLO) 2001-I-000812 (SLO) 2001-I-000813 (SLO) 2001-I-000812 (SLO) 2001-I-000813 (SLO) 2001-I-000813 (SLO) 1999-0097234 (SB) 1999-0097234 (SB) 1999-0097234 (SB)
Perrett, H.D.	Perrett, Carol M.	090-401-019 090-424-001 090-424-002 090-424-004 090-424-005 090-424-006 090-425-002 090-425-003 128-002-029 128-101-003 129-030-012	1999-086875 (SLO) 2001-I-000812 (SLO) 2001-I-000812 (SLO) 2001-I-000812 (SLO) 2001-I-000813 (SLO) 2001-I-000812 (SLO) 2001-I-000813 (SLO) 2001-I-000813 (SLO) 1999-0097234 (SB) 1999-0097234 (SB) 1999-0097234 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Phelan & Taylor Produce Company, Inc.		061-134-009 061-321-001 061-321-002 061-321-004 061-331-006 061-331-008 061-331-012 061-331-013 075-121-003 075-121-005 075-121-007 075-131-004	1989-I-004131 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-002269 (SLO) 1996-I-000230 (SLO)
Phelan & Taylor Produce Company, Inc.	Taylor, John Taylor, Diane	061-134-001 061-134-006 061-134-007 061-134-008 061-331-010	6203 (SLO) 16779 (SLO) 1996-I-000230 (SLO) 1996-012400 (SLO) 16288 (SLO)
Phelan, Ruth		129-110-025 129-050-014	2001-0114470 (SB) 2001-0114470 (SB)
Pictsweet Company		117-191-011 117-191-052	1995-054485 (SB) 1995-054484 (SB)
Piers, Robert		Not provided	
Pinoli, Mary S.	Perez, Shirley A. Brenner, Merritt Brenner, Nancy Bryden, James	117-180-021 117-180-002 117-170-013 117-170-014	2002-0076787 (SB) 2002-0076787 (SB) 2002-0076787 (SB) 2002-0076787 (SB)
Pinoli, Mary S.	Bryden, James M.	091-053-021	2005-026215 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Pinoli, Mary S.		007-891-012 091-053-018 091-053-019	2003-054761 (SLO) Unable to locate Unable to locate
Pismo Beach, City of		005-242-042	72780 (SLO)
Pismo Beach, City of		005-242-049 060-228-017 060-544-005	2004-I-002946 (SLO) Unable to locate Unable to locate
Pismo Oceano Vegetable Packing Exchange (POVE)	Hayashi, Robert	075-032-006	1993-034975 (SLO)
Pohaku, LP		117-200-018	1998-060413 (SB)
Durley, Odette	Durley, Unknown First Name Durley, Katherine	117-030-061	2007-0037815 (SB)
Pudwill, James		091-201-024	2005-104231 (SLO)
Pybas Vegetable Seed Co.		111-040-020	2005-0110010 (SB)
Pybas Vegetable Seed Co.		117-820-040	2005-087609 (SB)
Pybas Vegetable Seed Co.		117-820-004	2005-046778 (SB)
Radio Representatives		129-170-002	2003-064422 (SB)
Rancho Maria Golf Club, Inc.		113-250-014	1970-030863 (SB)
Rancho Maria, LLC		092-371-007 092-371-017 092-031-008 092-031-009	1997-048636 (SLO) 1997-048636 (SLO) 1997-048627 (SLO) 1997-048627 (SLO)
RCT 2003, LLC		113-080-018 113-080-024	2005-0085104 (SB) 2005-0085104 (SB)
Reed, William Jr., Trustee of the E. Tunnell Trust	various	129-100-014 129-100-021	2006-0063723 (SB) 2006-0063723 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Reed, William Jr., Trustee of the E. Tunnell Trust	Tunnell, Arthur Donner, Marianne, Donne, Trustee of the Tunnell Trust Tunnell Ranch Tunnell, Cecilia Marsalek, Joseph F.	129-100-019	2007-008204 (SB)
Renner, John A.		091-232-041	Unable to locate
Richards Holding Company		129-240-029	2006-087173 (SB)
Richardson, Hugh L.	Richardson, Linda S.	129-151-037	1998-102734 (SB)
Richardson, Linda S.	Richardson, Hugh L.	129-151-037	1998-102734 (SB)
Righetti, Ernest, Trust	Rubacava, Annadell	113-190-005 113-200-006 113-200-007 113-200-008 113-200-009 113-200-016 113-200-017 113-230-001 113-230-006 113-230-007	2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB)
Rikalo, May J.	Coy, Jean Coy, Billy Cox, Charles E. Cox, Richard	129-010-019	2000-0050936 (SB)
Rio Mesa Land Company		128-064-006	2005-015717 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Rio Mesa Land Company		128-094-018 128-094-019 128-094-020 128-094-021 128-094-023 128-094-024	2004-0042536 (SB) 2004-0042536 (SB) 2004-0042536 (SB) 2004-0042536 (SB) 2004-0042536 (SB) 2004-0042536 (SB)
Rio Mesa Land Company		128-064-007	2004-0042536 (SB)
Rio Vista Associates	Duncan Group	113-030-055	2002-015812 (SB)
River Bluffs, LLC		090-301-013	2005-049489 (SLO)
Roberts, John Anthony		091-063-001	2007-R-016320 (SLO)
Roemer Jones, Joann, Individually and as General Partner of JJ Santa Maria, LP	Roemer, Robert R. Roemer, Vard A. Jones, JoAnn Roemer	128-002-04-00-13 128-002-04-00-14 128-002-04-00-15	Unable to locate Unable to locate Unable to locate
Roemer, Robert R.	Roemer, Robert R. Roemer, Vard A. Jones, JoAnn Roemer	128-002-04-00-13 128-002-04-00-14 128-002-04-00-15	Unable to locate Unable to locate Unable to locate
Roemery, Vard A.	Roemer, Robert R. Roemer, Vard A. Jones, JoAnn Roemer	128-002-04-00-13 128-002-04-00-14 128-002-04-00-15	Unable to locate Unable to locate Unable to locate
Roffoni, John	Minetti, Clarence	113-070-031 113-070-032	1999-052464 (SB) 1999-052464 (SB)
Rogers, Judy A., individually and as Trustee for the Pereira Family Trust	Pereira Trust, Judy Rogers, Trustee	129-010-024	2002-06771 (SB)
Rogers, Judy A., individually and as Trustee for the Pereira Family Trust	Pereira Trust, Judy Rogers, Trustee	129-010-023	1997-067420 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Roman Catholic Archbishop of Los Angeles, a corporation, sole Archdiocese of Los Angeles Education and Welfare Corporation		107-240-015 111-240-025	1965-006794 (SB) 1967-003174 (SB)
Rosa, Edward G.	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Dutra, Maria C. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
	Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Dutra, Maria C. Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine		
Rose, Helen	DeBernardi Family DeBernardi, Robert DeBernardi, Edward	128-094-042 128-094-048	2003-029362 (SB) 2005-0009460 (SB) 2003-029362 (SB) 2005-0009460 (SB)
Rose, Helen	DeBernardi Family DeBernardi, Robert DeBernardi, Edward	128-094-012 128-094-045 128-094-047	2006-074155 (SB) 2005-009460 (SB) 2001-089893 (SB) 2006-074155 (SB)
Rossi, Robin L., Tre		091-151-005 091-151-006	2002-053692 (SLO) 2002-053692 (SLO)
Rossi, Robin L., Tre		091-411-019 091-411-020 091-411-026 091-442-028	2002-032677 (SLO) 2002-032677 (SLO) 2002-032677 (SLO) 2002-032677 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Rubacava, Annadell	Righetti, Ernest, Trust	113-190-005 113-200-006 113-200-007 113-200-008 113-200-009 113-200-016 113-200-017 113-230-001 113-230-006 113-230-007	2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB)
Rubalcava Trust		113-280-009 113-200-009 113-230-006 113-190-005 113-200-007 113-200-008 113-200-015 113-230-001 101-020-069 101-020-070	2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB) 2004-0064709 (SB)
Ruffoni, Jacqueline	Fleming, Cindy Ruffoni, Michael Ruffoni, Todd	111-240-018 111-240-027	2003-079323 (SB) 2003-079323 (SB)
Ruffoni, John		Not provided	
Ruffoni, Michael	Ruffoni, Jacqueline Fleming, Cindy Ruffoni, Todd	111-240-018 111-240-027	2003-079323 (SB) 2003-079323 (SB)
Ruffoni, Todd	Ruffoni, Jacqueline Fleming, Cindy Ruffoni, Michael	111-240-018 111-240-027	2003-079323 (SB) 2003-079323 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Ruiz, Eileen, and Doty, Maurice, Trustees	various	090-031-003 090-031-004 092-191-001	50412 (SLO) 50412 (SLO) 1997-R-063108 (SLO)
Ruiz, Eileen, and Doty, Maurice, Trustees	Dana Properties Dana, W.G., Trust Dana, Earl, Trust Dana, Ernest, Trust Martin, Gwendolyn Marsalek, Velma	090-051-012 090-051-013 090-111-003 090-151-005 090-151-009 090-151-013	1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO) 1979-024591 (SLO)
Runels, John		006-391-021	51093 (SLO)
Runels, John	Runels, Thomas Runels, Thomas & Edith, Trust	075-021-002	1994-33739 (SLO)
Runels, John	Runels, Thomas Runels, Thomas & Edith, Trust	006-341-006	1970-20544 (SLO) 1994-071005 (SLO)
Runels, John	Runels, Thomas Runels, Thomas & Edith, Trust	075-011-010 075-021-031 075-021-045 075-021-046	1994-071007 (SLO) 1988-016350 (SLO) Unable to locate 49761 (SLO)
Runels, John	Runels, Thomas Runels, Thomas & Edith, Trust	092-031-004	1994-071010 (SLO)
Runels, Thomas	Runels, Thomas & Edith, Trust Runels, John	006-391-021	51093 (SLO)
Runels, Thomas	Runels, Thomas & Edith, Trust Runels, John	006-341-006	1970-20544 (SLO) 1994-R-071005 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Runels, Thomas	Runels, Thomas & Edith, Trust Runels, John	075-011-010 075-021-031 075-021-045 075-021-046 092-031-004	1994-71007 (SLO) 1988-016350 (SLO) Unable to locate 49761 (SLO) 1994-071010 (SLO)
Runels, Thomas	Runels, Thomas & Edith, Trust Runels, John	092-031-004	1994-071010 (SLO)
Runels, Thomas	Runels, Thomas & Edith, Trust Runels, John	075-021-002	1994-33739 (SLO)
Runels, Thomas & Edith, Trust	Runels, Thomas Runels, John	006-391-021	51093 (SLO)
Runels, Thomas & Edith, Trust	Runels, Thomas Runels, John	075-011-010 075-021-031 075-021-045 075-021-046	1994-71007 (SLO) 1988-R-016350 (SLO) Unable to locate 49761 (SLO)
Runels, Thomas & Edith, Trust	Runels, Thomas Runels, John	006-341-006	1970-20544 (SLO) 1994-R-071005 (SLO)
Runels, Thomas & Edith, Trust	Runels, Thomas Runels, John	092-031-00	1994-071010 (SLO)
Runels, Thomas & Edith, Trust	Runels, Thomas Runels, John	075-021-002	1994-33739 (SLO)
Rural Water Company		N/A	N/A
Russ, Richard		091-173-012	44755 (SLO)
Sagaysay, Marilyn		091-063-021	2007-029464 (SLO)
Sakamoto, Mitsko, Irrevocable Trust	various	092-231-014	1990-R-081123 (SLO) 2002-R-057958 (SLO)
Sakamoto, Robert	various	092-231-014	1990-R-081123 (SLO) 2002-R-057958 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Sakamoto, Teruko, Irrevocable Trust	various	092-231-014	1990-R-081123 (SLO) 2002-R-057958 (SLO)
Sakamoto, Yotsuko, Irrevocable Trust	various	092-231-014	1990-R-081123 (SLO) 2002-R-057958 (SLO)
Salazar Family Trust		101-050-041	1993-0018580 (SB)
Salazar Family Trust		101-050-040	1993-0018581 (SB)
San Luis Obispo County Flood Control and Water Conservation District		N/A	N/A
San Luis Obispo, County of		007-011-045 007-011-046 061-091-029 075-111-002 075-113-025 075-114-030 075-115-093 075-116-048 090-313-049 090-313-050 090-331-014 090-331-032 090-341-032 091-313-049 091-313-050 092-061-009 092-121-085 092-122-056 092-122-058 092-122-060	1990-I-001907 (SLO) 1990-I-001907 (SLO) 1990-029487 (SLO) 1944-R-C03682 (SLO) 1947-R-C05628 (SLO) 1971-34183 (SLO) 1970-30780 (SLO) 1970-30780 (SLO) Unable to locate Unable to locate 1985-I-001673 (SLO) Unable to locate 1970-30780 (SLO) 1991-I-010871 (SLO) 2000-067788 (SLO) 2000-067788 (SLO) 1986-77273 (SLO) 2005-I-000065 (SLO) 2001-020507 (SLO) 1990-066080 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		092-122-086 092-231-015 092-231-017	1993-I-002180 (SLO) Unable to locate 1970-R-C30780 (SLO) 2002-I-001075 (SLO)
San Ysidro Farms, Inc.		092-371-012 092-371-016 092-371-005	2004-113230 (SLO) 2004-113230 (SLO) 1994-051305 (SLO)
San Ysidro Land Co., LLC		092-371-012 092-371-016 092-371-005	2004-113230 (SLO) 2004-113230 (SLO) 1994-051305 (SLO)
San Ysidro Land Co., LLC		117-020-050	2004-137858 (SB)
Sand, Rich		129-240-025	2001-0100916 (SB)
Sander, Jean H.	Sander, Manfred	101-030-001 101-030-002 129-170-013 129-170-014	1997-006094 (SB) 1997-006094 (SB) 1997-006094 (SB) 1997-006094 (SB)
Sander, Manfred	Sander, Jean H.	101-030-001 101-030-002 129-170-013 129-170-014	1997-006094 (SB) 1997-006094 (SB) 1997-006094 (SB) 1997-006094 (SB)
Sandy Acres Estates		091-261-023 091-281-072	2001-059315 (SLO) 2001-092647 (SLO)
Santa Barbara County Flood Control and Water Conservation District		103-670-008 103-670-009 103-740-015 105-240-064 107-070-043 107-300-032 107-460-010	1981-038275 (SB) 1981-038275 (SB) 1980-32107 (SB) Unable to locate 1983-054304 (SB) 1989-066573 (SB) 1979-032667 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		107-510-021	1981-022484 (SB)
		107-690-001	1984-064539 (SB)
		107-710-022	1986-009438 (SB)
		111-510-056	1976-020097 (SB)
		111-580-006	1972-041814 (SB)
		113-050-055	1976-029924 (SB)
		117-020-053	1972-038193 (SB)
		117-020-054	1972-038193 (SB)
		117-020-060	1973-048649 (SB)
		117-020-062	1973-048647 (SB)
		117-020-065	1975-016665 (SB)
		117-020-070	1976-022459 (SB)
		117-020-071	1976-029924 (SB)
		117-030-070	1983-3416 (SB)
		117-030-086	1983-3416 (SB)
		117-030-087	1983-3416 (SB)
		117-070-058	Unable to locate
		117-160-042	1972-038193 (SB)
		117-160-044	1972-038194 (SB)
		117-160-048	1973-048648 (SB)
		117-191-001	1976-009813 (SB)
		117-191-003	1978-047609 (SB)
		117-200-027	1976-009813 (SB)
		117-570-067	1982-015937 (SB)
		117-770-004	1982-53220 (SB)
		117-820-017	1973-047004 (SB)
		128-002-010	1976-024158 (SB)
		128-003-040	Unable to locate
		128-003-041	Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		128-019-005 128-019-040 129-030-018 117-191-002 128-002-009	Unable to locate Unable to locate 1962-023801 (SB) 1976-009813 (SB) 1976-024157 (SB)
Santa Barbara County Water Agency		N/A	N/A
Santa Barbara, County of		117-020-019 117-020-030 117-020-033 117-020-035 113-050-035 113-050-036 113-040-012	1962-022361 (SB) 1962-026010 (SB) 1962-029762 (SB) 1962-037307 (SB) 1963-006992 (SB) 1963-006992 (SB) 1963-006991 (SB)
Santa Barbara, County of		103-401-002	1962-036532 (SB)
Santa Barbara, County of		103-374-006 103-375-002 103-381-013	1962-010208 (SB) 1962-010208 (SB) 1962-010208 (SB)
Santa Barbara, County of		103-200-011 103-395-001 103-401-004 103-412-003 103-500-052 103-530-069 103-550-052 103-690-046 107-161-022 107-750-070 109-134-011	2004-079383 (SB) Unable to locate Unable to locate Unable to locate 1976-013913 (SB) 1979-014471 (SB) 1977-053598 (SB) 1987-057887 (SB) 1962-038586 (SB) 1988-023484 (SB) Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		111-100-005	1964-010591 (SB)
		111-100-013	Unable to locate
		111-100-015	Unable to locate
		111-231-004	1981-017445 (SB)
		111-420-021	1980-022883 (SB)
		113-020-011	1970-006406 (SB)
		113-020-012	1970-006406 (SB)
		113-020-013	1970-006406 (SB)
		113-020-020	1989-017072 (SB)
		113-020-021	1989-017072 (SB)
		117-020-041	1963-024994 (SB)
		117-030-083	Unable to locate
		125-064-002	Unable to locate
		125-064-007	1996-014794 (SB)
		125-064-008	1996-014794 (SB)
		128-002-018	1962-038327 (SB)
		128-002-023	1962-025635 (SB)
		128-002-026	1962-025635 (SB)
		128-002-041	1971-028676 (SB)
		128-026-002	1964-000531 (SB)
		128-085-034	1991-032400 (SB)
		128-085-039	1991-032400 (SB)
		128-085-040	1991-032400 (SB)
		128-085-041	1991-047734 (SB)
		128-085-042	1991-047734 (SB)
		128-085-043	2002-128701 (SB)
		128-085-044	2002-128702 (SB)
		128-094-001	1962-030015 (SB)
		128-094-003	1959-039753 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		128-094-006 128-100-017 128-101-002 128-101-004 128-101-008 128-101-009 128-101-018 147-180-023 147-180-024 149-022-001 149-031-001 149-033-001 149-040-001 149-040-003 149-040-005 149-040-006 149-040-007 149-040-008 149-040-009	1959-040993 (SB) 1960-001558 (SB) 1959-039754 (SB) 1959-040993 (SB) 1961-009936 (SB) 1959-039752 (SB) Unable to locate 1981-017948 (SB) 1981-017948 (SB) Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate 1957-011475 (SB) 1955-016142 (SB) 1952-007288 (SB) 1952-007288 (SB) 1952-007288 (SB)
Santa Maria Country Club		111-070-003 111-070-027 111-070-029	1971-037191 (SB) 1971-037191 (SB) 1973-002548 (SB)
Santa Maria Crossroads, LLC		128-137-041	Unable to locate
Santa Maria Potato, Inc.	OSR Enterprises OSR Ranch LP	128-096-004 128-096-005 128-095-006 (50% interest)	2002-0036342 (SB) 2002-0036342 (SB) 1989-068135 (SB)
Santa Maria Potato, Inc.	various	128-096-010 (50% interest)	2002-056749 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Santa Maria Potato, Inc.	various	128-100-029 128-100-020 128-100-021 128-100-027	1993-0083640 (SB) 1993-0083640 (SB) 1993-0083641 (SB) 1993-0083641 (SB)
Santa Maria Potato, Inc.	various	128-096-002 (50% interest)	1976-003756 (SB)
Santa Maria Potato, Inc.	various	128-095-008 50% interest) 128-096-003 (50% interest) 128-096-009 (50% interest) 128-100-001 (50% interest) 128-100-003 (50% interest) 128-096-006 (50% interest)	1985-002572 (SB) 1989-068135 (SB) 1989-068135 (SB) 1989-068137 (SB) 1989-068137 (SB) 1989-068136 (SB)
Santa Maria Public Airport District		111-231-016	2004-101610 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Santa Maria Public Airport District		111-231-005 111-231-006 111-231-008 111-231-009 111-231-010 111-231-011 111-231-013 111-231-014 111-231-017 111-231-018 111-231-019 111-291-005 111-291-033 111-292-027	2001-050631 (SB) 2001-050631 (SB) 1986-038945 (SB) 1986-038945 (SB) 1986-038945 (SB) 1986-038945 (SB) 1986-038945 (SB) 1986-038945 (SB) Unable to locate 2001-050631 (SB) Unable to locate 1964-010280 (SB) Unable to locate 1991-024729 (SB)
Santa Maria Public Airport District		111-580-001 111-580-003 111-580-004	2005-0116280 (SB) 2005-0116280 (SB) 2005-0116280 (SB)
Santa Maria Refining Company		113-150-005	1994-053090 (SB)
Santa Maria Rifle Club		129-010-015	1970-004140 (SB)
Santa Maria Senior Living, LLC		128-033-036	2006-0018708 (SLO)
Santa Maria Valley Water Conservation District		N/A	N/A

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Santa Maria, City of		113-120-005 113-120-016 113-120-023 113-120-026 113-120-029 113-120-030 117-030-076 117-250-028 128-098-004 117-820-002	Unable to locate 1983-036209 (SB) 1996-046374 (SB) 1998-094198 (SB) Unable to locate 1999-083031 (SB) 1990-060945 (SB) 1973-011057 (SB) 1962-024682 (SB) 2004-0057296 (SB)
Santa Maria-Bonita School District		123-210-004 123-210-010 123-210-012 117-910-009	2002-132117 (SB) 2002-132117 (SB) 2002-132117 (SB) 2003-025633 (SB)
Santa Maria-Bonita School District		119-010-017	2005-0014642 (SB)
Santa Maria-Bonita School District		121-073-002 119-252-019 119-224-001 119-091-001 121-250-020 121-025-001 111-220-002 117-431-008 128-033-001	1948-001356 (SB) 1949-004902 (SB) 1950-005498 (SB) 1955-004158 (SB) 1959-009414 (SB) 1960-025944 (SB) 1960-026562 (SB) 1961-042604 (SB) 1963-000835 (SB)
Santa Maria-Bonita School District		125-200-028	89-042469 (SB)
Santa Maria-Bonita School District		113-050-007	1959-029324 (SB) 1961-027127 (SB)
Santa Maria-Bonita School District		107-200-013 107-200-012	1960-037030 (SB) 1960-037030 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Santa Maria-Bonita School District		113-050-007 119-091-029 119-141-005 121-073-001 121-250-011 128-066-020 123-220-004 117-030-057 117-770-037 120-090-010 123-019-006 125-232-001 128-002-043 128-030-001 128-303-002	1959-029324 (SB) Unable to locate Unable to locate Unable to locate 1991-033065 (SB) 1986-077310 (SB) Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate 2001-057265 (SB) Unable to locate Unable to locate
Santa Maria-Bonita School District		117-030-068	1988-023259 (SB)
Sarad, John	Minnies, Nora Gabbert, Sean, Administrator for the Estate of John S. Gabbert Gabbert, Steve Gabbert, Thomas Eckles Lorenz, Valerie	101-010-005	2006-0012214 (SB)
Saruwatari, Ayako, Trust	Lan-Vest Limited	075-001-022 006-311-076 006-311-074 006-341-017	Unable to locate Unable to locate Unable to locate Unable to locate
SB Clark, LLC		129-151-026	2003-037772 (SB)
Schaefer, Jean	Schaefer, Louis	091-221-005	2005-021795 (SLO)
Schaefer, Louis	Schaefer, Jean	091-221-005	2005-021795 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Schoerner, Kathryn		091-232-005	2004-032511 (SLO)
Seastedt, Norman		Not provided	
Second Horizon Group dba Prime Outlets of Pismo		005-242-059	1999-I-003402 (SLO)
Seminis Vegetable Seed Company, Inc., A California Corporation		075-011-042	2005031850 (SLO)
Serpa Ranch	Machado, Manuel A., et al.	092-211-006 092-211-007	2005-048328 (SLO) 2005-048328 (SLO)
Shahrabani, David M.		111-240-022	1999-063413 (SB)
Shannon, William R. Tre		091-402-007	2001-I-000167 (SLO)
Sharer, James		128-099-008 128-099-009	2006-0090268 (SB) 2006-0090268 (SB)
Sheehy, Claire C.	Sheehy Partners, LP Sheehy, Terence W.	128-071-003 128-071-004	1992-062480 (SB) 1992-067406 (SB)
Sheehy, Terence W.	Sheehy, Claire C. Sheehy Partners, LP	128-071-003 128-071-004	1992-062480 (SB) 1992-067406 (SB)
Sheehy Partners, LP	Sheehy, Claire C. Sheehy, Terence W.	128-071-003 128-071-004	1992-062480 (SB) 1992-067406 (SB)
Shell, Sharon	Anderson, Richard P.	090-321-033	1994-058614 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Shiffrar, Arthur L.		090-271-014	1989-R-075214 (SLO) 2001-001735 (SLO) 2001-000122 (SLO) 2003-065158 (SLO) 2003-080645 (SLO) 1999-081224 (SLO)
		090-271-015	1989-R-075216 (SLO) 2001-001735 (SLO) 2001-000122 (SLO) 2003-065158 (SLO) 2003-080645 (SLO) 1999-081224 (SLO)
Shiffrar, Arthur L.		090-271-028	2000-I-002577 (SLO) 2001-001735 (SLO) 2003-080645 (SLO)
		090-271-029	2000-I-002577 (SLO) 2001-001735 (SLO) 2003-065158 (SLO) 2003-080645 (SLO)
ShIPLEY, Nancy	ShIPLEY, William L.	091-232-019	1998-032514 (SLO)
ShIPLEY, William L.	ShIPLEY, Nancy	091-232-019	1998-032514 (SLO)
Shrefler, DeAnna	Shrefler, Steven F.	091-111-037	1992-I-003490 (SLO)
Shrefler, DeAnna	Shrefler, Steven F.	091-111-040	1997-046546 (SLO)
Shrefler, Steven F.	Shrefler, DeAnna	091-111-037	1992-I-003490 (SLO)
Shrefler, Steven F.	Shrefler, DeAnna	091-111-040	1997-046546 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Siepiela, Dianne	Adcock, Lawrence Chan, Fook Kheong Chan, Terry Kwan Yu	091-161-051	2002-019093 (SLO)
Siepiela, Dianne	Adcock, Lawrence Chan, Fook Kheong Chan, Terry Kwan Yu	091-161-049	2002-019094 (SLO)
Sierra Madre Ranch Holdings, LLC		129-020-035 129-020-036 129-020-037 129-020-038 129-020-039 129-020-040 129-020-041 129-020-042 129-010-007 129-020-057	2003-0143355 (SB) 2003-0143355 (SB) 2003-0143355 (SB) 2003-0143355 (SB) 2003-0143355 (SB) 2003-0143355 (SB) 2003-0143355 (SB) 2003-0143355 (SB) 2003-0143355 (SB) 2003-0143355 (SB)
Signorelli, Bernice, Trust	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Souza, Ronald Karleskint Family Trust Dated 1992 Souza, Lucille Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)
Silva IV		092-031-005 092-031-006	Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Silva IV, LP	Silva, Edward W. (deceased) Silva, Manuel Jr. Silva, Helen E. Silva V, LP Silva VI, LP	113-040-009	1997-034227 (SB)
Silva IV, LP	Silva, Edward W. (deceased) Silva, Manuel Jr. Silva, Helen E. Silva V, LP Silva VI, LP	092-031-006	1997-032022 (SLO)
Silva Land Co. Inc.		092-051-020 092-051-006 092-051-019 115-020-017 115-020-018 115-020-019	1995-017407 (SLO) 1995-017407 (SLO) 1995-017407 (SLO) 1995-022306 (SB) 1995-022306 (SB) 1995-022306 (SB)
Silva V		113-090-013	1997-03426 (SB)
Silva V, LP	Silva, Edward W. (deceased) Silva, Manuel Jr. Silva, Helen E. Silva IV, LP Silva VI, LP	113-040-009	1997-034227 (SB)
Silva V, LP	Silva, Edward W. (deceased) Silva, Manuel Jr. Silva, Helen E. Silva IV, LP Silva VI, LP	092-031-006	1997-R-032022 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Silva VI, LP	Silva, Edward W. (deceased) Silva, Manuel Jr. Silva, Helen E. Silva IV, LP Silva V, LP	113-040-009	1997-034227 (SB)
Silva VI, LP	Silva, Edward W. (deceased) Silva, Manuel Jr. Silva, Helen E. Silva IV, LP Silva V, LP	092-031-006	1997-R-032022 (SLO)
Silva, Edward W. (deceased)	Silva, Manuel Jr. Silva, Helen E. Silva IV, LP Silva V, LP Silva VI, LP	092-031-006	1997-R-032022 (SLO)
Silva, Edward W. (deceased)	Silva, Manuel Jr. Silva, Helen E. Silva IV, LP Silva V, LP Silva VI, LP	113-040-009	1997-034227 (SB)
Silva, Helen, Executor of the Estate of Edward W. Silva		None	
Silva, Helen E.	Silva, Edward W. (deceased) Silva, Manuel Jr. Silva IV, LP Silva V, LP Silva VI, LP	113-040-009	1997-034227 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Silva, Helen E.	Silva, Edward W. (deceased) Silva, Manuel Jr. Silva IV, LP Silva V, LP Silva VI, LP	092-031-006	1997-R-032022 (SLO)
Silva, Irene	Silva, Jesse	091-311-028	12721 (SLO)
Silva, Jesse	Silva, Irene	091-311-028	1988-012721 (SLO)
Silva, Manuel Jr.	Silva, Edward W. (deceased) Silva, Helen E. Silva IV, LP Silva V, LP Silva VI, LP	092-031-006 092-031-005	1997-R-032022 (SLO) Unable to locate
Silva, Manuel Jr.	Silva, Edward W. (deceased) Silva, Helen E. Silva IV, LP Silva V, LP Silva VI, LP	113-040-009	1997-034227 (SB)
Silva, Nadine	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
	Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Dutra, Maria C. Bognuda, Geraldine		
Silveira, Frank Louis	Silveira, Maxine	113-050-029	2005-076720 (SB)
Silveira, Maxine	Silveira, Frank Louis	113-050-029	2005-076720 (SB)
Simas, Robert E.	Hicks, Carolyn Ed & Ida Simas LLC	117-170-022 117-170-023	2003-018943 (SB) 2003-018943 (SB)
Simas, Robert E.	Hicks, Carolyn Ed & Ida Simas LLC	128-101-015 128-101-016 128-101-017 092-061-005 092-211-002 092-211-011 092-371-001	2001-0001439 (SB) 2001-0001439 (SB) 2001-0001439 (SB) 2000-075709 (SLO) 2000-075709 (SLO) 2000-075709 (SLO) 2000-075709 (SLO)
Sites, Ruth B.		091-111-041	2005-001783 (SLO) 2004-075553 (SLO)
Skaggs, Donald	Skaggs, Doris	091-063-030	2001-070179 (SLO)
Skaggs, Doris	Skaggs, Donald	091-063-030	2001-070179 (SLO)
Smith, Bryn, N., individually and as Trustee U/D/T dated September 1, 1993, F/B/O the Smith Family)		091-232-015 105-010-021	2005-108614 (SLO) 1993-070818 (SB)
Smith, Elizabeth H.	Houston, Anthony	105-140-084	2002-136956 (SB)
Smith, Kenneth D.		129-240-023	2003-089391 (SB)
Snyder Family Trust		133-070-004	1998-002046 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Soto, Maria D.	Soto, Vincente R.	090-281-011	1976-27553 (SLO)
Soto, Vincente R.	Soto, Maria D.	090-281-011	1976-27553 (SLO)
Souza Family Trust		117-020-055 117-160-029	1998-103235 (SB) 1998-103235 (SB)
Souza, Arthur	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Dutra, Maria C. Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Souza, Clifford J.	Souza, Virginia L. Souza, Clifford J. and Virginia, Trust	113-050-019 113-050-023	1973-010293 (SB) 1972-015169 (SB)
Souza, Clifford J.	Souza, Virginia L. Souza, Clifford J. and Virginia, Trust	113-050-020 113-050-021 113-050-022 113-050-024	1993-0094120 (SB) 1993-0094120 (SB) 1993-0094120 (SB) 1993-0094120 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Souza, Clifford J. and Virginia L., Trust	Souza, Lucille Souza, Earl, Family Trust Souza, Janet Souza, Ronald Karleskint Family Trust Dated 1992 Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	117-160-022 117-160-002	2004-120130 (SB) 2004-120130 (SB)
Souza, Clifford J. and Virginia L., Trust	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Souza, Lucille Souza, Ronald Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	113-050-020 113-050-021 113-050-022 113-050-024	1993-0094120 (SB) 1993-0094120 (SB) 1993-0094120 (SB) 1993-0094120 (SB)
Souza, Clifford J. and Virginia L., Trust	various	113-050-019 113-050-023	2002-053753 (SB) 1972-015169 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Souza, Earl, Family Trust	Souza, Clifford J. and Virginia L., Trust Souza, Lucille Souza, Janet Souza, Ronald Karleskint Family Trust Dated 1992 Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)
Souza, Janet	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Lucille Souza, Ronald Karleskint Family Trust Dated 1992 Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Souza, Laura	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Souza, Mary R. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Souza, Lucille	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Souza, Ronald H. Karleskint Family Trust Dated 1992 Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Souza, Mary R.	Serpa Ranch Machado, Manuel Gibbons, Christina Mitchell, Carolyn Mallory, Douglas Cornell Lauer, Doris Mallory, Philip J. Lowers, Monica Chambers, Clara M. Rosa, Edward G. Dutra, Maria C. Souza, Arthur Pereira, Jeffrey, Trustee of the Pereira Living Trust Souza, Laura Rosa, Gerald, Trustee of the Anna M. Rosa Family Trust Machado, M.A. Jr. Machado, Edward Silva, Nadine Bognuda, Geraldine	092-211-006 092-211-007	2005-048328 (SLO) 1992-37112 (SLO) 2005-048328 (SLO) 1992-37112 (SLO)
Souza, Pauline		113-050-017 117-160-020	1969-017948 (SB) 1969-017948 (SB)
Souza, Ramona A.	Souza, Ronald H.	129-010-018	2002-010710 (SB)

December 21, 2007

Exhibit 1A
Page 152 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Souza, Ronald H.	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Karleskint Family Trust Dated 1992 Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	117-160-002 117-160-022	2002-053753 (SB) 2004-120130 (SB)
Souza, Ronald H.	Souza, Clifford J. and Virginia L., Trust Souza, Earl, Family Trust Souza, Janet Souza, Lucille Karleskint Family Trust Dated 1992 Signorelli, Bernice, Trust Karleskint, Elizabeth, Trust Clyatt, Rose Marie Gabel, Mary Jo	129-010-018	2002-010710 (SB)
Souza, Ronald H., Successor in interest to the Irving and Delores Souza Trust		092-031-012 113-050-018	2005-016669 (SLO) 2005-005661 (SB)
Souza, Virginia L.	Souza, Clifford J. Souza, Clifford J. and Virginia, Trust	113-050-020 113-050-021 113-050-022 113-050-024	1993-0094120 (SB) 1993-0094120 (SB) 1993-0094120 (SB) 1993-0094120 (SB)
Souza, Virginia L.	Souza, Clifford J. Souza, Clifford J. and Virginia, Trust	113-050-019 113-050-023	1973-010293 (SB) 1972-015169 (SB)

December 21, 2007

Exhibit 1A
Page 153 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Staben, Jeanne L.		129-010-033	2007-0019379 (SB)
Staben, Jeanne L.		117-160-036	1998-103235 (SB)
Staben, John J.		129-010-033 107-240-008	2007-0019379 (SB) 2007-0037101 (SB)
Staben, John J.	Staben, Jeanne	117-160-036	1998-103235 (SB)
Stewart, Annette K.	Stewart, Robert R. Mahoney & Stewart	092-211-009	1987-067486 (SLO)
Stewart, Annette K.	Stewart, Robert R. Mahoney & Stewart	128-093-001 128-093-021	2006-052973 (SB) 1998-071138 (SB)
Stewart, Jessica		Not provided	
Stewart, Michael A.		075-181-020	1978-28826 (SLO)
Stewart, Robert R.	Stewart, Annette K. Mahoney & Stewart	128-093-001 128-093-021	2006-052973 (SB)
Stewart, Robert R.	Stewart, Annette K. Mahoney & Stewart	092-211-009	1987-067486 (SLO)
Stewart, Thomas		Not provided	
Storos, Walter W., individually and as Trustee of the Walter William Storos Revocable Living Trust		091-261-024	1997-063361 (SLO)
Streator, Jack L., individually and as Trustee	Streator, Patricia A. Stubblefield, Pauline Goodchild, Helen Toy, Yolanda	091-063-003	2000-I-001988 (SLO)
Streator, Patricia A.	Streator, Jack L., individually and as Trustee Stubblefield, Pauline Goodchild, Helen Toy, Yolanda	091-063-003	2000-I-001988 (SLO)
Struble, William E. and Laurie J., Trustees of the Struble Family Trust		091-121-067	1998-001289 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
dated March 12, 1993			
Struble, William E. and Laurie J., Trustees of the Struble Family Trust dated March 12, 1993		091-121-055 091-121-056 091-121-065 091-121-066 091-121-069	1994-049592 (SLO) 1998-075729 (SLO) 1993-024522 (SLO) 1993-024522 (SLO) 1993-024540 (SLO)
Stubblefield, Pauline	Streator, Jack L., individually and as Trustee Streator, Patricia A. Goodchild, Helen Toy, Yolanda	091-063-003	Unable to locate deed
Studer, Jean M.	Studer, Theodore	129-160-030	1993-084709 (SB)
Studer, Theodore	Studer, Jean M.	129-160-030	1993-084709 (SB)
Sunrise Terrace Mobilehome Owners Association, Inc.		Not provided	
Sutti, Emilio Edward, individually and as Trustee of the Sutti Living Trust	Cullivan, Janet	113-210-008 113-210-014 113-210-016 113-240-014	1998-054348 (SB) 1998-054348 (SB) 1998-054348 (SB) 1998-054348 (SB)
Sutti, Emilio Edward, individually and as Trustee of the Sutti Living Trust	Cullivan, Janet	111-240-029	1998-028024 (SB)
Sutti, Lillian	Harney, Sally	111-240-028	1989-079508 (SB)
Tanamachi, Charles		091-192-024 091-192-010 191-193-013	Unable to locate Unable to locate Unable to locate
Tanamachi, June		091-192-024 091-192-010 191-193-013	Unable to locate Unable to locate Unable to locate

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Tanner, Sharon A.		092-181-035	2005-077716 (SLO)
Tanner, Sharon A.		092-181-036	2005-077716 (SLO)
Taylor, Diane	various	075-131-005	1990-034785 (SLO) 1984-22234 (SLO) 1984-22230 (SLO) 1984-22231 (SLO) 1984-22232 (SLO) 1984-22233 (SLO) 1984-22235 (SLO) 1984-22236 (SLO) 1984-22237 (SLO)
Taylor, Diane	various	061-134-001 061-134-006 061-134-007 061-134-008 061-331-010 075-011-043 075-011-044	6203 (SLO) 16779 (SLO) 1996-I-002269 (SLO) 1996-012400 (SLO) 1996-I-000230 (SLO) 1996-012400 (SLO) 70186 (SLO) 1991-R-070186 (SLO)
Taylor, John	various	075-131-005	1990-034785 (SLO) 1984-22234 (SLO) 1984-22230 (SLO) 1984-22231 (SLO) 1984-22232 (SLO) 1984-22233 (SLO) 1984-22235 (SLO) 1984-22236 (SLO) 1984-22237 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Taylor, John	various	061-134-001 061-134-006 061-134-007 061-134-008 061-331-010 075-011-043 075-011-044	6203 (SLO) 16779 (SLO) 1996-I-002269 (SLO) 1996-012400 (SLO) 1996-I-000230 (SLO) 1996-012400 (SLO) 70186 (SLO) 1991-R-070186 (SLO)
Taylor, John, Trustee		061-331-011 075-121-004 075-121-008 075-121-009 075-121-010 061-331-004 006-095-002	1996-I-000230 (SLO) 1996-I-000230 (SLO) 1996-R-012400 (SLO) 1996-I-000230 (SLO) 1996-I-000230 (SLO) 1996-I-000230 (SLO) 1996-I-000230 (SLO)
Taylor, Pauline E.		129-210-028	1999-035074 (SB)
Taylor, Pauline E.		101-050-004	1999-035074 (SB)
TH Limited Partnership		128-095-003 128-095-004	97-011638 (SB) 97-011636 (SB)
Thompson, Dorothy M.	Thompson, Bob	128-091-002 128-091-003 128-091-004 128-091-005 128-098-001 128-098-002	1994-051209 (SB) 1994-051209 (SB) 1994-051210 (SB) 1994-051209 (SB) 1994-051210 (SB) 1994-051210 (SB)
Thompson, Linda	Thompson, Thomas F.	128-091-007	1984-062151 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Thompson, Bob	Thompson, Dorothy	128-091-002 128-091-003 128-091-004 128-091-005 128-098-001 128-098-002	1994-051209 (SB) 1994-051209 (SB) 1994-051210 (SB) 1994-051210 (SB) 1994-051209 (SB) 1994-051210 (SB)
Thomas, Robert C.		128-091-006	1994-037989 (SB)
Thompson, Thomas F.	Thompson, Linda	128-091-007	1984-062151 (SB)
Tomooka Brothers, GP		092-061-002 092-231-001 113-070-005 113-070-006 113-070-019 113-070-020	1992-11311 (SLO) 1992-011310 (SLO) 1977-063297 (SB) 1977-063297 (SB) 1978-25356 (SB) 1978-25356 (SB)
Tompkins, Kathleen J.	Tompkins, Nicholas J.	113-070-010 113-100-002 113-070-011	2004-082605 (SB) 2004-082605 (SB) 2004-082605 (SB)
Tompkins, Kathleen J.	Tompkins, Nicholas J.	092-031-003	1995-015462 (SLO)
Tompkins, Nicolas	various	113-070-029	2002-030656 (SB)
Tompkins, Nicolas	Tompkins, Kathleen	113-070-010 113-100-002 113-070-011	2004-082605 (SB) 2004-082605 (SB) 2004-082605 (SB)
Tompkins, Nicolas	various	113-270-013 113-270-018 113-280-007 113-280-008 092-031-003	1989-082609 (SB) 1989-082609 (SB) 1989-082609 (SB) 1989-082609 (SB) 1995-015462 (SLO)
Torres, Marlene, Trustee	Torres, Robert, Trustee	129-151-049	2005-083512 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Torres, Robert, Trustee	Torres, Marlene, Trustee	129-151-049	2005-083512 (SB)
Toste, Anthony	Toste, Daniel R. Toste, Deanna	075-211-021	2006-055715 (SLO)
Toste, Anthony	Toste, Daniel R. Toste, Deanna	075-211-020	2005-008559 (SLO)
Toste, Daniel R.	Toste, Deanna Toste, Anthony	075-211-020	2005-008559 (SLO)
Toste, Daniel R.	Toste, Deanna Toste, Anthony	075-211-021	2006-055715 (SLO)
Toste, Deanna	Toste, Daniel R. Toste, Anthony	075-211-021	2006-055715 (SLO)
Toste, Deanna	Toste, Daniel R. Toste, Anthony	075-211-020	2005-008559 (SLO)
Tower Grove Vintners, Inc. (dba Laetitia Vineyard and Winery)		Not provided	
Town and Country Community, L.P.		129-280-002	2005-0086173 (SB)
Toy, Yolanda	Stubblefield, Pauline T. Goodchild, Helen	105-380-033	2004-123514 (SB)
Travis, Dorothy B. Trust		129-180-006 129-180-007 129-180-008 129-180-009	2007-0004471 (SB) 2007-0004471 (SB) 2007-0004471 (SB) 2007-0004471 (SB)
Treur, Henny		117-820-021	Unable to locate
Treur, Henny		117-820-022	2007-0015093 (SB)
Tri-M Rental Group		090-431-006	1999-074139 (SLO)

December 21, 2007

Exhibit 1A
Page 159 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
Tri-M Rental Group		090-431-007 090-431-016 128-101-007 129-030-003 129-030-005 129-030-009 129-030-013 129-030-014 129-030-015 129-030-016 129-030-017 129-030-019 129-040-001 129-040-002 129-040-008 129-040-009 129-040-010 129-040-011 113-150-021	2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020549 (SB) 1998-075363 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2001-0020552 (SB) 2002-100405 (SB)
Tunnell Ranch	various	129-100-014 129-100-021	2006-0063723 (SB) 2006-0063723 (SB)
Tunnell Ranch	Tunnell, Arthur Donner, Marianne, Donne, Trustee of the Tunnell Trust Reed, William Jr., Trustee of the E. Tunnell Trust Tunnell, Cecilia Marsalek, Joseph F.	129-100-019	2007-008204 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Tunnell, Arthur	various	129-100-014 129-100-021	2006-0063723 (SB) 2006-0063723 (SB)
Tunnell, Arthur	Donner, Marianne, Trustee of the Tunnell Trust Tunnell Ranch Reed, William Jr., Trustee of the E. Tunnell Trust Tunnell, Cecilia Marsalek, Joseph F.	129-100-019	2007-008204 (SB)
Tunnell, Cecilia	Tunnell, Arthur Donner, Marianne, Trustee of the Tunnell Trust Tunnell Ranch Reed, William Jr., Trustee of the E. Tunnell Trust Marsalek, Joseph F.	129-100-019	2007-008204 (SB)
Tunnell, Cecilia	various	129-100-014 129-100-021	2006-0063723 (SB) 2006-0063723 (SB)
Union Asphalt, Inc.		129-110-008 129-110-021 129-220-016 129-220-034 129-220-017	1994-063765 (SB) 1990-073376 (SB) 1996-001940 (SB) 1998-057825 (SB) 1983-30957 (SB)
Union Asphalt, Inc.		129-210-023 129-210-031 129-210-036 129-220-011 129-220-015	2007-0032265 (SB) 2007-0032265 (SB) 2007-0032265 (SB) 2007-0032265 (SB) 2007-0032265 (SB)
Union Asphalt, Inc.		129-220-024 129-220-023	1983-030957 (SB) 2001-005079 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		008-0011-608129 008-0012-608130 008-0017-608131 008-0019-608132 008-0021-608133 009-0001-608136 009-0002-608137 009-0003-608138 075-281-031 115-010-020	unable to locate unable to locate unable to locate unable to locate unable to locate unable to locate unable to locate unable to locate 1991-I-007953 (SLO) unable to locate
Union Oil Company of California		111-360-084 111-360-083	2005-0081672 (SB) 2005-0081675 (SB)
Union Oil Company of California		117-310-004 117-310-005 117-310-006 117-310-007 117-310-008 117-310-009 117-310-010 117-320-016 117-320-017	2005-0114486 (SB) 2005-0114486 (SB) 2005-0114486 (SB) 2005-0114486 (SB) 2005-0114486 (SB) 2005-0114486 (SB) 2005-0114486 (SB) 2007-0033424 (SB) 2007-0033425 (SB)
Union Oil Company of California		109-230-014 117-820-015	2002-0112997 (SB) 2003-0012667 (SB)
Union Oil Company of California		129-020-013	1996-021714 (SB)
Union Oil Company of California		117-250-026	1948-010319 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Union Oil Company of California		091-053-033 109-239-015 109-360-009 111-360-087 113-240-007 117-250-030 117-310-003 117-320-001 128-066-018 128-066-019 128-066-038 128-071-005 128-093-002 128-093-003 128-093-004 128-093-005 128-093-008 128-101-011 117-490-030 129-020-013	2004-I-002946 (SLO) 2003-081343 (SB) 2004-018904 (SB) 2005-081675 (SB) 1994-019654 (SB) Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate 1949-010094 (SB) Unable to locate
Union Oil Company of California		105-380-012	2007-0049110 (SB)
Union Oil Company of California		105-380-001 105-380-002 105-380-003 105-380-004 105-380-005 105-380-006 105-380-007 105-380-008	2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		105-380-009 105-380-010 105-380-013 105-380-014 105-380-015 105-380-016 105-380-017 105-380-018 105-380-019 105-380-021 105-380-022 105-380-023 105-380-024 105-380-025 105-380-026 105-380-027	2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB) 2005-0122937 (SB)
Union Oil Company of California		113-050-037 113-040-015	2006-024590 (SLO) 2006-024590 (SLO)
Union Oil Company of California		091-053-033 109-239-015 109-360-009 111-360-087 113-240-007 117-250-026 117-250-030 117-310-003 117-310-004 117-310-005 117-310-006	2004-I-002946 (SLO) 2003-081343 (SB) 2004-018904 (SB) 2001-093803 (SB) 1948-010319 (SB) Unable to locate Unable to locate Unable to locate 2005-114486 (SB) 2005-114486 (SB) 2005-114486 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
		117-310-007 117-310-008 117-310-009 117-310-010 117-320-001 117-320-016 117-320-017 128-066-018 128-066-019 128-066-038 128-071-005 128-093-002 128-093-003 128-093-004 128-093-005 128-093-008 128-101-011 117-490-030	2005-114486 (SB) 2005-114486 (SB) 2005-114486 (SB) 2005-114486 (SB) Unable to locate 2007-033424 (SB) 2007-033425 (SB) unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate 1949-010094 (SB) Unable to locate
Union Oil Company of California		113-030-003	2006-0094759 (SB) 2006-024588 (SLO)
Valley Investment Co.		047-161-012 047-161-010 047-161-023	Unable to locate Unable to locate Unable to locate
Varini, Lorenzo	various	113-240-001 113-240-010	2007-0038481 (SB) 2007-0038481 (SB)
Varini, Lorenzo	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella	113-080-006	1991-009647 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number ¹
	Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina		
Varini, Lorenzo	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-110-001 117-240-006	1991-009647 (SB) Unable to locate
Varini, Riccardino	various	113-240-001 113-240-010	2007-0038481 (SB) 2007-0038481 (SB)
Varini, Riccardino	Wineman, Ernest C. Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella	113-080-006	1991-009647 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
	Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina		
Varini, Riccardino	Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Cameroni Moretti, Paola Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-110-001 117-240-006 128-071-002	1991-009647 (SB) Unable to locate Unable to locate
Ventura, Robin	Ventura, Stephanie	129-100-029	2000-0045145 (SB)
Ventura, Stephanie	Ventura, Robin	129-100-029	2000-0045145 (SB)
Victorino, Cindy L.	Victorino, Roy	075-181-027	2007-R-026939 (SLO)
Victorino, Roy	Victorino, Cindy L.	075-181-027	2007-R-026939 (SLO)

December 21, 2007

Exhibit 1A
Page 168 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Village of North Point Homeowners Association		107-470-002	1981-14532 (SB)
Vincent Family Ranches		128-092-004 128-092-005 128-092-008	1984-029276 (SB) 1984-029276 (SB) 1984-029276 (SB)
Vreeland, Kathleen	Lanini, Stella Lanini, Roland Hart, Arletta Lanini, Peggy Allen, Carol	113-040-003	2007-0054038 (SB)
Vreeland, Kathleen	Lanini, Stella Lanini, Roland Hart, Arletta Lanini, Peggy Allen, Carol	113-949-003	Unable to locate
Wage, Julie Marsalek		129-100-014 129-100-021	2006-0063723 (SB) 2006-0063723 (SB)
Waller, June S.		075-031-009 075-031-017 113-140-003 113-140-008 113-140-011	1983-R-C33999 (SLO) 1983-R-C33999 (SLO) 1983-36221 (SB) Unable to locate Unable to locate
Waller, June S.		115-140-015	2005-000246 (SB)
Wal-mart Real Estate Business Trust		128-137-018	1997-062164 (SB)
Walsh, Harold		090-131-001	Unable to locate
Ware, Roxanne	Gilder, James, Trust Gilder, James Gilder, Dolores Lanini, Eloise Lanini, Roland	091-201-054 091-201-055	2003-144070 (SLO) 1996-046106 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Ware, Roxanne	Gilder, Dolores Lanini, Eloise Lanini, Roland Gilder, James	091-201-054 091-201-055	2003144070 (SLO) 1996-046106 (SLO)
Weatherby, Patricia, Trust		Not provided	
Weldon, Marilyn	Weldon, Richard	113-120-020	2003-001612 (SB)
Weldon, Marilyn	Weldon, Richard	090-271-011	1986-045008 (SLO)
Weldon, Olga	Abel, Marilee Franklin, Donna M. Franklin, Douglas Franklin, Paul Giacomini Ranch Weldon, Richard Weldon, Steve Weldon, Tony	117-121-026	Unable to locate
Weldon, Richard	Abel, Marilee Franklin, Donna M. Franklin, Douglas Franklin, Paul Giacomini Ranch Weldon, Olga Weldon, Steve Weldon, Tony	117-121-026	Unable to locate
Weldon, Richard	Weldon, Marilyn	113-120-020	2003-001612 (SB)
Weldon, Richard	Weldon, Marilyn	090-271-011	1986-045008 (SLO)
Weldon, Steve	Abel, Marilee Franklin, Donna M. Franklin, Douglas Franklin, Paul Giacomini Ranch Weldon, Olga Weldon, Richard Weldon, Tony	117-121-026	Unable to locate

December 21, 2007

Exhibit 1A
Page 170 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Weldon, Tony	Abel, Marilee Franklin, Donna M. Franklin, Douglas Franklin, Paul Giacomini Ranch Weldon, Olga Weldon, Richard Weldon, Steve	117-121-026	Unable to locate
West Bay Company LLC		103-070-004 107-300-007 107-300-008 107-300-012 129-120-001 129-120-023 129-151-029 129-151-031 129-151-032 129-151-033	1998-048516 (SB) 1998-048516 (SB) 1998-048516 (SB) 1998-048516 (SB) 1998-048516 (SB) 1998-048516 (SB) 1998-048516 (SB) 1998-048516 (SB) 1998-048516 (SB) 1998-048516 (SB)
West Bay Company LLC		129-050-012 129-050-015 129-050-016	Unable to locate Unable to locate Unable to locate
Western Media, Inc.		005-241-066	13413 (SLO)
Western Refrigeration and Cold Storage Co.		117-240-026	81-5711 (SB)
Westphal, Carol	Hilliard, Don	091-073-048	2000-007753 (SLO)
Whiterock Company		129-110-001 129-110-004	1996-077585 (SB) 1996-077587 (SB)
Wickenden Family Trust	Dore, LP	133-070-030 133-070-031	2006-054837 (SB) 2006-054839 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Wickenden Family Trust	Dore, LP	101-050-017 101-050-016	2006-0054837 (SB) 2006-0054838 (SB)
Will, Jill	Will, Kevin	129-240-011	1999-060273 (SB)
Will, Kevin	Will, Jill	129-240-011	1999-060273 (SB)
Williams Holding Company		101-040-010 101-040-015 101-040-024 101-070-006 129-210-006	1975-021752 (SB) Unable to locate 1975-021752 (SB) 1975-027813 (SB) 1975-027812 (SB)
Williams, Kay		075-081-005	2001-I-003435 (SLO)
Wilson, Gary M.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Bettencourt, Catherine	091-121-079	2005-032962 (SLO)
Wilson, Gary M.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Bettencourt, Catherine	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Wilson, Gary M.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Bettencourt, Catherine	091-121-064	2005-016471 (SLO) 2004-R-096188 (SLO)
Wilson, Gary M.	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Bettencourt, Catherine	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO) 2004-R-096188 (SLO)
Wilson, Susan	Bettencourt, Catherine Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	0091-121-079	2005-032962 (SLO)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Wilson, Susan	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-064	2005-016471 (SLO) 2004-R-096188 (SLO)
Wilson, Susan	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-078 091-121-063	2005-R-032962 (SLO) 2005-R-016472 (SLO) 2004-R-096188 (SLO)
Wilson, Susan	Wilson, Susan M. Fratello, Florence (spouse, Frank Fratello deceased) Bettencourt, James Jr. Bettencourt, Catrina Bettencourt, James III Owen, Christina M. Owen, Stephanie S. Wilson, Gary M.	091-121-076 091-121-077	2004-096187 (SLO) 2004-096187 (SLO)
Wineman, Chris	Lenger, Jeanette F. Wineman, Ernest, Jr. Ferini, Andre	113-040-011	2007-0021952 (SB)
Wineman, Dean A.	Cooper, Janice F.	128-092-002 128-092-001	2003-071627 (SB) 2003-071627 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Wineman, Ernest	Wineman, Peggie Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)
Wineman, Ernest, Jr.	Lenger, Jeanette F. Wineman, Chris Ferini, Andre	113-040-011	2007-0021952 (SB)
Wineman, Peggie L.	Wineman, Ernest C. Moretti, Peter M. Cotti, Nicola Cotti, Rossella Herold, Maria Herold, George Moretti Cotti, Liliana Magoria Landolt, Floridita Landolt, Lea Landolt-Ritter, Claudine Varini, Riccardino Varini, Lorenzo Moretti, Michele Crettenand Moretti, Isabella Favre Moretti, Christina	113-080-006	1991-009647 (SB)

December 21, 2007

Exhibit 1A
Page 175 of 177

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Wise, Diana Stewart	Wise, Fred F.	129-240-010	1992-091763 (SB)
Wise, Fred F.	Wise, Diana Stewart	129-240-010	1992-091763 (SB)
Wolfe, Douglas, Revocable Trust		113-040-004	84-065832 (SB)
Wood, Mary W.	Wood, Steven W.	101-050-011 101-050-045	2005-0010881 (SB) 2005-0010881 (SB)
Wood, Steven W.	Wood, Mary W.	101-050-011 101-050-045	2005-0010881 (SB) 2005-0010881 (SB)
Woodland Park Mutual Water Company		091-341-048 091-341-050 091-351-057 091-193-043 091-193-046 091-194-065	Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate Unable to locate
Woodlands Ventures		091-211-009 091-211-018 091-221-001 091-261-025 092-411-003	2002-093395 (SLO) 2002-093395 (SLO) Unable to locate 2002-093395 (SLO) 2002-093395 (SLO)
Woods, Edwin N.	Woods, Jeanne P.	129-260-031 129-260-033	1996-010355 (SB) 1996-010355 (SB)
Woods, Edwin N. and Jeanne P., Trustees		129-110-002	2004-090775 (SB)
Woods, Jeanne P.	Woods, Edwin N.	129-260-031 129-260-033	1996-010355 (SB) 1996-010355 (SB)
Work, Carmen		091-054-012	1998-059750 (SLO)
Wortley, Lou Jean	Wortley, Rollin K.	128-064-005	1997-060500 (SB)
Wortley, Lou Jean	Wortley, Rollin K.	128-064-004	1993-06426 (SB)
Wortley, Rollin K.	Wortley, Lou Jean	128-064-005	1997-060500 (SB)

December 21, 2007

Stipulating Party	Co-Owner Per Stipulation	APN	Deed No. or Deed Reference Number¹
Wortley, Rollin K.	Wortley, Lou Jean	128-064-004	1993-06426 (SB)
Yokoyama, Howard		091-192-024 091-192-010 191-193-013	Unable to locate Unable to locate Unable to locate
Yokoyama, Nadine		091-192-024 091-192-010 191-193-013	Unable to locate Unable to locate Unable to locate
Zimmerman, David	Zimmerman, Joan	129-010-021	1976-002032 (SB)
Zimmerman, Joan	Zimmerman, David	129-010-021	1976-002032 (SB)

December 21, 2007

Exhibit 1B

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF SANTA CLARA

DEPARTMENT 17

SANTA MARIA VALLEY WATER	)	Case No. CV 770214
CONSERVATION DISTRICTS, A PUBLIC)	
ENTITY,	)	ORDER AFTER HEARING GRANTING
) NIPOMO COMMUNITY SERVICES)	
Plaintiff,	)	DISTRICT'S MOTION FOR SUMMARY
	)	ADJUDICATION
vs.)	
)	
CITY OF SANTA MARIA, A MUNICIPAL)	
CORPORATION, ET AL.)	
_____)	
AND RELATED CROSS-ACTIONS.)	
_____)	

The above-entitled matter came on regularly for hearing on January 8, 2001, at 1:30 p.m., the Honorable Conrad L. Rushing presiding. Counsel Robert Dougherty appeared on behalf of the Land Owner Group Parties and Steven Saxton, appeared on behalf of Plaintiffs and James Markman appeared on behalf of Nipomo Community Services District, Henry Weinstock appeared on behalf of Northern Cities and Ryan Bezzera appeared on behalf of Rancho Maria, et al. The Court, having read and considered the supporting and opposing papers, and having heard and considered the arguments of counsel, and good cause appearing therefor, makes the following order:

IT IS ORDERED THAT:

Nipomo Community Services District's Motion for Summary Adjudication is GRANTED. The Court grants all joinders. Based on the Land Owner Group's concession that the adoption of the "Foreman Line" is appropriate, as well as the concession offered by Mr. Slade that he does not disagree with Mr. Foreman on the "outermost" basin boundary, the Court finds that there is no triable issue of material fact as to the "outermost" basin boundary as articulated in the Declaration of Terry Foreman, dated December 8, 2000, and as depicted on Exhibit 1 thereto¹. (See Nipomo's Statement of Material Fact #3, evidence in support and in opposition thereto.) Therefore, the moving parties are entitled to judgment on all affirmative defenses dealing with uncertainty of the basin boundaries.

The Court finds that the outermost lateral boundary of the Santa Maria Valley Groundwater Basin ("the Basin") lies along a type of material that does not readily transmit water, that is, for the purposes of this case, it is impermeable (impermeable is used here to mean only that the rocks, sediments and other materials do not readily transmit water). Thus, material (rock, sediments, sand, etc.) that do readily transmit water are within the basin.

Those that do not readily store and transmit water are the Foxen Formation or older, including the Franciscan Formation, the Knoxville Formation, the Monterey Formation, the Obispo Formation, and the Sisquoc Formation; and those that do readily store and transmit water are the Careaga Sandstone or younger, including the Careaga Formation, the Pismo Formation, the Paso Robles Formation, time-

¹The boundary described herein is shown on that certain map marked Exhibit 1, by a black dash double dot line and said Exhibit is in evidence and a part of this Order.

equivalent Paso Robles Formation, Orcutt Formation, terrace deposits, young and old alluvium, and dune and sand deposits, with the following three exceptions:

- a. The southern boundary along the Solomon Hills is located on the axis of antic lines where the Careaga Sandstone and Paso Robles Formation dip in the Basin on the north side of the axis and dip into a separate basin, the San Antonio Basin, on the south side of the axis;
- b. Where the Basin boundary crosses tributary streams, the boundary is located across the mouth of each such stream to directly connect the closest bedrock contacts on each side of that stream; and,
- c. The western boundary of the Basin is the Pacific Ocean.

The vertical boundary of the Basin is located at the contact between those rocks and sediments that readily store and transmit water (generally, the Careaga Formation and younger) and those rocks and sediments that do not readily store and transmit water (generally, the Foxen Formation and older) as described above in reference to the lateral boundary of the Basin, except that in the northeast portion of the area north of the Santa Maria River, the vertical Basin boundary extends to the base of the Obispo tuffs of the Obispo Formation. The Obispo tuffs underlie the alluvium of the Nipomo Valley, and extend beneath the Paso Robles Formation northerly to the Arroyo Grande Valley.

SO ORDERED.

Dated: January 9, 2001

[ORIGINAL SIGNED]
CONRAD L. RUSHING

CMS
FILED
DEC 21 2001
KIM TORRE
Clerk of the Court
Superior Court of Santa Clara
BY: DEPUTY

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**SUPERIOR COURT OF CALIFORNIA
COUNTY OF SANTA CLARA
DEPARTMENT 17C**

SANTA MARIA VALLEY WATER
CONSERVATION DISTRICTS, a
public entity,

Plaintiff,

vs.

CITY OF SANTA MARIA, a municipal
corporation, et al.,

Defendants,

Case No. CV 770214

ORDER AFTER HEARING RE:
TRIAL (PHASE II)

Hearing Date: October 9, 2001
Time: 8:45 a.m.
Dept.: 17C

Judge: Hon. Conrad L. Rushing

AND RELATED CROSS-ACTIONS

Trial of Phase II of the above-entitled matter came on regularly on October 9, 2001, at 10:00 a.m., the Honorable Conrad L. Rushing presiding. The Court, having considered the testimony, declarations and exhibits, and good cause appearing therefor, issues the following decision and order:

Plaintiff's motion for an order establishing the geographic area constituting the Santa Maria Groundwater Basin (hereinafter "Basin"), for the purposes of this case, is hereby GRANTED.

The Court finds that the boundary of the Basin is that described on the map filed as Exhibit 5 with the Declaration of Robert C. Wagner dated November 20, 2001 (which can be found currently at <http://www.secomplex.org/docfiles/QD0CB28E06D5.pdf>), hereinafter referred to as the

1 "Boundary Line." Each of the parties to the Phase II proceedings on October 9, 2001, stipulated to
2 the Court's determining the Boundary Line of the Basin. The Basin shall also include for purposes
3 of adjudication herein all those parcels of land, which are shown on the said Exhibit 5 and listed on
4 Exhibit 6 to the said Declaration of Robert C. Wagner, which either touch or are intersected by the
5 Boundary Line, to the full extent of the perimeter of such parcels. The Court has not at this time
6 received full briefing as to whether there are legal issues as to such parcels which touch or are
7 intersected by the Boundary Line, concerning whether owners of such parcels may appropriate water
8 from the Basin for the use of the remainder of the subject parcels, whether the owners of such parcels
9 are considered to be landowners or purveyors, or whether their rights to extract or export water are
10 affected by their parcels not being fully within the Basin. Thus, at this time, until further order, the
11 Court orders that those parcels are to be considered within the Basin.

12 The Court finds on the basis of the evidence presented that the Boundary Line demarcates
13 the boundary of the Basin, and that the Basin constitutes the area beneath which groundwater exists
14 in sufficient quantities to be meaningfully included in this lawsuit. The Court also finds that the
15 area previously included in the "outermost basin boundary," but excluded by the Boundary Line,
16 contains potentially water-bearing materials, but nevertheless lacks actual groundwater in amounts
17 sufficient to justify including that area in this case for purposes of adjudicating the various claims
18 to groundwater in the Basin. Owners of lands beneath which no significant groundwater supply
19 exists do not have property right claims concerning such water that present a justiciable issue.
20 Similarly, owners of lands beneath which no significant groundwater supply exists should not be
21 permitted to assert, by virtue of their ownership of such lands, claims respecting groundwater
22 supplies underlying adjacent or nearby lands.

23 The Court further finds that the Declaration of Robert C. Wagner dated November 20, 2001,
24 attached to this Order, along with Mr. Wagner's map and table of parcels, attached as Exhibits 5 and
25 6, set forth sufficient detail regarding the specific parcels traversed by the Basin Boundary Line so
26 as to apprise potentially affected landowners and other interested parties of the location of the Basin
27 and Boundary Line fixed by this Order. A digital rendition of the map prepared by Mr. Wagner to
28 depict affected parcels is posted for inspection on the Court's website.

2 The Court determines that only the lands, groundwater extraction claims and claims to
3 groundwater storage rights within the Boundary Line shall be subject to claims in this lawsuit. The
4 Court has considered the possibility that ground water charging and storage might extend the
5 boundaries of the basin but finds at this point that there is *insufficient* evidence of that affecting the
6 prospective orders to be made by this Court.

7 The motion of the Northern Cities (joined by other parties) that the Northern Cities Area be
8 conditionally severed from this litigation, is denied. The Northern Cities Area is also shown on the
9 map which is attached as Exhibit 5 to the Declaration of Wagner. That area shall remain within the
10 Basin and Boundary Line fixed in this Order. The Court finds that a comprehensive judgment in this
11 litigation is advisable and necessary, in that only such a comprehensive judgment would prevent later
12 litigation of the same issues, prevent the risk of rulings which are inconsistent, and prevent erroneous
13 rulings which may be affected by facts which would be adduced if the interests of all parties who
14 may be affected by these rulings were represented and involved throughout this litigation. Cases
15 cited by the proponents of severance can also be read as indicating that retaining the Northern Cities
16 Area in the litigation is necessary to render an effective judgment. Orange County Water District
17 v. City of Riverside (1959) 173 Cal.App.2d 137, 173 ("Undoubtedly the preferable course is, so
18 far at least as is practicable, to 'have all owners of lands on the watershed and all appropriators who
19 use water in court at the same time"); City of Chino v. Superior Court (1967) 255 Cal.App.2d
20 747, 752 ("Because of the failure of OCWD in that earlier suit to join as defendants all claimants to
21 prescriptive rights to water from the Upper and Middle Basins, many questions were left
22 unanswered").

23 The Court has listened to the testimony and read the exhibits submitted, and additionally the
24 supplemental memorandum of Richard C. Slade and supplemental declaration of Terry L. Foreman.
25 The Court finds that there is no substantial controversy that the Northern Cities Area, the Nipomo
26 Mesa and the Santa Maria Valley area all overlie one large groundwater basin. Each area is subject
27 to the same general climatologic and hydrologic conditions. The Court concludes there are no
28 geologic or hydrologic features that separate the Northern Cities Area from the remainder of the
Basin encompassed by this litigation. The Court must consider that the water rights to be

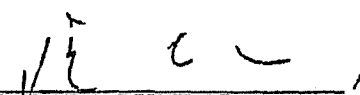
1 determined in this litigation will apply to situations that might occur in other than a "best case"
2 scenario. Future conditions could produce adverse impacts, such as drought, earthquake, failure of
3 the Lopez Reservoir, or failure of the Northern Cities for other reasons to adhere to the so-called
4 'gentlemen's agreement' governing groundwater pumping in the Northern Cities Area.
5 Representatives of the Northern Cities failed to stipulate to quieting title in other parties who have
6 sued the Northern Cities for whatever rights they may possess, and failed to stipulate that they would
7 desist from claiming water rights in the remainder of the Basin in such an eventuality. Indeed, it
8 appears from the testimony that groundwater pumping in the Northern Cities area can potentially
9 increase the flow of water to it from other parts of the Basin.

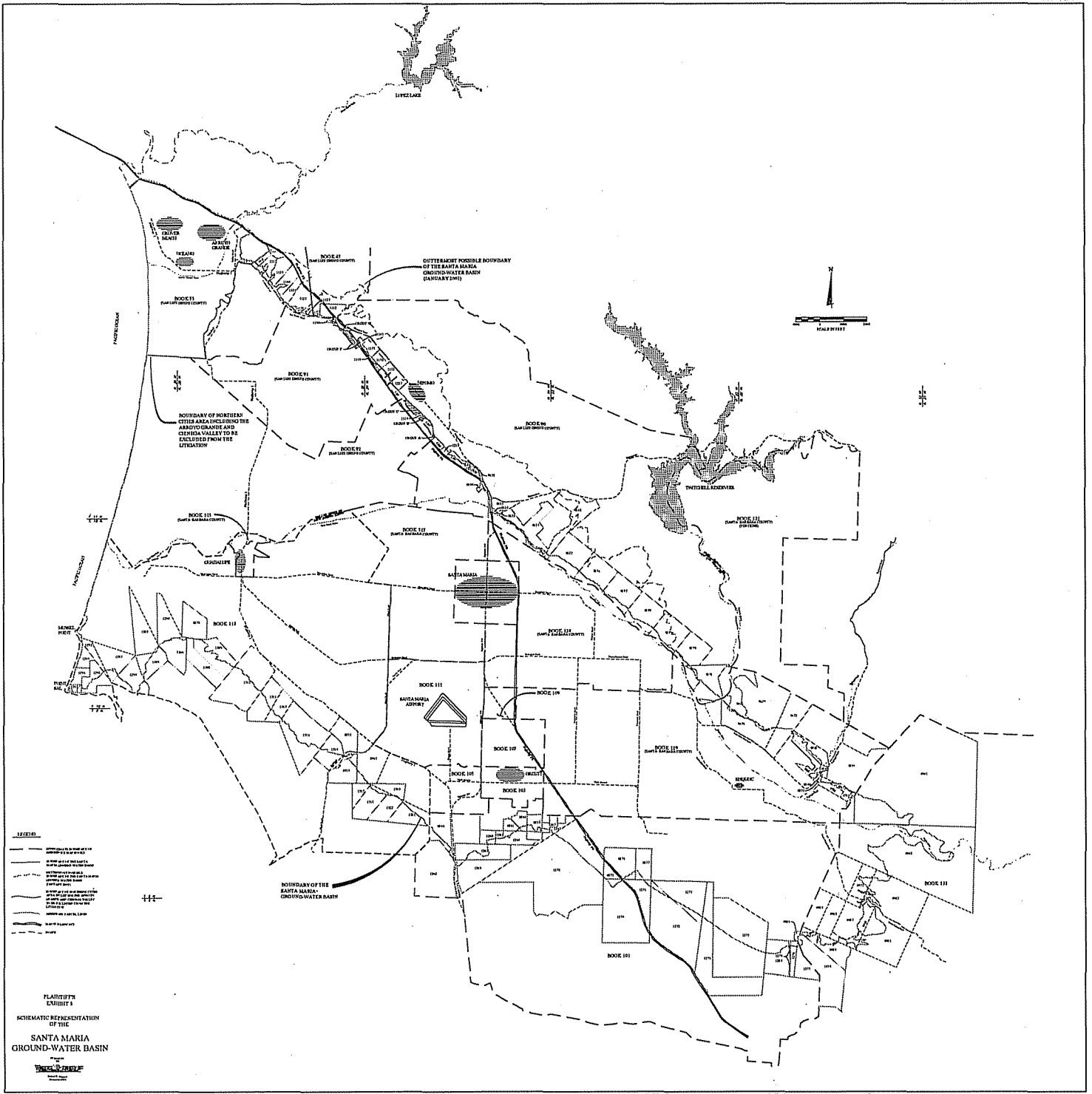
10 The parties reluctance to retain the Northern Cities area in the litigation appears to stem from
11 the prospect of joining and serving all landowners in the Northern Cities area whose rights may
12 potentially be affected. It may be possible, however, to obtain effective representation and due
13 process for such landowners by means of a class action, after due notice is provided, in which such
14 landowners are a defendant class. United States v. Truckee-Carson Irrigation District (D.Nev. 1975)
15 71 F.R.D. 10. The Court would entertain a motion to amend the cross-complaints or other pleadings
16 to join the landowners in that area as a defendant class, represented by a handful of interested
17 landowners who are similarly situated, in lieu of joinder of each owner. The Court would also
18 entertain a motion, briefing and argument as to why it may be inappropriate or inconvenient to
19 adjudicate the matter by means of a defendant class.

20 Any litigant now in the action who is asserting a quiet title claim concerning property outside
21 of the Boundary Line must move for severance of that claim from this action and must file such a
22 motion on or before thirty (30) days following service of this Order. Any such claims for which no
23 motion to sever is filed will be dismissed without prejudice on motion of any party or by the Court
24 on its own motion.

25 SO ORDERED.

26
27 Dated DEC 21 2001

28 
CONRAD L. RUSHING
Judge of the Superior Court



0118
FILED

JAN 25 2002

JOHN TORRES
Clerk of the Superior Court
Superior Court of California County of Santa Clara
BY: RICARDO GARCIA ALBER Deputy

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7 **SUPERIOR COURT OF CALIFORNIA**
8 **COUNTY OF SANTA CLARA**
9 **DEPARTMENT 17C**

10
11 **SANTA MARIA VALLEY WATER**
12 **CONSERVATION DISTRICTS, a**
13 **public entity,**

14 **Plaintiff,**

15 **vs.**

16 **CITY OF SANTA MARIA, a municipal**
17 **corporation, et al.,**

18 **Defendants,**

19 **AND RELATED CROSS-ACTIONS**

Case No. CV 770214

ORDER WITH RESPECT TO BRIEF OF
CONOCO, INC., NUEVO ENERGY
COMPANY, AERA ENERGY LLC,
TEXACO EXPLORATION AND
PRODUCTION, INC. AND CHEVRON
USA, INC.

20 **IT IS HEREBY ORDERED:**

21 The Court shall not be holding a hearing with respect to the brief of Conoco, Inc., Nuevo
22 Energy Company, Aera Energy LLC, Texaco Exploration And Production Inc., and Chevron USA
23 Inc., or request for clarification requested therein. The Court finds that the request for clarification
24 found in the Conclusion section of the said Brief appears to restate what was intended by the Court's
25 Order filed December 21, 2002. The parties may consider the Order to be so clarified if it aids in
26 further proceedings in this matter.

27 **SO ORDERED.**

28 Dated: JAN 25 2002


CONRAD L. RUSHING
Judge of the Superior Court

TOTAL P. 03

Note: Pursuant to the Court's Order, July 16, 2007, pages 10 through and including 16 of Exhibit 1B to the Stipulation, dated June 30, 2005, have been removed and replaced with this page.

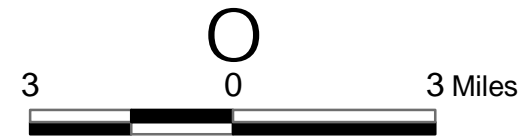
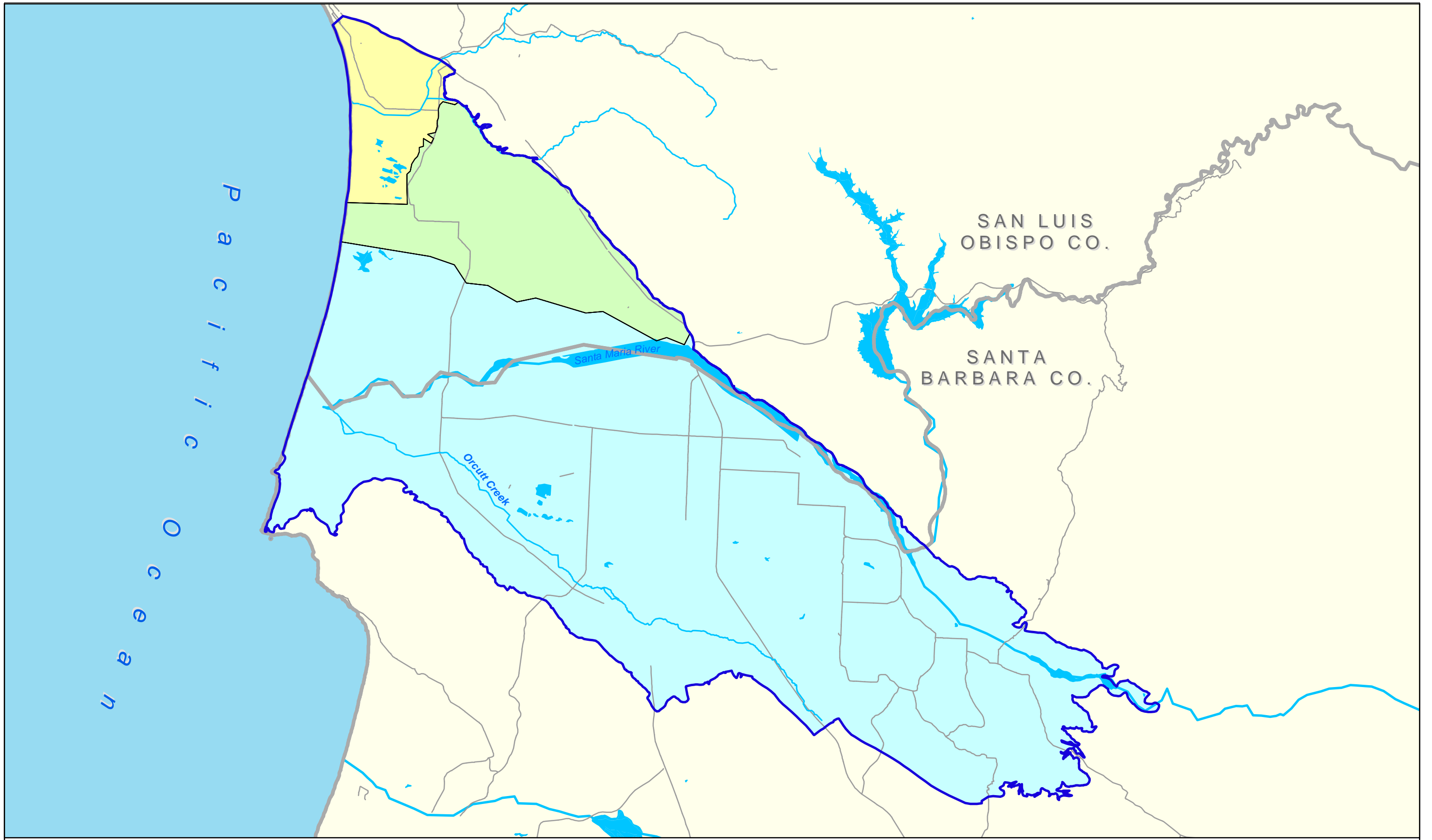
CONCLUSION

In light of this Court's prior orders and decrees, the provisions of the Order, and the above-cited authorities, the Oil Group parties respectfully request confirmation from the Court that the December 21, 2001 order and decision provides, with regard to the issues raised in this Brief, as follows:

(1) That the boundary of the Basin is as depicted on the Exhibit 5 to the Declaration of Robert C. Wagner, dated November 20, 2001. Specifically, the boundary of the Basin is that line identified on the legend to the map as "boundary of the Santa Maria Ground-Water Basin" depicted on the map as a **solid magenta** colored line; and

(2) That the Basin boundary is not that line identified on the legend to the map as the "Assessors' Parcel Lines" depicted on the map as a **solid orange** colored line.

Exhibit 1C



- Legend**
- Santa Maria Groundwater Basin
 - Northern Cities Management Area
 - Nipomo Mesa Management Area
 - Santa Maria Valley Management Area

Note: Management Area boundaries are approximate

Management Areas
Santa Maria Groundwater Basin

Exhibit 1D

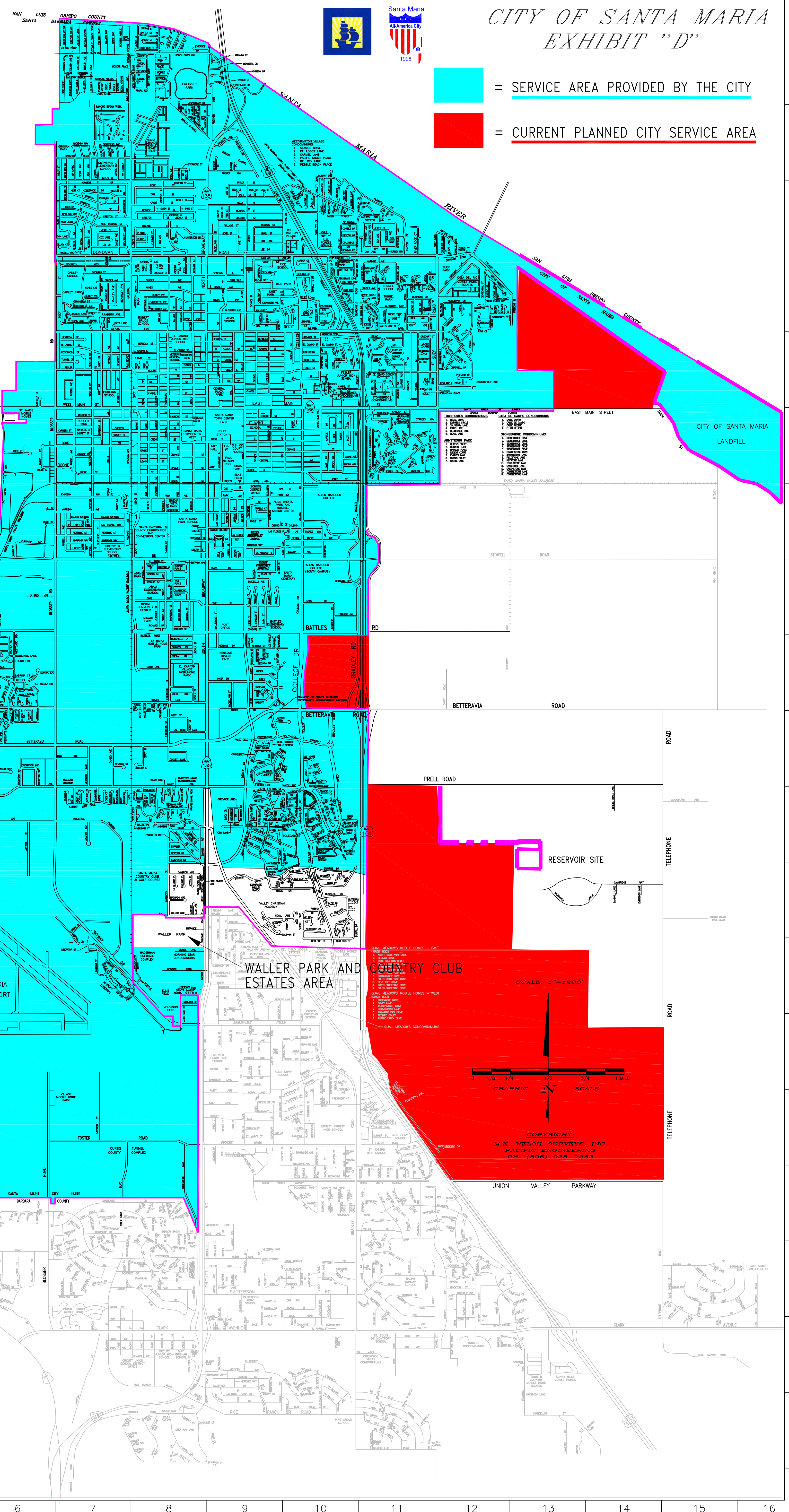
CURRENT PLANNED CITY SERVICE AREA

<u>107-150-001</u>	<u>111-014-001</u>	<u>117-191-010</u>
<u>107-150-002</u>	<u>111-014-002</u>	<u>117-191-013</u>
<u>107-150-007</u>	<u>111-014-003</u>	<u>117-820-001</u>
<u>107-150-013</u>	<u>111-014-004</u>	<u>117-820-002</u>
<u>107-150-015</u>	<u>111-014-005</u>	<u>117-820-024</u>
<u>107-150-016</u>	<u>111-014-006</u>	<u>117-820-025</u>
<u>107-150-018</u>	<u>111-014-008</u>	<u>128-078-004</u>
<u>107-150-019</u>	<u>111-014-009</u>	<u>128-078-005</u>
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<u>107-240-006</u>	<u>111-014-011</u>	
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<u>107-240-027</u>	<u>111-014-013</u>	<u>128-091-005</u>
<u>107-240-028</u>	<u>111-014-014</u>	<u>128-091-006</u>
<u>107-240-029</u>		<u>128-091-007</u>
<u>111-011-001</u>	<u>111-015-001</u>	<u>128-094-012</u>
<u>111-011-002</u>	<u>111-015-002</u>	<u>128-094-014</u>
<u>111-011-003</u>	<u>111-015-003</u>	<u>128-094-016</u>
<u>111-011-004</u>	<u>111-015-004</u>	<u>128-094-042</u>
<u>111-011-005</u>	<u>111-015-005</u>	<u>128-094-047</u>
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<u>111-011-008</u>	<u>111-015-008</u>	<u>129-010-012</u>
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<u>111-011-010</u>		<u>129-010-021</u>
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<u>111-011-012</u>		<u>129-010-023</u>
<u>111-011-013</u>		<u>129-010-024</u>

CITY OF SANTA MARIA
WASTE WATER
TREATMENT PLANT
SANTA MARIA CITY LIMITS

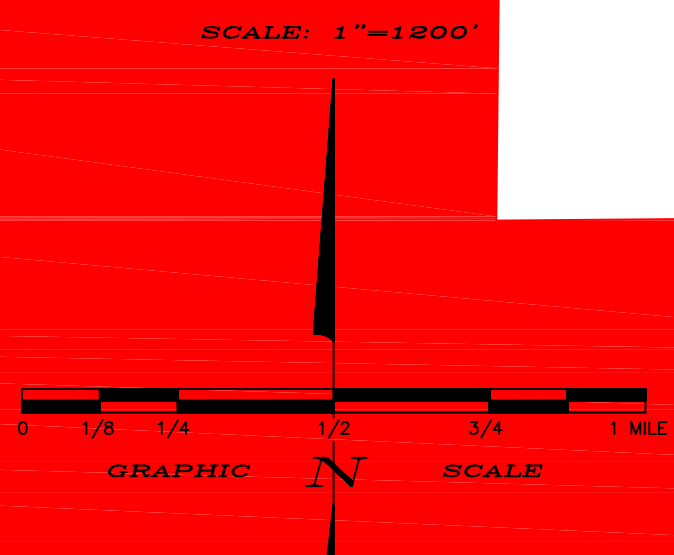
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	<u>111-020-016</u>	
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<u>111-013-011</u>		
<u>111-013-012</u>		
<u>111-013-013</u>	<u>111-130-001</u>	
<u>111-013-014</u>		

<u>111-013-014</u>		
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**CITY OF SANTA MARIA
EXHIBIT "D"**

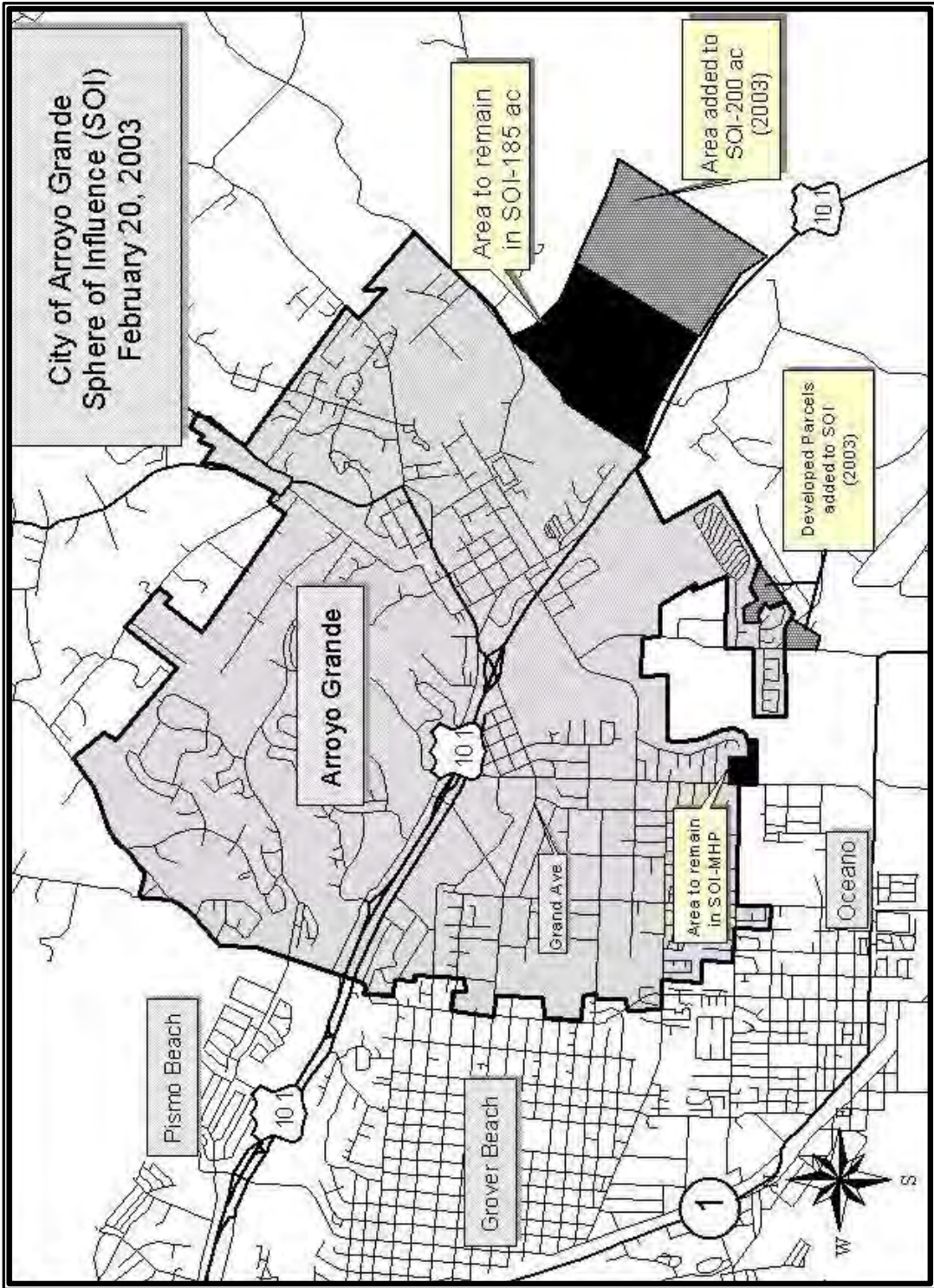
Cyan = SERVICE AREA PROVIDED BY THE CITY
Red = CURRENT PLANNED CITY SERVICE AREA



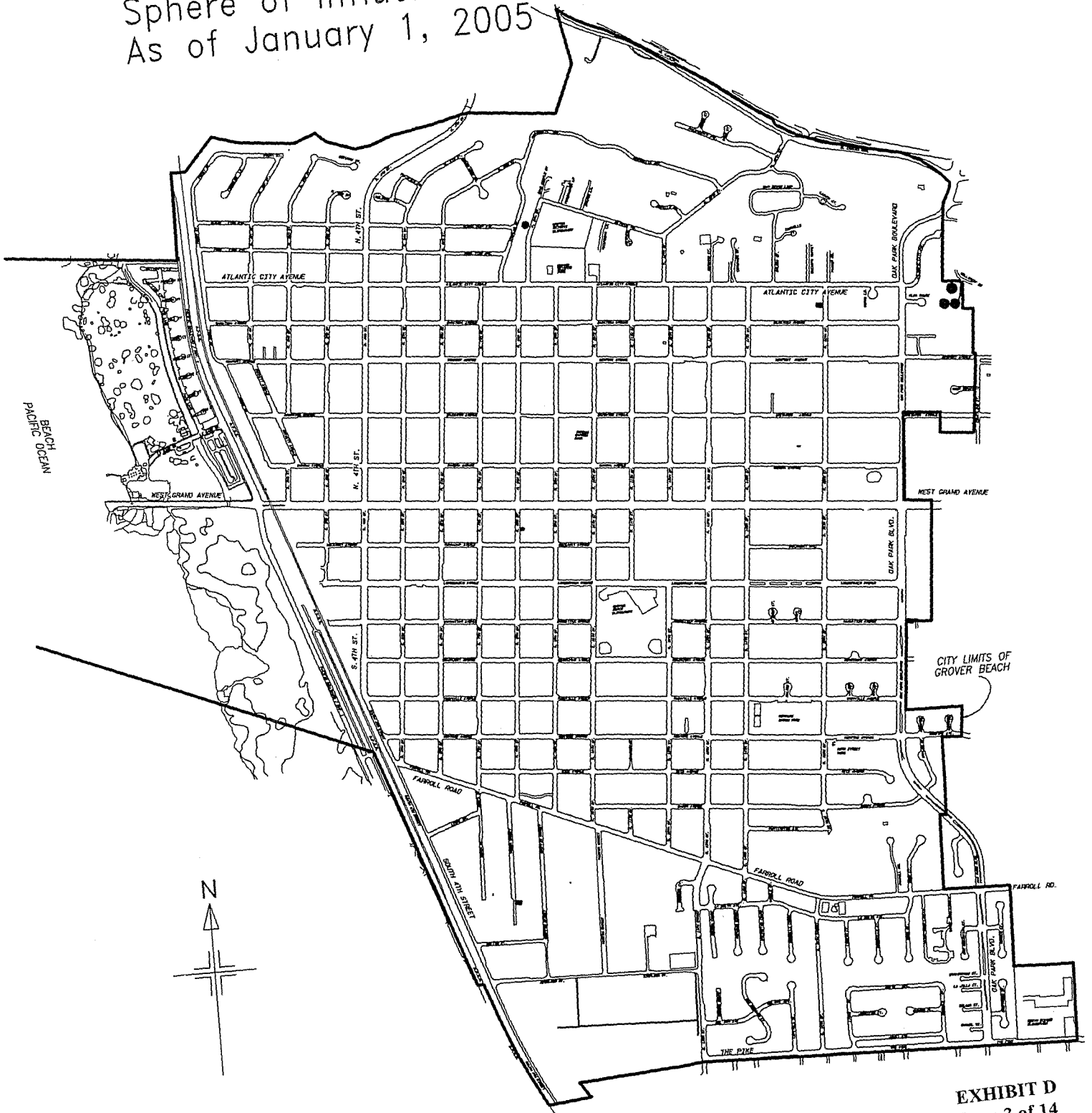
GRAPHIC SCALE
N

COPYRIGHT:
M.K. WELCH SURVEYS, INC.
PACIFIC ENGINEERING
PH. (805) 928-7983

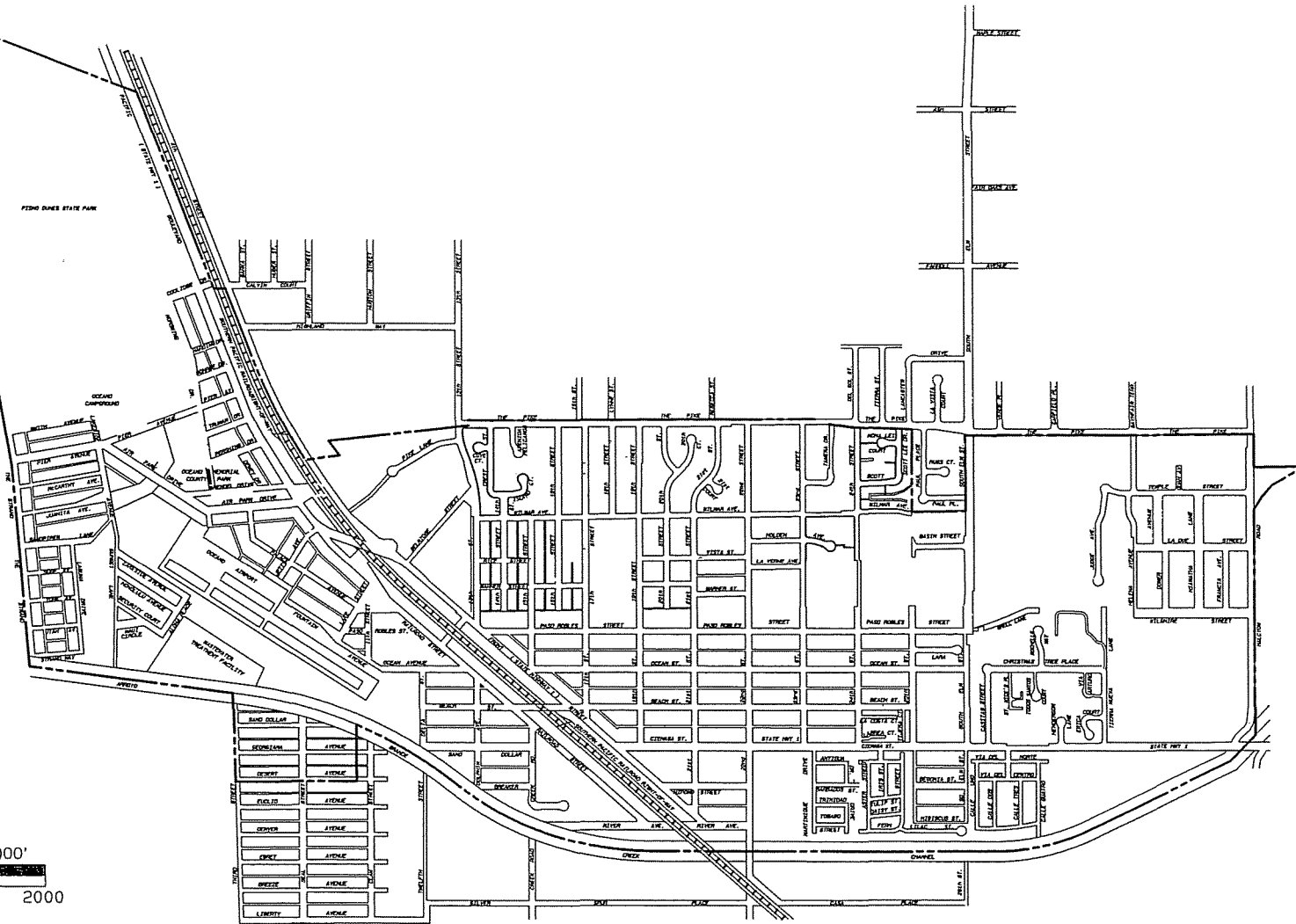
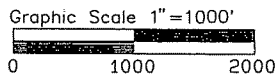
Figure 1 – Sphere of Influence
City of Arroyo Grande



CITY OF GROVER BEACH Sphere of Influence and City Boundary As of January 1, 2005



North



Oceano Community
Services District
P.O. Box 544
1655 Front Street
Oceano, CA 93445-0544
tel (805)481-6730

Service Area and Sphere of Influence January 1, 2005
OCEANO COMMUNITY SERVICES DISTRICT



Civil Engineering
Surveying
Project Development

141 South Elm Street
Arroyo Grande, CA 93420
805/489-1321

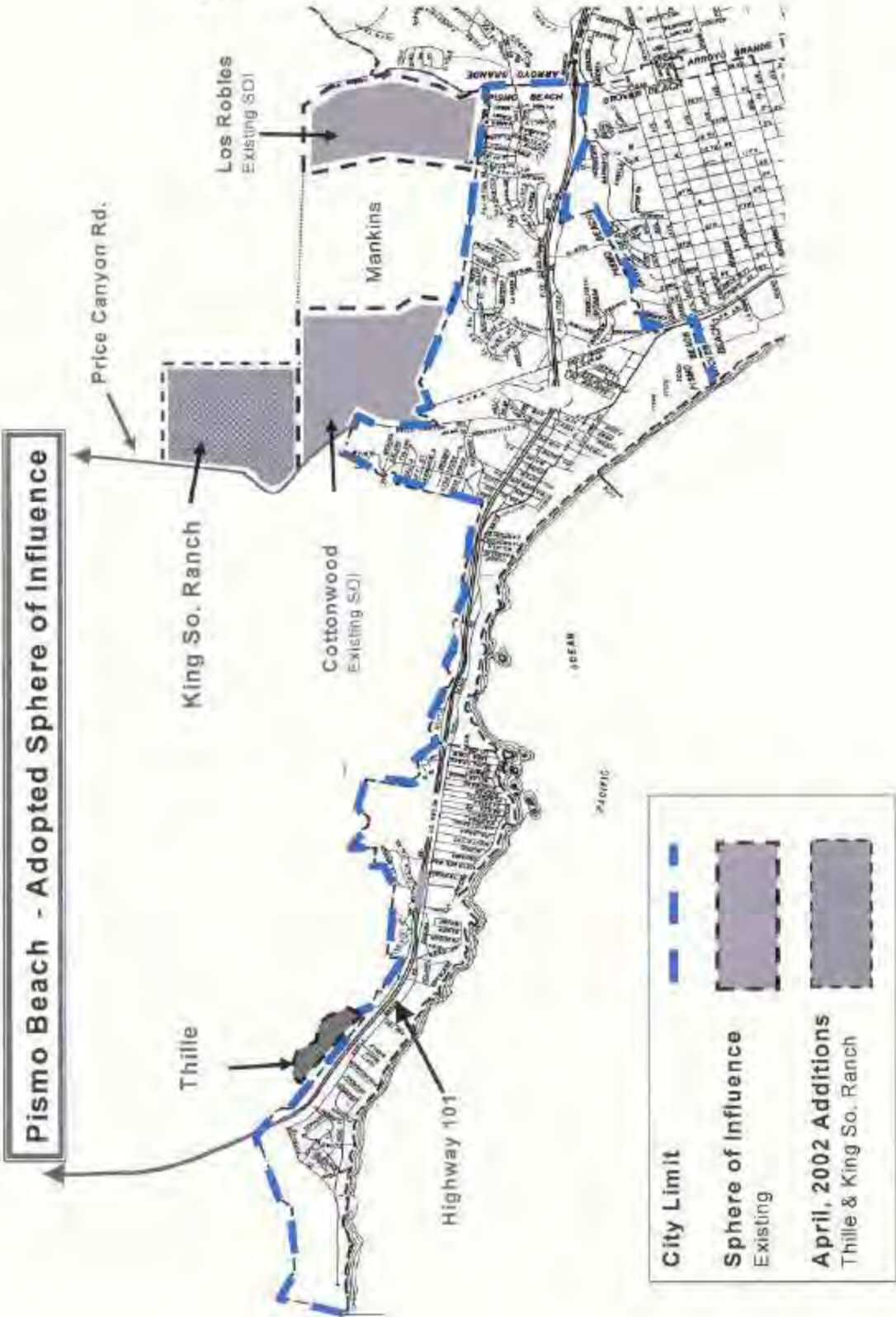
Scale: 1" = 1000'

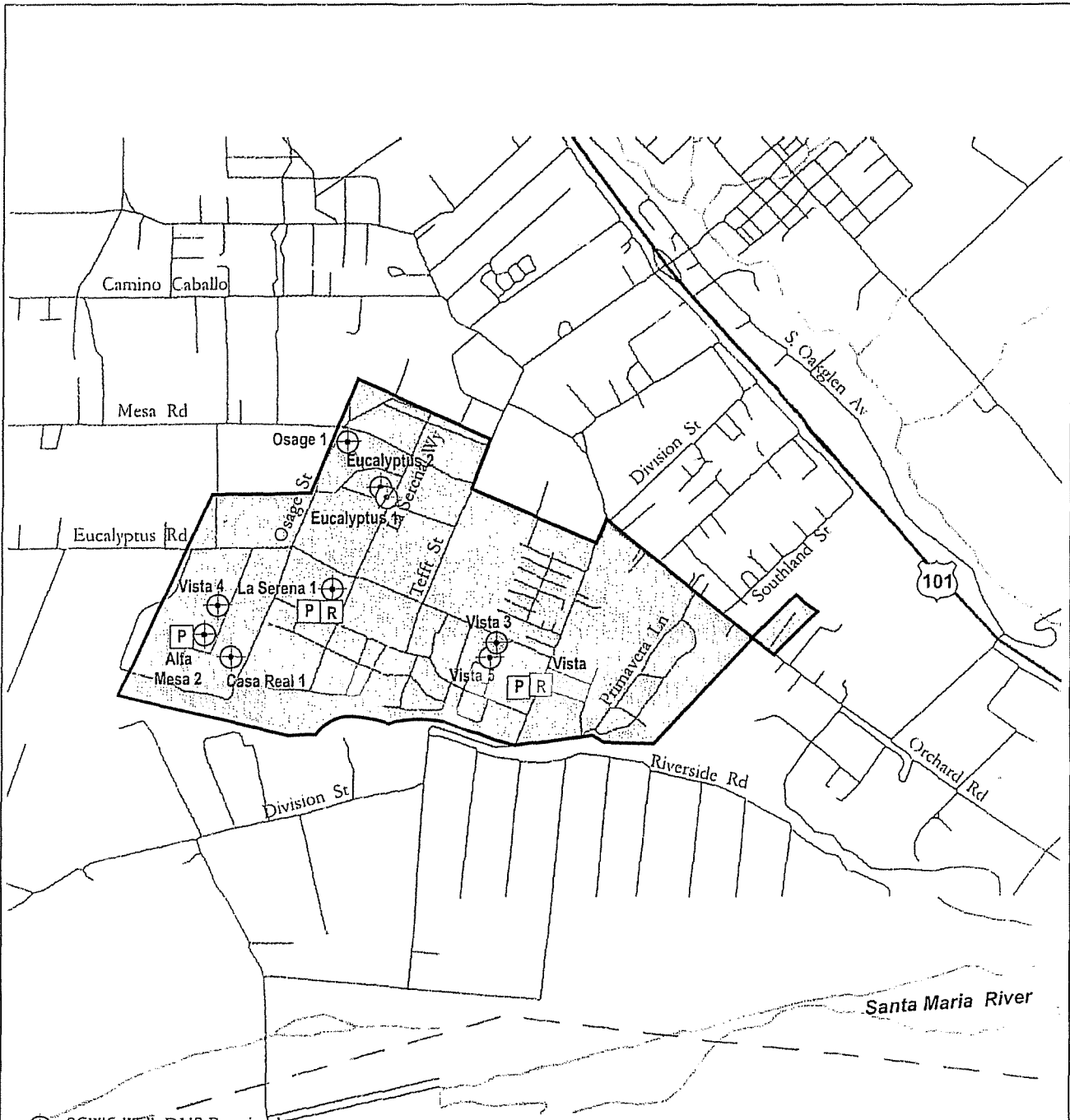
W.O. No. 0D01-007

File Name
OCSD_Boundary_and_SOI
_01-01-2005.pro

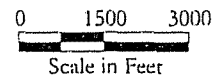
Plot date 6/20/2005

Figure 1 – Existing SOI and Proposed Additions





- ⊕ SCWC-Well, DHS Permitted
- ⊗ SCWC Well, Destroyed
- ⊕ SCWC Well, Inactive
- Ⓟ Booster Pump Station
- Ⓡ Reservoir
- ▭ System Boundary

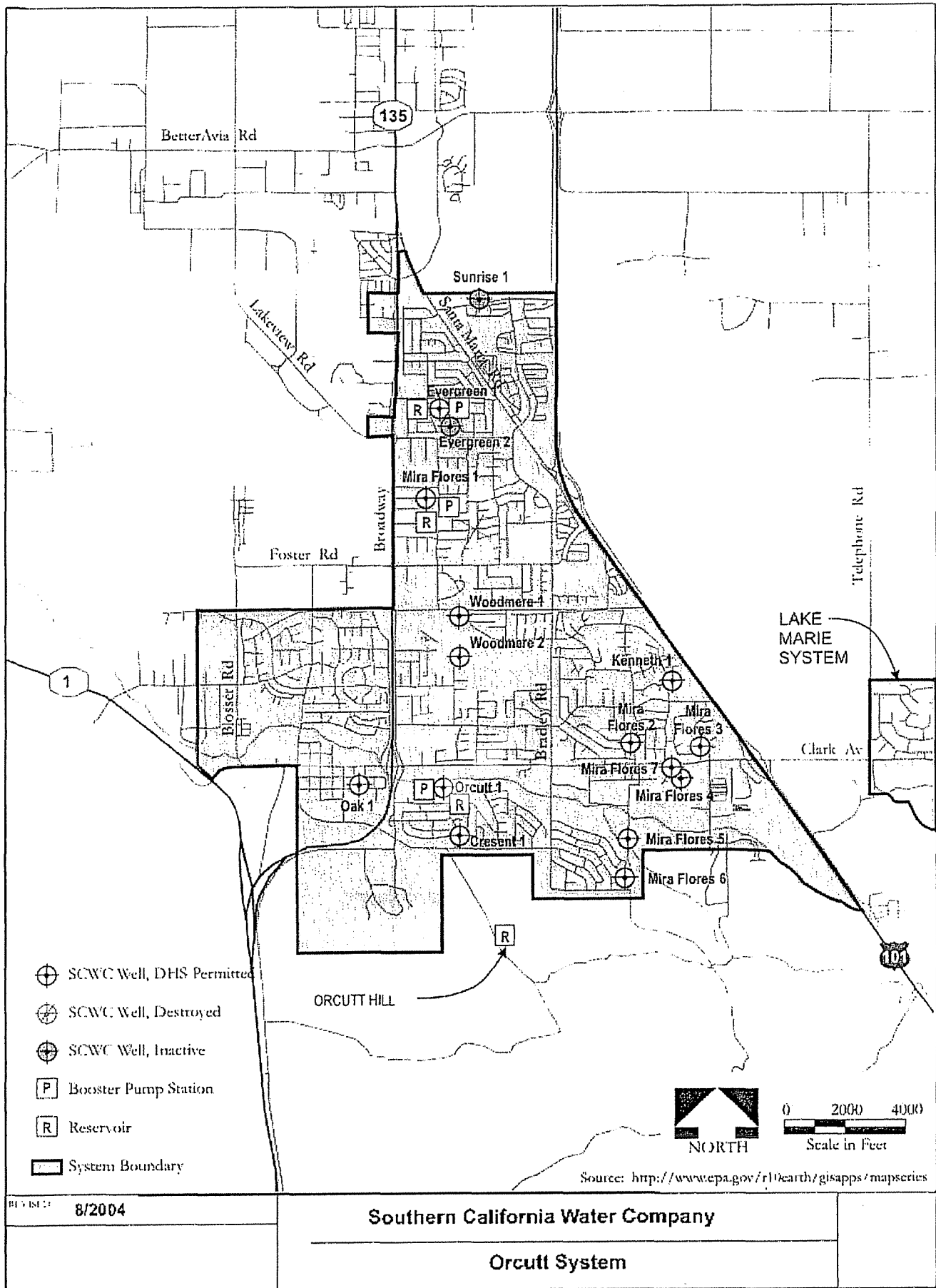


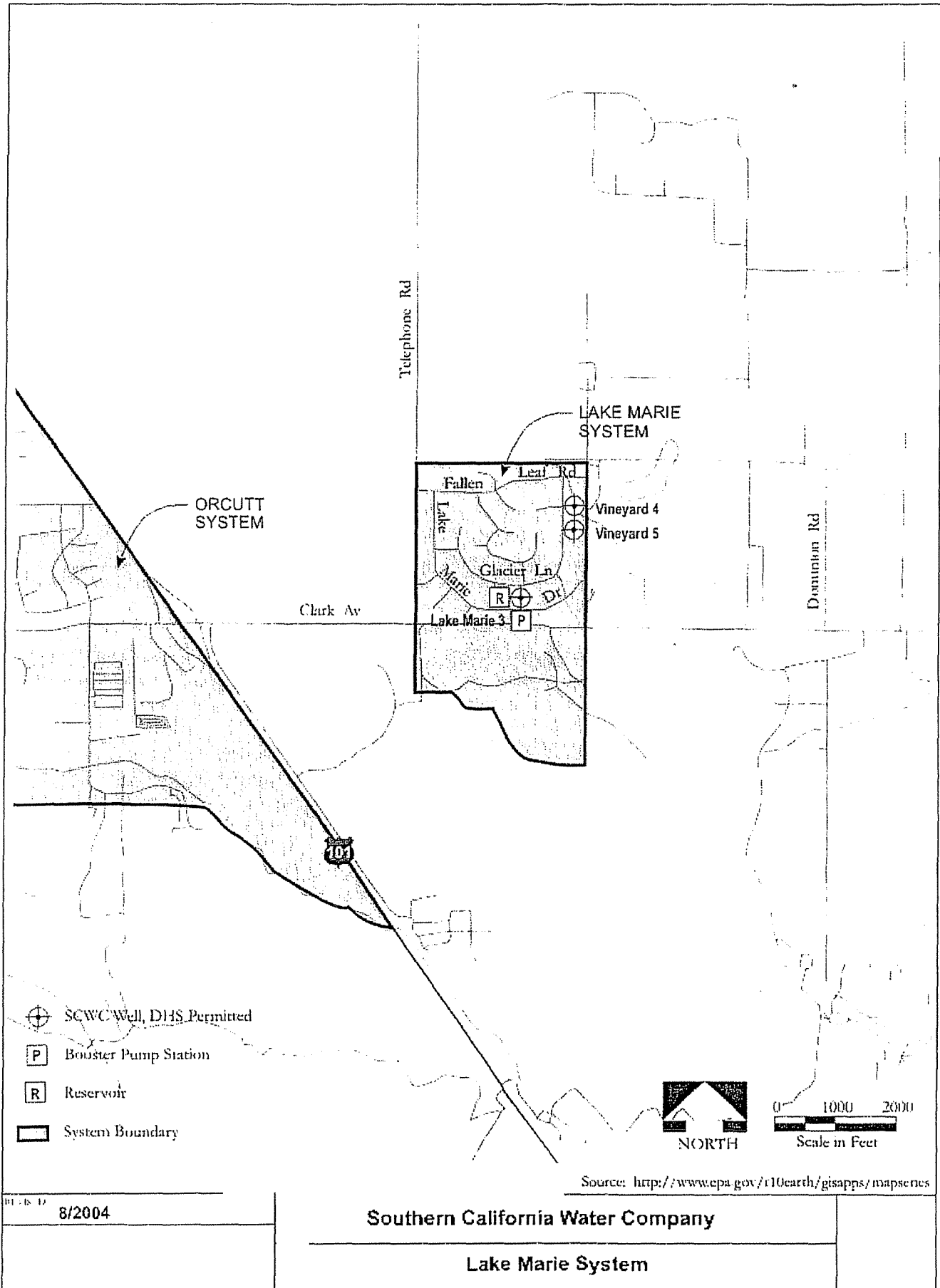
Source: <http://www.epa.gov/r10earth/gisapps/mapseries>

REVISED: 8/2004

Southern California Water Company

Nipomo System

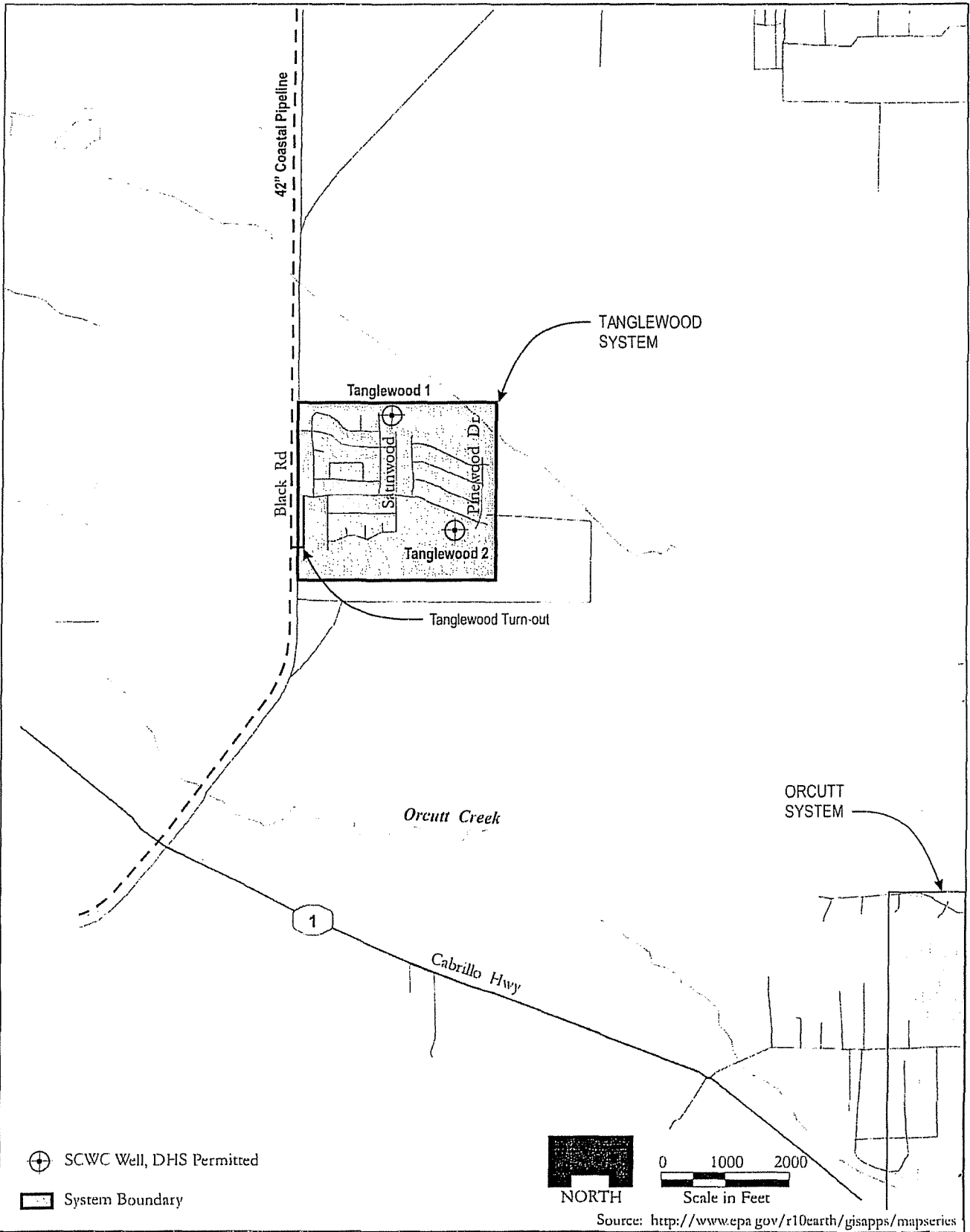




8/2004

Southern California Water Company

Lake Marie System

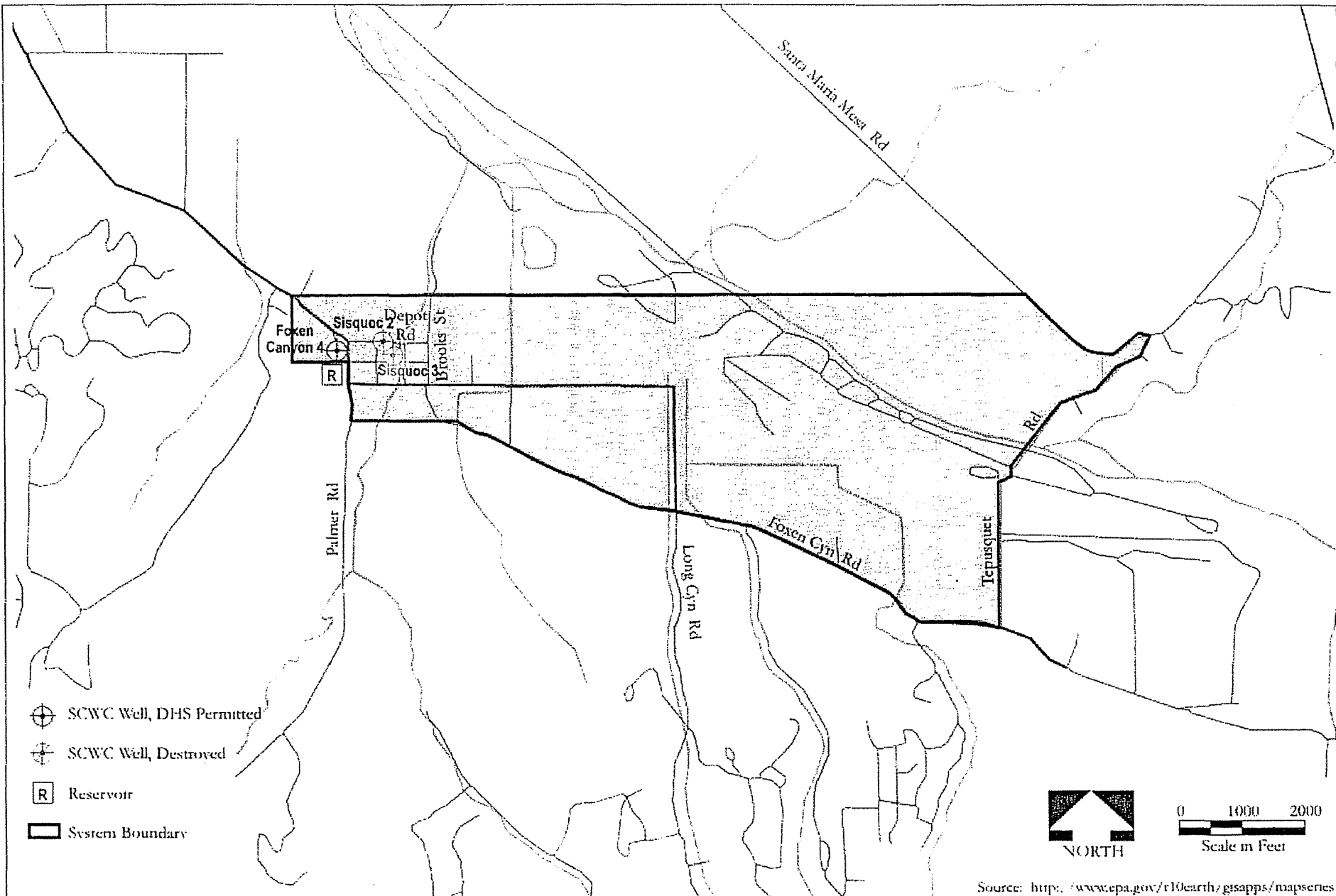






REVISED: 8/2004

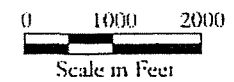
Southern California Water Company

Tanglewood System

FIGURE



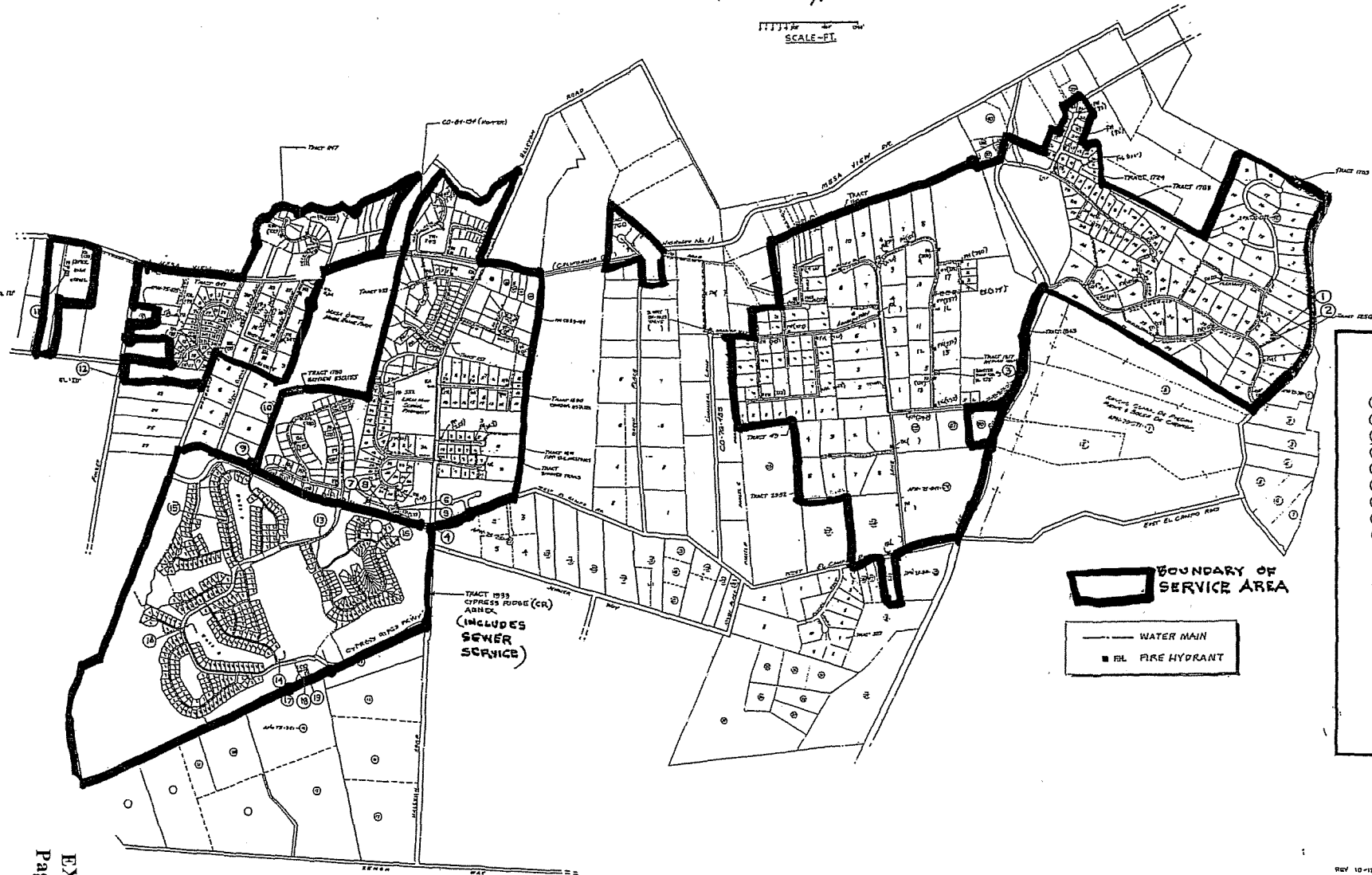
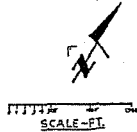
-  SCWC Well, DHS Permitted
-  SCWC Well, Destroyed
-  Reservoir
-  System Boundary



Source: <http://www.epa.gov/r10earth/gisapps/mapseries>

REV-D 8/2004

Southern California Water Company
Sisquoc System



RURAL WATER COMPANY, INC.

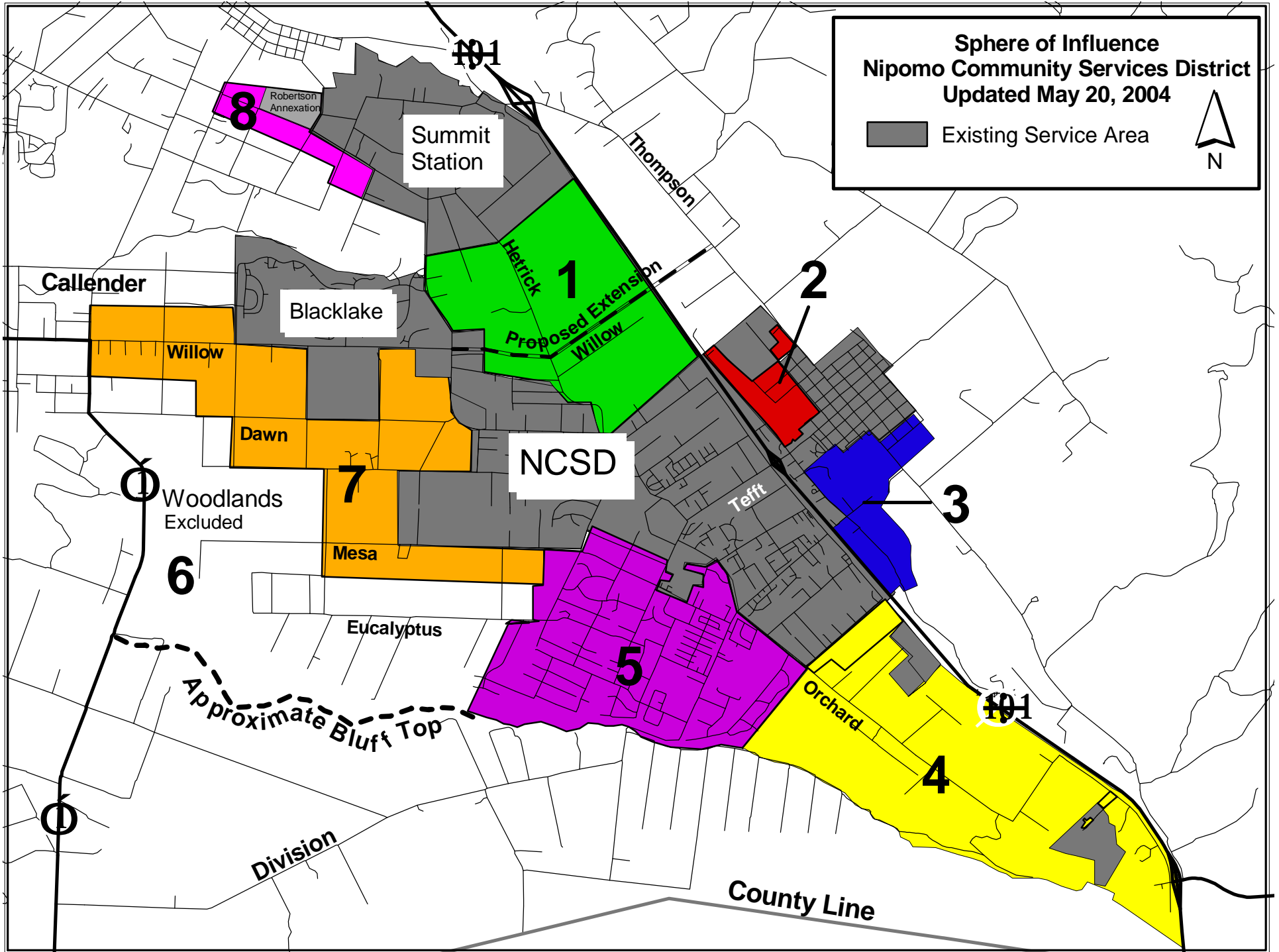
- ① PUMP STA #2
- ② STORAGE TANK, 210,000 GAL
- ③ PUMP STA #3
- ④ PUMP STA #1, CHLORINATION BLD.
- ⑤ STORAGE TANK, 245,000 GAL
- ⑥ STORAGE TANK, 245,000 GAL
- ⑦ WELL #2
- ⑧ WELL #6
- ⑨ WELL #4
- ⑩ WELL #5
- ⑪ WELL #8 (WITH CHLORINATION)
- ⑫ WELL #3 (WITH CHLORINATION)
- ⑬ CR WELL #4
- ⑭ CR WELL #5
- ⑮ CR WELL #6
- ⑯ CR WELLS #7 & #8 (inactive)
- ⑰ CR STORAGE TANK, 275,000 GAL
- ⑱ CR STORAGE TANK, 275,000 GAL
- ⑲ CR PUMP STA, CHLORINATION BLD.

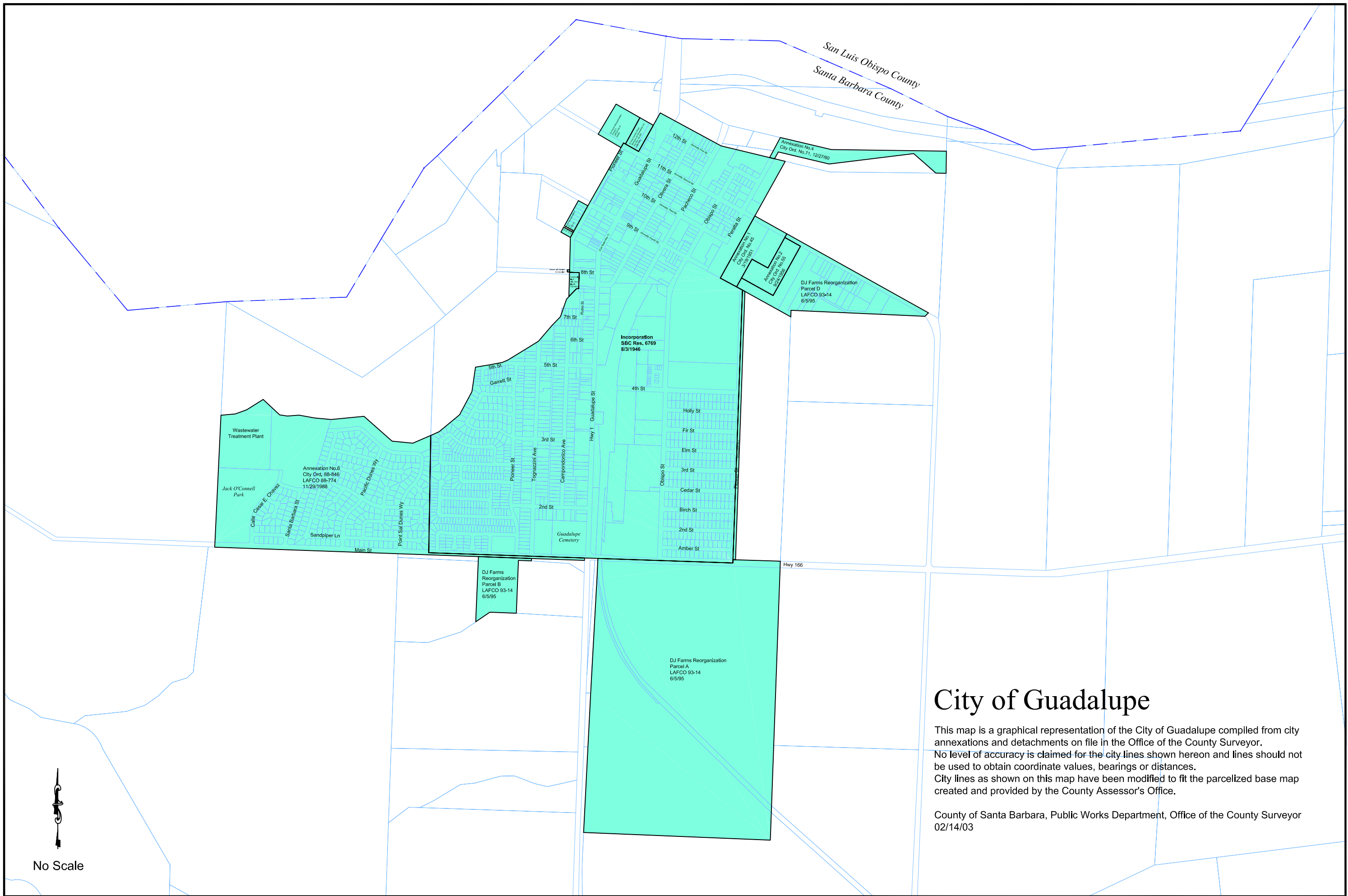
DATE	BY	APPROVED	SCALE
			1" = 20'
RURAL WATER COMPY SERVICE AREA MAI			
DATE	BY	APPROVED	
10-17-2000	CHS		
DATE	BY	APPROVED	

REV 10-17-2000

**Sphere of Influence
Nipomo Community Services District
Updated May 20, 2004**

Existing Service Area





City of Guadalupe

This map is a graphical representation of the City of Guadalupe compiled from city annexations and detachments on file in the Office of the County Surveyor. No level of accuracy is claimed for the city lines shown hereon and lines should not be used to obtain coordinate values, bearings or distances. City lines as shown on this map have been modified to fit the parcelized base map created and provided by the County Assessor's Office.

County of Santa Barbara, Public Works Department, Office of the County Surveyor
02/14/03

Note: This Exhibit has been amended on August 27, 2007 to reflect a parcel change by the County of Santa Barbara, to add parcels that were inadvertently omitted from the original version of Exhibit D that was attached to the June 30, 2005 Stipulation, and to change former APN 128-056-024 to APN 128-064-007.

Stipulation
Santa Maria Valley Water Conservation District v. City of Santa Maria

EXHIBIT 1D

List of Selected Excluded Parcels Nearby the Boundaries of New Urban Use Areas

103-070-004	128-096-010
107-300-007	128-098-005
107-300-008	129-180-020
107-300-012	128-099-001
128-064-007	128-100-001
128-094-018	128-100-003
128-094-019	128-100-020
128-094-020	128-100-021
128-094-021	128-100-022
128-094-023	128-100-027
128-094-024	128-100-028
128-094-029	128-100-029
128-094-031	128-100-030
128-095-001	128-100-031
128-095-002	128-101-010
128-095-003	128-101-012
128-095-004	129-100-008
128-095-006	129-110-020
128-095-008	129-120-001
128-096-001	129-120-023
128-096-002	129-151-029
128-096-003	129-151-031
128-096-004	129-151-032
128-096-005	129-151-033
128-096-006	129-180-010
128-096-007	129-180-011
128-096-009	129-210-017

Exhibit 1E

Settlement Agreement Between Northern Cities, Northern Cities Landowners, and Other Parties

The original signature pages of this agreement were hand-delivered to the Court prior to the August 2002 hearing, at which the Court approved this agreement.

1 NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP
Frederic A. Fudacz, State Bar No. 50546
2 Henry S. Weinstock, State Bar No. 89765
Alfred E. Smith, State Bar No. 186257
3 445 South Figueroa Street, 31st Floor
Los Angeles, California 90071
4 Telephone: (213) 612-7800
Facsimile: (213) 612-7801

5 Attorneys for Defendants City of Arroyo Grande,
6 City of Grover Beach, City of Pismo Beach,
Oceano Community Services District
7

8 SUPERIOR COURT OF THE STATE OF CALIFORNIA
9 FOR THE COUNTY OF SANTA CLARA
10

11 SANTA MARIA VALLEY WATER
CONSERVATION DISTRICT, a public
12 entity,

13 Plaintiff,

14 v.

15 CITY OF SANTA MARIA, et al.,

16 Defendants.
17

SANTA MARIA GROUNDWATER
LITIGATION, LEAD CASE No. CV 770214
(Consolidated with CV 784900, 784921,
784926, 785509, 785511, 785515, 785522,
785936, 786971, 787150, 787151, 787152,
990738, 990739)

SETTLEMENT AGREEMENT BETWEEN
NORTHERN CITIES, NORTHERN
LANDOWNERS, AND OTHER PARTIES
18

19 AND ALL RELATED ACTIONS.
20

21 **PARTIES AND EFFECTIVE DATE**

22 This Agreement is entered into among the Cities of Arroyo Grande, Pismo
23 Beach, Grover Beach and the Oceano Community Services District (collectively "Northern
24 Cities"), owners/lessors of land located in the Northern Cities Area ("Northern Landowners"),
25 and other parties who execute this Agreement. This Agreement is entered into as of April 30,
2002.

26 **STIPULATIONS OF FACT**

27 A. In 1997, the Santa Maria Valley Water Conservation District initiated this
28 action, Santa Clara Superior Court Case Number CV 770214, consolidated with Case

1 Numbers 784900, 784921, 784926, 785509, 785511, 785515, 785522, 785936, 786971,
2 787150, 787151, 787152, 990738, and 990739 (the "Action"), to adjudicate groundwater rights
3 in the Santa Maria Groundwater Basin;

4 B. Numerous parties have filed complaints and/or cross-complaints in the
5 Action with respect to rights to produce water in the Santa Maria Groundwater Basin;

6 C. By Order dated December 21, 2001, the Court determined the geographic
7 area constituting the Santa Maria Groundwater Basin ("Basin") and ruled that the Northern
8 Cities Area (identified on the map attached hereto as Exhibit A) is within the Basin;

9 D. Under current water supply and demand conditions, the groundwater
10 basin in the Northern Cities Area is in rough equilibrium, and groundwater pumping in the
11 Northern Cities Area does not negatively affect water supplies in the remainder of the Basin;

12 E. For more than 30 years, there have been separate funding, management
13 and usage of groundwater in the Northern Cities Area from groundwater in the Santa Maria
14 Valley. For example, the Northern Cities and Northern Landowners have paid and are paying
15 tens of millions of dollars for the construction and retrofit of the Lopez Reservoir, which
16 benefits the Northern Cities Area; whereas the Twitchell Reservoir has been paid for by parties
17 in the Santa Maria Valley who benefit from it.

18 F. The Northern Cities and Northern Landowners have agreed among
19 themselves and do hereby reaffirm their agreement to cooperatively share and manage
20 groundwater resources in the Northern Cities Area in accordance with a "Gentlemen's
21 Agreement" that was originally developed in 1983 and amended thereafter. Said Agreement
22 confers no rights on any third parties;

23 G. It is in the interest of all of the parties to this litigation that the parties settle
24 their claims and potential claims on the basis of the continued separate funding, management,
25 and usage of the waters conserved by the Lopez Reservoir in the Northern Cities Area and by
26 the Twitchell Reservoir in the remainder of the Basin, to preserve and protect water resources
27 in those separate management areas.

28 H. This Settlement Agreement is also intended to provide the parties with

1 advance notice of changes in the groundwater conditions in the Northern Cities Area and
2 Nipomo Mesa, as water supplies and demands may change with time. (The Nipomo Mesa is
3 southeast of the Zone 3 Line, and north of the Santa Maria River.); and

4 1. The parties to this Settlement Agreement have agreed to settle and
5 resolve their cross-claims and potential cross-claims on the conditions set forth below:

6 **NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS**

7 1. Separate Management Areas. Subject to the conditions set forth below,
8 water resources and water production facilities in the Northern Cities Area shall continue to be
9 independently managed by the Northern Cities, the San Luis Obispo County Flood Control and
10 Water Conservation District, and the Northern Landowners, with the intention of preserving the
11 long-term integrity of water supplies in the Northern Cities Area. For example, the Northern
12 Cities and Northern Landowners will not be responsible to pay for any of the costs of the
13 Twitchell Reservoir; and the parties outside of the Northern Cities Area (Zone 3) shall not be
14 responsible to pay any of the costs relating to the Lopez Reservoir.

15 2. Effects on Litigation. Except as provided below, the parties in the
16 Northern Cities Area, on the one hand, and the other parties hereto, on the other hand, agree
17 not to pursue or assert any claims against one another relating to water rights in the Santa
18 Maria Groundwater Basin. Each of the Northern Landowners who execute this Agreement will
19 be deemed to have been served by each of the water purveyor parties in this action who have
20 signed this Agreement with cross-complaints seeking declaratory and other relief in the form of
21 the cross-complaints previously filed by the City of Santa Maria; and each of the Northern
22 Landowners who execute this Agreement shall be deemed to have served and filed answers to
23 said cross-complaints denying all of their material allegations and asserting all available
24 affirmative defenses. The Northern Cities and Landowners shall continue to be subject to
25 reasonable discovery requests that are relevant to the remaining issues in the case.

26 3. Court Approval. This Settlement Agreement shall be submitted to the
27 Court for approval. If approved, this Settlement Agreement shall be included in and attached
28 as an exhibit to the final judgment in this Action, and the Northern Cities Area shall be treated

1 separately under the judgment in accordance with the provisions set forth herein. Paragraphs
2 4 and 7-20 of this Agreement shall take effect only upon Court approval of this Agreement.

3 4. Consent to Continuing Jurisdiction. Prior to this Agreement, there has
4 been no adjudication of the water rights of the Northern Cities, Northern Landowners, or any
5 other party, other than the determination of the boundaries of the Basin. Except ¶ 5 below,
6 nothing in this Agreement authorizes the Court to restrict or affect the right of any party to
7 pump, divert, use, or store groundwater or surface water without first according that party all of
8 its substantive, procedural, and due process rights under constitutional, statutory, and common
9 law requirements. Subject to the above and to the limitations of paragraphs 5-6 below, the
10 parties hereto agree that the Court reserves and retains full jurisdiction, power, and authority
11 over the Northern Cities Area, the Northern Cities, and the Northern Landowners, to enable the
12 Court, upon motion of any party, to make such further orders or directions (1) to interpret,
13 enforce, amend, or amplify any of the provisions of this Agreement; (2) to enforce, protect, or
14 preserve the rights of the respective parties, consistent with the rights herein decreed; or (3) to
15 issue such additional orders and/or injunctions to prevent injury to any party that might result
16 from any material adverse change in the availability or quality of the water supplies in the
17 Northern Cities Area, or the Nipomo Mesa Area, or any part of the Basin.

18 5. Reaffirmation of Gentlemen's Agreement. The Northern Cities and
19 Northern Landowners hereby reaffirm their Agreement to cooperatively share and manage
20 groundwater resources in the Northern Cities' Area in accordance with their AGREEMENT
21 REGARDING MANAGEMENT OF THE ARROYO GRANDE GROUNDWATER BASIN, aka
22 the "Gentlemen's Agreement." (A copy of the current version of this Agreement is attached
23 hereto as Exhibit B.) In particular, the Northern Cities and the Northern Landowners agree
24 with each other to continue to divide the safe yield of groundwater in the Northern Cities' Area,
25 including any increases or decreases of the safe yield, in accordance with ¶ 1 of Exhibit B
26 hereto. Said water-sharing Agreement and this paragraph 5 shall only be binding on and
27 enforceable by the Northern Cities and Northern Landowners.

28 6. No Effect on Water Rights. Except as provided in ¶ 5 above, nothing in

1 this Agreement shall be construed to create, eliminate, increase, or reduce any substantive
2 right of any party to pump, divert, use, or store groundwater or surface water; and nothing in
3 this Agreement shall be construed to prove or disprove, directly or indirectly, any element of
4 prescriptive rights to groundwater.

5 TECHNICAL OVERSIGHT COMMITTEE

6 7. Formation. A Technical Oversight Committee (TOC) shall be established
7 to carry out the ongoing monitoring and analysis program ("MAP," see below).

8 8. Composition. The TOC shall be comprised of two voting representatives
9 of the Northern Cities and two voting representatives of parties providing public water service
10 on the Nipomo Mesa ("Mesa Parties," which include the Nipomo Community Services District,
11 Rural Water Company and Southern California Water Company, and their successors or
12 assigns). At least one of the two representatives from the Northern Cities and the Mesa
13 Parties shall be technically qualified to carry out the MAP duties described below. The other
14 TOC representatives may be technical, policy, managerial, or legal in nature. The voting
15 representatives shall attempt to operate by consensus. However, if consensus cannot be
16 achieved, TOC decisions may be made by majority vote of the voting representatives.

17 9. Responsibility. The TOC shall implement and carry out the MAP.

18 10. Meetings. The TOC shall meet at least semi-annually for the first five (5)
19 years of implementing the MAP, and at least annually thereafter.

20 11. Procedures of the TOC. The TOC shall establish procedures for the
21 fulfillment of its responsibilities under this Agreement.

22 MONITORING AND ANALYSIS PROGRAM

23 12. Purpose and Legal Effect. A monitoring and analysis program (MAP) shall
24 be established to provide ongoing data collection and analysis of water supplies and demands
25 in the Northern Cities Area and the Nipomo Mesa. The purpose of the MAP is to regularly
26 assess the potential impact on the water supplies on either side of the Zone 3 boundary line
27 resulting from changing conditions regarding the water supplies and demands in the Northern
28 Cities Area and the Nipomo Mesa, and the resulting changes in the surface and groundwater

1 flow conditions adjacent to and across the Zone 3 boundary line.

2 13. The Water Management Plans and the Annual Reports (collectively
3 "Plans") prepared pursuant to this Agreement are for information purposes only. They shall
4 not independently create in the party(ies) preparing them any affirmative obligation to act, or
5 implement any part of the Plans, nor shall they independently provide any other party or the
6 Court any right to compel Action or enforce any obligation. However, any party may challenge
7 the sufficiency of any Plan produced pursuant to this Agreement by showing that it has not
8 been completed in substantial compliance with the requirements of this Agreement, except that
9 any challenge to a Water Management Plan created pursuant to Paragraph 15 below may only
10 be undertaken in a proceeding and under the standards set forth under Water Code sections
11 10650, *et seq.*

12 14. The Parties shall be excused from the preparation of the Plans required in
13 this Agreement when the Court enters a final judgment in this litigation.

14 15. Water Supply Planning and Reports. Within two years after Court
15 approval of this Settlement, each of the Northern Cities and the Mesa Parties shall evaluate
16 their current and future water supplies and prepare a Water Management Plan. The Water
17 Management Plan shall generally include the content and analysis described in Water Code
18 sections 10630 through 10635, and shall also include an analysis of the ongoing availability of
19 groundwater in the Northern Cities Area given the changing urban and agricultural water
20 demands in the Northern Cities Area. Each of the Northern Cities and the Mesa Parties shall
21 update and revise their previously prepared Water Management Plans prior to December 31,
22 2006, and every five years thereafter; provided however, that this requirement to prepare a
23 Water Management Plan is not intended to expand or impose upon any party rights or
24 obligations with respect to such Water Management Plans, other than those specifically stated
25 in this Section. Copies of the Water Management Plans shall be provided to the Northern
26 Cities, the Mesa Parties, the Santa Maria Valley Water Conservation District and the City of
27 Santa Maria.

28 16. Monitoring and Data Collection. The TOC shall implement a MAP that

1 shall include the data collection and analysis elements described below, and any other
2 monitoring and analysis, if the TOC deems them appropriate and cost-effective to fulfill the
3 purpose of this Agreement. The data collection and database development shall be created so
4 that the data can be shared and transferred between the TOC members for review and
5 evaluation in electronic format. The MAP shall include the following elements.

6 a. Design. Within six months after Court approval of this Agreement,
7 the TOC shall review existing data to select existing wells to include in the MAP. The TOC
8 shall define the list of wells to be monitored and specific information to be obtained from each
9 well, such as groundwater levels and groundwater quality constituents. The MAP shall also
10 include data collection to provide for early detection of seawater intrusion and collection of
11 other related data (e.g., deliveries of supplemental water, precipitation, discharge of treated
12 waste water, etc.) as are necessary for preparation of the analyses and reports required by this
13 Agreement. To the extent practical to adequately meet the purpose of this Agreement, the
14 TOC shall use existing facilities, rather than new facilities, in the design of the MAP.

15 b. Data Collection. As soon as the design of the MAP is complete, the
16 TOC shall commence collection of groundwater monitoring data, with data collection to occur
17 at intervals determined by the TOC.

18 c. Changing Groundwater Use Patterns. The TOC may also monitor
19 the groundwater pumping patterns in the Northern Cities Area and the Nipomo Mesa. The
20 monitoring shall be based on either observed changes (municipal pumping) or estimated
21 changes (private or agricultural pumping). The TOC may review the changes in pumping to
22 assess the potential impacts on groundwater flow conditions along the Zone 3 boundary line
23 and include its findings in the Annual Report, described below.

24 d. MAP Assessment. Within two years of Court approval of this
25 Agreement, and annually thereafter, the TOC shall evaluate data from the monitoring program,
26 assess data gaps, and make recommendations to revise the monitoring program, including the
27 use of other wells or installation of new monitoring wells, as appropriate. The TOC may
28 recommend to the Northern Cities and the Mesa Parties or to the Court any additional

1 monitoring of hydrologic characteristics that may be prudent and cost-effective to meet the
2 goals of this Agreement, to provide a higher level of confidence in the data and analyses than
3 that which is based on existing wells, stream gages, etc.

4 17. Annual Report. Based upon the MAP and other relevant information, the
5 TOC shall annually prepare a Report on Water Supply and Groundwater Conditions (Annual
6 Report) for the Northern Cities Area and Nipomo Mesa. The Annual Report shall be filed with
7 the Court, posted on the Court's website, and served on the Northern Cities, the Mesa Parties,
8 the Santa Maria Valley Water Conservation District, and the City of Santa Maria. The first
9 Annual Report shall be completed, filed and served, as described in the previous sentence, on
10 or before the second (2nd) anniversary of this Court's approval of this Agreement, and
11 annually thereafter. The Annual Report shall assess the adequacy of the water supplies in
12 each area in comparison to the corresponding demands, and shall include an analysis and
13 discussion of the estimates of the volume of groundwater in storage, an updated water budget
14 assessment, and anticipated water supply constraints, if any.

15 18. Cost Sharing. Unless otherwise agreed, each of the Northern Cities and
16 the Mesa Parties shall bear their own costs in participating in the TOC, gathering and
17 analyzing data, and producing any written documents as may be required by this Agreement.
18 To the extent the construction of new facilities may be required to implement this Agreement,
19 the Northern Cities and the Mesa Parties shall develop an equitable cost sharing agreement.
20 The parties will use their best efforts to minimize the costs of compliance in undertaking the
21 obligations of this Agreement.

22 19. Cooperation of all Parties. All parties to this litigation and this Agreement
23 shall provide any documents, information, access to wells, and well data, and take any other
24 actions reasonably requested to implement the MAP, subject to prior protective orders and
25 reasonable confidentiality restrictions.

26 **ADVANCE NOTICE OF INCREASED WATER PRODUCTION**

27 20. The Mesa Parties, the Northern Cities, and the Northern Landowners shall
28 provide prior written notice to each other of their intent to drill new wells, materially increase

1 the production capacity of existing wells or take over the use of an existing well, if the well is to
2 be used for water production (not monitoring). The notice must be served prior to or
3 concurrent with the initiation of environmental review under the California Environmental
4 Quality Act (CEQA), if required, or at least ninety (90) days prior to the construction of a new
5 well or the takeover or increase in capacity of an existing well. This ninety (90) day notice
6 requirement shall not apply in the event of emergencies, such as replacement of a collapsed
7 well, in which case notice will be provided as promptly as possible. The notice should provide
8 a description of the location, intended capacity and use of the well.

9 GENERAL PROVISIONS

10 21. No Third Party Beneficiary. Nothing in this Agreement, whether express
11 or implied, shall confer any rights or remedies under this Agreement on any persons other than
12 the Parties to it and their respective successors and assigns. Nothing in this Agreement shall
13 relieve or discharge the obligation or liability of any third parties to any Party to this Agreement.

14 22. Legal Capacity. The Parties warrant that all necessary approvals and
15 authorizations have been obtained to bind them to all terms of this Agreement, and further
16 warrant that the persons signing have authority to sign on behalf of their respective Parties.

17 23. Amendment. No amendment to this Agreement will be binding unless it
18 is either signed by an authorized representative of all of the Parties or approved by the Court.

19 24. Governing Law. This Agreement will be construed in accordance with,
20 and governed by, the laws of the State of California as applied to contracts that are executed
21 and performed entirely in California.

22 25. Severability. If any provision of this Agreement is held invalid or
23 unenforceable by any court, it is the intent of the Parties that all other provisions of this
24 Agreement be construed so as to remain fully valid, enforceable, and binding on the Parties.

25 26. Counterparts. This Agreement may be executed in one or more
26 counterparts, each of which will be considered an original, but all of which together will
27 constitute one and the same instrument. Any party that is currently a party to this Action and
28 any Northern Landowner may become a party to this Agreement by agreeing in writing to be

1 bound by its terms at any time prior to the entry of judgment in this Action. Future signatories
2 to this Agreement shall sign the signature pages attached hereto as Exhibits C (for Northern
3 Landowners) or D (for other parties to this litigation) to confirm their acceptance of its terms.

4 27. Merger Clause. This Agreement supersedes and replaces all prior
5 settlement negotiations and agreements, written or oral. It is the complete, final, and exclusive
6 statement of the parties' agreement. The parties hereto acknowledge that no party, agent or
7 attorney of any party has made any promise, representation or warranty whatsoever, express
8 or implied, ~~not contained herein, to induce them to execute this Agreement.~~ Each party has
9 executed this Agreement in reliance on the advice of his/her or its own attorney.

10 Dated: April __, 2002

CITY OF ARROYO GRANDE

11 By: _____
12 Title: _____
13

14 Dated: April __, 2002

CITY OF GROVER BEACH

15 By: _____
16 Title: _____
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18 Dated: April __, 2002

CITY OF PISMO BEACH

19 By: Rudy Natali
20 Title: MAYOR

21 Dated: April __, 2002

OCEANO COMMUNITY SERVICES DISTRICT

22 By: _____
23 Title: _____
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1 bound by its terms at any time prior to the entry of judgment in this Action. Future signatories
2 to this Agreement shall sign the signature pages attached hereto as Exhibits C (for Northern
3 Landowners) or D (for other parties to this litigation) to confirm their acceptance of its terms.

4 27. Merger Clause. This Agreement supersedes and replaces all prior
5 settlement negotiations and agreements, written or oral. It is the complete, final, and exclusive
6 statement of the parties' agreement. The parties hereto acknowledge that no party, agent or
7 attorney of any party has made any promise, representation or warranty whatsoever, express
8 or implied, not contained herein, to induce them to execute this Agreement. Each party has
9 executed this Agreement in reliance on the advice of his/her or its own attorney.

10 Dated: April __, 2002

CITY OF ARROYO GRANDE

11
12 By: _____
13 Title: _____

14 Dated: April __, 2002

CITY OF GROVER BEACH

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16 By: _____
17 Title: _____

18 Dated: April __, 2002

CITY OF PISMO BEACH

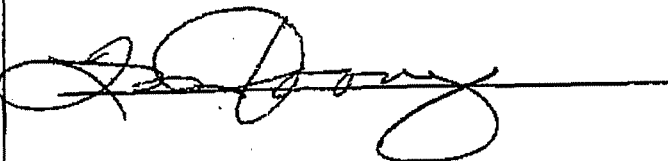
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20 By: _____
21 Title: _____

22 Dated: ^{RMV} April 24, 2002

OCEANO COMMUNITY SERVICES DISTRICT

23 By: Bill Serna
24 Title: President, Board of Directors

25 ATTEST:
26 Francis M. Cooney
27 Board Secretary

28 

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9 executed this Agreement in reliance on the advice of his/her or its own attorney.

10 Dated: April __, 2002 CITY OF ARROYO GRANDE
11
12 By: _____
13 Title: _____

14 Dated: ~~April~~ ~~XXXXXX~~ 2002 CITY OF GROVER BEACH
15 May 24, 2002
16 Attest: Donna L. McMahon (Stephen C. Lieberman)
17 Donna L. McMahon By: [Signature]
18 City Clerk Title: MAYOR

19 Dated: April __, 2002 CITY OF PISMO BEACH
20
21 By: _____
22 Title: _____

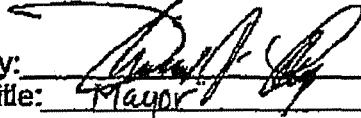
23 Dated: April __, 2002 OCEANO COMMUNITY SERVICES DISTRICT
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25 By: _____
26 Title: _____
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8 or implied, not contained herein, to induce them to execute this Agreement. Each party has
9 executed this Agreement in reliance on the advice of his/her or its own attorney.

10 Dated: ~~April~~ ^{May} 28, 2002

CITY OF ARROYO GRANDE

11 By: 
12 Title: Mayor

14 Dated: April __, 2002

CITY OF GROVER BEACH

15 By: _____
16 Title: _____

18 Dated: April __, 2002

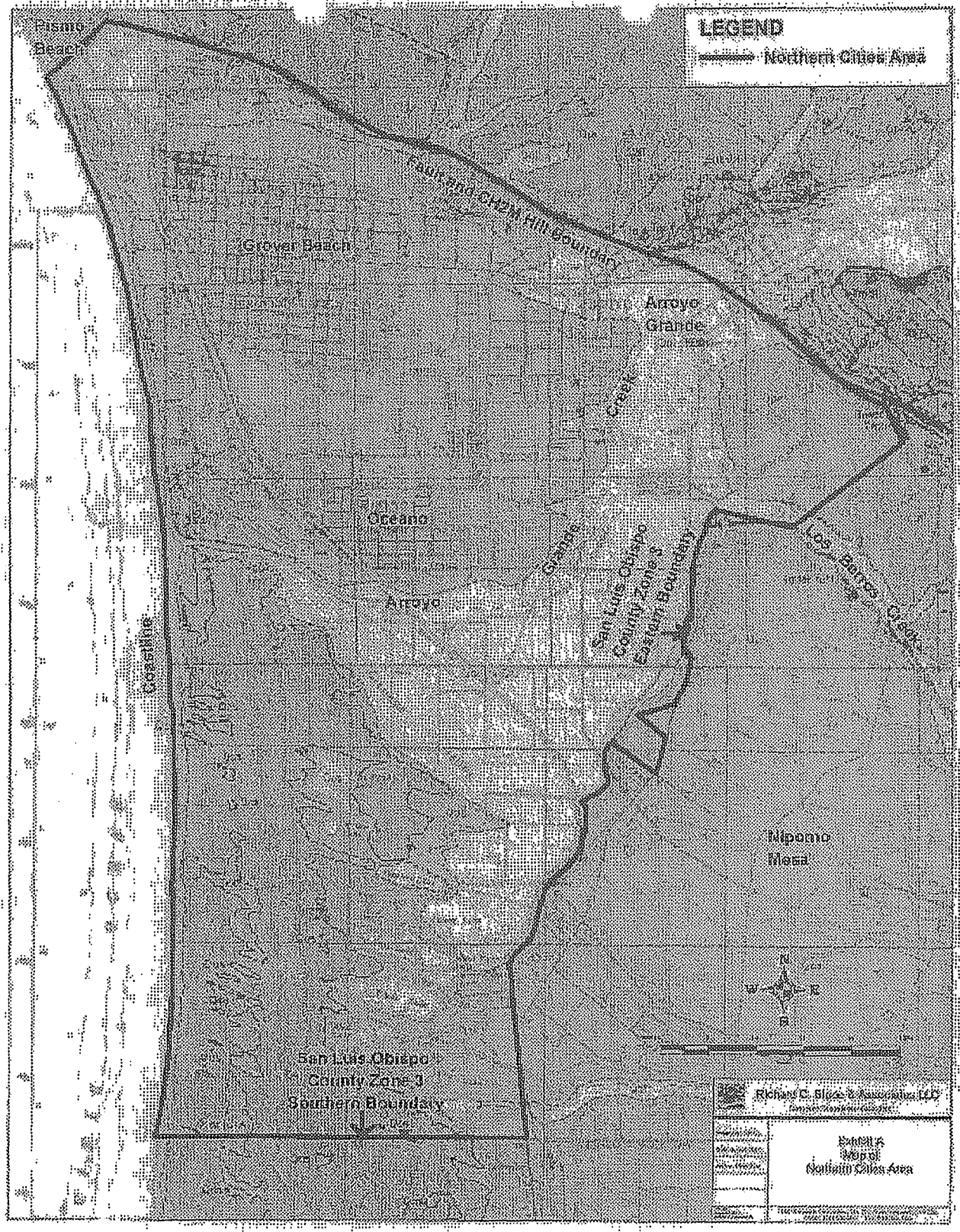
CITY OF PISMO BEACH

19 By: _____
20 Title: _____

21 Dated: April __, 2002

OCEANO COMMUNITY SERVICES DISTRICT

23 By: _____
24 Title: _____



**AGREEMENT REGARDING
MANAGEMENT OF THE
ARROYO GRANDE GROUNDWATER BASIN**

A. Parties

This Agreement is entered into among the Cities of Arroyo Grande, Pismo Beach, Grover Beach and the Oceano Community Services District (collectively referred to hereinafter as "Parties" or "Urban Parties").

B. Recitals

WHEREAS, in January 1983, a Technical Advisory Committee consisting of representatives of Arroyo Grande, Grover City, Pismo Beach, Oceano Community Services District, Port San Luis Harbor District, the Farm Bureau, Avila Beach County Water District and the County of San Luis Obispo ("Committee") determined in reliance on the 1979 Report of the Department of Water Resources entitled Ground Water in the Arroyo Grande Area that the safe yield of the Arroyo Grande Groundwater Basin ("Basin") is 9,500 acre feet per year;

WHEREAS, in or about February 1983, the Parties agreed to enter into a voluntary groundwater management plan to provide for effective management of groundwater resources in the Basin through which each party was given sufficient water to meet its needs as then projected; such needs being met in part by the City of Arroyo Grande foregoing 358 acre feet per year of its historical use and the City of Pismo Beach foregoing 20 acre feet per year of its historical use;

WHEREAS, this management plan provided a reasonable division of the safe yield of the Basin without court imposed groundwater basin adjudication;

WHEREAS, on February 9, 1983, the terms of the management plan were incorporated into Resolution No. 83-1 of the South San Luis Obispo County Water Association Approving the Recommendations of the Committee relating to the Basin (the "Resolution");

WHEREAS, each of the Parties have adopted individual resolutions endorsing the provisions of the Resolution;

WHEREAS, the Parties have generally complied with the terms and conditions of the Resolution; and

WHEREAS, general compliance with the Resolution has proven to be a fair and efficient means of managing and protecting groundwater resources in the Basin as confirmed by the revised final draft report prepared by the Department of Water Resources entitled, Water Resources of Arroyo Grande and Nipomo Mesa, January 2000.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Division of Safe Yield.

a. The Parties agree to a division of the safe yield of the Basin as follows:

Applied Irrigation 5,300 acre feet

Subsurface flow to ocean 200 acre feet

Urban Use:

City of Arroyo Grande 1,202 acre feet

City of Grover Beach 1,198 acre feet

City of Pismo Beach 700 acre feet

Oceano Community Services District 900 acre feet

b. Any increase or decrease in the safe yield of the Basin attributable to changed operation of the Lopez Reservoir, or any other cause, shall first be divided between the Urban Parties and applied irrigation on a pro rata basis using the formula from the 1983 Gentlemen's Agreement, fifty-seven percent (57%) to applied irrigation and forty-three percent (43%) to the Urban Parties. Thereafter, the first 378 acre feet per year of any increase of safe yield allocated to the Urban Parties shall be divided between the City of Arroyo Grande and the City of Pismo Beach on a pro rata basis (95% to Arroyo Grande and 5% to Pismo Beach).

c. The entitlements of each respective Urban Party may be increased based upon the conversion of irrigated agricultural lands to urban use. An Urban Party to this Agreement may increase its entitlement for urban use by a factor of three (3) acre feet per acre per year minus the calculated urban usage per acre per year upon the conversion of irrigated agricultural land to urban usage. "Irrigated agricultural land" shall be that land within the corporate limits of the party that was identified as irrigated agricultural land in the 1979 Department of Water Resources Report entitled Ground Water in the Arroyo Grande Area. This agricultural conversion factor may be applied to all acreage converted to urban use from January 1, 1983, throughout the life of this Agreement. Such an agricultural conversion factor is in the best interests of the overall Basin in that it will not result in any decline in the groundwater service over time. The Parties agree that no water should be converted to urban use within the Basin without establishing that it was irrigated agricultural land as defined in the 1979 Department of Water Resources Report, Groundwater in the Arroyo Grande Area.

d. The Parties agree and understand that the safe yield figures utilized in this Agreement are a product of the 1979 Department of Water Resources Report regarding the Arroyo Grande Basin as adjusted by the 1983 ad hoc Technical Advisory Committee and that the division of the resources is based upon the historical use of each party and a practical accommodation of each Party's needs as they existed at the time of the adoption of the 1983

agreement. It is agreed that the Parties will meet and confer on issues related to safe yield and division of existing water resources upon the final adoption of the new Arroyo Grande Basin study performed by the Department of Water Resources, which is currently in draft.

2. Shared Information and Monitoring: The Urban Parties to this Agreement shall freely share information with each other regarding each of their respective uses of groundwater in the Basin, including all pumping data such as amounts of water extracted, well static water levels, and water quality. The Urban Parties to this Agreement shall meet on a quarterly basis to share this information and to discuss water usage and impacts upon the Basin. The Parties shall conduct a review of water usage and the impacts on Basin hydrology in 2010 and 2020.

3. Term:

a. This Agreement shall bind the Parties indefinitely absent a significant change of circumstances as to available water, water quality, or hydrogeology of the Arroyo Grande Basin. A significant change of circumstances shall allow any Party to opt out of this Agreement if the significant change of circumstances put that Party at risk of not being able to meet its potable water needs.

b. Significant changed circumstances shall include changes within the Basin or outside of the Basin, including but not restricted to, a change in the Lopez Reservoir safe yield or an increase in Lopez Reservoir discharges for conservation purposes that threatens the ability of the Urban Parties to obtain their contractual allotments under their Lopez agreements, or a significant change in groundwater yields or quality, or a reduction in foreign water imported by any Urban Party. The Parties recognize that rainfall within the watershed is the most significant factor affecting the yield of Lopez Reservoir and the Basin.

c. The Parties shall revisit the issue of the allocation of groundwater resources within the Arroyo Grande Basin in 2010 and 2020 in the context of the review provided for in section 2 of this Agreement. The Parties shall make new allocations of groundwater resources at that time if circumstances justify it and if no harm will result to other groundwater users. Priority shall be given to reallocation of historical use of groundwater to Arroyo Grande and Pismo Beach that those agencies chose not to pursue in the entering into of the original Gentlemen's Agreement in 1983 should such new allocations be made.

d. A Party may opt out of this Agreement if significant changed circumstances arise as defined in this section. Such a party shall give all other parties to the agreement not less than six months written notice of its intention to opt out. The written notice shall describe in detail the significant changed circumstances upon which the Party bases its election to opt out of the Agreement.

4. Mediation Agreement: The Parties agree to mediate any disputes that arise out of the Parties' performance under this Agreement, or the interpretation of the terms of this Agreement, prior to instituting any litigation against or between any other Party to this Agreement. Should a Party institute litigation without first offering in good faith to mediate any such dispute, any Party may move for an order compelling mediation and staying the proceedings in the litigation until

after mediation has been completed. The prevailing party on a motion to compel mediation shall be entitled to recover its attorney's fees against any resisting party or any party who filed litigation without first making a good faith attempt to mediate the dispute. This mediation requirement shall not apply where the health and safety of any of the Parties, or any of the Parties' residents, is threatened and they must seek, and have obtained, preliminary relief for the purposes of preserving health and safety.

5. No Third Party Beneficiaries: The Parties are entering into this Agreement in order to reasonably allocate existing groundwater resources between themselves and not to benefit any third parties. This agreement shall only be enforceable between the Parties themselves. This Agreement does not create any right enforceable by any person or entity that is not a party to this Agreement.

6. General Provisions:

a. The Parties warrant that all necessary approvals and authorizations have been obtained to bind them to all terms of this Agreement, and further warrant that the persons signing have authority to sign on behalf of their respective Parties.

b. Written notice under this Agreement shall be given by placing such notice in the first class mail, postage prepaid, or by hand delivery to the current address of the office of any Party to this Agreement.

c. No amendment to this Agreement will be binding on any of the Parties unless it is in writing and signed by an authorized representative of all of the Parties.

d. This Agreement will be construed in accordance with, and governed by, the laws of the State of California as applied to contracts that are executed and performed entirely in California.

e. If any provision of this Agreement is held invalid or unenforceable by any final judgment, it is the intent of the Parties that all other provisions of this Agreement be construed to remain fully valid, enforceable, and binding on the Parties.


f. This Agreement may be executed simultaneously in one or more counterparts, each of which will be considered an original, but all of which together will constitute one and the same instrument.

g. The Parties represent that prior to the execution of this Agreement, they consulted independent legal counsel of their own selection regarding the substance of this Agreement.

WHEREFORE, the Parties publicly consent to the terms and conditions of this Agreement by executing the same as set forth below.

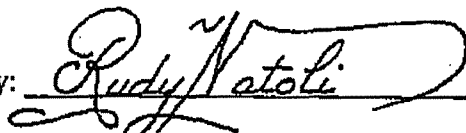
Dated: MAY 30, 2002.

City of Arroyo Grande

By: 
Print Name and Title: MICHAELA LADY, MAYOR


Dated: June 10, 2002.


City of Pismo Beach

By: 
Print Name and Title: MAYOR RUDY NATOLI

Dated: May 21, 2002.

City of Grover Beach

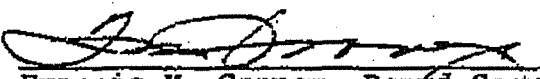
Attest: 
Donna L. McMahon
City Clerk


By: 
Print Name and Title: MAYOR

Dated: April 24, 2002.

Oceano Community Services District

Attest:


Francis M. Cooney, Board Secretary

By: 
Print Name and Title: Board President

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**EXHIBIT C – NORTHERN LANDOWNER SIGNATURE PAGE FOR
SETTLEMENT AGREEMENT**

1. I am the owner and/or lessor (*circle one or both*) of at least ten acres of agricultural land in the Northern Cities Area (the area so designated on Exhibit A to this Settlement Agreement).

2. Describe the parcel(s) of agricultural land that you own or lease:

- (a) Address(es): _____
- (b) Assessor's Parcel Number(s): _____
- (c) Number of acres of agricultural land that you own or lease: _____
- (d) Approximate number of acre-feet of water pumped annually: _____

3. I have read this Settlement Agreement. I have obtained such legal advice or other counsel regarding its terms as I deem appropriate. I understand and agree to its terms.

Dated: _____, 2002

Print Name of Owner/Lessor: _____

Title of Signer: _____

Signature: _____ *Signature Page Filed with Court*

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**EXHIBIT D – SIGNATURE PAGE FOR OTHER PARTIES – WATER PURVEYORS
AND LANDOWNERS OUTSIDE NORTHERN CITIES AREA**

1. I am a party to the Santa Maria Groundwater Litigation, or the legal representative of such a party.

2. I have read this Settlement Agreement. I have obtained such legal advice or other counsel regarding its terms as I deem appropriate. I understand and agree to its terms.

Dated: _____, 2002

Print Name of Party(ies): _____

Title of Signer: _____

Signature: Signature Page Filed with Court

Exhibit 1F

Santa Maria Valley Public Water Purveyor Water Management Agreement

The original signature page of this agreement for Southern California Water Company was filed with the Court on or about September 1, 2005. The original signature page for the City of Guadalupe was filed on or about September 6, 2005. The original signature page for the City of Santa Maria was previously hand-delivered to the Court.

**SANTA MARIA VALLEY PUBLIC WATER PURVEYOR WATER MANAGEMENT
AGREEMENT**

The CITY OF SANTA MARIA ("Santa Maria"), the CITY OF GUADALUPE ("Guadalupe"), and SOUTHERN CALIFORNIA WATER COMPANY ("SCWC") enter into this SANTA MARIA VALLEY PUBLIC WATER PURVEYOR WATER MANAGEMENT AGREEMENT ("Agreement") on this ___ day of _____. Santa Maria, Guadalupe and SCWC are referred to individually as a "Party" and collectively as the "Parties".

RECITALS

A. Santa Maria is a Charter City, providing potable water service to customers within and adjacent to its municipal boundaries.

B. Guadalupe is a general law city, providing potable water service to customers.

C. SCWC is an investor-owned public utility within the meaning of Public Utilities Code section 2400 *et seq.* and operates pursuant to the California Public Utility Act, Public Utilities Code section 200 *et seq.* SCWC provides potable water service to customers within its certificated service area in Santa Barbara County, generally referred to as the "Santa Maria Customer Service Area," which includes four unincorporated areas of Santa Barbara County, commonly known as "Orcutt," "Tanglewood," "Lake Marie," and "Sisquoc," and one unincorporated area in San Luis Obispo County, commonly referred to as the "Nipomo Mesa."

D. On July 20, 2004, Santa Maria and SCWC entered into a Water Management Agreement ("2004 Agreement"), which formalized certain efforts to coordinate the provision of potable water service within their respective service areas. The 2004 Agreement is incorporated herein by reference and remains in full force and effect and is attached as Exhibit A.

E. The Parties have historically relied on local groundwater to provide potable water service to their respective customers and hold rights to pump groundwater ("Groundwater Rights") from the Santa Maria Groundwater Basin ("Basin").

F. The Parties also each hold contracts to receive water from the State Water Project ("SWP Entitlement," collectively, and "Santa Maria SWP Entitlement," "Guadalupe SWP Entitlement," or "SCWC SWP Entitlement," individually). Santa Maria's contract is for 17,800

acre feet, SCWC's contract is for 550 acre feet and Guadalupe's contract is for 610 acre feet. Collectively, the SWP Entitlement totals 18,960 acre-feet per year.

G. The Parties are also litigants in the Santa Maria groundwater basin (*Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*, Superior Court, County of Santa Clara, Lead Case No. CV 770214 ("Basin Adjudication")).

H. The Parties, along with a large number of other litigants, intend to enter into a stipulation ("Stipulation") which will settle the Basin Adjudication among the stipulating parties.

I. This Agreement is that agreement described as Exhibit F in the Stipulation.

NOW THEREFORE, in consideration of the foregoing recitals and the promises and covenants contained herein, the Parties agree as follows:

Section 1. Definitions. The terms used in this Agreement shall have the same definition as provided in the Stipulation, unless expressly provided otherwise in this Agreement.

Section 2: Purpose. The purpose of this Agreement is to provide the mechanism through which the Parties shall meet their obligations as intended in the Stipulation, through that certain agreement designated as Exhibit F.

Section 3: Term. This Agreement shall be effective concurrently with and on the same terms as the Stipulation, and shall remain in effect concurrent with the Stipulation.

Section 4: Twitchell Yield.

4.1 Division. The Parties agree that the 80% of the 32,000 acre-feet of Twitchell Yield shall be allocated as follows: Santa Maria 14,300 acre-feet; Guadalupe 1,300 acre-feet and SCWC 10,000 acre-feet. The Parties acknowledge that the remaining 20% of the Twitchell Yield (6,400 acre-feet) is allocated to the Overlying Owners within the District who are Stipulating Parties, subject to the terms of the Stipulation.

4.2 Transfer of Twitchell Yield. The Parties agree that any proposed transfer of Twitchell Yield to one of the Parties shall be made available to all Parties. Each Party shall be given 30 days advance notice to elect to participate in any proposed transfer. The amount of transferred Twitchell Yield shall be divided between the Parties participating in the transfer in proportion to those Parties' then existing Twitchell Yield. If only one Party participates in the transfer, that Party shall be entitled to the full amount of transferred Twitchell Yield.

Section 5. Twitchell Management Authority.

5.1 All decision making of the TMA shall be conducted, to the extent reasonably practical, on a consensus basis. Provided, however, if consensus cannot be achieved, TMA decisions shall be made by majority vote. Unless otherwise specified, the weight of each Party's voting rights shall be equivalent to its then-existing Twitchell Yield.

5.2 The Parties will work with the other Twitchell Participants to develop rules and regulations governing the TMA.

5.3 Budget. Each Stipulating Party holding Twitchell Yield shall be obligated to fund the TMA in proportion to that Party's then existing Twitchell Yield.

5.3.1 The TMA shall establish its members' funding obligations through a duly adopted budget, which shall project the TMA funding needs in 3-5 year increments, as it deems necessary to meet its obligations to preserve Twitchell Yield. Any TMA budget shall be adopted at least 18 months in advance of its intended implementation to provide adequate time for SCWC to secure PUC approval to fulfill its financial obligations as a member of the TMA. The Parties will to work cooperatively to achieve consensus on the TMA operating budget. If Santa Maria and SCWC are unable to agree on the operating budget, SCWC shall grant Santa Maria a proxy for purposes of the TMA vote on the operating budget. If SCWC grants such a proxy and an operating budget is subsequently approved, SCWC retains the right to challenge any such operating budget through the Court's reserved jurisdiction provided in the Stipulation. SCWC's obligations with respect to any such operating budget is subject to final approval by the PUC.

5.3.2 Consistent with Section V(D)(3)(c) of the Stipulation, the TMA's annual budget for the first five years following PUC approval of the Stipulation shall be as provided in Exhibit B to this Agreement. As provided in Exhibit B, the TMA budget shall include anticipated costs necessary to fund:

5.3.2.1 The Management Area Engineer activities for the Valley Management Area, including the implementation of the Valley Management Area Monitoring Program and the associated preparation of the Annual Report; and

5.3.2.2 The preparation and implementation of the Twitchell Project Manual; and

5.3.2.3 The funding of Twitchell Project operations and capital funds that the TMA determines are necessary to preserve the Twitchell Yield. The requirements for the Twitchell operational fund shall take into account the amount collected by the District from its current operation and maintenance assessment. The Twitchell capital fund shall consist of any unused revenues from the Twitchell operating fund, plus other funds necessary to implement approved Capital Improvement Projects.

5.4 Capital Improvement Projects.

5.4.1 The Parties agree that if one Party proposes a TMA Capital Improvement Project, that Party shall make available to the other Parties the opportunity to participate in the funding of the TMA Capital Improvement Project in proportion to the Parties' share of Twitchell Yield.

5.4.1.1 If a Party chooses not to participate in the funding of the TMA Capital Improvement Project, and that Party's participation is required to implement the Project, the Parties may petition the Court to resolve the issue on an expedited basis.

5.4.1.2 If a Party chooses not to participate in the funding of the TMA Capital Improvement Project, and that Party's participation is not required to implement the Project, the Party or Parties choosing not to participate in the Project shall grant the Party proposing the Project a proxy for purposes of the TMA vote to approve the Project, so long as the proposed Project will not adversely affect a Party's share of Twitchell Yield or otherwise cause material injury to a Party.

5.4.1.3 If fewer than all Parties participate in the funding of a TMA Capital Improvement Project, the Parties who participate in the funding of the Project shall be entitled to the benefits received from the Project in proportion to their financial contribution.

5.4.2 If an emergency situation exists such that a TMA Capital Improvement Project is necessary to abate the emergency, the Parties may petition the Court for an order approving the Project on an expedited basis.

Section 6. New Urban Uses - SCWC. The 2004 Agreement is expressed modified only as follows:

6.1 All new customers of SCWC, or existing customers proposing to increase their water use through a change in land use requiring a discretionary land use permit or other form of land use entitlement, as specified in Section X(D)(2) of the Stipulation ("SCWC Project

Proponents”) shall provide Supplemental Water to offset the demand associated with that prospective use, through the protocol provided in the 2004 Agreement. The entities that have entered into the Reservation/Purchase Agreements identified on Exhibit C to this Agreement and Exhibit B to the 2004 Agreement are deemed to have satisfied the requirements of this Section and are exempt from the requirements of Section 6.2, below.

6.2 In addition to the fee paid to secure Supplemental Water pursuant to the 2004 Agreement, an additional 20% shall be charged to the SCWC Project Proponent by Santa Maria and shall be placed into either the Twitchell operational fund or the Twitchell capital fund. That incremental charge deposited in the applicable fund, shall be deemed a SCWC contribution to offset any SCWC TMA funding requirements.

Section 7. New Urban Uses – Guadalupe.

7.1 Guadalupe and Santa Maria agree that it is within their mutual interests to cooperate and coordinate their efforts to provide retail water service within their respective service areas.

7.2 Guadalupe and Santa Maria mutually acknowledge the benefits of importing SWP supplies to augment their use of local groundwater.

7.3 It is to the mutual advantage of Guadalupe and Santa Maria to have several alternatives for making use of their SWP Entitlements, Return Flows and Twitchell Yield to create flexibility, reliability, and cost effectiveness in their water supply systems. Santa Maria and Guadalupe shall each have the right to use the other’s unused Twitchell Yield in any given year if needed.

7.4 Guadalupe and Santa Maria agree to work cooperatively to provide a reliable and cost effective mechanism through which Santa Maria and Guadalupe can maximize the use of their respective SWP supplies and Return Flows within the Basin. Santa Maria agrees not to oppose any effort by Guadalupe that is based on reliable data to increase the fixed percentage of Guadalupe’s SWP Return Flow.

7.5 Santa Maria agrees to work cooperatively with Guadalupe to provide Guadalupe with additional SWP supplies. Guadalupe shall compensate Santa Maria through a specified dollar amount or through an exchange of water resources, as Guadalupe and Santa Maria deem appropriate. As further consideration, Santa Maria shall have a right of first refusal to purchase any SWP Return Flows that Guadalupe elects to sell from its existing SWP Entitle-

ment, and any future SWP Entitlement, that are not for use within or adjacent to Guadalupe's service area.

Section 8. Representations or Warranties of Guadalupe. Guadalupe makes the following representations, warranties and covenants to SCWC and Santa Maria:

8.1 Power and Authority to Execute and Perform this Agreement. Guadalupe has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

8.2 Enforceability. This Agreement constitutes a legal, valid and binding obligation of Guadalupe, and is enforceable against Guadalupe in accordance with its terms.

Section 9. Representations or Warranties of Santa Maria. Santa Maria makes the following representations, warranties and covenants to SCWC and Guadalupe:

9.1 Power and Authority to Execute and Perform this Agreement. Santa Maria has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

9.2 Enforceability. This Agreement constitutes a legal, valid and binding obligation of Santa Maria, and is enforceable against Santa Maria in accordance with its terms.

Section 10. Representations or Warranties of SCWC. SCWC makes the following representations, warranties and covenants to Santa Maria and Guadalupe:

10.1 Power and Authority to Execute and Perform this Agreement. SCWC is a corporation duly formed and in good standing in the State of California. Subject to California Public Utility Commission approval, expressly including the ability to recover the costs of implementing this agreement through its authorized regulated utility rates, SCWC has the corporate power and authority to enter into this Agreement and to perform its obligations and all necessary corporate approvals and authorizations have been obtained.

10.2 Enforceability. Subject to California Public Utility Commission approval as provided in section 10.1, this Agreement constitutes a legal, valid and binding obligation of SCWC, enforceable against SCWC in accordance with its terms.

Section 11. Remedies Not Exclusive. Remedies provided in this Agreement for enforcement of its terms are intended and shall be construed as cumulative rather than exclusive and shall not be deemed to deprive any Party from also using any other remedies provided by this Agreement or by law.

Section 12. Subject to Applicable Law. The Parties acknowledge and agree that this Agreement and the rights and obligations of the Parties shall be subject to the laws governing municipal corporations as they now exist and as they may be amended or codified by the Legislature of the State of California.

Section 13. Integration. This Agreement shall be integrated with, and interpreted in companion with the 2004 Agreement, the Stipulation, and the final judgment entered in the Basin Adjudication that is based upon the Stipulation. These set of agreements contain the entire understanding between SCWC, Santa Maria and Guadalupe with respect to the subject matter, and supersede all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between SCWC, Santa Maria and Guadalupe. This Agreement cannot be amended except in writing signed by all Parties.

Section 14. No Waiver. Any failure or delay on the part any Party to exercise any right under this Agreement shall not constitute a waiver of the right, and shall not preclude such Party from exercising or enforcing the right, or any other provision of this Agreement, on any subsequent occasion.

Section 15. Notices. All notices or other communications required or desired to be given pursuant to this Agreement shall be in writing and shall be hand-delivered, or mailed by certified mail, return receipt requested, or sent by a reputable overnight courier service providing delivery confirmation. Each such notice or communication shall be deemed to be duly given when hand-delivered, or three (3) days after being mailed in any depository maintained by the United States Postal Service, with prepaid postage, certified, return receipt requested or one (1) day after being deposited for next day delivery with Federal Express or other reputable overnight courier. Each such notice or communication shall be addressed to the Parties at their respective addresses set forth next to their signatures below, or such other address as a Party notifies the other in writing.

Section 16. Headings; Section References. Captions and headings appearing in this Agreement are inserted solely as reference aids for the ease and convenience; they shall not be deemed to define or limit the scope or substance of the provisions they introduce, nor shall they be used in construing the intent or effect of such provisions.

Section 17. Separability. If any provision of this Agreement is finally determined by a court to be invalid or unenforceable as written, the provision shall, if possible, be enforced to

the extent reasonable under the circumstances and otherwise shall be deemed deleted from this Agreement. The other provisions of this Agreement shall remain in full force and effect so long as the material purposes of the Agreement and understandings of the Parties are not impaired.

Section 18. Binding Effect Assignment. This Agreement shall only be binding on and inure to the benefit of the Parties, and their respective successors and permitted assigns. No Party shall assign this Agreement except with the prior written approval of the other Parties. Any unauthorized attempt to assign this Agreement shall be null and void. Notwithstanding the foregoing, SCWC shall have the right to assign this Agreement to any affiliate.

Section 19. Attorneys Fees. In the event that any action or proceeding is brought to enforce one or more of the terms of this Agreement, to restrain an alleged violation of this Agreement, or to determine the validity of this Agreement or any part, the prevailing Party in any such action or proceeding shall be entitled to recover from the other its reasonable costs and attorneys' fees, in addition to any other remedies available to it in law or equity. If all Parties are successful in one or more causes of action during any such proceeding, the costs and fees shall be apportioned as determined by the Court.

Section 20. Force Majeure. If by reason of acts of God, earthquakes, floods, storms, explosion, fires, labor troubles, strikes, insurrection, riots, acts of the public enemy, or federal, state, or local law, order, rule, or regulation, any Party is prevented from complying with any condition of this Agreement, then while so prevented the condition shall be suspended and the Party shall be relieved of the obligation of complying with such covenant and shall not be liable for damages for failure to comply with it. Any obligation of any Party shall be extended for as long as it is so prevented from complying with any condition or covenant in the Agreement.

Section 21. Dispute Resolution, Governing Law and Venue. This Agreement is a contract governed in accordance with the laws of the State of California. The Parties agree that if any dispute arises with respect to any provision of this Agreement, the Parties shall meet and confer in an attempt to resolve any such disputes. If, after 90 days, the meet and confer process is unsuccessful, the dispute shall be presented for Court review and determination pursuant to the Court's reserved jurisdiction and judicial review provisions provided in the Stipulation.

Section 22. Counterparts. This Agreement may be signed in any number of counterparts, including counterparts by facsimile signature, each of which shall be deemed an original,

but all of which shall together constitute one and the same instrument. The original signature pages shall be filed with the Court as Exhibit F to the Stipulation.

IN WITNESS WHEREOF, the parties have executed this agreement as of the date first written above.

CITY OF SANTA MARIA:

SCWC:

City of Santa Maria
a California municipal corporation

Southern California Water Company,
a California corporation

By: _____

By: Denise L. Kruger

Name: _____

Name: Denise L. Kruger

Title: _____

Title: Senior Vice President of Operations

Address: _____

Address: 3035 Prospect Park, Suite 60
Rancho Cordova, CA 95670

Fax: _____

Fax: (916) 853-3674

Phone: _____

Phone: (916) 853-3606

Attest:

APPROVED AS TO FORM:

By: _____

By: Robert J. Saperstein

_____, City Clerk

Robert J. Saperstein,
Hatch & Parent
Attorneys for SCWC

APPROVED AS TO FORM:

By: _____

Eric Garner,
Best Best & Krieger
Attorneys for City of Santa Maria

(Signatures continued on following page)

but all of which shall together constitute one and the same instrument. The original signature pages shall be filed with the Court as Exhibit F to the Stipulation.

IN WITNESS WHEREOF, the parties have executed this agreement as of the date first written above.

CITY OF SANTA MARIA:

SCWC:

City of Santa Maria
a California municipal corporation

Southern California Water Company,
a California corporation

By: *L. Lavagnino*
Name: Larry Lavagnino
Title: Mayor

By: _____
Name: Denise L. Kruger
Title: Senior Vice President of Operations

Address: 110 E. Cook St. Rm. 1
Santa Maria, CA 93454

Address: 3035 Prospect Park, Suite 60
Rancho Cordova, CA 95670

Fax: (805) 349-0567
Phone: (805) 925-0951 x204

Fax: (916) 853-3674
Phone: (916) 853-3606

Attest:

APPROVED AS TO FORM:

By: *Patricia A. Perez*
Patricia A. Perez City Clerk
Chief Deputy

By: _____
Robert J. Saperstein,
Hatch & Parent
Attorneys for SCWC

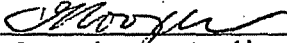
APPROVED AS TO FORM:

By: _____
Eric Garner,
Best Best & Krieger
Attorneys for City of Santa Maria


(Signatures continued on following page)

CITY OF GUADALUPE

City of Guadalupe,
a California municipal corporation

By: 
Name: Carolyn Galloway-Cooper
Title: City Administrator
Address: 918 Obispo Street
Guadalupe, CA 93434
Fax: 805 343-5512
Phone: 805 343-1340

Attest:

By: 
BRENDA HOFF, City Clerk

APPROVED AS TO FORM:


By: 
Mark J. Mulkerin,
Burke, Williams & Sorensen, LLP
Attorneys for Guadalupe

EXHIBIT A
to
STIPULATION EXHIBIT F

WATER MANAGEMENT AGREEMENT

This Water Management Agreement ("Agreement") is made and entered into this ~~30th~~ day of July 2004, by and between the CITY OF SANTA MARIA ("City"), a California municipal corporation, and SOUTHERN CALIFORNIA WATER COMPANY, a California corporation ("SCWC"). The City and SCWC are referred to individually as a "Party" and collectively as the "Parties".

RECITALS

A. The City is a Charter City. The City provides potable water service to customers within the greater Santa Maria area of Santa Barbara County.

B. SCWC is an investor-owned public utility within the meaning of Public Utilities Code Section 2400, *et seq.* and operates pursuant to the California Public Utility Act, Public Utilities Code Section 200, *et seq.* SCWC provides potable water service to customers within its certificated service area in Santa Barbara County, generally referred to as the "Santa Maria Customer Service Area", which includes four unincorporated areas of Northern Santa Barbara County, commonly known as "Orcutt," "Tanglewood," "Lake Marie," and "Sisquoc," and one unincorporated area in San Luis Obispo County, commonly referred to as the "Nipomo Mesa."

C. The City and SCWC have historically cooperated and coordinated their efforts to provide retail water service within their respective service areas.

D. Both the City and SCWC have historically relied on local groundwater to provide potable water service to their respective customers and both hold rights to pump groundwater ("Groundwater Rights") from the Santa Maria Groundwater Basin ("Basin").

E. The City and SCWC also each hold contracts to receive water from the State Water Project ("SWP Entitlement," collectively, and "City SWP Entitlement" or "SCWC SWP Entitlement," individually). Collectively, their contract entitlements total 18,350 acre-feet per year.

F. Both the City and SCWC are legally entitled to retain and recapture that portion of their respective SWP Entitlement that recharges the Basin after the consumptive use of the SWP Entitlement ("Return Flows").

G. The City and SCWC mutually acknowledge the benefits of importing SWP supplies to augment their use of local groundwater.

H. It is to the mutual advantage of the City and SCWC to have several alternatives for making use of their SWP Entitlements, Return Flows and Groundwater Rights, to create flexibility, reliability and cost-effective redundancy in their water supply systems.

I. The County of Santa Barbara ("County") regulates the land use activities within Orcutt. In 1997, the County adopted the Orcutt Community Plan ("OCP"), which establishes, among other things, certain policies regarding water supplies to be secured for new development projects in Orcutt ("Project" or "Projects"). The OCP was amended in 2001. In particular, the OCP requires that the water demand associated with Projects be offset by "supplemental" water supplies that do not result in further overdraft of the Basin ("OCP Water Policies").

J. As of the date of this Agreement, SCWC has fully reserved the SCWC SWP Entitlement for the benefit of Projects (See Section 3 below). In addition, without significant investment in and construction of additional capital facilities and/or the access to City facilities as provided in this Agreement, SCWC is unable to take delivery of the full extent of its SCWC SWP Entitlement.

K. Without the construction of additional capital facilities that extend the SCWC SWP turnout from Tanglewood to Orcutt, SCWC is unable to take delivery of any additional alternative sources of water that may comply with the OCP Water Policies, except as provided in this Agreement.

L. The City has elected to make available to certain Project proponents within Orcutt supplemental water supplies that will satisfy the OCP Water Policies applicable to Projects. (See City Resolution 2003-150, attached as Exhibit "A" ("Resolution 2003-150").)

M. SCWC and the City are also parties to litigation regarding water rights in the Santa Maria groundwater basin (*Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*, Superior Court, County of Santa Clara, Lead Case No. CV 770214 ("Basin Adjudication"))

N. The Parties intend that this Agreement provide a reliable and cost effective mechanism through which the City and SCWC can maximize the use of their respective SWP supplies within the Basin, while making the most efficient use of existing facilities to take delivery of the Parties' respective SWP supplies.

O. The Parties also intend that this Agreement establish a mechanism through which potential new SCWC customers in Orcutt may access supplemental water through the City, consistent with the OCP Water Policies.

NOW THEREFORE, in consideration of the foregoing recitals and the promises and covenants contained herein, the Parties agree as follows:

Section 1. Purpose. The purposes of this Agreement are to: (a) provide a reliable and cost effective mechanism through which the City and SCWC can maximize the use of their respective SWP supplies within the Basin, (b) make the most efficient use of existing facilities to take delivery of the Parties' respective SWP supplies, (c) secure a reliable means of accessing Supplemental Water (defined below), and (d) fairly allocate the costs of obtaining and using Supplemental Water within the Basin. Nothing in this Agreement shall be interpreted to impose on either Party any obligation that might arise out of the final judgment entered in the Basin Adjudication, other than as expressly provided in this Agreement.

Section 2. Term.

2.1 This Agreement shall be effective on the date first written above ("Effective Date") and shall continue to February 25, 2038, and thereafter shall remain in effect for so long as both the City and SCWC remain SWP contractors ("Term").

2.2 While the Parties contend PUC approval of this Agreement is not required, should the PUC rule that PUC approval is required and that approval of the Agreement as written is denied, the Parties shall make every reasonable effort to modify the Agreement in a manner that the PUC will approve and that also preserves its original, essential terms.

Section 3. Right to Acquire Water.

3.1 The Parties acknowledge that given the limits of existing facilities, SCWC is unable to take full delivery of the SCWC SWP Entitlement through its existing SWP facilities because the water demand in the area with direct access to the SCWC SWP Entitlement (Tanglewood) is significantly less than the full SCWC SWP Entitlement. Further, SCWC has fully committed to those Projects listed in Exhibit "B" ("Committed Projects") SCWC's SWP Entitlement and the use of SCWC's existing facilities to make use of the SCWC SWP Entitlement reserved to the benefit of the Committed Projects. To take delivery of the entirety of the SCWC SWP Entitlement, SCWC must either construct additional capital facilities to extend the

SWP turnout from Tanglewood to Orcutt, and/or obtain the rights to rely on the interconnection between the SCWC and City systems, as provided in this Agreement.

3.2 SCWC agrees that, given its geographic proximity to and existing interconnection with SCWC, the City provides the best, most cost effective, and logical source of Supplemental Water for the benefit of Projects in Orcutt to which SCWC would provide retail potable water service.

3.3 For the purpose of this Agreement, "Supplemental Water" shall mean a portion of the yield of the SWP Entitlement held by the City, or a portion of the historic groundwater rights to the Basin held by the City in accordance with the final judgment entered in the Basin Adjudication.

3.4 In working with Project proponents, SCWC agrees that prior to accepting any water that is intended to satisfy the OCP Water Policies, other than the SCWC SWP Entitlement, Supplemental Water and that obtained under Section 7.1, SCWC shall:

3.4.1 Refer to the City any Project proponent that requests water service from SCWC that is also subject to the OCP Water Policies; and

3.4.2 Allow sufficient time for the City and the Project proponent to attempt to make arrangements consistent with the OCP Water Policies, this Agreement and other applicable considerations.

3.5 The City shall make available Supplemental Water to Projects in Orcutt pursuant to Resolution 2003-150 or a substantially similar policy. The City shall not unreasonably withhold Supplemental Water from Projects in Orcutt.

3.6 If any portion of SCWC's SWP Entitlement becomes uncommitted (i.e., a Committed Project is not approved for development or if the County adjusts upward the reliability factor it applies to SCWC SWP Entitlement), SCWC shall use the uncommitted SCWC SWP Entitlement as specified in this Section 3.6 and the Parties shall undertake the following:

3.6.1 SCWC shall provide written notice to the City of the availability of the SCWC SWP Entitlement ("Notice of Availability"), specifying the quantity of SCWC SWP Entitlement that has become available. Within 45 days of the Notice of Availability, the City shall pay to SCWC \$22,000 per acre foot, adjusted annually based on the consumer price index (Los Angeles-Riverside-Orange County), for the SCWC SWP Entitlement specified in the Notice of Availability. Upon provision of payment to SCWC, the City, at its sole discretion, may make

available to Project(s) in Orcutt, as otherwise provided in this Agreement, this SCWC SWP Entitlement as though it is Supplemental Water. SCWC shall continue to use the SCWC SWP Entitlement as though it is fully committed for the benefit of Projects in Orcutt.

3.7 SCWC shall be relieved of its obligation to refer the Project proponent to the City as provided in subsection 3.4, during any period which:

3.7.1 The City determines that the City has no additional Supplemental Water available for use in Orcutt, or the County determines that the City has no additional Supplemental Water available for use in Orcutt. If the Parties disagree with the County's determination, the Parties agree to use their reasonable best efforts to convince the County that the City does have available Supplemental Water.

3.8 After January 1, 2014, SCWC shall be relieved of its obligation to refer the Project Proponent to the City as provided in subsection 3.4, if one or more of the following conditions applies:

3.8.1 A source of water becomes available to SCWC for use in the Basin at a cost less than the cost of the City's Supplemental Water, on a per acre foot basis;

3.8.2 The Parties agree to meet and confer in good faith to attempt to resolve any issues that arise pursuant to this Section 3.8 prior to SCWC seeking an alternative source of water.

3.9 The Parties acknowledge and agree that this Agreement is not a mechanism through which SCWC may use the City's water distribution system to access alternative sources of water, either directly or indirectly, except as expressly provided in this Agreement.

Section 4. Interconnection. The Parties have previously established an interconnection between their respective water distribution facilities, consisting of a two-way meter, meter vault and appurtenances located inside the meter vault ("Interconnection"). The Interconnection is located at Miller Street and Santa Maria Way. The maintenance, repair and improvements to the Interconnection shall be managed as follows:

4.1 The Parties shall share equally the costs of all maintenance and repairs on the Interconnection. SCWC shall be responsible for physically implementing the ongoing maintenance and repair of the Interconnection, subject to the City's prior review of the maintenance and repair plans.

4.2 The Parties shall share the costs of any needed improvements to the Interconnection one-fourth (¼) by the City and three-fourths (¾) by SCWC. Unless otherwise arranged between the Parties, SCWC shall be responsible for physically implementing any improvements to the Interconnection. The City shall provide prior input and approval of any improvements to the Interconnection.

4.3 Both the City and SCWC shall have reasonable access to the meter at the Interconnection.

Section 5. Delivery of Water Through the Interconnection. Either Party may take delivery of water through the Interconnection subject to the following conditions (for the purpose of this Agreement, the Party taking delivery shall be referred to as the "Receiving Party" and the Party supplying the water shall be referred to as the "Supplying Party"):

5.1 As a Receiving Party, SCWC shall have a first priority right to use the Interconnection to take delivery each Year (defined below) of only that amount of SCWC SWP Entitlement that SCWC cannot take delivery of through SCWC's own facilities. In addition, each Year, SCWC's receipt of water through the Interconnection pursuant to this Section shall be limited to that quantity of SCWC's SWP Entitlement SCWC has made available for the City's receipt during that Year, at the City's SWP turnout within the City. The City may impose reasonable limitations on the rate of water SCWC takes through the Interconnection subject to this subsection 5.1.

5.2 Subject to SCWC's use of the Interconnection as provided in Section 5.1, either Party may use the Interconnection to take delivery of water by providing the Supplying Party at least 48 hours advance notice of the quantity and rate at which water will be taken.

5.3 Other than as provided in subsection 5.1, the Supplying Party may impose reasonable limitations on the rate and quantity of water to be taken through the Interconnection. Each Party is under an affirmative obligation to accommodate reasonable requests for use of the Interconnection, subject to SCWC's priority right provided in Section 5.1. Unless otherwise agreed between the Parties, the use of the Interconnection other than as provided in Section 5.1 shall be interim and temporary in nature.

5.4 Payment for receipt of water through the Interconnection shall be made in accordance with Section 6.

Section 6. Payments for Delivered Water. The Receiving Party shall pay to the Supplying Party for receipt of water through the Interconnection, as follows:

6.1 Section 5.1 deliveries. For use of the Interconnection as provided in Section 5.1, SCWC shall pay to the Central Coast Water Authority ("CCWA") all costs associated with making available to the City, at the City's SWP turnout within the City, that quantity of the SCWC SWP Entitlement equivalent to that amount of water SCWC intends to receive through the Interconnection. Payment shall be made in accordance with applicable CCWA policies.

6.2 Section 5.2 deliveries. For delivery of water obtained through the Interconnection pursuant to Section 5.2, the Receiving Party shall pay the Supplying Party a per acre-foot charge equivalent to the Supplying Party's cost of producing the water for that Year. The Supplying Party shall determine cost of producing water and shall provide the Receiving Party with an itemized statement summarizing those costs. The Parties agree to meet and confer in good faith regarding any dispute in determining the cost of producing water.

6.3 Neither Party shall be obligated to pay any charge, other than as provided in this Section.

6.4 For the purpose of this Agreement, a "Year" shall refer to a water year commencing on October 1 and ending in the subsequent year on September 30. The Payments required in Section 6.2 shall be made annually, on or before November 1 of each Year, based on actual metered receipt of water through the Interconnection.

Section 7. Additional Supplemental Water. In exchange for the commitments in Section 3 and as an element of consideration for those commitments, the City hereby provides to SCWC, upon the Effective Date, the right to take delivery of 20 acre-feet of Supplemental Water annually for the Term of this Agreement, at no cost to SCWC. The City provides these 20 acre-feet of Supplemental Water under the same terms and conditions provided in Resolution 2003-150. If the County determines that Supplemental Water provided pursuant to Resolution 2003-150 does not satisfy the OCP Water Policies, the City shall provide SCWC at no cost, 20 acre-feet per year of water through the Interconnection, in addition and subject to the same priority as that amount of water SCWC can obtain under Section 5.1. SCWC shall have the right to use 20 acre-feet of water provided in this Section 7 for the benefit of any residential Project.

Section 8. Service Area Integrity. Nothing in this Agreement is intended nor shall it be interpreted to waive either Party's rights to provide water service to current or future areas within or adjacent to their existing service areas. Should the City seek to acquire (by any means) any portion of, or all of the SCWC certificated service area in SCWC's Santa Maria Customer Service Area, the City shall pay as fair compensation, the greater of 10 times the SCWC rate base or the court-approved fair compensation.

Section 9. Representations or Warranties of City. The City makes the following representations, warranties and covenants to SCWC:

9.1 Power and Authority to Execute and Perform this Agreement. The City has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

9.2 Enforceability. This Agreement constitutes a legal, valid and binding obligation of the City, and is enforceable against the City in accordance with its terms.

Section 10. Representations or Warranties of SCWC. SCWC makes the following representations, warranties and covenants to City:

10.1 Power and Authority to Execute and Perform this Agreement. SCWC is a corporation duly formed and in good standing in the State of California. Subject to the conditions of Section 2.2, SCWC has the corporate power and authority to enter into this Agreement and to perform its obligations and all necessary corporate approvals and authorizations have been obtained. The City agrees that nothing in this representation, warranty or covenant shall be interpreted or applied to negate the City's indemnity obligations provided in Section 12.

10.2 Enforceability. This Agreement constitutes a legal, valid and binding obligation of SCWC, enforceable against SCWC in accordance with its terms.

Section 11. Termination. This Agreement shall terminate as described in Section 2. If this Agreement is terminated prior to the expiration of the Term, its termination shall not impact: (a) any other agreements regarding Supplemental Water between the City and Project proponents, and SCWC and Project proponents, (b) the provision of water to SCWC pursuant to Section 7 and (c) the payments and associated commitments, if any, regarding the SCWC SWP Entitlement between the City and SCWC made pursuant to Section 3.6.

Section 12. Indemnity.

12.1 The City shall hold harmless, defend and indemnify SCWC, its directors, employees, agents, successors and assigns (all of which are herein referred to as the "SCWC Indemnified Parties") from and against all liabilities, obligations, claims, damages, losses, actions, judgments, suits, costs and expenses, including but not limited to reasonable attorneys' fees (collectively, "Damages"), which may be imposed on, incurred by, or asserted against the SCWC Indemnified Parties as a result of or arising out of the restrictions placed on SCWC's access to Supplemental Water as provided in Section 3, and/or the implementation of this Agreement as of the Effective Date as provided in Section 2. This indemnification shall survive termination of the Agreement.

12.2 Promptly following notice of any claim for which SCWC is indemnified, SCWC shall notify the City of such claim in writing. The City shall thereafter defend against such claim, in consultation with SCWC, in a manner the Parties mutually deem appropriate, including settlement on such terms as SCWC and the City both approve. The City and SCWC shall mutually select counsel. SCWC may also elect to have separate representation at its sole discretion and cost. If the City fails to promptly defend such claim, SCWC may defend the claim in any manner it deems appropriate and with counsel of its choice, including without limitation, settlement of the claim on terms SCWC deems appropriate, and to pursue such remedies as may be available to SCWC against the City.

Section 13. Remedies Not Exclusive. Remedies provided in this Agreement for enforcement of its terms are intended and shall be construed as cumulative rather than exclusive and shall not be deemed to deprive either Party from also using any other remedies provided by this Agreement or by law.

Section 14. No Transfer of Water Rights or Contracts. The rights granted pursuant to this Agreement constitute the right to take delivery of water only and shall not be interpreted as a sale, transfer, or assignment of either Party's water rights or contract entitlements.

Section 15. Subject to Applicable Law. The Parties acknowledge and agree that this Agreement and the rights and obligations of the Parties shall be subject to the laws governing municipal corporations as they now exist and as they may be amended or codified by the Legislature of the State of California.

Section 16. Entire Agreement. This Agreement contain the entire understanding between SCWC and the City with respect to the subject matter, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between SCWC and the City. This Agreement cannot be amended except in writing signed by both Parties.

Section 17. No Waiver. Any failure or delay on the part either Party to exercise any right under this Agreement shall not constitute a waiver of the right, and shall not preclude such Party from exercising or enforcing the right, or any other provision of this Agreement, on any subsequent occasion.

Section 18. Notices. All notices or other communications required or desired to be given pursuant to this Agreement shall be in writing and shall be hand-delivered, or mailed by certified mail, return receipt requested, or sent by a reputable overnight courier service providing delivery confirmation. Each such notice or communication shall be deemed to be duly given when hand-delivered, or three (3) days after being mailed in any depository maintained by the United States Postal Service, with prepaid postage, certified, return receipt requested or one (1) day after being deposited for next day delivery with Federal Express or other reputable overnight courier. Each such notice or communication shall be addressed to the Parties at their respective addresses set forth next to their signatures below, or such other address as a Party notifies the other in writing.

Section 19. Headings; Section References. Captions and headings appearing in this Agreement are inserted solely as reference aids for the ease and convenience; they shall not be deemed to define or limit the scope or substance of the provisions they introduce, nor shall they be used in construing the intent or effect of such provisions.

Section 20. Separability. If any provision of this Agreement is finally determined by a court to be invalid or unenforceable as written, the provision shall, if possible, be enforced to the extent reasonable under the circumstances and otherwise shall be deemed deleted from this Agreement. The other provisions of this Agreement shall remain in full force and effect so long as the material purposes of the Agreement and understandings of the Parties are not impaired.

Section 21. Binding Effect Assignment. This Agreement shall be binding on and inure to the benefit of the Parties, and their respective successors and permitted assigns. Neither Party shall assign this Agreement except with the prior written approval of the other Party. Any

unauthorized attempt to assign this Agreement shall be null and void. Notwithstanding the foregoing, SCWC shall have the right to assign this Agreement to any affiliate.

Section 22. Attorneys Fees. In the event that any action or proceeding is brought to enforce one or more of the terms of this Agreement, to restrain an alleged violation of this Agreement, or to determine the validity of this Agreement or any part, the prevailing Party in any such action or proceeding shall be entitled to recover from the other its reasonable costs and attorneys' fees, in addition to any other remedies available to it in law or equity. If both Parties are successful in one or more causes of action during any such proceeding, the costs and fees shall be apportioned as determined by the court.

Section 23. Force Majeure. If by reason of acts of God, earthquakes, floods, storms, explosion, fires, labor troubles, strikes, insurrection, riots, acts of the public enemy, or federal, state, or local law, order, rule, or regulation, either Party is prevented from complying with any condition of this Agreement, then while so prevented the condition shall be suspended and the Party shall be relieved of the obligation of complying with such covenant and shall not be liable for damages for failure to comply with it. Any obligation of either Party shall be extended for as long as it is so prevented from complying with any condition or covenant in the Agreement.

Section 24. Governing Law and Venue. This Agreement is a contract governed in accordance with the laws of the State of California. THE PARTIES HEREBY AGREE THAT VENUE FOR ANY ACTION BROUGHT TO ENFORCE THE TERMS OF THIS AGREEMENT SHALL BE IN A COURT OF COMPETENT JURISDICTION IN THE COUNTY OF SANTA BARBARA, CALIFORNIA, AND CONSENT TO THE JURISDICTION THEREOF.


IN WITNESS WHEREOF, the parties have executed this agreement as of the date first written above.


CITY:

SCWC:

City of Santa Maria
a California municipal corporation

Southern California Water Company,
a California corporation

By: 
Name: L. J. Lavagnino
Title: Mayor

By: 
Name: Denise L. Kruger
Title: Senior Vice President of Operations

Address: 110 E. Cook Street
Santa Maria, CA 93454

Fax: (805) 349-0657
Phone: (805) 925-0951, ext. 200

Address: 3035 Prospect Park, Suite 60
Rancho Cordova, CA 95670

Fax: (916) 853-3674
Phone: (916) 853-3606

APPROVED AS TO FORM:

Best Best & Krieger LLP

By:


Eric Garner, Partner

ATTEST:

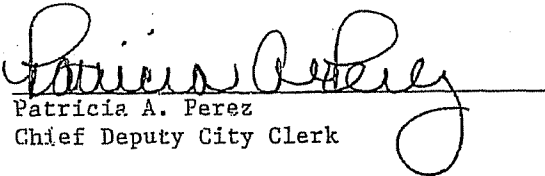

Patricia A. Perez
Chief Deputy City Clerk

EXHIBIT A

RESOLUTION NO. 2003 - 150

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
SANTA MARIA, CALIFORNIA APPROVING THE SALE OF UP
TO 400 ACRE-FEET ANNUALLY OF SUPPLEMENTAL STATE
WATER PROJECT YIELD AND AUTHORIZING THE CITY
MANAGER TO EXECUTE AGREEMENTS FOR THE SALE OF
UP TO 400 ACRE-FEET ANNUALLY OF SUPPLEMENTAL
STATE WATER PROJECT YIELD**

WHEREAS, the City of Santa Maria ("City") holds contracts to receive water from the State Water Project ("Project"), and can import up to 17,820 acre feet of water per year from the Project; and

WHEREAS, the City also holds rights to pump groundwater from the Santa Maria Valley Groundwater Basin ("Basin"); and

WHEREAS, the County of Santa Barbara ("County") regulates the land use activities within the Orcutt area. In 1997, the County adopted the Orcutt Community Plan ("OCP"), which establishes, among other things, certain policies regarding water supplies to be secured for new development projects in Orcutt. The OCP requires that the water demand associated with projects be offset by "supplemental" water supplies that do not result in further overdraft of the Basin; and

WHEREAS, the City has water available for use in the Orcutt area pursuant to the OCP, that is surplus to that needed to serve the City's current and long-term future anticipated demands; and

WHEREAS, "Supplemental Water" shall mean a portion of the yield of the SWP entitlement held by the City, or a portion of the historic groundwater rights to the Basin held by the City in accordance with the final judgment entered in *Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*, Superior Court, County of Santa Clara, Lead Case No. CV 770214; and

WHEREAS, the sale of up to 400 acre-feet of Project water will not change the existing setting and will not affect the net amount of water that will be extracted from the Basin; and

WHEREAS, the City is willing to enter into agreements to provide up to 400 acre-feet annually of supplemental water to individual property owners for the benefit of the individual property owners and their associated Projects.

NOW, THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Santa Maria as follows:

1. The City Council approves the sale of up to 400 acre-feet annually of Supplemental water.

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA) ss.
CITY OF SANTA MARIA)


I, **RHONDA M. GARIETZ**, Deputy City Clerk of the City of Santa Maria and ex officio Clerk of the City Council DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of **Resolution No. 2003-150** which was duly and regularly introduced and adopted by said City Council at a regular meeting held **August 5, 2003**, by the following vote:

AYES: **Councilmembers Mariscal, Orach, Patino, Trujillo and Mayor Lavagnino.**

NOES: **None.**

ABSENT: **None.**

ABSTAIN: **None.**



Deputy City Clerk of the City of Santa Maria
and ex officio Clerk of the City Council

EXHIBIT B

SCWC SWP ENTITLEMENT: PROJECT LIST

PROJECT	TYPE	QUANTITY
Oak Knolls South	Residential	3.36 af
Mesa Verde	Residential	33 af
Orthodox Church	Commercial	1.6 af
Fundamental Baptist Church	Commercial	0.6 af
Orcutt Marketplace	Commercial	37 af
Rice Ranch	Residential	350 af
Eskridge Lot Split	Residential	0.5 af
Diamante Estates	Residential	9 af
Hummel Village/Senior Housing	Commercial/Residential	3.5 af
TOTAL		438.6*af

* Because the County of Santa Barbara considers State Water Project water less than 100% reliable, the County applies a reliability factor to the SCWC SWP Entitlement. For the purposes of the projects on this Exhibit B, the County has adopted a 79% reliability factor for the SCWC SWP Entitlement. Based on this reliability factor, the County considers the entirety of the SCWC SWP Entitlement fully committed.

EXHIBIT B
to
STIPULATION EXHIBIT F

DRAFT: Subject to Ratification by the TMA

Exhibit B

**SANTA MARIA VALLEY PUBLIC WATER PURVEYOR WATER
MANAGEMENT AGREEMENT**

**Twitchell Management Authority
Annual Budget
Applicable for 2006-2011**

Item	Amount
Administration	\$50,000
Management Area Engineer	\$100,000
Twitchell Operation (including Twitchell Project Manual)	\$300,000
Monitoring Program/Annual Report	\$100,000
Reserves	\$100,000

EXHIBIT C
to
STIPULATION EXHIBIT F

SUPPLEMENTAL WATER PURCHASE AGREEMENTS

City of Santa Maria and OakGlen General Partnership dated July 31, 2003 – Project known as OakGlen – 22 afy.

City of Santa Maria and Ronald Chappell and Raymond Gonzales dated July 31, 2003 – Project known as 1374 Solomon – 1 afy.

City of Santa Maria and SB Clark LLC dated July 31, 2003 – Project known as Clark Ranch Estates – 200 afy.

City of Santa Maria and Wellmack dated August 18, 2003 – Project known as Jensen's Crossing/Cobblestone Creek – 59 afy.

City of Santa Maria and Harpstone Parntership LP dated August 18, 2003 – Project known as Harp Springs – 26.5 afy.

City of Santa Maria and Stonegate Development LP dated August 18, 2003 – Project StoneGate – 11 afy.

City of Santa Maria and Old Mill Orcutt Venture, LLC dated August 18, 2003 – Project known as Old Mill – 26 afy.

City of Santa Maria and Andy Fetyko dated January 15, 2004 – Project known as Keysite 10 – 10 afy.

City of Santa Maria and Steve LeBard and Debbie LeBard dated February 11, 2004 – Project known as LeBard Project – 2 afy.

City of Santa Maria and Knollwood Properties LP dated March 23, 2004 – Project known as Knollwood Meadows Phase II – 10 afy.

City of Santa Maria and Walter Mendoza dated May 19, 2003 – 1 afy.

City of Santa Maria and Darren Hulstine dated November 17, 2004 – Property located at 1430 Solomon Road – 1 afy.

City of Santa Maria and Cameron Realty Partners dated July 28, 2004 – Project known as Keysite 10 – 10 afy.

City of Santa Maria and David Daniels undated – Project known as 520 W. Rice Ranch Road – ½ afy.

City of Santa Maria and Chris Henderson dated November 30, 2004 – Project known as 295 Siles Lane -- +/- ½ afy.

City of Santa Maria and Simonsen & Associates dated March 1, 2005 – Project known as

Hummel Village II – 3.01 afy.

City of Santa Maria and East Clark Avenue Partnership undated but returned signed on May 9, 2005 – Project known as 250 E. Clark Avenue – 4 afy.

City of Santa Maria and Thor Gjerdrum dated May 12, 2005 – Project known as Rice Oak -- .75 afy

Exhibit 1G

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SUPERIOR COURT OF CALIFORNIA
COUNTY OF SANTA CLARA
DEPARTMENT 17

ENDORSED

FILED

JUN 28 2000

STEPHEN V. LOVE
Chief Executive Officer
Superior Court of the County of Santa Clara
By Deputy

SANTA MARIA VALLEY WATER
CONSERVATION DISTRICT, a public
entity,

Plaintiff,

vs.

CITY OF SANTA MARIA, et al.,

Defendant

) SANTA MARIA GROUNDWATER
) LITIGATION
)
) Case No. CV770214
)
) ORDER CONCERNING ELECTRONIC
) SERVICE OF PLEADINGS AND
) ELECTRONIC POSTING OF DISCOVERY
) DOCUMENTS
)
) Consolidated Cases:
) CV784900; CV784921; CV784926;
) CV785509; CV785511; CV785515;
) CV785522; CV785936; CV786971;
) CV787150; CV787151; CV787152
) San Luis Obispo County Superior
) Court Cases: 990738 and 990739

And Related Cross-Actions and Actions Consolidated For
All Purposes

I. INTRODUCTION

- A. The Court, through its Complex Civil Litigation Pilot Project, will host a Website to provide:
- 1. Electronic service on the parties of pleadings, discovery requests, discovery responses, and other documents to be served, and electronic access by the parties to all such pleadings, requests, responses, and other documents served;
 - 2. Electronic production of documents, and electronic access by the parties to all such documents produced; and
 - 3. A place for the electronic posting of deposition transcripts (as made available by

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the attorneys) and transcripts of Court proceedings (when they are brief) and access to such transcripts by the parties.

B. The Website address is <http://www.sccomplex.org>. A dedicated link to the Santa Maria Groundwater Litigation is contained on the home page of this site.

C. The Court's Website will be maintained, and the tasks required of the Website will be conducted by, the Court's outside Website Vendor:

Andy Jamieson
Global Transactions, Inc.
519 17th St., Oakland, CA 94612
Telephone: 510-548-9050
Email: ajam@glotans.com

D. This Order supercedes and entirely replaces parts VII ("Document Repository") and VIII ("Filing and Service of Papers") of the Court's Case Management Order No. 4. All other parts of Case Management Order No. 4 remain unaffected.

E. The term "Document Repository" as used in Case Management Order No. 4 shall mean the Court's Website.

II. SERVICE LISTS

A. The firm of Hatch & Parent shall compile an initial service list consisting of the service addresses of all parties to the case.

B. On or before July 7, 2000, all parties shall submit to Hatch & Parent the address at which they wish to receive service. Service addresses may be submitted electronically to: GLane@HatchParent.com, or by facsimile to Gina Lane, Hatch & Parent, 805-965-4333.

Parties must elect one of the following three service options. All parties who are able must opt for email service.

1. Parties receiving service electronically shall provide a current electronic mail address, and a backup facsimile number.

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- 2. Parties without email who elect fax service shall provide a current facsimile number.
- 3. Other parties receiving service by U.S. Mail shall provide a current U.S. Mail address.

The court will notify email recipients that a document has been posted; parties must serve other parties by fax and mail.

- C. On or before July 10, 2000, Hatch & Parent shall transmit the initial electronic, facsimile and U.S. Mail service lists to the Website Vendor, based on the addresses submitted by the parties.
- D. All parties are obligated to check their email addresses on the website and notify the vendor immediately of any errors.
- E. New parties, upon making their first appearance in this case, will be required to elect their preferred method of service (i.e. electronic, facsimile, or U.S. Mail).
- F. Parties making any additions, corrections or changes to the electronic, facsimile, or U.S. Mail service lists after June 26, 2000, shall submit their changes directly to the Website Vendor. The Website Vendor shall post and keep current the electronic, facsimile, and U.S. Mail service lists on the Website.
- G. Once a party posts a document, the court, through its website, will make email service. The parties are under a continuing obligation to make fax and mail service of the notice of posting in the normal manner.

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1 III. PLEADING DOCUMENTS

2 A. POSTING OF PLEADING DOCUMENTS

- 3 1. Commencing on July 11, 2000, all parties, including parties who elect service
4 options two (2) and three (3), will be required to serve all Pleading Documents¹
5 by posting them on the Website. Parties without Internet access will have to
6 seek it out at the public library or at copy stores.
- 7 2. Instructions for posting will be provided on the Website itself. Documents
8 posted shall be catalogued according to the instructions provided. The posting
9 party shall provide: its name, the complete title of the document, and the date of
10 posting. All Pleading Documents will be posted to the Website in xml text
11 format (with a copy in PDF format being optional). All Adobe Acrobat
12 resources can be obtained from www.abode.com.
- 13 3. Once a Pleading Document has been posted to the Website, no change shall be
14 made to that document by any party. No Pleading Document posted to the
15 Website shall be removed from the Website except upon further Order of the
16 Court.
- 17 4. Exhibits attached to Pleading Documents shall be submitted as image file
18 attachments in .GIF or .JPG form.
- 19 5. For all Pleading Documents in this case served prior to July 11, 2000, the
20 serving party shall post a copy of that document to the Website no later than
21 August 10, 2000.

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24 1 "Pleading Document" means: pleadings or any other documents produced in the course of this
25 action and required to be filed with the Court, including, but not limited to: (1) all
complaints, cross-complaints and answers, including amendments thereto; (2) all demurrers,
opposition to demurrers and replies; (3) all writ petitions and orders thereon; (4) all
motions, oppositions to motions and replies; (5) all proposed orders; (6) all expert
designations; and (7) all trial briefs.

1 6. Nothing in this Order modifies the manner of obtaining personal jurisdiction
2 (through service of process) over a party who has not appeared in these
3 consolidated actions. Service of process shall proceed in the regular manner
4 provided under California law.

5 B. ELECTRONIC SERVICE AND CONFIRMATION OF RECEIPT

6 1. The Website will be configured to transmit automatically an electronic "Notice
7 of Availability" to all parties on the electronic service list notifying them that a
8 Pleading Document has been served on them and is available for their review on
9 the Website.

10 2. Any party posting a Pleading Document on the Website who does not receive
11 electronic notice indicating that service of their document has been made shall,
12 within 12 hours of its posting, notify the Website Vendor of this problem.

13 3. All Parties electronically served shall confirm receipt of electronic service by
14 replying to the electronic mail "Notice of Availability" message received by no
15 later than 5:00 p.m. on the next business day following posting of the document
16 served, not including weekends and holidays. (For instance, an electronic
17 "Notice of Availability" transmitted at 4:59 p.m. on a Thursday must be
18 confirmed by 5:00 p.m. on Friday. Electronic Notice of Availability transmitted
19 at 5:01 p.m. on a Thursday must be confirmed by 5:00 p.m. on the following
20 Monday.) To confirm receipt, simply select "Reply" and then "Send."

21 4. Parties who fail to confirm receipt of electronic service within the time period
22 specified above will automatically receive a "Notice of Availability" by
23 facsimile from the Court's Website Vendor. A party's repeated failure to timely
24 confirm receipt of electronic service will be reported to the Court, and the court
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will require the party to personally appear to explain his failure to comply with the court's electronic service requirements.

C. FACSIMILE AND U.S. MAIL SERVICE

1. Commencing on July 11, 2000, in addition to posting all Pleading Documents on the Website, all parties shall serve, by facsimile and U.S. Mail as applicable, a "Notice of Availability" on all parties electing to receive service by facsimile or U.S. Mail shall be sufficient to constitute service of the Pleading Document itself.
2. The "Notice of Availability" shall contain; (1) the serving party's name and contact information; (2) the title of the document posted on the Website; and (3) the date of posting; and shall indicate that the document served is available for viewing on the Website.

D. PROOF OF SERVICE

3. All Pleading Documents posted to the Website shall contain a Proof of Service. The Proof of Service shall be sufficient if it indicates: (1) the title of the Pleading Document posted; (2) the date and time of posting; (3) that a "Notice of Availability" has been faxed to all parties on the Website's current facsimile service list; and (4) that a "Notice of Availability" has been mailed to all parties on the Website's current U.S. Mail service list.

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1 IV. DISCOVERY DOCUMENTS

2 A. POSTING OF DISCOVERY DOCUMENTS

- 3 1. Commencing on July 11, 2000, Discovery Documents² that are written requests
4 for discovery or written responses to those requests shall be posted to the
5 Website and served in the same manner as Pleading Documents. For all
6 Discovery Documents that are written requests for discovery or written
7 responses to those requests that are produced prior to July 11, 2000, the
8 producing party shall post a copy of that document to the Website no later than
9 August 10, 2000.
- 10 2. Commencing on July 11, 2000, Discovery Documents that are deposition
11 transcripts (including exhibits), whether party or non-party, shall be posted to the
12 Website and served by the noticing party in the same manner as Pleading
13 Documents. Deposition transcripts shall be posted promptly after receipt of the
14 transcript. For all Discovery Documents that are deposition transcripts
15 (including exhibits) that are produced prior to July 11, 2000, the noticing party
16 shall post a copy of that document to the Website no later than August 10, 2000.
- 17 3. Commencing on July 11, 2000, documents produced in response to a demand for
18 inspection and copying of documents shall be produced by the
19 producing/responding party as follows:
- 20 a. All parties are required to produce documents electronically.
- 21 b. To ensure quality control and uniformity of imaging and indexing, all
22 parties are required to utilize the Document Services Vendor approved
23

24

25 ²"Discovery Documents" means: non-pleading, discovery documents, including, but limited to:
(1) all written discovery requests; (2) all written responses to discovery requests; (3)
documents produced in response to requests or demands for production of documents; (4) all
deposition transcripts; (5) all privilege logs; and (6) all trial exhibits.

1 by the Court: APS, 3485 Sacramento Drive, Suite H, San Luis Obispo,
2 California 93401, (805) 545-9100. All parties shall contact APS directly
3 to establish their individual accounts with the Document Services
4 Vendor.

5 c. Documents produced by a party shall be provided to the Document
6 Services Vendor not later than 15 days after the date of service of the
7 written response (unless another time is set by agreement of the parties
8 or by Order of Court).

9 d. Upon production of document(s) to the Document Services Vendor, the
10 producing/responding party shall post on the Website a "Notice of
11 Submission of Discovery Documents to the Document Services Vendor"
12 indicating: (1) the name of the producing/responding party; (2) the name
13 of the propounding party; (3) the title of the document requesting the
14 production; and (4) the date of the production.

15 e. The Document Services Vendor will apply a standard indexing protocol
16 (including electronic "Bates" stamping and bibliographic fields).

17 f. The Document Services Vendor will transmit electronic images of the
18 documents produced directly to the Website Vendor. The Website
19 Vendor will then post those documents to the Website on behalf of the
20 producing/responding party, and will notify the producing/responding
21 party of this fact.

22 g. Documents previously produced shall be submitted to the Document
23 Services Vendor on or before July 17, 2000.

24 B. COSTS

25 1. Each party producing Discovery Documents shall be responsible for the
scanning/imaging and indexing costs charged by the Document Services Vendor

1 for those services, and any and all costs associated with transmitting these
2 documents to the Website Vendor, as described below.

3 2. A party utilizing the Document Services Vendor for any other services (e.g.,
4 obtaining electronic images of produced documents on CD Rom) shall be
5 responsible for all costs associated with those other services.

6 3. For non-party document productions, the requesting party shall be responsible
7 for posting the documents and for the costs charged by the Document Services
8 Vendor to scan/image and index the documents.

9 **C. PROTECTIVE ORDERS**

10 1. The Court's standard procedures shall apply to any party seeking to protect or
11 limit disclosure of information in a Discovery Document. In lieu of posting of
12 electronic images for documents subject to Court-ordered protection or
13 limitations on disclosure, the Website shall contain a listing of the document and
14 identifying information (including at least the title and description of the
15 document), information on the nature of the protection or limitation ordered by
16 the Court, and information on how to obtain the document.

17 **V. FILING OF DOCUMENTS WITH THE COURT AND EFFECTIVE DATE OF**
18 **SERVICE**

19 A. Notwithstanding the procedures for posting Pleading Documents on the Website
20 provide by this Order, no party is relieved of its responsibility to file any and all
21 documents required by law with this Court.

22 B. All Pleading Documents and any other documents required to be filed with the Court
23 may be filed with the Court by facsimile.

24 C. For purposes of a party's obligation to produce and/or serve upon another party a
25 document, that party shall be deemed to have produced/served the document on the date
on which the document was posted to the Website or submitted to the Document

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Services Vendor (as applicable). Documents posted to the Website or submitted to the Document Services Vendor after the close of a business day (5:00 p.m.) shall be deemed to have been produced/served on the next business day.

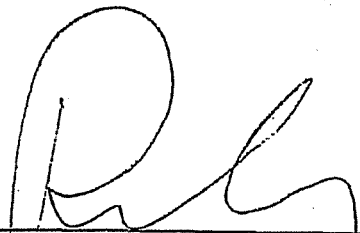
D. For purposes of a party's obligation to respond to any document served on him, service by electronic posting, facsimile and U.S. Mail in accordance with this Order shall be deemed to be service by facsimile transmission in accordance with Code of Civil Procedure section 1013(e), and the time obligations and duties of the parties shall be governed as if such service had been made by facsimile transmission.

E. All parties are under a continuing obligation to post all Pleading Documents and Discovery Documents to the Website, in the manner described in this Order.

VI. STAY

A. The stay on responsive pleadings imposed by the court at the May 12, 2000 hearing is lifted. Responsive pleadings are due July 17, 2000 and shall be posted in accordance with section III.A.2. of this order.

Dated this 27th day of June, 2000



CONRAD L. RUSHING
Judge of the Superior Court

Exhibit 1H

RECORDING REQUESTED BY:

XYZ CORPORATION

WHEN RECORDED MAIL TO:

**CITY OF SANTA MARIA
A California municipal corporation
110 E. Cook Street
Santa Maria, CA 903454**

**THIS SPACE RESERVED FOR RECORDER ONL
(Gov. Code 27361.6)**

NOTICE OF AGREEMENT BY STIPULATION

THIS NOTICE ("Notice") is authorized and required to be recorded in Santa Barbara County by order of the Superior Court of the County of Santa Clara and Government Code Section 27201.

Effective _____, 2005 the Clerk of the Court for Santa Clara County has entered a written stipulation in the matter of *Santa Maria Valley Water Conservation District v. City of Santa Maria*, Santa Clara County Superior Court, Lead Case No. CV 770214 (hereinafter "Stipulation") affecting the use of water rights in the Santa Maria Groundwater Basin as more particularly described in the Stipulation. A copy of the Stipulation is on file with and may be viewed at the Santa Clara County Superior Court, City of Santa Maria, City of Guadalupe, and County of Santa Barbara. The below stated Stipulating Party and it's real property located in Santa Barbara County bound by the terms of the Stipulation is identified in Exhibit "A" attached hereto and incorporated herein.

**XYZ CORPORATION
A California corporation**

By:
Name:
Title:

EXHIBIT "A"

STIPULATING PARTY AND PROPERTY DESCRIPTION (Santa Barbara County)

<u>Stipulating Party</u>	<u>Property Description</u>
XYZ Corporation	(APN 101-040-014) NW ¼ of SW ¼, Section 1, R 29E, T 30S, MDB&M (APN 101-040-019) As described in that certain recorded instrument No. 123, Recorded June 29, 2001, Book 123, Page 111, Santa Barbara County Recorder.

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA BARBARA)

On the ___ day of _____, 2005, before me, the below-named Notary Public, personally appeared _____

personally known to me or proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities and that by their signatures on the instrument the persons, or the entity upon behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

Notary Public

RECORDING REQUESTED BY:

XYZ CORPORATION

WHEN RECORDED MAIL TO:

**NIPOMO COMMUNITY SERVICES
DISTRICT**

**A California CSD
148 South Wilson Street
Nipomo, CA 93444**

**THIS SPACE RESERVED FOR RECORDER ONL
(Gov. Code 27361.6)**

NOTICE OF AGREEMENT BY STIPULATION

THIS NOTICE ("Notice") is authorized and required to be recorded in San Luis Obispo County by order of the Superior Court of the County of Santa Clara and Government Code Section 27201.

Effective _____, 2005 the Clerk of the Court for Santa Clara County has entered a written stipulation in the matter of *Santa Maria Valley Water Conservation District v. City of Santa Maria*, Santa Clara County Superior Court, Lead Case No. CV 770214 (hereinafter "Stipulation") affecting the use of water rights in the Santa Maria Groundwater Basin as more particularly described in the Stipulation. A copy of the Stipulation is on file with and may be viewed at the Santa Clara County Superior Court, Nipomo Community Services District, Oceano Community Services District, City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, and County of San Luis Obispo. The below stated Stipulating Party and it's real property located in San Luis Obispo County bound by the terms of the Stipulation are identified in Exhibit "A" attached hereto and incorporated herein.

XYZ CORPORATION
A California corporation

By:
Name:
Title:

EXHIBIT "A"

STIPULATING PARTY AND PROPERTY DESCRIPTION (San Luis Obispo County)

<u>Stipulating Party</u>	<u>Assessors Parcel Number</u>
XYZ Corporation	(APN 101-040-014) NW ¼ of SW ¼, Section 1, R 29E, T 30S, MDB&M (APN 101-040-019) As described in that certain recorded instrument No. 123, Recorded June 29, 2001, Book 123, Page 111, San Luis Obispo County Recorder.

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN LUIS OBISPO)

On the ___ day of _____, 2005, before me, the below-named Notary Public, personally appeared _____

_____ ,
personally known to me or proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities and that by their signatures on the instrument the persons, or the entity upon behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

Notary Public

Exhibit 2

Non-Stipulating Landowner Group Parties and Wineman Parties

Note: The Assessor Parcel Number (APN) and ownership information is derived from the stipulation entered into on February 28, 2006 by the Landowner Group (LOG), Wineman Parties and the Public Water Producers as to the overlying parcels of property owned by the LOG and Wineman Parties at the time of Phase IV of the trial. (Property Ownership Stipulation, Phase IV Trial, February 28, 2006.) The applicable Phase IV Trial Exhibit No. for each overlying parcel is provided.

Litigation Group: Wineman, et al.

Owner, per Deed provided on 2/28/06	Owner as of 2/28/06 Stipulation	APN	Phase IV Trial Exhibit No.	Deed No.¹
James M. Acquistapace and Tracy L. Acquistapace, Trustees of the Acquistapace 2004 Family Trust under the Declaration of Trust dated March 25, 2004	Acquistapace, James M. and Tracey L., Trustees of the Acquistapace 2004 Family Trust	128-094-034	Exh. 30	2004-116736 (SB)
Adam Agricultural Limited Partnership	Adam Agricultural Limited Partnership	117-160-041	Exh. 6, 23	98-6980 (SB)
Adam Agricultural Limited Partnership	Adam Agricultural Limited Partnership	117-170-060 117-170-064	Exh. 6, 23	98-006978 (SB)

¹ Property in San Luis Obispo County is indicated by ö(SLOö) after the deed number; property in Santa Barbara County is indicated by ö(SB) after the deed number.ö

December 21, 2007

Owner, per Deed provided on 2/28/06	Owner as of 2/28/06 Stipulation	APN	Phase IV Trial Exhibit No.	Deed No.¹
Same	Adam Agricultural Limited Partnership; Acquistapace, James M.; and Acquistapace, Mili and Acquistapace, Barbara, as Trustees of the Acquistapace 2003 Family Trust dated December 31, 2003	113-080-010 113-080-022	Exh. 6	98-006980 (SB) 2004-6956 (SB) 2005-20121 (SB)
Same	Adam, George J.; Adam, John F. Jr.; and Adam, Dena Acquistapace, as Trustees; Adam, Mark S.; Adam, Mark K.; and Cruden, Christine M.	117-160-033	Exh. 9a	92-003154 (SB)
Same	B. Pezzoni Estate Company	113-190-006 113-200-003 113-200-004	Exhs. 12-13	Book 144, Page 479 and 534 (1914), and Book 58, Page 351 (1896) of Deeds
Same	Clark, Richard L. and Janet A., Trustees of the Rick and Janet Family Trust dated September 24, 1986	117-170-063	Exh. 24A	2005-0123547
Same	Clark, Richard L. and Janet A., Trustees of the Rick and Janet Family Trust dated September 24, 1986	128-094-038 128-094-039	Exh. 15	96-046840 (SB) 96-046845 (SB) 96-046840 (SB) 96-046845 (SB)

December 21, 2007

Exhibit 2
2 of 36

Owner, per Deed provided on 2/28/06	Owner as of 2/28/06 Stipulation	APN	Phase IV Trial Exhibit No.	Deed No.¹
Same	Wineman, Edward S.; Brooks, Carol; Hanson, Fred W., and Hanson, Nancy W. - as Trustees of the Hanson Revocable Trust; and Helen J. Freeman	117-200-030 117-191-050	Exh. 27	98-049296 90-066154
Same	Wineman, Edward S.; Brooks, Carol; Hanson, Fred W., and Hanson, Nancy W. - as Trustees of the Hanson Revocable Trust; and Helen J. Freeman	117-200-032 117-191-008	Exh. 28	94-012663
Same	Hanson, Fred W. and Nancy W., Co-Trustees of the Hanson Revocable Trust	117-091-050	Exh. 27	Quitclaim Deed dated 4/97

December 21, 2007

Landowner Group Parties (LOG)

Legal description(s) from Trial Exhibit 2A page: G109-G112
Location on Court Web site: <http://www.sccomplex.org/docfiles/X8CFA4A6EFB0.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1975-14582
Associated Trial Exhibit 2A APN(s): 113 070 023, 113 070 025, 113 070 030
Associated Trial Exhibit 2A Owner(s): George R. Niedens and Nancy C. Niedens, as Co-Trustees Under that Declaration of Trust Dated August 16, 1972 Wherein the Survivor is First Successor

Legal description(s) from Trial Exhibit 2A page: G118
Location on Court Web site: <http://www.sccomplex.org/docfiles/NB8FAD2C2C19.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1993-028545
Associated Trial Exhibit 2A APN(s): 128 094 035, 128 094 036, 128 094 037
Associated Trial Exhibit 2A Owner(s): Alamo West, a General Partnership

Legal description(s) from Trial Exhibit 2A page: G126
Location on Court Web site: <http://www.sccomplex.org/docfiles/TA0FAE04ED9D.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1995-001382
Associated Trial Exhibit 2A APN(s): 129 010 032
Associated Trial Exhibit 2A Owner(s): Plantel Nurseries, Inc., A California Corporation

Legal description(s) from Trial Exhibit 2A page: G129
Location on Court Web site: <http://www.sccomplex.org/docfiles/TA0FAE04ED9D.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1996-000229
Associated Trial Exhibit 2A APN(s): 129 100 015, 129 100 036
Associated Trial Exhibit 2A Owner(s): Plantel Nurseries, Inc., A California Corporation

December 21, 2007

Exhibit 2
4 of 36

Legal description(s) from Trial Exhibit 2A page:	G138 to G141
Location on Court Web site:	http://www.sccomplex.org/docfiles/G42FAF639433.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1997-071138
Associated Trial Exhibit 2A APN(s):	128 093 009, 128 093 012, 128 093 027, 128 094 025, 128 094 026, 128 094 027, 128 094 028
Associated Trial Exhibit 2A Owner(s):	Santa Maria Berry Farms LLC., A Limited Liability Company
Legal description(s) from Trial Exhibit 2A page:	G149-G149.5
Location on Court Web site:	http://www.sccomplex.org/docfiles/F13FB08054D2.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 2001-0018695
Associated Trial Exhibit 2A APN(s):	117 020 047, 117 170 029
Associated Trial Exhibit 2A Owner(s):	Iceberg Holdings LP., a California Limited Partnership
Legal description(s) from Trial Exhibit 2A page:	G151
Location on Court Web site:	http://www.sccomplex.org/docfiles/F13FB08054D2.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1998-102461
Associated Trial Exhibit 2A APN(s):	107 070 009, 107 070 046, 109 200 033
Associated Trial Exhibit 2A Owner(s):	Iceberg Holdings LP., a California Limited Partnership
Legal description(s) from Trial Exhibit 2A page:	G153
Location on Court Web site:	http://www.sccomplex.org/docfiles/F13FB08054D2.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1998-102460
Associated Trial Exhibit 2A APN(s):	117 170 002
Associated Trial Exhibit 2A Owner(s):	Iceberg Holdings LP., a California Limited Partnership
Legal description(s) from Trial Exhibit 2A page:	G155-G158
Location on Court Web site:	http://www.sccomplex.org/docfiles/F13FB08054D2.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1998-102459
Associated Trial Exhibit 2A APN(s):	111 240 005, 111 240 007, 111 240 024
Associated Trial Exhibit 2A Owner(s):	Iceberg Holdings LP., a California Limited Partnership

December 21, 2007

Legal description(s) from Trial Exhibit 2A page: G182
Location on Court Web site: <http://www.sccomplex.org/docfiles/F2901A67B967.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1992-101289
Associated Trial Exhibit 2A APN(s): 117 020 043
Associated Trial Exhibit 2A Owner(s): Howard Freeman Mehlschau and Donna Gene Mehlschau Trustees U/D/T dated June 26, 1992 F/B/O the Mehlschau Family Trust

Legal description(s) from Trial Exhibit 2A page: G185
Location on Court Web site: <http://www.sccomplex.org/docfiles/F2901A67B967.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1992-073777
Associated Trial Exhibit 2A APN(s): 091 301 042
Associated Trial Exhibit 2A Owner(s): Howard Freeman Mehlschau and Donna Gene Mehlschau Trustees U/D/T dated June 26, 1992 F/B/O the Mehlschau Family Trust

Legal description(s) from Trial Exhibit 2A page: G188-G189
Location on Court Web site: <http://www.sccomplex.org/docfiles/F2901A67B967.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1992-101290
Associated Trial Exhibit 2A APN(s): 117 020 042
Associated Trial Exhibit 2A Owner(s): Howard Freeman Mehlschau and Donna Gene Mehlschau Trustees U/D/T dated June 26, 1992 F/B/O the Mehlschau Family Trust

Legal description(s) from Trial Exhibit 2A page: G193
Location on Court Web site: <http://www.sccomplex.org/docfiles/E5E022773070.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2005-0112330
Associated Trial Exhibit 2A APN(s): 113 200 014, 113 210 012
Associated Trial Exhibit 2A Owner(s): Lawrence J. Ferini and Traci L. Ferini, Trustees of the Ferini 2005 Family Trust, dated October 24, 2005

December 21, 2007

Exhibit 2
6 of 36

Legal description(s) from Trial Exhibit 2A page: G200
Location on Court Web site: <http://www.sccomplex.org/docfiles/CA4022F41136.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0089429
Associated Trial Exhibit 2A APN(s): 113 130 009, 113 130 013
Associated Trial Exhibit 2A Owner(s): Ferini-Crews-Ferini, LLC, a California manager-managed limited liability company

Legal description(s) from Trial Exhibit 2A page: G205
Location on Court Web site: <http://www.sccomplex.org/docfiles/A390238D11EF.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2005-0098279 and
Associated Trial Exhibit 2A APN(s): 113 120 032
Associated Trial Exhibit 2A Owner(s): Nadine L. Ferini, Alberta J. Lefler and Darlene V. Krouse, Co-Trustees of The Nadine L. Ferini Survivor's Trust dated February 28, 2004, as to 50% of an undivided 50% interest (being an undivided 25% interest); and Nadine L. Ferini, Alberta J. Lefler and Darlene V. Krouse, Co-Trustees of The Ferini Credit Trust dated February 28, 2004, as to 50% of an undivided 50% interest (being an undivided 25% interest); as tenants-in-common

Legal description(s) from Trial Exhibit 2A page: G211
Location on Court Web site: <http://www.sccomplex.org/docfiles/A390238D11EF.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2005-00112328
Associated Trial Exhibit 2A APN(s): 113 120 032
Associated Trial Exhibit 2A Owner(s): Lawrence J. Ferini and Traci L. Ferini, Trustees of the Ferini 2005 Family Trust, dated October 24, 2005, as to an undivided fifty percent (50%) interest

Legal description(s) from Trial Exhibit 2A page: G215
Location on Court Web site: <http://www.sccomplex.org/docfiles/TEC0242C9DD3.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2005-0119317
Associated Trial Exhibit 2A APN(s): 128 099 005
Associated Trial Exhibit 2A Owner(s): IJC, Inc.

December 21, 2007

Exhibit 2
7 of 36

Legal description(s) from Trial Exhibit 2A page:	G220
Location on Court Web site:	http://www.sccomplex.org/docfiles/WDC024C4AF82.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1990-023939
Associated Trial Exhibit 2A APN(s):	107 150 001, 109 200 028
Associated Trial Exhibit 2A Owner(s):	Gerald W. Shipsey, John F. Adam, JR., William P. Adam, JR., Miriam L. Schnebly and Mary Ann Fumia, as successor Trustees under that certain "Adam Family Trust Agreement" dated January 20, 1966
Legal description(s) from Trial Exhibit 2A page:	G226
Location on Court Web site:	http://www.sccomplex.org/docfiles/WEB0255D3B10.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 2003-0152514
Associated Trial Exhibit 2A APN(s):	117 020 048
Associated Trial Exhibit 2A Owner(s):	Jerry Yeates and Constance M. Yeates are the co-trustees of the EGST EE Trust F80 James R. Adam Jr., created under the James R. Adam Family Trust UDTA dated July 31, 1978 and of the EGST EE Trust FBO Constance M. Yeates created under the James R. Adam Family Trust UDTA dated July 31, 1978. Trust UDTA dated July 31, 1978 as to an undivided one-half interest
Legal description(s) from Trial Exhibit 2A page:	G234
Location on Court Web site:	http://www.sccomplex.org/docfiles/J290261966BC.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 2005-0059183
Associated Trial Exhibit 2A APN(s):	117 170 065
Associated Trial Exhibit 2A Owner(s):	Kieran L. Adam, a married man as his sole and separate property, an undivided fifteen percent (15%) interest, to Dominic L. Adam, a married man as his sole and separate property, an undivided fifteen percent (15%) interest, to Peter L. Adam, a married man as his sole and separate property, an undivided fifteen percent (15%) interest, and to Richard E. Adam Jr. a married man as his sole and separate property, an undivided fifteen percent (15%) interest

December 21, 2007

Legal description(s) from Trial Exhibit 2A page: G235
Location on Court Web site: <http://www.sccomplex.org/docfiles/J290261966BC.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1996-055894
Associated Trial Exhibit 2A APN(s): 117 170 065
Associated Trial Exhibit 2A Owner(s): Richard E. Adam and Bernadette F. Adam, Trustees of the Richard E. Adam Family Loving Trust u/d/t dated June 2, 1993

Legal description(s) from Trial Exhibit 2A page: G230
Location on Court Web site: <http://www.sccomplex.org/docfiles/WEB0255D3B10.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0064697
Associated Trial Exhibit 2A APN(s): 117 170 052
Associated Trial Exhibit 2A Owner(s): Constance M. Yeates and Robert E. Crandall, Co-Trustees of the EGST EE Trust FBO James R. Adam Jr. created under the James Adam Family Trust UDTA dated July 31, 1978 as to an undivided one-half interest and Constance M. Yeates and Robert E. Crandall, Co-Trustees of the EGST EE Trust FBO Constance M. Yeates created under the James R. Adam Family Trust UDTA dated July 31, 1978, as to an undivided one-half interest.

Legal description(s) from Trial Exhibit 2A page: G231
Location on Court Web site: <http://www.sccomplex.org/docfiles/WEB0255D3B10.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0064697
Associated Trial Exhibit 2A APN(s): 117 170 062
Associated Trial Exhibit 2A Owner(s): Constance M. Yeates and Robert E. Crandall, Co-Trustees of the EGST EE Trust FBO James R. Adam Jr. created under the James Adam Family Trust UDTA dated July 31, 1978 as to an undivided one-half interest and Constance M. Yeates and Robert E. Crandall, Co-Trustees of the EGST EE Trust FBO Constance M. Yeates created under the James R. Adam Family Trust UDTA dated July 31, 1978, as to an undivided one-half interest.

December 21, 2007

Exhibit 2
9 of 36

Legal description(s) from Trial Exhibit 2A page: G246
Location on Court Web site: <http://www.sccomplex.org/docfiles/H3E02A829873.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0064698
Associated Trial Exhibit 2A APN(s): 117 170 062
Associated Trial Exhibit 2A Owner(s): Constance M. Yeates and Robert E. Crandall, Co-Trustees of the EGST EE Trust FBO James R. Adam Jr. created under the James Adam Family Trust UDTA dated July 31, 1978 as to an undivided one-half interest and Constance M. Yeates and Robert E. Crandall, Co-Trustees of the EGST EE Trust FBO Constance M. Yeates created under the James R. Adam Family Trust UDTA dated July 31, 1978, as to an undivided one-half interest.

Legal description(s) from Trial Exhibit 2A page: G250
Location on Court Web site: <http://www.sccomplex.org/docfiles/H3E02A829873.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0064699
Associated Trial Exhibit 2A APN(s): 117 170 062
Associated Trial Exhibit 2A Owner(s): Constance M. Yeates and Robert E. Crandall, Co-Trustees of the EGST EE Trust FBO James R. Adam Jr. created under the James Adam Family Trust UDTA dated July 31, 1978 as to an undivided one-half interest and Constance M. Yeates and Robert E. Crandall, Co-Trustees of the EGST EE Trust FBO Constance M. Yeates created under the James R. Adam Family Trust UDTA dated July 31, 1978, as to an undivided one-half interest.

Legal description(s) from Trial Exhibit 2A page: G257-G259
Location on Court Web site: <http://www.sccomplex.org/docfiles/TC02B9F09A0.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1997-065697
Associated Trial Exhibit 2A APN(s): 113 200 011
Associated Trial Exhibit 2A Owner(s): U.S. Trust Company of California, N.A., as Trustee of the Vecchioli Family Trust, established under the Restated Provisions of the Declaration of Trust of Andre LeRoy, dated April 4, 1980, as approved, ordered and filed by the Superior Court of the State of California, in and for the County of San Mateo, Case No. 85333, on June 20, 1997

December 21, 2007

Exhibit 2
10 of 36

Legal description(s) from Trial Exhibit 2A page: G263-G264
Location on Court Web site: <http://www.sccomplex.org/docfiles/TC02B9F09A0.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1997-065685
Associated Trial Exhibit 2A APN(s): 117 191 005, 117 191 006, 117 191 007, 117 191 014
Associated Trial Exhibit 2A Owner(s): U.S. Trust Company of California, N.A., as Trustee of the Vecchioli Family Trust, established under the Restated Provisions of the Declaration of Trust of Andre LeRoy, dated April 4, 1980, as approved, ordered and filed by the Superior Court of the State of California, in and for the County of San Mateo, Case No. 85333, on June 20. 1997

Legal description(s) from Trial Exhibit 2A page: G267-G268
Location on Court Web site: <http://www.sccomplex.org/docfiles/TC02B9F09A0.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1997-065675
Associated Trial Exhibit 2A APN(s): 113 140 001, 113 140 010
Associated Trial Exhibit 2A Owner(s): U.S. Trust Company of California, N.A., as Trustee of the Vecchioli Family Trust, established under the Restated Provisions of the Declaration of Trust of Andre LeRoy, dated April 4, 1980, as approved, ordered and filed by the Superior Court of the State of California, in and for the County of San Mateo, Case No. 85333, on June 20. 1997

Legal description(s) from Trial Exhibit 2A page: G284.5
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder3/G280-290.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2005-0015824
Associated Trial Exhibit 2A APN(s): 129 170 010, 129 170 016
Associated Trial Exhibit 2A Owner(s): CMT, LLC a California Limited Liability Company

Legal description(s) from Trial Exhibit 2A page: G299-G301
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder3/G291-303.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1975-14578
Associated Trial Exhibit 2A APN(s): 113 070 026
Associated Trial Exhibit 2A Owner(s): J.J.C. of Santa Maria, Inc., a California corporation

December 21, 2007

Exhibit 2
11 of 36

Legal description(s) from Trial Exhibit 2A page:	G304
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder3/G304-311.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1996-030432
Associated Trial Exhibit 2A APN(s):	113 090 020
Associated Trial Exhibit 2A Owner(s):	Teixeira Brothers Land Partnership
Legal description(s) from Trial Exhibit 2A page:	G314
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1993-041063
Associated Trial Exhibit 2A APN(s):	113 050 052
Associated Trial Exhibit 2A Owner(s):	J.C. Teixeira and Elsie G. Teixeira, trustees of the S.C. and Elsie Teixeira Living Trust dated August 31, 1983, as to an undivided 95% interest, Norman J. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Allan C. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Marvin C. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Glenn J. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, and Dean M. Teixeira, a married man as his sole and separate property, as to undivided 1% interest
Legal description(s) from Trial Exhibit 2A page:	G321
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 2000-0039413
Associated Trial Exhibit 2A APN(s):	113 050 052
Associated Trial Exhibit 2A Owner(s):	Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn I Teixeira and Dean M. Teixeira. Co-Trustees of the Elsie G. Teixeira Children's Trust I dated October 19, 1999, as to an undivided 9.73 interest

December 21, 2007

Legal description(s) from Trial Exhibit 2A page: G324
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0012000
Associated Trial Exhibit 2A APN(s): 113 050 052
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn J. Teixeira and Dean M. Teixeira, Co-Trustees of the Elsie G. Teixeira Children's Trust I dated October 19, 1999

Legal description(s) from Trial Exhibit 2A page: G331
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082256
Associated Trial Exhibit 2A APN(s): 113 050 052
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira and Evelyn M. Teixeira, trustees of the Norman and Evelyn Teixeira Living Trust dated February 28, 1984, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G335
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082257
Associated Trial Exhibit 2A APN(s): 113 050 052
Associated Trial Exhibit 2A Owner(s): Allan C. Teixeira and Cecilia T. Teixeira, trustees of the Allan and Cecilia Teixeira Living Trust dated June 17, 1983, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G339
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082258
Associated Trial Exhibit 2A APN(s): 113 050 052
Associated Trial Exhibit 2A Owner(s): Marvin C, Teixeira and Paulette M. Teixeira, trustees of the Marvin and Paulette Teixeira Living Trust dated August 8, 1983, an undivided 14% interest

December 21, 2007

Exhibit 2
13 of 36

Legal description(s) from Trial Exhibit 2A page: G343
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082259
Associated Trial Exhibit 2A APN(s): 113 050 052
Associated Trial Exhibit 2A Owner(s): Glenn J. Teixeira and Karen S. Teixeira, trustees of the Glenn and Karen Teixeira Living Trust dated May 19, 1989, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G347
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082260
Associated Trial Exhibit 2A APN(s): 113 050 052
Associated Trial Exhibit 2A Owner(s): Dean M. Teixeira and Nancy M. Teixeira, trustees of the Dean and Nancy Teixeira Living Trust dated November 24, 1986, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G358
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0039412
Associated Trial Exhibit 2A APN(s): 113 050 052
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn J. Teixeira and Dean M. Teixeira, Co-Trustees Of The Elsie G. Teixeira Children's Trust I dated October 19, 1999

December 21, 2007

Exhibit 2
14 of 36

Legal description(s) from Trial Exhibit 2A page: G314
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1993-041063
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): J.C. Teixeira and Elsie G. Teixeira, trustees of the S.C. and Elsie Teixeira Living Trust dated August 31, 1983, as to an undivided 95% interest, Norman J. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Allan C. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Marvin C. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Glenn J. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, and Dean M. Teixeira, a married man as his sole and separate property, as to undivided 1% interest

Legal description(s) from Trial Exhibit 2A page: G322
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0039413
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn I Teixeira and Dean M. Teixeira. Co-Trustees of the Elsie G. Teixeira Children's Trust I dated October 19, 1999, as to an undivided 9.73 interest

Legal description(s) from Trial Exhibit 2A page: G324
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0012000
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn J, Teixeira and Dean M. Teixeira, Co-Trustees Of The Elsie G. Teixeira Children's Trust I dated October 19, 1999

December 21, 2007

Exhibit 2
15 of 36

Legal description(s) from Trial Exhibit 2A page: G331
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082256
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira and Evelyn M. Teixeira, trustees of the Norman and Evelyn Teixeira Living Trust dated February 28, 1984, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G335
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082257
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): Allan C. Teixeira and Cecilia T. Teixeira, trustees of the Allan and Cecilia Teixeira Living Trust dated June 17, 1983, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G339
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082258
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): Marvin C, Teixeira and Paulette M. Teixeira, trustees of the Marvin and Paulette Teixeira Living Trust dated August 8, 1983, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G343
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082259
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): Glenn J. Teixeira and Karen S. Teixeira, trustees of the Glenn and Karen Teixeira Living Trust dated May 19, 1989, an undivided 14% interest

December 21, 2007

Exhibit 2
16 of 36

Legal description(s) from Trial Exhibit 2A page: G347
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082260
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): Dean M. Teixeira and Nancy M. Teixeira, trustees of the Dean and Nancy Teixeira Living Trust dated November 24, 1986, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G359
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0039412
Associated Trial Exhibit 2A APN(s): 129 210 003
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira. Marvin C. Teixeira, Glenn J. Teixeira And Dean M. Teixeira, Co-Trustees Of The Elsie G. Teixeira Children's Trust I dated October 19, 1999

Legal description(s) from Trial Exhibit 2A page: G314
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1993-041063
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): J.C. Teixeira and Elsie G. Teixeira, trustees of the S.C. and Elsie Teixeira Living Trust dated August 31, 1983, as to an undivided 95% interest, Norman J. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Allan C. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Marvin C. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Glenn J. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, and Dean M. Teixeira, a married man as his sole and separate property, as to undivided 1% interest

December 21, 2007

Exhibit 2
17 of 36

Legal description(s) from Trial Exhibit 2A page: G331
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082256
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira and Evelyn M. Teixeira, trustees of the Norman and Evelyn Teixeira Living Trust dated February 28, 1984, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G335
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082257
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Allan C. Teixeira and Cecilia T. Teixeira, trustees of the Allan and Cecilia Teixeira Living Trust dated June 17, 1983, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G339
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082258
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Marvin C, Teixeira and Paulette M. Teixeira, trustees of the Marvin and Paulette Teixeira Living Trust dated August 8, 1983, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G343
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082259
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Glenn J. Teixeira and Karen S. Teixeira, trustees of the Glenn and Karen Teixeira Living Trust dated May 19, 1989, an undivided 14% interest

December 21, 2007

Exhibit 2
18 of 36

Legal description(s) from Trial Exhibit 2A page: G347
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082260
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Dean M. Teixeira and Nancy M. Teixeira, trustees of the Dean and Nancy Teixeira Living Trust dated November 24, 1986, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G359
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0039412
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira. Marvin C. Teixeira, Glenn J. Teixeira And Dean M. Teixeira, Co-Trustees Of The Elsie G. Teixeira Children's Trust I dated October 19, 1999

Legal description(s) from Trial Exhibit 2A page: G362
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0039413
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn I Teixeira and Dean M. Teixeira. Co-Trustees of the Elsie G. Teixeira Children's Trust I dated October 19, 1999, as to an undivided 9.73 interest

Legal description(s) from Trial Exhibit 2A page: G365
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0012000
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn J, Teixeira and Dean M. Teixeira, Co-Trustees of the Elsie G. Teixeira Children's Trust I dated October 19, 1999

December 21, 2007

Exhibit 2
19 of 36

Legal description(s) from Trial Exhibit 2A page: G368
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0048046
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira and Evelyn M. Teixeira, As Co-Trustees of the Teixeira Living Trust Dated February 28, 1984

Legal description(s) from Trial Exhibit 2A page: G371
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0048047
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Allan C. Teixeira and Cecilia T. Teixeira, as Co-Trustees of the Teixeira Living Trust Dated June 17, 1983

Legal description(s) from Trial Exhibit 2A page: G374
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0048048
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Marvin C. Teixeira and Paulette M. Teixeira, as Co-Trustees of the Teixeira Living Trust Dated August 8, 1983

Legal description(s) from Trial Exhibit 2A page: G377
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0048049
Associated Trial Exhibit 2A APN(s): 117 160 046
Associated Trial Exhibit 2A Owner(s): Glenn Teixeira and Karen S. Teixeira, as Co-Trustees of the Glenn and Karen S. Teixeira Living Trust Dated February 23, 1993

December 21, 2007

Exhibit 2
20 of 36

Legal description(s) from Trial Exhibit page:
Location on Court Web site:

Page 53
http://www.sccomplex.org/docfiles/cov/mar2006/vol2/G-2_117-160-046_113-050-051partf.pdf

Associated Trial Exhibit 2A Document#:
Associated Trial Exhibit 2A APN(s):
Associated Trial Exhibit 2A Owner(s):

Santa Barbara 1979-58570
117 160 046
Allan C. Teixeira and Cecilia Teixeira, Husband and Wife as Joint Tenants as to an Undivided 1/5 Interest, Norman J. Teixeira and Evelyn M. Teixeira, Husband and Wife as Joint Tenants as to an Undivided 1/5 Interest, Marvin C. Teixeira and Paulette M. Teixeira, Husband and Wipe as Joint Tenants as to an Undivided 1/5 Interest, Dean M. Teixeira and Nancy Teixeira, Husband and Wife as Joint Tenants as to an Undivided 1/5 Interest, and Glenn J. Teixeira, an Unmarried Man as to an Undivided 1/5 Interest"

Legal description(s) from Trial Exhibit 2A page:
Location on Court Web site:
Associated Trial Exhibit 2A Document#:
Associated Trial Exhibit 2A APN(s):
Associated Trial Exhibit 2A Owner(s):

G315
<http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Santa Barbara 1993-041063
113 050 051
J.C. Teixeira and Elsie G. Teixeira, trustees of the S.C. and Elsie Teixeira Living Trust dated August 31, 1983, as to an undivided 95% interest, Norman J. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Allan C. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Marvin C. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, Glenn J. Teixeira, a married man as his sole and separate property, as to an undivided 1% interest, and Dean M. Teixeira, a married man as his sole and separate property, as to undivided 1% interest

December 21, 2007

Exhibit 2
21 of 36

Legal description(s) from Trial Exhibit 2A page: G332
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082256
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira and Evelyn M. Teixeira, trustees of the Norman and Evelyn Teixeira Living Trust dated February 28, 1984, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G336
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082257
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Allan C. Teixeira and Cecilia T. Teixeira, trustees of the Allan and Cecilia Teixeira Living Trust dated June 17, 1983, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G340
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082258
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Marvin C, Teixeira and Paulette M. Teixeira, trustees of the Marvin and Paulette Teixeira Living Trust dated August 8, 1983, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G344
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082259
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Glenn J. Teixeira and Karen S. Teixeira, trustees of the Glenn and Karen Teixeira Living Trust dated May 19, 1989, an undivided 14% interest

December 21, 2007

Exhibit 2
22 of 36

Legal description(s) from Trial Exhibit 2A page: G348
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G312-348.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 1994-082260
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Dean M. Teixeira and Nancy M. Teixeira, trustees of the Dean and Nancy Teixeira Living Trust dated November 24, 1986, an undivided 14% interest

Legal description(s) from Trial Exhibit 2A page: G358
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0039412
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn J. Teixeira and Dean M. Teixeira, Co-Trustees of the Elsie G. Teixeira Children's Trust I dated October 19, 1999

Legal description(s) from Trial Exhibit 2A page: G361
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2000-0039413
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn I Teixeira and Dean M. Teixeira, Co-Trustees Of The Elsie G. Teixeira Children's Trust I dated October 19, 1999, as to an undivided 9.73 interest

Legal description(s) from Trial Exhibit 2A page: G364
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0012000
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C. Teixeira, Marvin C. Teixeira, Glenn J, Teixeira and Dean M. Teixeira, Co-Trustees of the Elsie G. Teixeira Children's Trust I dated October 19, 1999

December 21, 2007

Exhibit 2
23 of 36

Legal description(s) from Trial Exhibit 2A page: G368
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0048046
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira and Evelyn M. Teixeira, as Co-Trustees of the Teixeira Living Trust Dated February 28, 1984

Legal description(s) from Trial Exhibit 2A page: G371
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0048047
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Allan C. Teixeira and Cecilia T. Teixeira, as Co-Trustees of the Teixeira Living Trust Dated June 17, 1983

Legal description(s) from Trial Exhibit 2A page: G374
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0048048
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Marvin C. Teixeira and Paulette M. Teixeira, as Co-Trustees of the Teixeira Living Trust Dated August 8, 1983

Legal description(s) from Trial Exhibit 2A page: G377
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder4/G349-381.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0048049
Associated Trial Exhibit 2A APN(s): 113 050 051
Associated Trial Exhibit 2A Owner(s): Glenn Teixeira and Karen S. Teixeira, as Co-Trustees of the Glenn and Karen S. Teixeira Living Trust Dated February 23, 1993

December 21, 2007

Exhibit 2
24 of 36

Legal description(s) from Trial Exhibit page:
Location on Court Web site:

Page 53
http://www.sccomplex.org/docfiles/cov/mar2006/vol2/G-2_117-160-046_113-050-051partf.pdf

Associated Trial Exhibit 2A Document#:
Associated Trial Exhibit 2A APN(s):
Associated Trial Exhibit 2A Owner(s):

Santa Barbara 1979-58570
113 050 051
Allan C. Teixeira and Cecilia Teixeira, Husband and Wife As Joint Tenants as to an Undivided 1/5 Interest, Norman J. Teixeira and Evelyn M. Teixeira, Husband and Wife As Joint Tenants as to an Undivided 1/5 Interest, Marvin C. Teixeira and Paulette M. Teixeira, Husband and Wipe as Joint Tenants as to an Undivided 1/5 Interest, Dean M. Teixeira and Nancy Teixeira, Husband and Wife as Joint Tenants as to an Undivided 1/5 Interest, and Glenn J. Teixeira, An Unmarried Man as to an Undivided 1/5 Interest"

Legal description(s) from Trial Exhibit 2A page:
Location on Court Web site:

G389-G391
<http://www.sccomplex.org/docfiles/johnston/060221/folder5/G382-411.pdf>

Associated Trial Exhibit 2A Document#:
Associated Trial Exhibit 2A APN(s):
Associated Trial Exhibit 2A Owner(s):

Santa Barbara 2002-0027379
128 097 003, 128 097 004, 128 097 005, 128 097 006, 128 097 007
Glenn and Karen S. Teixeira, Co-Trustees of the Glenn and Karen S. Teixeira Living Trust Dated February 23, 1993, as amended and restated

Legal description(s) from Trial Exhibit 2A page:
Location on Court Web site:

G394-G396
<http://www.sccomplex.org/docfiles/johnston/060221/folder5/G382-411.pdf>

Associated Trial Exhibit 2A Document#:
Associated Trial Exhibit 2A APN(s):
Associated Trial Exhibit 2A Owner(s):

Santa Barbara 2002-0027377
128 097 003, 128 097 004, 128 097 005, 128 097 006, 128 097 007
Allan C. Teixeira and Cecilia T. Teixeira as Co-Trustees of the Allan C. and Cecilia T. Teixeira Living Trust Dated June 17, 1983

December 21, 2007

Exhibit 2
25 of 36

Legal description(s) from Trial Exhibit 2A page: G399-G401
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G382-411.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0027381
Associated Trial Exhibit 2A APN(s): 128 097 003, 128 097 004, 128 097 005, 128 097 006, 128 097 007
Associated Trial Exhibit 2A Owner(s): Marvin C. Teixeira and Paulette M. Teixeira as Co-Trustees of the Marvin C. and Paulette M. Teixeira Living Trust Dated August 8, 1983

Legal description(s) from Trial Exhibit 2A page: G404-G406
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G382-411.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0027382
Associated Trial Exhibit 2A APN(s): 128 097 003, 128 097 004, 128 097 005, 128 097 006, 128 097 007
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira and Evelyn M. Teixeira as Co-Trustees of the Norman J. and Evelyn M. Teixeira Living Trust Dated February 28, 1984

Legal description(s) from Trial Exhibit 2A page: G409-G411
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G382-411.pdf>
Associated Trial Exhibit 2A Document#: Santa Barbara 2002-0027385
Associated Trial Exhibit 2A APN(s): 128 097 003, 128 097 004, 128 097 005, 128 097 006, 128 097 007
Associated Trial Exhibit 2A Owner(s): Dean M. Teixeira, Trustee of the Dean M. and Nancy M. Teixeira Living Trust Dated November 24, 1986

Legal description(s) from Trial Exhibit 2B page: G413
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G412-422.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1995-043849
Associated Trial Exhibit 2A APN(s): 091 101 009
Associated Trial Exhibit 2A Owner(s): Ball Horticulture Company, an Illinois corporation

Legal description(s) from Trial Exhibit 2B page: G415
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G412-422.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1992-066606
Associated Trial Exhibit 2A APN(s): 091 101 011
Associated Trial Exhibit 2A Owner(s): Ball Tagawa Growers, a Partnership

December 21, 2007

Legal description(s) from Trial Exhibit 2B page: G425
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G423-431.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2002-106523
Associated Trial Exhibit 2A APN(s): 091 181 019
Associated Trial Exhibit 2A Owner(s): Rene T. Van Wingerden and June B. Van Wingerden, Trustees U/D/T dated November 28, 1995 F/B/O the R & J Van Wingerden Family Trust

Legal description(s) from Trial Exhibit 2B page: G428
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G423-431.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2000-057848
Associated Trial Exhibit 2A APN(s): 091 181 045, 091 181 046
Associated Trial Exhibit 2A Owner(s): Rene T. Van Wingerden and June B. Van Wingerden, Trustees U/D/T dated November 28, 1995 F/B/O the R & J Van Wingerden Family Trust

Legal description(s) from Trial Exhibit 2B page: G436
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G432-452.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2000-014397
Associated Trial Exhibit 2A APN(s): 091 211 012, 091 211 019
Associated Trial Exhibit 2A Owner(s): Dobbe Enterprises, a California Limited Partnership

Legal description(s) from Trial Exhibit 2B page: G439
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G432-452.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1987-24675
Associated Trial Exhibit 2A APN(s): 091 201 068
Associated Trial Exhibit 2A Owner(s): Dobbe Enterprises, a California Limited Partnership

Legal description(s) from Trial Exhibit 2B page: G447
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G432-452.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1987-24666
Associated Trial Exhibit 2A APN(s): 091 192 028
Associated Trial Exhibit 2A Owner(s): Dobbe Enterprises, a California Limited Partnership

December 21, 2007

Legal description(s) from Trial Exhibit 2B page: G448
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G432-452.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1987-24674
Associated Trial Exhibit 2A APN(s): 091 192 020
Associated Trial Exhibit 2A Owner(s): Dobbe Enterprises, a California Limited Partnership

Legal description(s) from Trial Exhibit 2B page: G454
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder5/G453-459.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1999-069894
Associated Trial Exhibit 2A APN(s): 091 283 042, 091 283 042, 092 142 009
Associated Trial Exhibit 2A Owner(s): Holger Andersen and Leatrice P. Andersen, as Trustees of the Holger and Leatrice Andersen Revocable Trust dated September 28, 1999

Legal description(s) from Trial Exhibit 2B page: G461
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G460-462.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2004-055383
Associated Trial Exhibit 2A APN(s): 091 283 028
Associated Trial Exhibit 2A Owner(s): Robin J. Shroyer and Benjamin L. Trogdon, trustees of the Robin J. Shroyer and Benjamin L. Trogdon Living Trust

Legal description(s) from Trial Exhibit 2B page: G466
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G463-466.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1998-028950
Associated Trial Exhibit 2A APN(s): 091 283 031
Associated Trial Exhibit 2A Owner(s): Robert Nicholson, a single man

December 21, 2007

Exhibit 2
28 of 36

Legal description(s) from Trial Exhibit 2B page: G467
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G467-469.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1998-019416
Associated Trial Exhibit 2A APN(s): 091 281 068
Associated Trial Exhibit 2A Owner(s): Jeffrey E. Corey as Trustee and his Successors as Trustees, of the Jeffrey E. Corey Revocable Trust, a Trust Agreement dated March 16, 1998

Legal description(s) from Trial Exhibit 2B page: G471
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G470-475.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2003-028291
Associated Trial Exhibit 2A APN(s): 091 281 077
Associated Trial Exhibit 2A Owner(s): Jafroodi Properties, L.P., a California Limited Partnership

Legal description(s) from Trial Exhibit 2B page: G474
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G470-475.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2003-028290
Associated Trial Exhibit 2A APN(s): 091 281 071
Associated Trial Exhibit 2A Owner(s): Jafroodi Properties, L.P., a California Limited Partnership

Legal description(s) from Trial Exhibit 2B page: G477
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G476-479.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1992-073777
Associated Trial Exhibit 2A APN(s): 091 301 042
Associated Trial Exhibit 2A Owner(s): Howard Freeman Mehlschau and Donna Gene Mehlschau, Trustees U/D/T dated June 26, 1992 F/B/O the Mehlschau Family Trust

Legal description(s) from Trial Exhibit 2B page: G482-G483
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G480-489.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2003-132925
Associated Trial Exhibit 2A APN(s): 092 021 005, 092 021 009
Associated Trial Exhibit 2A Owner(s): Frank Leigh Church Trustee of the Barbara B. Church Revocable Trust under the Declaration of Trust dated January 30, 1998

December 21, 2007

Exhibit 2
29 of 36

Legal description(s) from Trial Exhibit 2B page: G490
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G490-493.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2000-059066
Associated Trial Exhibit 2A APN(s): 092 021 034
Associated Trial Exhibit 2A Owner(s): Henry J. Macagni and Shirley M. Macagni, Trustees of the Macagni Trust dated October 5, 2000

Legal description(s) from Trial Exhibit 2B page: G491
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G490-493.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2000-023902
Associated Trial Exhibit 2A APN(s): 092 021 034
Associated Trial Exhibit 2A Owner(s): Gary Macagni, Trustee of the Macagni Trust dated March 23, 2000

Legal description(s) from Trial Exhibit 2B page: G494
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G494-497.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1976-38840
Associated Trial Exhibit 2A APN(s): 091 311 019
Associated Trial Exhibit 2A Owner(s): Koch California Ltd, a California Corporation

Legal description(s) from Trial Exhibit 2B page: G498
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G498-501.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1979-34804
Associated Trial Exhibit 2A APN(s): 092 021 039
Associated Trial Exhibit 2A Owner(s): J.J.C. of Santa Maria, Inc., a California corporation

Legal description(s) from Trial Exhibit 2B page: G504
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder6/G502-507.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2000-028833
Associated Trial Exhibit 2A APN(s): 092 031 020, 092 031 021
Associated Trial Exhibit 2A Owner(s): Freitas Farms, LLC, a California Limited liability company

December 21, 2007

Exhibit 2
30 of 36

Legal description(s) from Trial Exhibit 2B page:	G509
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder6/G508-513.pdf
Associated Trial Exhibit 2A Document#:	San Luis Obispo 1999-052301
Associated Trial Exhibit 2A APN(s):	092 061 006, 092 211 001
Associated Trial Exhibit 2A Owner(s):	Daniel E. Silva and Socorro M. Silva, husband and wife, as joint tenants
Legal description(s) from Trial Exhibit 2B page:	G516
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder7/G514-521.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 2004-0022466
Associated Trial Exhibit 2A APN(s):	101 010 008
Associated Trial Exhibit 2A Owner(s):	William E. Jones and Sharon E. Jones, husband and wife, as Joint Tenants, as to an undivided forty-four percent (44%); and Robert Wayne Jones, an unmarried man, as to an undivided fifty-six percent (56%) interest, as Tenant in Common
Legal description(s) from Trial Exhibit 2B page:	G523
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder7/G522-525.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 2003-0155760
Associated Trial Exhibit 2A APN(s):	129 090 013, 129 090 016, 129 090 017
Associated Trial Exhibit 2A Owner(s):	Plantel Nurseries, Inc., A California Corporation
Legal description(s) from Trial Exhibit 2B page:	G527
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder7/G526-530.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1991-003946
Associated Trial Exhibit 2A APN(s):	113 120 007, 113 120 009
Associated Trial Exhibit 2A Owner(s):	Thomas G. Adam, a married man, as to an undivided 50% interest.

December 21, 2007

Legal description(s) from Trial Exhibit 2B page:	G532-G534
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder7/G531-536.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 2000-0032016
Associated Trial Exhibit 2A APN(s):	129 151 036
Associated Trial Exhibit 2A Owner(s):	Gary Teixeira and Wendy Teixeira, Husband and Wife, as Joint Tenants
Legal description(s) from Trial Exhibit 2B page:	G540
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder7/G537-544.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1990-076920
Associated Trial Exhibit 2A APN(s):	113 080 019, 113 100 012, 113 100 027
Associated Trial Exhibit 2A Owner(s):	Arthur R. Tognazzini Family Farms, a California Limited Partnership
Legal description(s) from Trial Exhibit 2B page:	G545-G548
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder7/G545-551.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1984-044366
Associated Trial Exhibit 2A APN(s):	Santa Barbara 113 030 002, San Luis Obispo 092 004 007
Associated Trial Exhibit 2A Owner(s):	Central Pacific, a General Partnership
Legal description(s) from Trial Exhibit 2B page:	G554
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder7/G552-564.pdf
Associated Trial Exhibit 2A Document#:	Santa Barbara 1997-009167
Associated Trial Exhibit 2A APN(s):	113 100 025
Associated Trial Exhibit 2A Owner(s):	Teixeira Brothers Land Partnership, a California General Partnership
Legal description(s) from Trial Exhibit 2B page:	G566
Location on Court Web site:	http://www.sccomplex.org/docfiles/johnston/060221/folder7/G565-569.pdf
Associated Trial Exhibit 2A Document#:	San Luis Obispo 2002-040482
Associated Trial Exhibit 2A APN(s):	090 041 032
Associated Trial Exhibit 2A Owner(s):	Glenn Teixeira Co-Trustee of the Glenn and Karen S. Teixeira Living Trust dated February 23, 1993

December 21, 2007

Legal description(s) from Trial Exhibit 2B page: G571
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder8/G570-577.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2003-090197
Associated Trial Exhibit 2A APN(s): 091 281 074
Associated Trial Exhibit 2A Owner(s): Andreas Koch, Trustee of Trust A ó The Survivor's Trust created by the Koch Family Trust under the Declaration and Trust Agreement dated March 9, 1988

Legal description(s) from Trial Exhibit 2B page: G573
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder8/G570-577.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2003-090198
Associated Trial Exhibit 2A APN(s): 091 281 031, 091 281 075
Associated Trial Exhibit 2A Owner(s): Andreas Koch, Trustee of Trust A ó The Survivor's Trust created by the Koch Family Trust under the Declaration and Trust Agreement dated March 9, 1988, as to an undivided 50% interest, and Andreas Koch, Trustee of the Trust B ó The residual Trust created by the Koch Family Trust under the Declaration and Trust Agreement dated March 9, 1988, as to an undivided 50% interest

Legal description(s) from Trial Exhibit 2B page: G584
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder8/G582-588.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2002-045132
Associated Trial Exhibit 2A APN(s): 092 011 009, 092 021 004
Associated Trial Exhibit 2A Owner(s): Teixeira Investments, LP, a California limited Partnership

Legal description(s) from Trial Exhibit 2B page: G589-G591
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder8/G587-614.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1995-055839
Associated Trial Exhibit 2A APN(s): 092 011 019, 092 011 020, 092 021 020, 092 021 025, 092 021 026, 092 021 040, 092 021 043, 092 021 044, 092 021 047, 092 021 048
Associated Trial Exhibit 2A Owner(s): Teixeira Brother Land Partnership, a California General Partnership

December 21, 2007

Exhibit 2
33 of 36

Legal description(s) from Trial Exhibit 2B page: G593
 Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder8/G587-614.pdf>
 Associated Trial Exhibit 2A Document#: San Luis Obispo 1995-055839
 Associated Trial Exhibit 2A APN(s): 092 021 023, 092 021 027, 092 021 028, 092 021 038, 092 391 019, 092 401 007, 092 401 008
 Associated Trial Exhibit 2A Owner(s): Teixeira Brother Land Partnership, a California General Partnership

Legal description(s) from Trial Exhibit 2B page: G596.1
 Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder8/G587-614.pdf>
 Associated Trial Exhibit 2A Document#: San Luis Obispo 1980-20626
 Associated Trial Exhibit 2A APN(s): 092 021 033
 Associated Trial Exhibit 2A Owner(s): Teixeira Brother Land Partnership, a California General Partnership

Legal description(s) from Trial Exhibit 2B page: G616
 Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G615-629.pdf>
 Associated Trial Exhibit 2A Document#: San Luis Obispo 1993-012580
 Associated Trial Exhibit 2A APN(s): 092 191 002
 Associated Trial Exhibit 2A Owner(s): Myrna Novo Leclair, a married woman, as her sole and separate property

Legal description(s) from Trial Exhibit 2B page: G621
 Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G615-629.pdf>
 Associated Trial Exhibit 2A Document#: San Luis Obispo 1993-012580
 Associated Trial Exhibit 2A APN(s): 092 191 002
 Associated Trial Exhibit 2A Owner(s): Ethel Novo, a married woman, as her sole and separate property

Legal description(s) from Trial Exhibit 2B page: G635
 Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G630-640.pdf>
 Associated Trial Exhibit 2A Document#: San Luis Obispo 2001-100238
 Associated Trial Exhibit 2A APN(s): 092 191 003
 Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira, Allan C Teixeira, Marvin C. Teixeira, Glenn J. Teixeira and Dean M. Teixeira, Co-Trustees of the Elsie G. Teixeira Children's Trust I Dated October 19, 1999

December 21, 2007

Legal description(s) from Trial Exhibit 2B page: G642
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G641-644.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1992-073778
Associated Trial Exhibit 2A APN(s): 090 331 004
Associated Trial Exhibit 2A Owner(s): Howard Freeman Mehlschau and Donna Gene Mehlschau, Trustees U/D/T dated June 26, 1992 F/B/O the Mehlschau Family Trust

Legal description(s) from Trial Exhibit 2B page: G647
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G645-661.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2002-0027380
Associated Trial Exhibit 2A APN(s): 113 050 014
Associated Trial Exhibit 2A Owner(s): Marvin C. Teixeira and Paulette M. Teixeira as Co-Trustees of the Marvin C. And Paulette M. Teixeira Living Trust Dated August 8, 1983

Legal description(s) from Trial Exhibit 2B page: G650
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G645-661.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2002-0027378
Associated Trial Exhibit 2A APN(s): 113 050 014
Associated Trial Exhibit 2A Owner(s): Glenn and Karen S. Teixeira. Co-Trustees of the Glenn and Karen S. Teixeira Living Trust Dated February 23, 1993

Legal description(s) from Trial Exhibit 2B page: G653
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G645-661.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2002-0027383
Associated Trial Exhibit 2A APN(s): 113 050 014
Associated Trial Exhibit 2A Owner(s): Norman J. Teixeira and Evelyn M. Teixeira as Co-Trustees of the Norman J. and Evelyn M. Teixeira Living Trust Dated February 28, 1984

December 21, 2007

Exhibit 2
35 of 36

Legal description(s) from Trial Exhibit 2B page: G656
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G645-661.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2002-0027384
Associated Trial Exhibit 2A APN(s): 113 050 014
Associated Trial Exhibit 2A Owner(s): Allan C. Teixeira and Cecilia T. Teixeira as Co-Trustees of the Allan C. and Cecilia T. Teixeira Living Trust Dated June 17, 1983

Legal description(s) from Trial Exhibit 2B page: G659
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G645-661.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 2002-0027386
Associated Trial Exhibit 2A APN(s): 113 050 014
Associated Trial Exhibit 2A Owner(s): Dean M. Teixeira, Trustee of the Dean. M. and Nancy M. Teixeira Living Trust Dated November 24, 1986

Legal description(s) from Trial Exhibit 2B page: G662
Location on Court Web site: <http://www.sccomplex.org/docfiles/johnston/060221/folder9/G661-667.pdf>
Associated Trial Exhibit 2A Document#: San Luis Obispo 1986-84683
Associated Trial Exhibit 2A APN(s): 092 011 017, 092 011 018
Associated Trial Exhibit 2A Owner(s): Teixeira Brother Land Partnership, a California General Partnership

December 21, 2007

Exhibit 2
36 of 36

Exhibit 3

Defaulting Parties

Note: Exhibit 3 lists those parties against whom default judgment is entered pursuant to section 585 of the Code of Civil Procedure, and also those parties against whom judgment is entered pursuant to Code of Civil Procedure section 594. (Notice of Phase V Trial and Pre-Trial Order, Mar. 21, 2006.)

Defaulting Parties (Code of Civil Procedure § 585)

Party Name	Named/ Served	Appeared
Ainscough, Arthur	X	
Alcantar, Fabian	X	
Alcantar, Lourdes	X	
Alcantar, Martha	X	
Alcantar, Pedro ¹	X	
Allan-Santos Family Trust ²	X	
Allen Hancock Jr. College District	X	
Ames, Dorothy	X	
Ames, Paul W.	X	
Anderson, David C.	X	

¹ This party has been dismissed by Nipomo Community Services District (NCSD).

² This party has been dismissed by Southern California Water Company (now Golden State Water Company) (GSWC), Rural Water Company (RWC), and the City of Santa Maria.

December 21, 2007

Exhibit 3
Page 1 of 19

Party Name	Named/ Served	Appeared
Andres, Beverly A., Trust	X	
Asmussen, Fred	X	
Asmussen, Judy	X	
Bantz, John E.	X	
Bauer, Harry J.	X	
Bauer, Helen L.	X	
Bautista, Javier ³	X	
Bautista, Teresa	X	
Blanco, Henry	X	
Borg, Roger E., Trustee	X	
Bozenich Partnership	X	
Bozenich, Gary N., Tre	X	
Brown, Alfred L.	X	
Brown, Elaine S.	X	
Brown, Pauline J.	X	
Cagliero Trust	X	
Calderon, Juan Carlos	X	
Calderon, Rosalina	X	
Capanna, Anthony	X	
Carriage Homes	X	
Casmalia Community Services District	X	
Castellanos, Andrew, Trustee of the Castellanos Family Trust	X	

³ This party has been dismissed by NCSD and the City of Santa Maria.

December 21, 2007

Party Name	Named/ Served	Appeared
Castellanos, Andrew	X	
Castellanos, Ophela	X	
Castellanos, Ophelia, Trustee	X	
Castellanos Partnership	X	
Castillo, Raymond, Trustee	X	
Ceglia, Philip	X	
Cervantes, Antonio	X	
Cervantes, Engracia	X	
Chaloupka, Hilda M.	X	
Chaloupka, Howard O.	X	
Chan, Ting-Fung	X	
Charles A. Pratt Construction Co., Inc.	X	
Christenson, Brian	X	
Christenson, Lisa	X	
Ciavarelli, Marlene	X	
Ciavarelli, Richard	X	
Clement, Rebecca	X	
Colandrea, A.J.	X	
Cole, Joan ⁴	X	
Cole, Richard R.	X	
Cooper, Charles R.	X	
Cooper, Charles R., Trustee	X	

⁴ This party has been dismissed by NCSD, GSWC, and RWC.

December 21, 2007

Exhibit 3
Page 3 of 19

Party Name	Named/ Served	Appeared
Corbellini, Ida	X	
Corporate International Investors	X	
Coudriet, Joanne	X	
Crandall, Teresa Ann	X	
Crandall, Todd	X	
Cutler, Edward H.	X	
Cutler, Rosalee	X	
Cutler, Jack E.	X	
Cutler, Sherrie L.	X	
Dana, Leonard E., Trustee	X	
Diaz, Arelia C.	X	
Diaz, Jose C.	X	
Elkhorn Homeowners Association	X	
Elliott, Susan J.	X	
Ellis, James	X	
Ellis, Roberta	X	
Ervin, Barbara ⁵	X	
Farao, Diane P.	X	
Farao, Manuel B.	X	
Fernandez, Alicia M.	X	
Ferrara, Deborah	X	
Ferrara, James	X	
Fort, Nettie, Trustee	X	

⁵ This party has been dismissed by NCSD, GSWC, and RWC.

December 21, 2007

Party Name	Named/ Served	Appeared
Fox, Carla	X	
G N Investments, LLC	X	
G N Properties, LLC	X	
Gamboa, Desiderio	X	
Gamboa, Eduardo	X	
Gamboa, Jeff	X	
Gamboa, Steven	X	
Garibay, Efren	X	
Garibay, Evelia	X	
Garson-moynagh, Roberta L.	X	
Gin, Melvin M.	X	
Glanville, Gordon B.	X	
Glenn, Janet A.	X	
Gonzales, Felipe, Trustee	X	
Gordon Sand Company	X	
,Garcia, Alfred E.	X	
Gresser, Jack C.	X	
Guevara, Luis	X	
Gutierrez, Peter	X	
Gutierrez, Rosa	X	
Haddox, Hazel E.	X	
Haddox, Hazel E., Trustee	X	
Hampton, Richard E., Trust	X	
Hampton, Terry, Trustee	X	

December 21, 2007

Exhibit 3
Page 5 of 19

Party Name	Named/ Served	Appeared
Hartman, Ervin, Trust	X	
Harvey, Jill	X	
Hawkins, Bonnie J.	X	
Hawkins, Roger V.	X	
Hearn, Hardy	X	
Hearn, Judith	X	
Heath, Barbara	X	
Heath, Joel H.	X	
Heath, Margaret	X	
Heath, Paul	X	
Henderson, Edward E.	X	
Henderson, Mary F.	X	
Hetrick Water Company	X	
Holder, Donald K.	X	
Holder, Kristin K.	X	
Ikola, Roger A.	X	
Ingle, Ann V.	X	
Ingle, Ted C.	X	
Iniguez, Jose M.	X	
Iniguez, Rosalba D.	X	
International Church of Foursquare Gospel	X	
Investors of America	X	
Jensen Family Trust	X	
Jones, Ralph L. and Edla J., Trust	X	

December 21, 2007

Exhibit 3
Page 6 of 19

Party Name	Named/ Served	Appeared
Kim, Dong	X	
Kim, Jook S.	X	
Kirk, David M. ⁶	X	
Kirk, David M. and Lorna, Trust ⁷	X	
Kirk, Lorna ⁸	X	
Knight, Julie L.	X	
Knight, Robert L.	X	
Kolikant, Penina	X	
Koski, Constance	X	
Koski, Daniel	X	
Kraus, Janet	X	
Kundaria, B. D. ⁹	X	
Lane, Cheryl A.	X	
Lane, Larry L.	X	
Lan-Vested Securities Company	X	
Lem, Hoy ¹⁰	X	
Lem, Hoy, Trustee ¹¹	X	
Lewis, Gregory Dean	X	
Life Steps Foundation, Inc.	X	

⁶ This party has been dismissed by the City of Santa Maria.

⁷ This party has been dismissed by the City of Santa Maria.

⁸ This party has been dismissed by the City of Santa Maria.

⁹ This party has been dismissed by the City of Santa Maria.

¹⁰ This party has been dismissed by NCSA.

¹¹ This party has been dismissed by GSWC, RWC, and the City of Santa Maria.

December 21, 2007

Exhibit 3
Page 7 of 19

Party Name	Named/ Served	Appeared
Lopez, David G.	X	
Lopez, Loni J.	X	
Lovett, Taka	X	
Los Rubios Ranch	X	
Luh Family Trust	X	
Machamer, F. George	X	
Maldonado, Arnulfo	X	
Maldonado, Margarita Q.	X	
Mancinello, Bruno	X	
Marshall, Robert	X	
McGovran, April D.	X	
McGovran, Dwayne	X	
Miller, Marcia K.	X	
Miller, William E.	X	
Mitchell, Harriett	X	
Mitchell, Ralph	X	
McGovran, April	X	
Morrison, M.J.	X	
Munzer, William J., Trustee	X	
Murphy, Sharon L.	X	
Murphy, Steven A.	X	
Musalo, Barbara	X	
Musalo, Ralph	X	
Nipomo Group, A California General Partnership	X	

December 21, 2007

Exhibit 3
Page 8 of 19

Party Name	Named/ Served	Appeared
Nolan, Beaman	X	
Oakridge Park Estates	X	
Okeefe, Mary	X	
Omberg, Edward R.	X	
Omberg, Sharon R.	X	
Ortega, Diane L.	X	
Ortega, Natalie M.	X	
Ortega, Richard J.	X	
Ortiz, Cathie C.	X	
Payne, Leslie	X	
Payne, Mark	X	
Petersen, Dorothy	X	
Phelan Land Co.	X	
Phelan, Colleen J., Trustee	X	
Pismo Beach Mobile Home Park, Inc.	X	
Pond, Eddie	X	
Pond, Jeanne ¹²	X	
Power of God Christian Center	X	
Ramey, Genine A.	X	
Ramey, Jesse A.	X	
Rancho Guadalupe, LLC	X	
Rees, Thomas Jr.	X	
Reeser, Robert ¹³	X	

¹² This party has been dismissed by the City of Santa Maria.

December 21, 2007

Party Name	Named/ Served	Appeared
Ricker, Alice J. ¹⁴	X	
Ricker, John J. ¹⁵	X	
Robinson, James	X	
Rodriguez, Guadalupe	X	
Rodriguez, Jesus	X	
Ross, Michael, Trust	X	
Rubio, Amador	X	
Salazar, June	X	
Santa Maria Cemetery District	X	
Santa Maria Solid Waste District ¹⁶	X	
Santa Maria Enterprises, Inc.	X	
Santa Maria Valley Cooling Co.	X	
Sawyer, Willis B., Trust	X	
SCPI	X	
Severn, Cheryl L.	X	
Severn, Raymond S.	X	
Simonini, Fran	X	
Simonini, Rick	X	
Skaggs, Wesley	X	
Solid Rock Group LLC	X	
Sorensen, Phyllis A., Trust (Phyllis A. Sorensen, Trustee)	X	

¹³ This party has been dismissed by the City of Santa Maria.

¹⁴ This party has been dismissed by the City of Santa Maria.

¹⁵ This party has been dismissed by the City of Santa Maria.

¹⁶ This party has been dismissed by the City of Santa Maria.

December 21, 2007

Party Name	Named/ Served	Appeared
South County Sanitary District	X	
State of California Grandmothers Club	X	
Tang, Hsin	X	
Tanner, Jaqueline C., Trust	X	
Tanner, Jacqueline	X	
Taylor, Philip A.	X	
Tognazzini, Dora	X	
Tognazzini, Teri J., Trust	X	
Tract 458	X	
Universal Life Church, Inc.	X	
Vanderlei, Phillip M.	X	
Vanderlei, Tara	X	
Vaughn, Robert	X	
Veal, Thomas ¹⁷	X	
Velasquez, Gloria	X	
Vista de las Flores Water	X	
Volentine, James M.	X	
Vore, Marion J., Family Trust	X	
Warren, James	X	
Weber, Josephine	X	
Weber, Virginia, Trust	X	
West, Frederic	X	
West, Marilyn	X	

¹⁷ This party has been dismissed by GSWC, RWC, and the City of Santa Maria.

December 21, 2007

Party Name	Named/ Served	Appeared
Williams, Robert E.	X	
Yokoyama, Jane	X	
Ziamba, Lisa ¹⁸	X	

¹⁸ This party has been dismissed by the City of Santa Maria and NCSD.

December 21, 2007

Absent Adversary Parties
(Code of Civil Procedure § 594)

Party Name	Named/ Served	Appeared
Agro Industries Corp. (incorrectly named as "Argo Industries Corp.")	X	X
Andrew Norman Foundation, a California charitable trust (incorrectly named as "Andrew Norman Foundation, a corporation")	X	X
Anthony, Florence	X	X
Apio Land Company	X	X
Appel, Clinton	X	X
Appel, Roberta R.	X	X
Arbor Ridge, Inc.	X	X
Arroyo Grande Bay View Estates Homeowners Assn., Inc.	X	X
Bailey, Verna, Trustee	X	X
Bank of America Corporation (incorrectly named as "Bank of America (Trust Real Estate Ops #3)", "Bank of America," and "Bank of America Nt & Sa")	X	X
Bank of America, as Trustee (formerly known as Security Pacific National Bank, as Trustee) (incorrectly named as "Security Pacific National Bank")	X	X
Bantz, Loretta K.	X	X
Bantz, Loretta, Trustee	X	X
Bejo Seeds, Inc.	X	X
Biely, William	X	X
Black Lake Ranch Homeowners Association	X	X
Blum, John E., Trustee	X	X
Born, Eleanor	X	X
Cagliero Trust	X	X

December 21, 2007

Exhibit 3
Page 13 of 19

Party Name	Named/ Served	Appeared
Cal-Cobblestone Creek, LLC (incorrectly named as "Cal & Cobblestone Creek, a corporation")	X	X
Campisi, Elizabeth, Trust	X	X
Canada, Earl ¹⁹	X	X
Castillo, Raymond, Trustee	X	X
Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints, a Utah corporation (incorrectly named as "Church of Jesus Christ of Latter Day Saints")	X	X
Cienaga Seabreeze Park, Inc.	X	X
Clay Properties, LLC	X	X
Collins, Carmen, Trustee (incorrectly named as "Carmen Collins")	X	X
Collins, James E., Trustee (incorrectly named as "James E. Collins")	X	X
Coudriet, Donald A.	X	X
Cuzick, Brenda V.	X	X
Cuzick, W. Ray	X	X
DeLaRosa, Adeline (incorrectly named as "Adeline Delarosa")	X	X
DeLaRosa, Louis (incorrectly named as "Lous Delarosa")	X	X
Delmartini, Nadine Julia	X	X
Dewsnup, Jeannine	X	X
Dewsnup, Wynn	X	X
Diaz, Jaime	X	X
Diaz, Olga	X	X
Fairbrother, Russell (erroneously named as "Russel Fairbrother")	X	X
Fernald, Bonnie	X	X
Fernald, Fred	X	X

¹⁹ This party has been dismissed by the City of Santa Maria.

December 21, 2007

Party Name	Named/ Served	Appeared
Ferrari, Alison E.	X	X
Ferrari, Ted J.	X	X
Fields, Jack McKay	X	X
Filipe Ranch, A California Limited Partnership	X	X
First Baptist Church of Santa Maria	X	X
Fort, Nettie U. ²⁰	X	X
Frampton, Marion Family Trust (incorrectly named as Marion H. Frampton Trustö)	X	X
Furukawa, Leslie K.	X	X
Gackle, MaryAnne (incorrectly named as öMary A. Gackle Trustö)	X	X
Gagliardini, Carolyn L., Trustee	X	X
Gannon, Darrel E.	X	X
Garcia, Francisco	X	X
Garcia, Maria	X	X
Gibson, Joni R.	X	X
Gibson, Oliver E. Jr.	X	X
Glad-A-Way Gardens, Inc. (incorrectly named as öGlad & A & Way Gardens Inc., a corporationö)	X	X
Grabeel, Elizabeth	X	X
Grabeel, Elizabeth, Trustee ²¹	X	X
Graghani, Don & Thelma Irene Trust	X	X
Guadalupe Land Company	X	X
Guadalupe Union School District	X	X
Haanpaa, Olavi	X	X

²⁰ This party has been dismissed by NCSD, GSWC and RWC.

²¹ This party has been dismissed by NCSD.

December 21, 2007

Exhibit 3
Page 15 of 19

Party Name	Named/ Served	Appeared
Hart, Leonard, Trustee	X	X
Heinsohn, Frank P., Trustee	X	X
Hernandez, Cornelia	X	X
Hernandez, Richard S.	X	X
Hi Thompson, Inc. (incorrectly named as "Hi Thompson Investments, Inc., a CA Corp.")	X	X
Houghton, Vernon, Trustee	X	X
Jackson, Emory	X	X
Jackson, Sarah	X	X
Kanawyer, Gary	X	X
Kendall Jackson Wine Estates (incorrectly named as "Kendall & Jackson Winery Ltd., a corporation" and "Jackson Family Estates I, LLC, a partnership")	X	X
Kendall, Robert, Co-Trustee for Parcel Number 133-200-001 [Cappel et al.] (incorrectly named as "Patricia Cappel, Trustee," "Patricia Cappel," and "Patricia Cappel Trust")	X	X
Krouse, Stephanie (incorrectly named as Stephanie Krouse Irrevocable Trust)	X	X
Lamphier, Donna	X	X
Lamphier, Jerry	X	X
Lazelle, Willis W.	X	X
Lovett, John	X	X
M. Chavez & Son Farming, Inc. (incorrectly named as M. Chavez & Son Farming Inc., a corporation)	X	X
M.V.S., Inc.	X	X
Major, Arthur F.	X	X
Major, Evelyn K.	X	X
McCadden Development, LLC	X	X
McDonald, Merrlyn (incorrectly named as "Merrlyn W. McDonald")	X	X
McGee, Roger L.	X	X

December 21, 2007

Exhibit 3
Page 16 of 19

Party Name	Named/ Served	Appeared
Mesa Verde Development, LLC	X	X
Mideb Nominees, Inc.	X	X
Miller, Mary C. Peggy, Trustee (incorrectly named as "Peggy Miller" and "Mary C. Miller")	X	X
Morrow, Robert S.	X	X
Morrow, Yvonne	X	X
Nipomo Oaks, A General Partnership	X	X
Nuevo Energy Company	X	X
Okonite Company, Inc.	X	X
Oliver, George K.	X	X
Orcutt Aquacenter, Inc.	X	X
Pajaro Valley Greenhouses	X	X
Pak, Song W., Trustee	X	X
Pak, Song W.	X	X
Persons, Kelley M.	X	X
Pismo Coast Village, Inc.	X	X
Putty, Bernice E.	X	X
Pyche 2000 Trust	X	X
Radford Family Trust Tr/d 6/15	X	X
Rapp, George C.	X	X
Rapp, George, Trustee	X	X
Rhea, Dorene	X	X
Rhea, Sam	X	X
Richards, Eva (incorrectly named as "Ebba Richards") ²²	X	X

²² This party has been dismissed by the City of Santa Maria.

December 21, 2007

Party Name	Named/ Served	Appeared
Richards, Burnell H. ²³	X	X
Righetti, Paul	X	X
Robinson, A.D.	X	X
Robinson, Arlene	X	X
Robinson, Franklin D.	X	X
Robinson, James, Trustee	X	X
Roderman Family LLC	X	X
Rodriguez, Raul V.	X	X
Rowan, Raquel	X	X
Rowan, Scott	X	X
Rush-Gannon, Olga M. (incorrectly named as õOlga M. Rushö)	X	X
Sanchez, Maria Z.	X	X
Sanchez, Roberto C.	X	X
Schubert Brodie, Kathleen S. (incorrectly named as õKathleen S. Schubertö)	X	X
Seal, Marc	X	X
Sellers, Robert D., Trust	X	X
Smith, Patricia	X	X
Smith, Paula	X	X
Stiles, John	X	X
Tahmisian, James	X	X
Tahmisian, Lynne	X	X
Tepusquet Ranch	X	X

²³ This party has been dismissed by the City of Santa Maria.

December 21, 2007

Party Name	Named/ Served	Appeared
Thomas, C.T. (incorrectly named as Cecil T. Thomas, Jr.ö)	X	X
Thomas, Suzette	X	X
Thomas California Investments, a Hawaii limited partnership (incorrectly named as öThomas California Investmentsö)	X	X
Thompson, Jacquelyn	X	X
Thompson, Mickey D.	X	X
Thompson, Nancy	X	X
True Water (incorrectly named as öTrue Water Supplyö)	X	X
Van Solinge, Christine J.	X	X
Van Solinge, Roelof L.	X	X
Vaughn, Robert L., Trustee	X	X
Wayner, Delwyn G., Trustee for the Wayner Family Trust (incorrectly named as öDelwyn Wayner Trustö)	X	X
Welsh, James L. ²⁴	X	X
Welsh, Lula ²⁵	X	X
Whipple 2001 Trust	X	X
Williams, Kathryn B., Trust	X	X
Woodmere Villas Owners Association	X	X

²⁴ This party has been dismissed by the City of Santa Maria.

²⁵ This party has been dismissed by the City of Santa Maria.

December 21, 2007

Gina M Lane

From: Gina M Lane
Sent: Tuesday, February 12, 2008 7:47 AM
To: 'scserv@scscomplex.org'
Subject: RE: Sta. Clara Sup. Court Document Service: #req2198

-----Original Message-----

From: SC Doc Service [mailto:scserv@scscomplex.org]
Sent: Monday, February 11, 2008 5:37 PM
To: Abl@bkslawfirm.com; acedocmajor@earthlink.com; ajam@glotrans.com; amcdaniel@bak.rr.com; andy@plownow.com; antony.buchignani@piperrudnick.com; April A Robitaille; Amy M. Steinfeld; awhitfield@calattys.com; awsmhermie@aol.com; barbara.stroud@bbklaw.com; Bepstein@fablaw.com; Bradley J Herrema; bixlerlaw@sbcglobal.net; bmccarthy@rwglaw.com; BTorres@bhfs.com; bw@ppplaw.com; bwayner@juno.com; cap@ppplaw.com; caryl@law.com; catlver72@hotmail.com; cbargiel@mullenlaw.com; chill@kmclaw.com; chillier@amblaw.com; cjones@nossaman.com; ckslawyer@aol.com; cleesmith48@aol.com; cole2010@juno.com; cson@sidley.com; Dannemyr@concentric.net; depps@fe-law.com; djb@cmf-law.com; dlaw@amblaw.com; dluis@lebeauthelen.com; dsemels@elthlaw.com; edward.strohbehn@bingham.com; eileen.horschel@swcglaw.com; Elgarner@bbklaw.com; epowers@rwglaw.com; eric.garner@bbklaw.com; erios@co.santa-barbara.ca.us; eschepman@hotmail.com; gandrews@adgrcpa.com; GDuran@rwglaw.com; geoffrey.robinson@bingham.com; Gina M Lane; glickslaw@msn.com; gllarson99@aol.com; gmittchell@lawwmf.com; goldenringlaw@aol.com; gopcpa@verizon.net; guenther@slocounsel.com; haiqiu@yahoo.com; hal-nelson@sbcglobal.net; hathlaw@pacbell.net; hbsattylaw@aol.com; huberranchlp@aol.com; hweinstock@nossaman.com; info@smithtardiff.com; italianesq@aol.com; james.miller@am.joneslanglasalle.com; jaminyard@yahoo.com; jan@grebenlaw.com; jat@fix.net; jduffy@fmam.com; jeffrey.dunn@bbklaw.com; jenna@grebenlaw.com; Jgoldsmith@kmtg.com; jill.willis@bbklaw.com; jjackson@bryancave.com; jkuperberg@rutan.com; jlopez@sidley.com; Jmarkman@rwglaw.com; JNWillis@bbklaw.com; johnjn338@earthlink.net; jon@shipseyandseitz.com; jpraitis@sidley.com; jrigali@kirksimas.com; jsokol@ggfirm.com; Jvflaw@aol.com; karen_mehl@yahoo.com; Keith@lemieux-oneill.com; kerry.keefe@bbklaw.com; Kfree@co.santa-barbara.ca.us; kherrington@rwglaw.com; kliberty@rwglaw.com; kobrien@downeybrand.com; kochcal@earthlink.net; kreolex@aol.com; laverne.patane@piperrudnick.com; lbanducci@youngwooldridge.com; legal@robinsonheli.com; linda@lemieux-oneill.com; lkaster@sonnenschein.com; llimone@twitchehellandrice.com; mark@ccnlegal.com; Martyroof@aol.com; marvebreech@yahoo.com; Mhensley@bwsllaw.com; michael.dierberg@fbol.com; mje@ewb-law.com; mkanny@manatt.com; mmulkerin@bwsllaw.com; mpfau@rppmh.com; msaephan@klnlg.com; nicholson@adamskimoroski.com; nipomolaw@aol.com; nixternabz@aol.com; nkoenen@charterinternet.com; NMaxey@clifford-brownlaw.com; normanlylaw@verizon.net; ochrach@rcsis.com; ogplaw@aol.com; paknox@earthlink.net; pchristensen@irell.com; pkibel@fablaw.com; Plcandy@hbsb.com; pumoff@seedmackall.com; rcbylsma@up.com; RCohen@englandandcohen.com; RDougherty@covcrowe.com; rechristiansen@charter.net; robertasa@earthlink.net;

rogden@ogdenfricks.com; Rachel R Robledo; Robert J Saperstein; Robert J Saperstein; rsb@bkslawfirm.com; ruben_rs@pillsburylaw.com; rwalker@scscourt.org; SantaMariaBasin@bingham.com; sapodaca@brightandbrown.com; scomis@calattys.com; scroot@sccomplex.org; Stephanie Osler Hastings; sherifamichael@msn.com; slolaw@belsherandbecker.com; slolaw@pobox.com; smaria@youngwooldridge.com; smw@grekaenergy.com; Sorr@rwglaw.com; SShadow5@aol.com; stefanie.hedlund@bbklaw.com; stewartjohnston@mac.com; swisebus@aol.com; tchester@smilandlaw.com; Ted@Frame-Matsumoto.com; tgiff1@fastermac.net; Tkim@rwglaw.com; tonya@mendlovitz.com; txs55@gte.net; t_shar@hotmail.com; varnifraser2@msn.com; vpobninsky@comcast.net; Wayne@lemieux-oneill.com; weldon.law@verizon.net; william.borders@piperrudnick.com; winelawyer@gmail.com; wwalter@tcsn.net
Subject: Sta. Clara Sup. Court Document Service: #req2198

The Superior Court of the County of Santa Clara Hon. Jack Komar, Department 17
191 N. First Street, San Jose, CA 95113

YOU MUST REPLY TO THIS EMAIL MESSAGE.
SEE INSTRUCTIONS BELOW.

Santa Maria Groundwater Litigation
Case No: CV770214

NOTICE OF AVAILABILITY OF DOCUMENTS

Document Type: Judgment
Document Title: "Judgment After Trial"
Author: Honorable Jack Komar
Parties:
Filing Date: 01/25/2008
Submit Date: 02/07/2008
[http://www.sccomplex.org/cases/noticelink.jsp?](http://www.sccomplex.org/cases/noticelink.jsp?FormCaseId=VAE2661C98F&FormDocId=ZE16528D17E8)
FormCaseId=VAE2661C98F&FormDocId=ZE16528D17E8

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VERIFY THAT YOU HAVE RECEIVED THIS NOTICE OF AVAILABILITY.

Press the "Reply" button on your email reader, and then press "Send". The reply message should just be a copy of the message itself. Please do NOT alter the subject of the message.

The Superior Court of Santa Clara County thanks you for your prompt attention.

Appendix 5: Wholesale Water Supply Agreement between NCSD and City of Santa Maria (May 2013)

Appendix 5

RESOLUTION NO. 2013-40

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA MARIA, CALIFORNIA, APPROVING A WHOLESALE WATER SUPPLY AGREEMENT WITH NIPOMO COMMUNITY SERVICES DISTRICT

WHEREAS, on September 7, 2004, the City Council entered into a Memorandum of Understanding with Nipomo Community Services District ("NCSD") to define the terms under which the City of Santa Maria ("City") and NCSD would negotiate for NCSD to purchase supplemental water from the City; and

WHEREAS, on June 30, 2005, a majority of the parties in the Santa Maria Groundwater Litigation, including the City and NCSD, entered into a Stipulated Agreement ("Stipulation"); and

WHEREAS, on June 25, 2008, the Superior Court of California (Santa Maria Groundwater Litigation Lead Case No. 1-97-CV-770214) entered into a judgment incorporating the Stipulation; and

WHEREAS, on January 5, 2010, the City Council adopted a statement of overriding consideration and made findings of consistency regarding the Final Environmental Impact Report on Resolution 2010-04; and

WHEREAS, on January 5, 2010, the City Council approved a Wholesale Water Supply Agreement ("Agreement") for the sale and delivery of supplemental water by the City to NCSD on Resolution 2010-04; and

WHEREAS, on May 9, 2012, the NCSD failed to achieve votes necessary to form an Assessment District to acquire approximately \$30 million in funding to construct infrastructure to deliver the quantities of water specified in the initial Agreement; and

WHEREAS, the NCSD desires to construct an interim project to deliver quantities of water greatly reduced from the original project, thereby reducing delivery capacity; and

WHEREAS, the City and NCSD wish to revise the initial Agreement, notably to modify the Minimum Takedown Schedule (i.e. Quantity) to reflect the reduced delivery capacity, and to modify renegotiation language; and

WHEREAS, the proposed revision to the initial Agreement was approved by the NCSD Board of Directors at their regular meeting on Wednesday, April 24, 2013; and

WHEREAS, all other terms in the Agreement approved on Resolution 2010-04 remain the same.

NOW, THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Santa Maria as follows:

- 1.) Authorize and direct the Director of Utilities to enter into a new Wholesale Water Supply Agreement with Nipomo Community Services District, hereto attached as Exhibit "A" and made a part of this resolution; and
- 2.) Authorize and direct the Director of Utilities, or his designee, to enter into extensions and modifications to the Agreement, consistent with the terms of the Agreement, in order to carry out the project.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Santa Maria, California, held this 7th day of May 2013.

/s/ ALICE M. PATINO

Mayor

ATTEST:

/s/ RHONDA M. GARIETZ, CMC

Chief Deputy City Clerk

APPROVED AS TO FORM



Sr. Ass. City Attorney

APPROVED AS TO CONTENT



City Manager



Department Head

WHOLESALE WATER SUPPLY AGREEMENT

This Wholesale Water Supply Agreement ("Agreement") is made and entered into as of May 7, 2013, by and between the **CITY OF SANTA MARIA ("City")**, a California municipal corporation and charter City, and **NIPOMO COMMUNITY SERVICES DISTRICT ("NCSD")**, an independent special district formed under and pursuant to Section 61000, *et seq.* of the California Government Code. City and NCSD are sometimes individually referred to herein as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, the City provides retail potable water service to customers within its service area in the Santa Maria Valley, in northern Santa Barbara County. The City holds a contract with the Central Coast Water Authority to receive water from the State Water Project ("SWP"). City also holds rights to recharge from Twitchell Reservoir and rights to pump groundwater from the Santa Maria Groundwater Basin ("Santa Maria Basin"); and

WHEREAS, NCSD provides retail potable water service and sewer service within its established boundaries located in and around the Nipomo Mesa Management Area ("NMMA") of the Santa Maria Basin; and

WHEREAS, both the City and the NCSD are Parties to a certain groundwater adjudication lawsuit commonly referred to as the Santa Maria Groundwater Litigation (Santa Maria Valley Water Conservation District vs. City of Santa Maria, et al.; Superior Court of California, County of Santa Clara Case no. 1-97-CV-770214) (referred to herein as "Basin Litigation"). On August 3, 2005, the Court approved a Settlement Stipulation (referred to herein as "Stipulation") that was signed by the Parties, related to the Basin Litigation which, among other things, provides that "the NCSD and City shall employ their best efforts to timely implement the Nipomo Supplemental Water Project, subject to their quasi-judicial obligations specified for administrative action and in the California Environmental Quality Act." The Stipulation was later incorporated into the final Judgment; and

WHEREAS, on a long term basis, City has water available for use in the NMMA that is surplus to that needed to serve City's current and long-term future anticipated demands; and

WHEREAS, pursuant to the Stipulation, NCSD seeks to acquire a Supplemental Water supply (referred to herein as "Supplemental Water") to alleviate pressure on the NMMA from groundwater pumping and to meet current needs and projected demands of NCSD customers; and

WHEREAS, consistent with the Stipulation and Judgment, and subject to the terms and conditions of this Agreement, City is willing to sell and deliver to NCSD an established quantity of Supplemental Water on a wholesale basis.

NOW THEREFORE, in consideration of the foregoing recitals and the promises and covenants contained herein, the Parties agree as follows:

1. **Purpose.** Consistent with the Stipulation and Judgment, the purpose of this Agreement is to formalize the terms and conditions by which City will provide Supplemental Water to NCSD, including an equivalent amount of capacity in City's water distribution system, for delivery to the NCSD water distribution system through the interconnection described in Paragraph 9, beginning on the Effective Date and continuing each year thereafter for as long as this Agreement remains in effect.

2. **Termination of MOU and Original Wholesale Water Supply Agreement.** City and NCSD executed a Memorandum of Understanding ("MOU") on September 7, 2004, to provide for the reservation of a Supplemental Water supply of up to three thousand (3,000) acre-feet per year ("AFY") in anticipation of the negotiation of the original Wholesale Water Supply Agreement ("Original Agreement"), executed on January 5, 2010. This Agreement shall supersede the terms of the MOU and Original Agreement, which shall terminate and be of no further force or effect. The initial reservation payment of \$37,500 made upon execution of the MOU has already been credited by City to the first quarterly invoice for water delivery pursuant to Paragraph 8.

3. **Term of Agreement.**

(a) **Contract Term.** The term of the Agreement shall commence on the Effective Date and end on June 30, 2085 ("Term"). Notwithstanding the Term, the delivery of Supplemental Water pursuant to this Agreement during any period on or after June 30, 2035, shall be subject to the renewal of the contract between the City and Central Coast Water Authority for SWP water. Furthermore, the terms of this Agreement shall be subject to renegotiation as described below in the event that the SWP contract or any subsequent SWP contract is not renewed or is renegotiated by the City and Central Coast Water Authority prior to June 30, 2035, and the terms of such renegotiation or renewal either (i) substantially impair the ability of City to continue to provide Supplemental Water in the quantities set forth in this Agreement; or (ii) the cost of continuing to provide Supplemental Water pursuant to the terms of this Agreement would create a significant financial burden on the City. In no event shall the City be required to deliver Supplemental Water at a financial loss following June 30, 2035, or in the event of a change in price due to a renegotiation occurring prior to June 30, 2035, as described in the foregoing sentence. Upon the occurrence of one of the foregoing events and within thirty (30) days of a written request from City to NCSD requesting renegotiation, the Parties shall negotiate in good faith and use their best efforts to equitably amend the terms of this Agreement to allow for the continued delivery of Supplemental Water on terms that are mutually beneficial to the Parties for the duration of the Term. The parties will meet in good faith in 2085 to determine whether to extend the term of the Agreement.

(b) **Dispute Resolution.** In the event of a dispute as to whether clause (i) and/or (ii) of Paragraph 3(a) have been triggered as a result of the renegotiation or non-renewal of the SWP contract, then such dispute shall be referred to the dispute resolution procedures referenced in Paragraph 19 of this Agreement. If a final finding is made as a result of such dispute resolution procedure that clause (i) and /or clause (ii) have been triggered, then the Parties shall negotiate in good faith pursuant to Paragraph 3(a). If the Parties cannot agree on the terms and conditions for equitably amending the terms of this

Agreement to address a substantial impairment pursuant to clause (i) of Paragraph 3(a), then whether or not there is a feasible solution to address such substantial impairment may also be referred to the dispute resolution procedures referenced in Paragraph 19 of this Agreement. Notwithstanding the foregoing, the allocation of cost and/or any revision in the price of Supplemental Water to implement a solution or address the existence of an impairment or significant financial burden as set forth in Paragraph 3(a) shall be solely determined by the Parties on mutually acceptable terms and the dispute resolution procedure shall have no authority to order or impose any change with respect to such terms.

(c) **Effective Date.** The "Effective Date" shall mean the date that the NCSD interconnection described in Paragraph 9 has been completed and approved by City's technical staff as operationally ready for commencement of delivery of Supplemental Water.

(d) **Delivery Year.** Each "Delivery Year" shall commence on the Effective Date and any anniversary thereof during the Term and continue for a period of one (1) year.

4. Quantity of Supplemental Water.

(a) **Minimum Delivery.** In each Delivery Year during the Term of this Agreement, City shall deliver and NCSD shall purchase the following minimum quantity of Supplemental Water ("Minimum Quantity"):

<u>Delivery Years</u>	<u>Minimum Delivery Volume (AFY)</u>
1	645
2-5	800
6-10	1,000
11-Term	2,500

Any portion of the Minimum Quantity of Supplemental Water that is available for delivery by City in accordance with the mutually agreeable to delivery schedule referenced in Paragraph 9(e) and that is not taken by NCSD during a given Delivery Year shall be forfeit and shall not roll over to the next year. In the event that City, in its sole and absolute discretion, agrees to deliver unused Supplemental Water in a subsequent Delivery Year, such late delivery shall be an accommodation to NCSD and shall not constitute a waiver or amendment to the terms of this Agreement.

(b) **Additional Delivery.** NCSD may request delivery of Supplemental Water in excess of the Minimum Quantity up to an additional thirty-two hundred (3,200) acre feet per year. NCSD shall give City no less than thirty (30) days written notice of its desire to purchase additional Supplemental Water and the proposed schedule for such delivery. City shall make a good faith effort to comply with such request subject to (i) the availability of excess Supplemental Water from sources used for delivery of water to City's retail customers; and (ii) sufficient delivery capacity to fulfill such request at the NCSD interconnection using the City's existing water distribution system. Any such additional Supplemental Water shall be purchased and delivered on the same terms as the Minimum Quantity, provided, however, that if the cost of procuring and delivering

additional Supplemental Water exceeds the cost of delivering the Minimum Quantity, City shall have the right to impose a surcharge to compensate City for such additional cost as a condition to delivery. City shall notify NCSD of the amount of any such surcharge prior to delivery of any additional Supplemental Water and NCSD shall have the right to withdraw its request. In no event shall City be required to undertake any capital cost or expansion of its existing infrastructure to provide additional Supplemental Water.

5. Reservation of Minimum Quantity. Subject to the terms and conditions of this Agreement, City shall hold on reserve sufficient Supplemental Water each year, including an equivalent amount of capacity in City's water distribution system, for City to fulfill its obligation to deliver the Minimum Quantity to NCSD under this Agreement. City shall deliver such Supplemental Water to NCSD from sources used to provide water to City's retail customers. Notwithstanding the foregoing, during the term of the Agreement, City may substitute or combine new or additional replacement sources of water for the source of Supplemental Water, provided, however, that any substitute, combined or additional sources must be equivalent in deliverability, reliability, quality, pressure, and environmental impacts to the source being replaced. Disputes regarding this Paragraph shall be resolved pursuant to Paragraph 19.

6. Purchase Price for Supplemental Water. The purchase price for Supplemental Water delivered by City to NCSD shall be based on the "Base Rate" of the City's Water Consumption Rates. For fiscal year 2012-13, the Base Rate is two dollars and ninety seven cents (\$2.97) per one hundred (100) cubic feet of water (or \$1,293.73 per acre-foot of water). The Base Rate may be adjusted each fiscal year subject to approval by the City Council, consistent with applicable legal requirements. Any such adjustment in the purchase price shall go into effect in the next quarterly billing period.

7. Costs of Delivery. Except as expressly set forth in this Agreement, City shall be responsible for all costs and expenses related to providing Supplemental Water to NCSD at the NCSD interconnection pursuant to this Agreement. Notwithstanding the foregoing, the purchase price for Supplemental Water includes a cost component for energy costs incurred by City to supply Supplemental Water to the NCSD interconnection equal to two hundred and six dollars and eighty five cents (\$206.85) per acre foot ("Base Energy Cost"). In the event that the actual cost of energy incurred by City to supply Supplemental Water in any Delivery Year exceeds the Base Energy Cost, then City shall have the right to charge NCSD a premium equal to the difference between the actual cost and the Base Energy Cost. The Base Energy Cost shall be adjusted each Delivery Year by a percentage which is equivalent to fifty (50) percent of the increase or decrease, if any, in the Consumer Price Index-Energy Services (Electricity and Natural Gas)-Los Angeles-Riverside-Orange County or any successor index.

8. Payments for Supplemental Water. City shall bill NCSD on a quarterly basis in arrears for Supplemental Water delivered to NCSD's interconnection during the previous three (3) months. The amount payable by NCSD to City shall be based on the total quantity in acre-feet of Supplemental Water delivered during the quarter just ended multiplied by the then-current purchase price (as determined in Paragraph 6), plus any costs payable by NCSD pursuant to this Agreement. Notwithstanding the foregoing, to the extent that NCSD has taken less than the Minimum Quantity as of the final quarterly billing

for a Delivery Year, City shall bill NCSD for the remainder of the Minimum Quantity whether or not such Supplemental Water has been delivered, provided that such water was made available for delivery to NCSD as provided in Paragraph 9. All invoices billed to NCSD shall be payable within thirty (30) days of the invoice date, provided that no charges are disputed. City shall have the right to charge late fees of up to five (5) percent of the overdue amount for any invoice that is not paid within such period. In the event NCSD disputes any charges on an invoice, the undisputed amount shall be paid consistent with this Paragraph and the original invoice shall be returned to City for correction and resubmission. If the parties are unable to reach an agreement regarding disputed charges, disputes shall be resolved pursuant to Paragraph 19.

9. Delivery of Water.

(a) **Point of Delivery.** The physical point of delivery of Supplemental Water pursuant to this Agreement shall be the proposed interconnection between the City water distribution system and the NCSD water distribution system located at Taylor Street and Blosser Road or such other alternative location as may be approved by City and NCSD. All facilities constructed by NCSD will be used solely for the purpose of delivering Supplemental Water to NCSD. NCSD shall cooperate with the reasonable requests of City with respect to taking any action necessary to preserve the integrity of the City's water distribution system and the City shall do likewise for NCSD. The operation and maintenance of the NSCD Interconnection will be detailed in an Operation Memorandum of Understanding that will be approved by the City and NCSD prior to connection. City shall waive any fees for City permits related to construction of facilities for delivery of the water. If the parties cannot agree on the terms of the Operations Memorandum of Understanding then the disputed terms will be subject to the dispute resolution procedures referenced in Paragraph 19 of this Agreement.

(b) **Facilities.** NCSD shall be responsible for designing, constructing and operating the NCSD interconnect. The plans and specifications of the NCSD interconnect shall be subject to prior approval by City, which approval shall not unreasonably be withheld provided that such plans and specifications conform to applicable code provisions and any technical requirements imposed for connections to the City's water distribution system. NCSD shall also be responsible for obtaining any and all regulatory and environmental permits, licenses or other approvals necessary to construct and operate the NCSD interconnection. NCSD and/or any contractor working on the NCSD interconnect shall provide insurance coverage naming the City as an additional insured and the scope of such insurance coverage shall be subject to the reasonable approval of City's Risk Manager prior to commencement of any work.

(c) **Construction, Regulatory/Permit and Other Costs.** NCSD shall be solely responsible for all costs related to the construction and operation of the NCSD interconnection with City's retail water distribution system. NCSD shall also be solely responsible for all regulatory and/or permit compliance and costs with respect to the NCSD interconnection.

(d) **City Streets: License to Use Easements and Rights of Way.** The City shall provide NCSD a license, at no additional cost, to use such portions of City streets,

easements, and right of ways as are reasonably necessary to build the NCSD interconnect and deliver the Supplemental Water to NCSD. Such license shall be non-revocable during the Term of this Agreement and shall automatically terminate upon the termination of this Agreement. The foregoing licenses shall not include the right of NCSD to make any alteration or improvement within such City streets, easements and rights of way except in compliance with Paragraph 9.

(e) **Delivery Schedule.** City will deliver the Supplemental Water to NCSD at the NCSD interconnection upon a mutually agreeable delivery schedule. The volume of delivery to the NCSD interconnection shall not exceed a maximum of two hundred seventy-five (275) acre-feet per month or a peak hour flow averaging twenty-five hundred (2,500) gallons per minute. Delivery pressure at the point of connection shall exceed sixty (60) psi during City's normal system operation, not including emergencies or incidents described in Paragraph 9(f). Before delivery begins, the District and City shall agree to an Operation Memorandum of Understanding (OMOU) to describe the specific procedures and limitation on the operations provided for in this Agreement.

(f) **Force Majeure.** If by reason of acts of God, earthquakes, droughts, floods, storms, explosion, fires, labor troubles, strikes, insurrection, riots, acts of the public enemy, or federal, or state, order, rule, or regulation, the City is prevented, in whole or in part, from the delivery of the Supplemental Water to NCSD, as provided herein, then City may reduce delivery of Supplemental Water up to the same percentage the City reduces water delivery to its retail customers.

(g) **Suspension.** The delivery of water may be suspended or curtailed during any period of public emergency or disaster that is declared by City. For the purposes of this Agreement, a public emergency or disaster shall not include ordinary measures taken during periods of drought or water shortage.

(h) **Obligations of City.** For the purposes of this Agreement and subject the limitations contained in this Paragraph 9, City shall have fulfilled its obligation to make Supplemental Water available for delivery so long as the amount of Supplemental Water purchased by NCSD is available at the NCSD interconnection for NCSD to take delivery of pursuant to a predetermined and mutually agreed upon delivery schedule.

10. **Water Quality.** City shall be responsible for ensuring that the quality of the Supplemental Water made available for delivery is of the same pressure and quality of water that City delivers to its residential customers. The quality of water which is delivered by the City to its residents complies with federal, state and local laws, regulations and permit requirements which are applicable to City, including standards applicable to wastewater discharge, as amended from time to time and subject to any compliance waiver granted to the City ("Quality Standards"). City shall provide NCSD with a copy of the Quality Standards (and any change thereto) which are applicable to City and NCSD shall be solely responsible for ensuring that the Quality Standards meet the federal, state and local laws, regulations and permit requirements for potable water delivery by NCSD to its customers, including the discharge of such water. To the extent that the quality standards which are applicable to NCSD exceed the Quality Standards, then NCSD shall be responsible for any necessary additional treatment of the Supplemental Water. City

agrees to indemnify and hold NCSD harmless from any actual liability which arises as a result of the failure of Supplemental Water which is delivered to the NCSD interconnection to meet the Quality Standards. NCSD shall be solely responsible for any actual liability resulting from a change in water quality following the point of delivery (including any additional treatment undertaken by NCSD) and shall indemnify and hold City harmless from any actual liability which arises from any such change. City and NCSD shall promptly notify the other in the event that either becomes aware of a material adverse change in the quality of the Supplemental Water and shall cooperate to identify the cause of such change.

11. **Remarketing of Supplemental Water.** NCSD shall be free to remarket the Supplemental Water to other Parties within the NMMA without restriction to price and terms. NCSD assumes all responsibility for delivery of Supplemental Water from the NCSD interconnection to its customers and contracting Parties. City's obligations under this Agreement are solely with NCSD and no customer of NCSD nor other third party shall have the right to enforce the terms of this Agreement as a third party beneficiary. City shall not sell water to other parties or persons within NCSD's service area or sphere of influence, as amended from time to time, without first receiving the written approval of NCSD.

12. **Regulatory Requirements.**

(a) **Obligations of the City.** The implementation of this Agreement shall be subject to satisfaction by City of the regulatory requirements set forth herein. City shall, if necessary, undertake the following: (i) Obtain all permits, consents, entitlements and approvals necessary to enable the City to reserve and sell, and NCSD to purchase, the Supplemental Water that is the subject of this Agreement; and (ii) fully and completely comply with the requirements of the California Environmental Quality Act ("CEQA"), including, if it is determined that this transaction is subject to CEQA and not exempt from CEQA. The completion of an initial study, and (1) either (a) there shall have been adopted a negative declaration or a mitigated negative declaration, or (b) a final environmental impact report shall have been completed and certified, and (2) the time shall have expired within which a judicial proceeding may be instituted challenging the validity or completeness of any such determination of exemption, or adoption of a negative declaration or of a mitigated negative declaration, or approval of a final environmental impact report.

(b) **Obligations of NCSD.** NCSD shall be solely responsible for obtaining all regulatory approvals necessary in connection with purchasing and taking delivery of the Supplemental Water.

13. **Service Area Integrity.** Nothing in this Agreement is intended nor shall it be interpreted to waive the right of City to provide water service to current or future areas within or adjacent to its existing service area.

14. **Representations or Warranties of City.** City makes the following representations, warranties, and covenants to NCSD:

(a) **Power and Authority to Execute and Perform this Agreement.** The City has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

(b) **Availability of Resource.** Based on information which is currently known to City and City's current forecast of future use, on a long-term basis, City has water and the necessary infrastructure available to fulfill City's obligations under this Agreement that is surplus to that needed to serve City's current and long-term future anticipated demand.

(c) **Enforceability.** This Agreement constitutes a legal, valid, and binding obligation of the City, and is enforceable against the City in accordance with its terms.

15. **Representations or Warranties of NCSD.** NCSD makes the following representations, warranties, and covenants to City:

(a) **Power and Authority to Execute and Perform this Agreement.** NCSD has the power and authority to enter into this Agreement and to perform its obligations and all necessary approvals and authorizations have been obtained.

(b) **Enforceability.** This Agreement constitutes a legal, valid, and binding obligation of NCSD, enforceable against NCSD in accordance with its terms.

16. **Default and Termination by City.** In the event NCSD fails to make any payment to City under this Agreement when due, or fails to perform any obligation otherwise required by this Agreement, City shall demand in writing that NCSD cure such non-performance. NCSD shall have thirty (30) days after receipt of such demand to cure. In the event NCSD fails to cure a default within the thirty (30) day period, City may suspend delivery of Supplemental Water and redirect such water to other uses for the duration of the suspension. City shall restore water delivery when NCSD has cured all outstanding defaults and paid all amounts due to the City in full. In the event that NCSD does not cure a default within one (1) year of suspension, then City may terminate this Agreement at any time thereafter.

17. **Default and Termination by NCSD.** NCSD shall have the right to terminate this Agreement, without recourse, if (i) the City is found to be in material breach of its obligations to deliver the Supplemental Water as set forth in this agreement; or (ii) upon written notice to City that NCSD is unable to pay for the Supplemental Water due to the majority protest procedures or other procedures referenced in Proposition 218; or (iii) upon three (3) years prior written notice to City, provided, however, that no such termination without cause shall become effective until the thirtieth (30th) anniversary of the Effective Date.

18. **Expiration of Term.** This Agreement shall terminate and be of no further force and effect as of the expiration of the Term.

19. **Dispute Resolution.** Except as otherwise limited by this Agreement, any dispute arising under this Agreement, including, without limitation, all disputes relating in any manner to the performance or enforcement of this Agreement, shall be resolved by

binding arbitration in the County of Santa Barbara, California, pursuant to the comprehensive arbitration rules and procedures of Judicial Arbitration and Mediation Services ("JAMS") or any successor thereto, as amended or as augmented in this Agreement (the "Rules"). Arbitration shall be initiated as provided by the Rules, although the written notice to the other party initiating arbitration shall also include a description of the claim(s) asserted and the facts upon which the claim(s) are based. Arbitration shall be final and binding upon the parties and shall be the exclusive remedy for all claims subject hereto, including any award of attorney's fees and costs. Either party may bring an action in court to compel arbitration under this Agreement and to enforce an arbitration award. All disputes shall be decided by a single arbitrator. The arbitrator shall be selected by mutual agreement of the parties within thirty (30) days of the effective date of the notice initiating the arbitration. If the parties cannot agree on an arbitrator, then the complaining party shall notify JAMS and request selection of an arbitrator in accordance with the Rules. The arbitrator shall have only such authority to award equitable relief, damages, costs, and fees as a court would have for the particular claim(s) asserted. In no event shall the arbitrator award punitive damages of any kind. The parties acknowledge that one of the purposes of utilizing arbitration is to avoid lengthy and expensive discovery and allow for prompt resolution of the dispute. The arbitrator shall have the power to limit or deny a request for documents or a deposition if the arbitrator determines that the request exceeds those matters which are directly relevant to the claims in controversy. The parties may make a motion for protective order or motion to compel before the arbitrator with regard to the discovery, as provided in the Code of Civil Procedure. Notwithstanding the election by the parties to arbitrate their disputes, nothing contained herein shall prevent a party from filing an action in a court of competent jurisdiction to seek any form of equitable remedy or relief.

20. **Indemnity.** NCSD, its successors and assigns, shall hold harmless, defend and indemnify City, its officials, employees, agents, successors and assigns (all of which are herein referred to as the "City Indemnified Parties") from and against all liabilities, obligations, claims, damages, losses, actions, judgments, suits, costs and expenses, including but not limited to reasonable attorneys' fees (collectively, "Damages"), which may be imposed on, incurred by, or asserted against City Indemnified Parties as a result of (i) a breach of NCSD's obligations; or (ii) the conduct of NCSD's operations associated with the NCSD interconnection to City's retail distribution system and the subsequent delivery of Supplemental Water to NCSD's customers. Notwithstanding the foregoing, in no event shall NCSD be liable to indemnify a City Indemnified Party for (i) any Damages resulting from the negligence or willful misconduct of City; (ii) any third party claim brought in connection with regulatory approvals; or (iii) any claim brought in connection with the quality of the Supplemental Water as provided in Paragraph 10 above. This indemnification shall survive termination of the Agreement.

21. **Third Party Claims.** Promptly following notice of any "Third Party Claim" for which City is indemnified hereunder, City shall notify NCSD of such claim in writing. NCSD shall have a period of thirty (30) days following the receipt of such notice to notify City of whether NCSD elects to assume the defense thereof. If NCSD so notifies City that it elects to assume the defense, NCSD thereafter shall undertake and diligently pursue the defense of the Third Party Claim. NCSD shall not consent to entry of a judgment or enter into any settlement agreement, without the consent of City, which does not include a

complete and unconditional release of City or which imposes injunctive or other equitable relief against City. City shall be entitled to participate in, but not control, the defense thereof, with counsel of its choice and at its own expense. If NCSD does not give the requisite notice, or fails to assume and diligently pursue the defense of such Third Party Claim, City may defend against such Third Party Claim in such manner as it may deem appropriate, at NCSD's expense, including without limitation settlement thereof on such terms as City may deem appropriate, and to pursue such remedies as may be available to City against NCSD. Notwithstanding the foregoing, City shall not consent to entry of a judgment or enter into any settlement agreement, without the consent of NCSD, which does not include a complete and unconditional release of NCSD.

22. **Notice of Claims.** The Parties shall promptly notify each other within ten (10) days of City or NCSD becoming aware of: (1) any claims or suits brought against City or NCSD which involve this Agreement or water supplied to NCSD pursuant to this Agreement, (2) any Third Party Claims, and (3) any force majeure event. Any such notice shall conform to the requirements specified in Paragraph 28 of this Agreement.

23. **Remedies Not Exclusive.** Remedies provided in this Agreement for enforcement of its terms are intended and shall be construed as cumulative rather than exclusive and shall not be deemed to deprive either Party from also using any other remedies provided by this Agreement or by law.

24. **No Transfer of Rights.** The rights granted to NCSD hereunder constitute the right to take delivery of Supplemental Water only and shall not be interpreted as a sale, transfer, or assignment of any of City's water rights.

25. **Subject to Applicable Law.** The Parties acknowledge and agree that this Agreement and the rights and obligations of the Parties shall be subject to the laws governing municipal corporations and special districts as they now exist and as they may be amended or codified by the Legislature of the State of California.

26. **Entire Agreement.** This Agreement contains the entire understanding between NCSD and City with respect to its subject matter, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between NCSD and City. This Agreement cannot be amended except in writing signed by both Parties.

27. **No Waiver.** Any failure or delay on the part of either Party to exercise any right under this Agreement shall not constitute a waiver of the right, and shall not preclude such Party from exercising or enforcing the right, or any other provision of this Agreement, on any subsequent occasion.

28. **Notices.** All notices or other communications required or desired to be given pursuant to this Agreement shall be in writing and shall be hand-delivered or sent by a reputable overnight courier service providing delivery confirmation. Each such notice or communication shall be deemed to be duly given when hand-delivered or one (1) day after being deposited for next day delivery with an overnight courier. Each such notice or communication shall be addressed to the Parties at their respective addresses set forth

next to their signatures below, or such other address as a Party notifies the other in writing.

29. **Headings; Paragraph References.** Captions and headings appearing in this Agreement are inserted solely as reference aids for the ease and convenience; they shall not be deemed to define or limit the scope or substance of the provisions they introduce, nor shall they be used in construing the intent or effect of such provisions.

30. **Separability.** If any provision of this Agreement is finally determined by a court to be invalid or unenforceable as written, the provision shall, if possible, be enforced to the extent reasonable under the circumstances and otherwise shall be deemed deleted from this Agreement. The other provisions of this Agreement shall remain in full force and effect so long as the material purposes of the Agreement and understandings of the Parties are not impaired.

31. **Binding Effect Assignment.** This Agreement shall be binding on and inure to the benefit of the Parties, and their respective successors and permitted assigns. NCSD shall have the right to assign its rights under this Agreement with the written consent of City, provided, however, that the City shall not unreasonably withhold such consent and further provided that the assignee agrees to be bound by all of the obligations of NCSD set forth herein. Notwithstanding the foregoing, no assignment permitted hereunder shall permit the delivery of Supplemental Water to any property or development other than the Property without the written consent of the City, in its sole and absolute discretion.

32. **Opinions and Determinations: Good Faith.** Where the terms of this Agreement provide for action to be based upon opinion, judgment, approval, review or determination of either party hereto, such terms are not intended to and shall never be construed to permit such opinion, judgment, approval, review or determination to be arbitrary, capricious or unreasonable. The City and the NCSD shall each act in good faith in performing their respective obligations as set forth in this Agreement.

33. **Incorporation of Recitals.** Recitals A through F are incorporated herein by reference as though set forth at length.

34. **Attorneys Fees.** In the event that any legal proceeding other than the dispute resolution procedures referenced in Paragraph 19, above, is brought to enforce one or more of the terms of this Agreement, to restrain an alleged violation of this Agreement, or to determine the validity of this Agreement or any part, the prevailing Party in any such action or proceeding shall be entitled to recover from the other its reasonable costs and attorneys' fees, in addition to any other remedies available to it in law or equity. If both Parties are successful in one or more causes of action during any such proceeding, the costs and fees shall be apportioned as determined by the court.


35. **Governing Law and Venue.** This Agreement is a contract governed in accordance with the laws of the State of California. THE PARTIES HEREBY AGREE THAT VENUE FOR ANY ACTION BROUGHT TO ENFORCE THE TERMS OF THIS AGREEMENT SHALL BE IN A COURT OF COMPETENT JURISDICTION IN THE

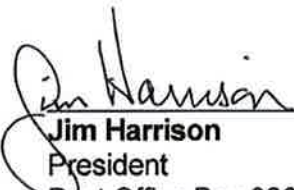
COUNTY OF SANTA BARBARA OTHER THAN A COURT LOCATED WITHIN THE CITY OF SANTA MARIA OR THE NORTHERN PORTION OF SANTA BARBARA COUNTY, CALIFORNIA, AND CONSENT TO THE JURISDICTION THEREOF.

IN WITNESS WHEREOF, the Parties have executed this agreement as of the date first written above.

CITY:
City of Santa Maria, a California
municipal corporation and charter city


NCS D:
Nipomo Community Services District,
a California public agency


By: 
Name: Richard G. Sweet, P.E.
Title: Director of Utilities
Address: 2065 East Main Street
Santa Maria, CA 93454
Fax: (805) 928-7240
Phone: (805) 925-0951 ext. 7211

By: 
Name: Jim Harrison
Title: President
Address: Post Office Box 326
Nipomo, CA 93444
Fax: (805) 929-1932
Phone: (805) 929-1133

APPROVED AS TO FORM:
Best, Best & Krieger LLP

APPROVED AS TO FORM:
District Counsel

By: 
Jill Willis, Partner

By: 
Michael W. Seitz, District Counsel

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA) ss.
CITY OF SANTA MARIA)

I, RHONDA M. GARIETZ, CMC, Chief Deputy City Clerk of the City of Santa Maria and ex officio Clerk of the City Council DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 2013-40 which was duly and regularly introduced and adopted by said City Council at a regular meeting held May 7, 2013, and carried on the following vote:

AYES: Councilmembers Boysen, Green, Orach, Zuniga,
 and Mayor Patino.

NOES: None.

ABSENT: None.

ABSTAIN: None.



Chief Deputy City Clerk
of the City of Santa Maria and
ex officio Clerk of the City Council



CITY OF SANTA MARIA
OFFICE OF THE CITY MANAGER
Records/City Clerk, Ext. 306

110 EAST COOK STREET, ROOM #3 • SANTA MARIA, CA 93454-5190 • 805-925-0951 • FAX 805-925-2243 • www.ci.santa-maria.ca.us

May 10, 2013

RECEIVED
MAY 13 2013
NIPOMO COMMUNITY
SERVICES DISTRICT

Jim Harrison
Nipomo Community Services District
P.O. Box 326
Nipomo, CA 93444

RE: WHOLESALE WATER SUPPLY AGREEMENT WITH NIPOMO COMMUNITY SERVICES DISTRICT (NCSD)

Dear Mr. Harrison:

At its regular meeting held on Tuesday, May 7, 2013, the City Council of the City of Santa Maria entered into an Agreement with Nipomo Community Services District ("NCSD") an independent special district formed under and pursuant to Section 61000, et seq. of the California Government Code. Enclosed are two execution originals of the Agreement.

Please sign the Agreements where indicated. Once you have done so, please return one fully executed original to me in the enclosed self-addressed envelope. You should retain one fully executed original for your records.

A certified copy of the Resolution approving the agreement is also enclosed for your records. Should you have any questions regarding the Council's action, please do not hesitate to contact this office at 805-925-0951, Ext. 307 or the Utilities Department at Ext. 7211.

Sincerely,

A handwritten signature in black ink, appearing to read "Rhonda M. Garietz".

Rhonda M. Garietz, CMC
Chief Deputy City Clerk

Enclosure: Wholesale Water Supply Agreement x2
Resolution - Certified

pc: Utilities Department

Appendix 6: Supplemental Water Management and Groundwater Replenishment Agreement
(October 2015)

NIPOMO SUPPLEMENTAL WATER PROJECT
SUPPLEMENTAL WATER MANAGEMENT AND GROUNDWATER
REPLENISHMENT AGREEMENT

This Nipomo Supplemental Water Project Supplemental Water Management and Groundwater Replenishment Agreement ("Agreement") is made this 16th day of ~~September~~ ^{October}, 2015, between the Nipomo Community Services District, Rural Water Company, The Woodlands Mutual Water Company of San Luis Obispo County and Golden State Water Company with regards to the following facts:

I. RECITALS:

A. The Nipomo Community Services District ("NCSD") is a public entity, independent special district organized and operated pursuant to Govt. Code section 61000 et seq. NCSD provides water and related services within the NCSD boundary located in the southern portion of San Luis Obispo County, within an area generally referred to as the Nipomo Mesa.

B. Golden State Water Company ("GSWC") is a California corporation and a public utility water corporation as defined by Public Utilities Code §§ 216 and 241 providing water service to customers within the Nipomo Mesa subject to California Public Utilities Commission ("PUC") regulation.

C. Rural Water Company ("RWC") is a California corporation and a public utility water corporation as defined by Public Utilities Code §§ 216 and 241 providing water service to customers within the Nipomo Mesa subject to PUC regulation.

D. The Woodlands Mutual Water Company of San Luis Obispo County ("WMWC") is a California corporation and a mutual water company providing water service to its shareholder – customers within the Nipomo Mesa.

E. Collectively, GSWC, RWC and WMWC, are referred to as the "Water Companies" and individually as a "Water Company". NCSD, GSWC, RWC and WMWC are collectively referred to as the "Parties" and individually as a "Party".

F. The Parties, along with hundreds of other individuals and entities are parties to a certain legal proceedings entitled "*Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*", Superior Court of the State of California, County of Santa Clara, Consolidated Cases CV770214 ("Santa Maria Litigation"), regarding the respective rights of the litigants to groundwater resources in the Santa Maria Groundwater Basin ("Basin").

G. After lengthy proceedings, the court entered an amended judgment

Appendix 6

(“Judgment”) on April 17, 2014, which provides for the long-term management of the Basin water resources.

H. The court retained jurisdiction over the Judgment to ensure the parties manage the Basin water resources consistently with the Judgment.

I. Incorporated into and made a part of the Judgment is a Stipulation dated June 30, 2005 (“Stipulation”), which establishes a detailed management plan for three subareas within the Basin. The Nipomo Mesa is included in the subarea called the Nipomo Mesa Management Area (“NMMA”).

J. The Judgment (through the Stipulation) requires NCSD to purchase and transmit to the NMMA a minimum of 2,500 acre-feet of “Nipomo Supplemental Water” each year. NCSD is further required to employ its best efforts to timely implement the Nipomo Supplemental Water Project (NSWP).

K. The Judgment further provides that once the Nipomo Supplemental Water is capable of being delivered, the Parties shall purchase the following portions of the Nipomo Supplemental Water each year to offset groundwater pumping within the NMMA.

Entity	Percent Allocation	AFY (2,500 AF NSWP Yield)
NCSD	66.68	1667.00
GSWC	8.33	208.25
RWC	8.33	208.25
WMWC	16.66	416.50
Total	100.00	2500.00

L. NCSD has entered into a Wholesale Water Supply Agreement with the City of Santa Maria (City), dated May 7, 2013, (“NCSD-City Agreement,” attached and incorporated as Exhibit “A”). The NCSD-City Agreement provides a mechanism through which NCSD may purchase Nipomo Supplemental Water for sale and distribution in the NSWP, consistent with the obligations in the Judgment.

M. NCSD has completed construction of the first stage of the NSWP such that NCSD is taking delivery of Nipomo Supplemental Water as of July 1, 2015. The additional stages of the NSWP to allow increased water delivery of a minimum of 2,500 AFY, as required under the Judgment, are currently being planned.

N. On or about June 25, 2015, the PUC approved GSWC’s acquisition of RWC. Upon completion of GSWC’s acquisition of RWC, GSWC will assume the entirety of RWC’s benefits and obligations under this Agreement.

O. NCSD has designed the NSWP to deliver 3,000 AFY. All costs associated with

Appendix 6

the capacity in excess of 2,500 AFY are solely assigned to NCSD. Should the Parties, or any faction thereof, elect to expand NSWP facilities to deliver water in excess of 3,000 AFY, further negotiation and agreement among the participating Parties will be required.

P. The purpose of this Agreement is to implement the Parties' obligations with respect to the NSWP as provided in the Stipulation and the Judgment.

In consideration of the foregoing recitals that are incorporated herein by reference and the mutual terms and conditions set forth herein, the Parties agree as follows:

II. DEFINITIONS:

Terms used herein with initial capitalization, whether in singular or plural, shall have the following meanings:

A. "AFY" shall mean acre-feet per year.

B. "Costs" shall mean all the administrative, planning, design, permitting, capital, financing, construction, operation, maintenance, repair, replacement and overhead allocation costs associated with and arising out of the construction and ongoing operation of the NSWP, excluding costs of Points of Interconnection, which shall be funded as provided in Section VII. Costs shall include both actual expenses and reasonably anticipated NSWP related expenses expected to be incurred for the completion of the NSWP and for the ongoing operations of the NSWP. Costs include future financing of phases of the NSWP and future changes in water costs resulting from renegotiation of the NCSD-City Agreement.

C. "Effective Date" shall mean July 1, 2015.

D. "Fiscal Year" shall mean the twelve (12) month period commencing each July 1st during the term of this Agreement and ending the following June 30th.

E. "NSWP Enterprise Fund" shall mean the NSWP Enterprise Fund used by NCSD to account for, budget and track the Costs.

F. "Judgment" shall mean the amended judgment entered by the Court in that case entitled *Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*, Superior Court of the State of California, County of Santa Clara, consolidated cases CV770214.

G. "NCSD-City Agreement" shall mean the agreement between the City of Santa Maria and Nipomo Community Services District titled "Wholesale Water Supply Agreement," dated May 7, 2013.

Appendix 6

H. “Nipomo Mesa Management Area” or “NMMA” shall mean the area so defined and described in the Judgment.

I. “Nipomo Supplemental Water” shall mean up to 2,500 AFY of water delivered within the NMMA to offset groundwater pumping.

J. “Nipomo Supplemental Water Project” or “NSWP” shall mean the facilities and appurtenances, including each Point of Interconnection, necessary to deliver Nipomo Supplemental Water as provided in Section VI.(A) of the Stipulation.

K. “NMMA Technical Group” is the group formed pursuant to the requirements of the Stipulation and Judgment.

L. “Point of Interconnection” shall mean those components of the NSWP extending from NCSD’s water distribution system to each Water Company through which Nipomo Supplemental Water may be delivered to each Water Company.

M. “Prudent Utility Practice” shall mean the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts (including but not limited to the practices, methods, and acts engaged in or approved by a significant portion of the water utility industry prior thereto) known at the time the decision was made, would have been expected to accomplish the desired result at the lowest reasonable cost consistent with good business practices, reliability, safety, and expedition, taking into account the fact that Prudent Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be a spectrum of possible practices, methods, or acts which could have been expected to accomplish the desired result. Prudent Utility Practice includes due regard for manufacturers’ warranties and requirements of agencies of competent jurisdiction.

N. “PUC” shall mean the California Public Utilities Commission, the entity with regulatory oversight responsibility for RWC and GSWC.

O. “PUC Application” shall mean those materials and testimony required so that GSWC and RWC may obtain PUC approval adequate to satisfy the conditions subsequent set forth in Section V below.

P. “Stipulation” shall mean the agreement dated June 30, 2005, by and between the majority of the litigants in the Santa Maria Litigation, settling their disputes and imposing a physical solution on the management of water resources in the Santa Maria Basin. The Stipulation is incorporated in and is a part of the Judgment.

Q. “Uncontrollable Force” shall mean any cause or event which is beyond the control of the Party affected, including, but not restricted to, failure of or threat of failure of facilities, flood, earthquake, storm, fire, lightning, epidemic, war, riot, civil disturbance or disobedience, labor dispute or strike, labor or material shortage, sabotage, restraint by court order or public authority and action or non-action by or

Appendix 6

failure to obtain the necessary authorizations or approvals from any governmental agency or authority which by exercise of due diligence such party could not reasonably have been expected to avoid and which by exercise of due diligence it shall be unable to overcome.

III. PURPOSE:

A. The purpose of this Agreement is to enable the Parties to meet their respective obligations under the Judgment, based on the percentage allocations presented in Section I.K, regarding the NSWP. In particular, the Parties intend this Agreement to provide for: (1) payment to NCSD for each Party's allocation of Costs, and (2) distribution and use of Nipomo Supplemental Water.

B. The underlying premise of the NSWP is to use Nipomo Supplemental Water within the NMMA to offset 2,500 AFY of groundwater pumping in those areas within the NMMA where groundwater levels are most depressed and thus augment the replenishment of groundwater in those critical areas within the NMMA. As described herein, the Parties will use the Nipomo Supplemental Water to increase groundwater replenishment within the NMMA and improve the long-term reliability and integrity of groundwater availability within the NMMA. The Nipomo Supplemental Water delivered to the Parties pursuant to this Agreement shall be used exclusively for the benefit of properties within the existing jurisdictions and service areas of the Parties and in accordance with the Judgment and Stipulation.

IV. EFFECTIVE DATE AND TERM:

A. This Agreement shall be effective on July 1, 2015 and shall terminate on June 30, 2085 ("Term").

B. Notwithstanding the Term, the delivery of Nipomo Supplemental Water to the Parties subsequent to June 30, 2035, is subject to the renewal of the contract for state water between the City and the Central Coast Water Authority. The NCSD-City Agreement provides that it is subject to renegotiation in the event that the City's contract with the Central Coast Water Authority is not renewed as of June 30, 2035 or if the renewal terms would create a significant financial burden to the City or impair the ability of the City to provide Nipomo Supplemental Water in the quantities set forth in the NCSD-City Agreement.

C. Should renegotiation of the NCSD-City Agreement be required, NCSD and the City are required to negotiate and use their best efforts to equitably amend the terms of the NCSD-City Agreement to allow for the continued delivery of Nipomo Supplemental Water on terms mutually beneficial to both parties for the duration of the Term. NCSD will consult and confer with the Water Companies prior to entering into any material amendments to the NCSD-City Agreement.

Appendix 6

D. Obligations incurred hereunder but not satisfied prior to termination of this Agreement shall survive such termination until fully discharged, including any payments due by one Party to another Party hereunder.

V. CONDITIONS SUBSEQUENT:

This Agreement shall terminate and shall be of no further force and effect as to either or both GSWC and RWC, subject to the following conditions.

A. As promptly as is reasonably practicable and in no event later than October 30, 2015, GSWC shall apply for PUC approval for imposition of the necessary rate adjustments so that GSWC may meet its financial obligations provided under this Agreement. GSWC shall provide NCSD with written notice of the satisfaction or waiver of this provision. If GSWC fails to obtain this PUC approval, through a PUC decision or order that is no longer subject to appeal, on or before December 31, 2017, either NCSD or GSWC may, each in its sole discretion, declare a failure to satisfy this condition and terminate this agreement as to GSWC. If either NCSD or GSWC exercises this termination right, the provisions of Article X(D)(1) of the Stipulation shall apply.

B. As promptly as is reasonably practicable and in no event later than October 30, 2015, RWC shall apply to for PUC approval for imposition of the necessary rate adjustments so that RWC may meet its financial obligations provided under this Agreement. RWC shall provide NCSD with written notice of the satisfaction or waiver of this provision. If RWC fails to obtain this PUC approval, through a PUC decision or order that is no longer subject to appeal, on or before December 31, 2017, either NCSD or RWC may, each in its sole discretion, declare a failure to satisfy this condition and terminate this agreement as to RWC. If either NCSD or RWC exercises this termination right, the provisions of Article X(D)(1) of the Stipulation shall apply.

C. The Parties shall make every reasonable business effort to coordinate and cooperate in providing any necessary data, information and testimony to support the PUC approval processes contemplated in this Section.

D. GSWC and RWC shall each be responsible for its own PUC Application. However, each entity expects its PUC Application to be substantially the same in its content. Each PUC Application shall include a request for full financial participation in the NSWP as provided in this Agreement, as of the Effective Date. RWC and GSWC shall make their reasonable best efforts to obtain a prompt and reasonable response to the PUC Application from the PUC, including making every reasonable attempt to reach an acceptable settlement of the PUC Application in lieu of processing the PUC Application through a contested administrative hearing at the PUC. The Parties acknowledge that obtaining PUC approval of each PUC Application may take 12 months or more, following the date of submission of the PUC Application, and that neither GSWC nor RWC have control over the time it takes the PUC to process and

Appendix 6

resolve each PUC Application. Notwithstanding the Effective Date, neither GSWC's, nor RWC's financial obligations provided in this Agreement accrue and are enforceable as to either entity, unless and until the PUC provides GSWC and RWC approval to make the necessary customer water rate adjustments equal to each entity's respective share of the Costs provided in this Agreement as of the Effective Date and otherwise consistent with Section IX.B.

E. Until the conditions subsequent in this section are satisfied with written notice, or waived, neither NCSD, RWC, nor GSWC waive their rights to exercise the provisions of Article X(D)(1) of the Stipulation.

VI. USE OF NIPOMO SUPPLEMENTAL WATER.

NCSD shall be responsible for the distribution and use of the Nipomo Supplemental Water between and among the Parties subject to the following:

A. Subject to the groundwater management and recharge protocols provided in this Agreement, the presumed quantity and rate of delivery of Nipomo Supplemental Water for each Party shall be as provided in the table below, based upon an assumed delivery of 2,500 AFY. To the extent Nipomo Supplemental Water is not available for delivery at the volumes or rates shown, each Party's deliveries shall be reduced on a proportional basis. To the extent the implementation of groundwater management and recharge protocols provide for alternative deliveries, each Party shall be responsible for its portion of the Costs as otherwise provided in this Agreement.

Entity	Annual (AF)	Quarterly (AF)	Maximum per Month (AF)
NCSD	1668	417	139
GSWC	208	52	17
RWC	208	52	17
WMWC	416	104	35

B. The highest priority use of Nipomo Supplemental Water shall be to offset groundwater pumping within those regions within the NMMA where depressed groundwater levels exist.

C. Provided that such reduction does not materially and adversely affect its ability to provide water for the reasonable and beneficial use of its customers, for each AF of the 2,500 AFY Nipomo Supplemental Water used within the NMMA, the user shall reduce its groundwater pumping by the same amount. The Parties shall develop a method of confirming this reduction in groundwater use.

D. Over the term of this Agreement, the Advisory Committee (as defined in XII.A) shall periodically meet and confer with the NMMA Technical Group regarding the distribution of the Nipomo Supplemental Water between the Parties, given the priority

Appendix 6

specified in subsections VI.A and B, above. Based on the input from the Advisory Committee and the NMMA Technical Group, the status of Points of Interconnection as provided in the Section VII.A below and other relevant hydrologic conditions, NCSD shall determine the distribution of Nipomo Supplemental Water among the Parties. NCSD shall make its determination regarding the distribution of Nipomo Supplemental Water, following the consultation described in this subsection and based upon a reasonable, good faith interpretation of how best to manage the then existing hydrologic conditions within the NMMA, the availability of Nipomo Supplemental Water and the ability to rely on existing Points of Interconnection and establish a new Point of Interconnection with RWC, if one has not yet been established.

E. Pursuant to section VI(B)(3) of the Stipulation, provided WMWC is concurrently using or has made arrangements for other Parties to use within the NMMA the Nipomo Supplemental Water allocated to the WMWC under Section VI(A), above, WMWC shall not be subject to restriction in the reasonable and beneficial use of groundwater necessary for full development of its service area; provided however, nothing in this Agreement is intended to modify or amend the benefits and obligations provided in the Stipulation and the Judgment applicable to WMWC, or the court's retained jurisdiction pursuant to the Stipulation and the Judgment.

VII. POINTS OF INTERCONNECTION, CONTROL AND MEASUREMENT OF NIPOMO SUPPLEMENTAL WATER DELIVERIES.

A. Point(s) of Interconnection. As of the Effective Date, NCSD's water system is interconnected with GSWC and WMWC water systems. Each of these existing interconnections will require improvements, and possibly reconstruction, to be fully functional "Point(s) of Interconnection." No Point of Interconnection is in place between NCSD and RWC. If, pursuant to Section VI.D, the Parties determine each or all Points of Interconnection are necessary to make optimal use of Nipomo Supplemental Water, NCSD and each Water Company shall develop the most cost effective design and arrange for the construction of the Points of Interconnection as promptly as practical. The Cost of each Point of Interconnection, including the improvements required for existing Points of Interconnection with WMWC and GSWC, shall be incorporated into the NSWP Costs and NSWP Enterprise Fund as provided in this Agreement. The Parties acknowledge and agree that the Point of Interconnection with RWC, if and when established, will be included as a component of the NWSP. However, the Parties agree that allocation of Costs for the pipeline portion of the RWC Point of Interconnection may differ from the allocation set forth in Section I.K above, to be agreed upon by the Parties once those Costs are determined. The Costs for the RWC Point of Interconnection, excluding the Costs of the pipeline portion of the RWC Point of Interconnection, shall be shared consistent with the allocation set forth in Section I.K in a magnitude equivalent to that included in the Costs for the WMWC and GSWC Points of Interconnection.

B. Each Point of Interconnection shall include flow control and metering devices

Appendix 6

used to control and measure the delivery of Nipomo Supplemental Water at the Point of Interconnection. Each Point of Interconnection and the appurtenant facilities shall be considered part of the NSWP and shall be owned, operated and maintained by NCSD.

C. NCSD shall arrange for the inspection and testing of the metering devices at least once per calendar year, unless more frequent testing and inspection is appropriate as a result of repairs to or replacements of a metering device. NCSD shall provide reasonable advance notice to and coordinate with each Water Company to accomplish required testing or inspection activities.

D. The operation and maintenance of any Point of Interconnection will be detailed in an Operation Memorandum of Understanding that will be approved by the NCSD and other affected parties prior to connection. If the Parties cannot agree on the terms of the Operations Memorandum of Understanding then the disputed terms will be subject to the dispute resolution procedures referenced in XII of this Agreement.

VIII. NSWP ENTERPRISE FUND BUDGET:

A. NCSD shall operate the NSWP as an enterprise fund ("NSWP Enterprise Fund"), separating all Costs related to the NSWP within and only to that NSWP Enterprise Fund. Prudent Utility Practices shall apply to NCSD's management of the NSWP Enterprise Fund and the NSWP.

B. Each Fiscal Year NCSD shall prepare a NSWP Enterprise Fund Budget ("Budget") for all revenues and expenditures related to the NSWP Enterprise Fund. The Budget shall include a summary of projected Nipomo Supplemental Water deliveries and the Costs associated with those deliveries. A draft of the Budget shall be available to each Water Company for review by May 1st of each year. NCSD shall make every reasonable effort to adopt the final Budget during June of each year at a regularly scheduled NCSD board meeting. The Advisory Committee shall determine the most effective content, format and reporting frequency for financial and budget reports for the NSWP Enterprise Fund.

C. The Budget shall provide the basis for and detail the cost allocations and quarterly billings described in Section IX.

D. Unless the Parties agree otherwise, every five years, a third party expert accounting firm shall perform an overhead allocation analysis for NCSD, including the NSWP Enterprise Fund. The overhead allocation recommendations of that study shall be applied in the next annual budgeting cycle for the NSWP Enterprise Fund. The cost of this study shall be included in the administrative overhead allocated to the NSWP Enterprise Fund. The Advisory Committee shall appoint the accounting firm to perform the overhead allocation analysis.

E. The Water Companies acknowledge and agree that NCSD has incurred

NSWP Supplemental Water Management and Groundwater Replenishment Agreement

Page 9 of 20

Appendix 6

substantial Costs related to the completed portions of the NSWP as of the Effective Date and will incur additional Costs to complete the NSWP. These costs include, but are not limited to, planning, environmental reviews, legal fees, acquisition of easements, an assessment election, and the construction and financing of the primary distribution pipeline extending from the City to NCSD facilities and future stages of the NSWP project. These Costs have been funded by NCSD, with very limited contributions from the Water Companies.

F. The Budget shall include the amortized recovery of the NSWP capital costs (whether funded by NCSD with internal funds or borrowed funds) attributable to each Water Company, pursuant to Section I.K above, plus interest on the unamortized balance of such costs. The capital costs to be amortized in each Budget shall include amounts expended to date and the additional costs necessary to complete the NSWP. NCSD shall not recover interest on the capital portion of NSWP Costs that are funded through the use of NSWP Enterprise Fund assets or reserves.

G. The amortization period for capital costs shall be 30 years beginning July 1, 2015. Interest will be charged monthly on the remaining unamortized balance as of the prior month end.

H. Each Water Company may elect to make early payments of its amortized portion of the capital costs and such early payments shall be credited against the capital obligation of that Water Company.

I. The interest rates to be charged to each Water Company will be determined as follows:

1. For GSWC and RWC, the interest rate charged will be equal to the interest rate on amounts NSCD has borrowed to finance a portion of the project Costs plus one-half of one percent. In the event GSWC's credit rating drops materially below its current rating of A+, and such change would have a material impact on any expected borrowing or financial security related to the NSWP Enterprise Fund, the interest rate charged will be subject to renegotiation between GSWC, RWC and NCSD. The interest specified in this subsection applicable to RWC is predicated on expectation that GSWC will complete its acquisition of RWC prior to the PUC approval of this Agreement. The interest rate and security assurance applicable to RWC's capital obligation shall be subject to renegotiation should GSWC fail to complete its acquisition prior to the PUC's approval of this Agreement.

2. For WMWC, the interest rate charged will be equal to the interest rate on amounts NSCD has borrowed to finance a portion of the project Costs plus two percent. In the event there is a material change in WMWC's financial condition, the interest rate charged will be subject to renegotiation between NCSD and WMWC. WMWC acknowledges that its agreement to amend its bylaws to authorize recordation and enforcement of liens under Corporations

Appendix 6

Code § 14304 (“Section 14304 Lien Rights”) constitutes a material inducement to NCSD to forego other forms of security for repayment of WMWC’s capital obligations, and agrees that it shall not subsequently revise its bylaws to relinquish its Section 14304 Lien Rights without having previously agreed to provide alternate security reasonably acceptable to NCSD.

3. In the event NCSD makes additional borrowings to finance subsequent stages of the NSWP, the interest rates charged GSWC, RWC and WMWC will be adjusted based on the weighted average of the interest rates attributable to unamortized balances of prior stages of the NSWP and the interest rate attributable to the capital costs of the new stage.

J. The NSWP Enterprise Fund shall include a funded replacement reserve (“NSWP Enterprise Fund Reserve”) to accumulate funds for the future replacement of NSWP equipment and facilities. The initial NSWP Enterprise Fund Reserve amount shall be set at one percent of total project Costs. Thereafter, the NSWP Enterprise Fund Reserve shall be increased annually based upon the percentage increase in the Consumer Price Index (CPI) – All Urban Consumers (Los Angeles-Riverside-Orange Co., CA area) for the immediately preceding calendar year, subject to the following.

1. The maximum balance in the NSWP Enterprise Fund Reserve shall be \$3,000,000. The NSWP Enterprise Fund Reserve maximum shall be increased annually based upon the percentage increase in the Consumer Price Index (CPI) – All Urban Consumers (Los Angeles-Riverside-Orange Co., CA area) for the immediately preceding calendar year. Once the balance in the NSWP Enterprise Fund Reserve reaches the maximum then in effect, the annual reserve shall cease to be collected until such time as the NSWP Enterprise Fund Reserve balance drops below the maximum. Should required expenditures exceed the balance then in the NSWP Enterprise Fund Reserve, the Advisory Committee will establish a plan for funding the deficit in a timely manner. The maximum balance in the NSWP Enterprise Fund Reserve may be increased or decreased subject to unanimous approval by the Advisory Committee.

2. Subject to approval by the Advisory Committee, the balance in the NSWP Enterprise Fund Reserve can be used to fund extraordinary unbudgeted operations and maintenance expenses in those cases where the NSWP Enterprise Fund does not have sufficient operating funds to cover the expenditure.

3. Interest income earned on the NSWP Enterprise Fund Reserve shall remain in the NSWP Enterprise Fund.

IX. RATES AND CHARGES: Based on the Budget, NCSD shall allocate Costs to and invoice the Water Companies as follows:

NSWP Supplemental Water Management and Groundwater Replenishment Agreement

Page 11 of 20

Appendix 6

A. Each Water Company shall be responsible for its share of the Costs of Nipomo Supplemental Water and the NSWP based on the pro-rata shares of the NSWP as provided in Section I.K and the Budget. The Cost allocations shall take into account all Costs for the NSWP. An energy (pumping) credit shall be provided to each Party for any portion of its Nipomo Supplemental Water not delivered directly to that Party, but instead used by another Party pursuant to Section VI.

B. During the term of this Agreement, and where applicable subject to the jurisdiction and approval by the PUC, each Water Company shall charge and collect rates and charges for the water services furnished in its service area which will yield gross revenues sufficient to pay all costs of operating and maintaining the water system within the designated area, including all payments due under this Agreement, as they become due and payable.

C. Following each calendar quarter, NCSD shall provide a written invoice to each Water Company for its share of the Costs during the prior quarter. All invoices will be payable within thirty (30) days of delivery of the invoice. NCSD shall have the right to charge late fees of up to five (5) percent of the overdue amount for any invoice that is not paid within such period.

D. Until such time as GSWC and RWC receive approval from the PUC as provided in Section V, NCSD will not charge late fees on outstanding GSWC and RWC invoices; however, interest will accrue on outstanding charges at the rate specified in Section VIII.

E. In the event a Party disputes any charges on an invoice, the undisputed amount shall be paid and no late fee will be assessed pending resolution of the disputed amount. Along with payment of the undisputed amount, the Party shall provide a detailed written description of the nature and amount in dispute. NCSD and the Party with the dispute shall make every reasonable business effort to resolve the dispute promptly.

F. Within 90 days after the end of each fiscal year, NCSD shall compare prior year actual Costs to the total amount billed to the Parties for that year. If actual Costs exceed the amount billed for that year, each Party will be billed for its allocated share of the excess costs. If actual Costs are less than the amount billed for that year, each party will have the option to have its allocated share of the difference be (1) credited against any unamortized capital costs then due NCSD or (2) be refunded.

X. CONTINUITY OF SERVICE:

A. NCSD reserves the right to temporarily interrupt or curtail delivery of Nipomo Supplemental Water to make repairs, replacements, modifications, or to perform maintenance work on the NSWP, or to respond to an existing or impending Uncontrollable Force, as determined in NCSD's sole judgment. NCSD shall use its

Appendix 6

reasonable best business efforts to provide advance written notice to the Water Companies of any restriction or interruption in the use of the NSWP or planned deliveries of Nipomo Supplemental Water.

B. In addition to limitations specified in X.A. above, NCSD may interrupt or curtail the use of the NSWP to the extent that the continued use of the NSWP could: (i) materially and adversely affect the reliability of the NSWP; or (ii) cause NCSD to violate the terms of any rule, regulation, or binding obligation it may otherwise have with respect to the production, treatment or delivery of Nipomo Supplemental Water.

XI. DEVELOPMENT OF EXPANDED GROUNDWATER MANAGEMENT AND RECHARGE CAPABILITY:

The Parties acknowledge and agree that the availability of additional Nipomo Supplemental Water would be beneficial for use within the NMMA. The Parties agree to negotiate an amendment to this Agreement to include the expanded use of Nipomo Supplemental Water for the benefit of the groundwater resources water balance within the NMMA. The Parties shall use their reasonable best efforts to complete the negotiation as promptly as practical.

XII. RESOLUTION OF DISPUTES:

The Parties' shall attempt to amicably and promptly resolve any dispute arising between the Parties and under this Agreement. Nothing in this Agreement shall preclude any Party from taking any lawful action it deems appropriate to enforce its rights under this Agreement. The Parties shall initially attempt to resolve any dispute by the means set forth below:

A. Advisory Committee. The Parties shall exercise best efforts to resolve disputes through consensus. An Advisory Committee shall be established and be comprised of two representatives of each Party. The Advisory Committee shall be convened whenever necessary to ensure this Agreement is being administered and implemented consistent with the intentions of all the Parties. An NCSD representative shall chair the Advisory Committee. The Chair shall be responsible for scheduling all meetings under this section. Any Party may request a meeting of the Advisory Committee.

B. Annual Meeting. The Advisory Committee shall meet annually, or as often as necessary, to review the administration and implementation of this Agreement. The Advisory Committee shall use its best efforts to obtain consensus on the resolution of technical, administrative, financial, legal and operational issues that may arise from time to time with regard to this Agreement.

C. Dispute Resolution Procedure. The Parties shall submit any dispute related to or arising out of this Agreement to the Advisory Committee for consideration. The

Appendix 6

Chair may request the Party or Parties to any dispute to submit a description of the dispute in writing prior to convening the Advisory Committee. As soon as practical, and within 14 days of the submission of a written description of a dispute, the Chair shall schedule a meeting of the Advisory Committee. The Advisory Committee shall convene within 30 days of the submission of a written description of a dispute and shall make every reasonable effort to resolve the dispute.

D. Failure of the Advisory Committee to Resolve the Dispute. If the Advisory Committee fails to resolve a dispute, the Parties may elect to refer the dispute to mediation. If the Parties are unable to agree promptly upon a mediator or a mediation process, each Party may freely pursue any equitable and legal remedy.

E. Emergencies. Where an unresolved dispute may pose an imminent danger to the public, health, safety or welfare, the Parties shall not be subject to the provisions of this Section.

XIII. LIABILITY AND INDEMNIFICATION:

A. Limitation of Liability: Except as to the negligent or willful misconduct of a Party, each Party shall release and hold harmless the other Parties from and against any and all liability, loss, damage and expense arising from, alleged to arise from, in connection with, or incident to the services rendered under this Agreement.

B. Indemnification and Defense: Each Party shall indemnify, defend and hold harmless the other Parties, its directors, members, officers, employees and agents from and against any and all third-party claims, suits or actions instituted on account of personal injuries or death of any person (including but not limited to workers and the public) or physical damage to property resulting from or arising out of the indemnitor's willful misconduct or negligent act or omission while engaged in the performance of obligations or exercise of rights under this Agreement.

C. Limitation on Damages: No Party shall be liable to any other Party for any consequential, incidental, punitive, special or exemplary damages or lost opportunity costs, lost profit or other business interruption damages, by statute or in tort or contract, under any provision of this Agreement.

D. Water Quality. NCS D shall be responsible for ensuring that the quality of the Nipomo Supplemental Water made available for delivery is of the same pressure and quality of water that NCS D delivers to its residential customers. The quality of water which is delivered by NCS D to its residents shall comply with all federal, state and local laws, regulations and permit requirements which are applicable to NCS D, including standards applicable to wastewater discharge, as amended from time to time and subject to any compliance waiver granted to NCS D ("Quality Standards"). NCS D shall provide GSWC, RWC and WMWC with a copy of the Quality Standards (and any change thereto) which are applicable to NCS D and GSWC, RWC and WMWC shall be solely responsible for ensuring that the Quality Standards meet the federal, state and local laws, regulations and

Appendix 6

permit requirements for potable water delivery by GSWC, RWC and WMWC to its customers, including the discharge of such water. To the extent that the quality standards which are applicable to GSWC, RWC and WMWC exceed the Quality Standards, then GSWC, RWC and WMWC shall be responsible for any necessary additional treatment of the Nipomo Supplemental Water. NCSO agrees to indemnify and hold GSWC, RWC and WMWC harmless from any liability which arises as a result of the failure of the Nipomo Supplemental Water which is delivered to the GSWC, RWC and WMWC to meet the Quality Standards. GSWC, RWC and WMWC shall be solely responsible for any actual liability resulting from a change in water quality following the Point of Interconnection (including any additional treatment undertaken by GSWC, RWC and WMWC) and shall indemnify and hold NCSO harmless from any actual liability which arises from any such change. NCSO and GSWC, RWC and WMWC shall promptly notify the other in the event that either becomes aware of a material adverse change in the quality of the Nipomo Supplemental Water and shall cooperate to identify the cause of such change.

XIV RELATIONSHIP OF THE PARTIES:

The covenants, obligations and liabilities of the Parties are intended to be several and not joint or collective and nothing herein contained shall ever be construed to create an association, joint venture, trust or partnership, or to impose a trust or partnership covenant, obligation or liability on or with regard to any Party. Each Party shall be individually responsible for its own covenants, obligations and liabilities as herein provided. No Party shall be under the control of or shall be deemed to control another Party. No Party shall be the agent of or have a right or power to bind another Party without such other Party's express written consent, except as provided in this Agreement.

XV. UNCONTROLLABLE FORCES:

If the existence of an Uncontrollable Force, as defined in Section II.Q above, disables a Party from performing its obligations under this Agreement (except for such Party's obligations to make payments hereunder), such Party shall not be considered to be in default in the performance of any such obligations while such disability of performance exists. A Party rendered unable to fulfill any of its obligations under this Agreement by reason of an Uncontrollable Force shall exercise due diligence to remove such inability with all reasonable dispatch. Nothing contained herein shall be construed so as to require a Party to settle any strike or labor dispute in which it may be involved.

XVI. AUDITS:

Each Party shall have the right to audit any costs, payments, settlements or other supporting information pertaining to this Agreement, including the Costs and the Budget. Any such audit shall be undertaken by the requesting Party or its representative at reasonable times and in conformance with generally accepted auditing standards. The audited Party shall fully cooperate with any such audit, the cost of which shall be paid by the requesting Party. The right to audit a billing shall extend for a period of three (3) years

Appendix 6

following the rendering of the bill. Each Party shall retain all necessary records or documentation for the entire length of such three (3) year period and shall, to the extent permitted by law, take all steps reasonably available to assure the confidentiality of the audited Party's accounting records and supporting documents.

XVII. THIRD PARTY BENEFICIARIES:

There are no third Party beneficiaries to this Agreement. This Agreement shall not confer any right or remedy upon any person or entity other than the Parties and their respective successors and assigns permitted under Section XVIII. This Agreement shall not release or discharge any obligation or liability of any third party to any Party or give any third party any right of subrogation or action over or against a Party.

XVIII. ASSIGNMENT OF INTERESTS:

A. No Party shall assign this Agreement without the prior written consent of the other Parties, which consent shall not be unreasonably withheld or delayed. Each Water Company expressly understands and agrees that it shall not be unreasonable for NCSD to withhold or delay its consent to any proposed or purported assignment to any person or entity ("Assignee") that has not demonstrated to NCSD's reasonable satisfaction that NCSD's interests as contemplated herein will not be adversely affected thereby.

B. Any assignment by a Party of its interest in this Agreement which is made without the prior written consent of the other Parties shall not relieve the assigning Party from primary liability for any of its duties and obligations under this Agreement, and in the event of any such assignment, the assigning Party shall continue to remain primarily liable for payment of any and all money due the other Parties as provided under this Agreement, and for the performance and observance of all covenants, duties and obligations to be performed and observed under this Agreement by the Party to the same extent as though no assignment had been made.

C. Whenever an assignment of a Party's interest in this Agreement is made with the written consent of the other Parties, the assigning Party's assignee shall expressly assume in writing the duties and obligations under this Agreement of the assigning party and, within thirty (30) days after any such assignment and assumption of duties and obligations, the assigning Party shall furnish, or cause to be furnished, to the other Party a true and correct copy of such assignment and assumption of duties and obligations. Upon the effective date of such assignment, the assigning Party shall be relieved of its obligations and duties under this Agreement.

D. Subject to the foregoing restrictions on assignment, this Agreement shall be binding upon, inure to the benefit of and be enforceable by the Parties and their respective successors and assigns.

XIX. NO DEDICATION OF FACILITIES:

Any undertaking by a Party to another Party under this Agreement shall not constitute the dedication of the system, or any portion thereof, of that Party to the public or to another Party, nor affect the status of that Party as an independent system.

XX. COMPLETE AGREEMENT:

This Agreement contains the entire agreement and understanding between the Parties as to the subject matter of this Agreement and supersedes all prior commitments, representations and discussions between the Parties.

XXI. CONSTRUCTION OF AGREEMENT:

Ambiguities or uncertainties in the wording of this Agreement shall not be construed for or against any Party, but shall be construed in a manner that most accurately reflects the intent of the Parties when this Agreement was executed and is consistent with the nature of the rights and obligations of the Parties with respect to the matter being construed.

XXII. NON-DISCRIMINATION:

During the performance of this Agreement, no Party shall deny the Agreement's benefits to any person, nor shall any Party discriminate unlawfully against any employee or applicant for employment, on the grounds of or because of race, color, creed, national origin, ancestry, age, sex, sexual orientation, marital status or disability, including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto. Each party shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination.

XXIII. EVENTS OF DEFAULT:

In the event that a Party shall materially default in the performance of its obligations under this Agreement, the Authorized Representatives of the non-defaulting Parties may give written notice of the default to the Authorized Representative of the defaulting Party. If within thirty (30) days after the non-defaulting Parties' Authorized Representative shall have given such written notice to the defaulting Party's Authorized Representative, the defaulting Party shall have failed to cure the default in its performance of this Agreement, or if such default requires more than thirty (30) days to cure and the defaulting Party fails to commence such cure and diligently prosecute such cure to completion, in addition to any other remedies provided by law, the non-defaulting Parties may terminate this Agreement by written notice of termination as provided for in Section **XXVIII**. In addition to any other cause of default arising hereunder, a Party shall be in a default if:

- A. It becomes insolvent; or

Appendix 6

B. It makes a general assignment of substantially all of its assets for the benefit of its creditors, files a petition for bankruptcy or reorganization or seeks other relief under any applicable insolvency laws; or

C. It has filed against it a petition for bankruptcy, reorganization or other relief under any applicable insolvency laws and such petition is not dismissed within sixty (60) days after it is filed.

D. In the event of a default and termination of the Agreement as to the defaulting Party, the non-defaulting Parties shall use commercially reasonable best efforts to negotiate any revisions to this Agreement that are necessary or appropriate in light of such termination, which revisions shall be consistent with the purpose and intent of this Agreement and shall preserve, to the maximum extent possible, all material consideration to the remaining parties. Termination of this Agreement, either in its entirety or as to one or more Parties, shall not affect the validity or enforceability of the Stipulation and Judgment or the rights and obligations of any Party thereunder.

XXIV. AMENDMENTS:

This Agreement may be modified, supplemented or amended only by a writing duly executed by the Parties.

XXV. WAIVERS:

A. Any waiver at any time by any Party of its rights with respect to a default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or other matter arising in connection therewith. Any delay, short of the statutory period of limitation in asserting or enforcing any right, shall not be deemed a waiver of such right.

B. Nothing in this Agreement shall limit, nor act as a waiver, of any Party's rights or defenses in pursuing or defending against any legal or equitable claim or remedy that may be asserted regarding each Party's rights and obligations to participate in the NSWP and bear its percentage allocation of the Costs of the NSWP (as presented in Recital K).

XXVI. SECTION HEADINGS:

All captions and headings appearing in this Agreement are inserted to facilitate reference and shall not govern, except where logically necessary, the interpretations of the provisions hereof.

XXVII. GOVERNING LAW:

NSWP Supplemental Water Management and Groundwater Replenishment Agreement

Page 18 of 20

Appendix 6

This Agreement shall be interpreted, governed by and construed under the laws of the State of California or the laws of the United States as applicable, as if executed and to be performed wholly within the State of California.

XXVIII. NOTICES:

A. Any notice, demand or request provided for in this Agreement, or served, given or made in connection with it, shall be in writing and shall be deemed properly served, given or made if delivered in person, by email or sent by United States mail, postage prepaid, to the persons specified below, unless otherwise provided for in this Agreement:

Nipomo Community Services District
Attention: General Manager
P.O. Box 326
Nipomo, California 93444-326
generalmanger@ncsd.ca.gov

Golden State Water Company
Attention: Senior Vice President of Regulated Utilities
630 East Foothill Blvd
San Dimas, CA 91773

Rural Water Company
c/o Frank B. & Associates
Attention: Frank Brommenschenkel
134 Davis Street
Santa Paula, CA 93060

Woodlands Mutual Water Company
c/o Wallace Group
Attention: Robert S. Miller
612 Clarion Ct.
San Luis Obispo, CA 93401

B. Any Party may at any time, by written notice to the other Parties, change the designation or address of the person so specified as the one to receive notices pursuant to this Agreement.

[signatures on following page]

XXIX. SIGNATURE CLAUSE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

NIPOMO COMMUNITY SERVICES DISTRICT

Michael S. LeBrun
Date: October 16, 2015
By: MICHAEL S. LEBRUN
GENERAL MANAGER

GOLDEN STATE WATER COMPANY

Date: _____, 2015
BY: _____

RURAL WATER COMPANY

Date: _____, 2015
BY: _____

WOODLANDS MUTUAL WATER COMPANY

Date: _____, 2015
BY: _____

XXIX. SIGNATURE CLAUSE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

NIPOMO COMMUNITY SERVICES DISTRICT

Date: _____, 2015
By: MICHAEL S. LEBRUN
GENERAL MANAGER

GOLDEN STATE WATER COMPANY

Date: Robert J. Spronks
September 10, 2015
BY: Robert J. Spronks
President & CEO

RURAL WATER COMPANY

Date: _____, 2015
BY:

WOODLANDS MUTUAL WATER COMPANY

Date: _____, 2015
BY:

XXIX. SIGNATURE CLAUSE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

NIPOMO COMMUNITY SERVICES DISTRICT

Date: _____, 2015
By: MICHAEL S. LEBRUN
GENERAL MANAGER

GOLDEN STATE WATER COMPANY

Date: _____, 2015
BY:

RURAL WATER COMPANY

Date: Charles M Baker
Sept 9, 2015
BY: Chuck Baker

WOODLANDS MUTUAL WATER COMPANY

Date: _____, 2015
BY:

XXIX. SIGNATURE CLAUSE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

NIPOMO COMMUNITY SERVICES DISTRICT

Date: _____, 2015
By: MICHAEL S. LEBRUN
GENERAL MANAGER

GOLDEN STATE WATER COMPANY

Date: _____, 2015
BY:

RURAL WATER COMPANY

Date: _____, 2015
BY:

WOODLANDS MUTUAL WATER COMPANY

Date: Don R. Go _____, 2015
10 / 15 _____, 2015
BY: _____

Appendix 7: NMMA 15th Annual Report for the Year 2022 Submitted April 2023

Nipomo Mesa Management Area

15th Annual Report
Calendar Year 2022

Prepared by
NMMA Technical Group

Submitted April 2023

Appendix 7

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Table of Contents

Table of Contents i

List of Figures iii

List of Tables iv

Acronyms v

Abbreviations vi

Executive Summary ES-1

ES-1. Background ES-1

ES-2. Findings ES-2

ES-3. Recommendations ES-3

 ES-3.1. Achievements from Previous NMMA Annual Report Recommendations ES-3

 ES-3.2. Technical Recommendations ES-4

1. Introduction 1

 1.1. Background 1

 1.1.1. History of the Litigation Process 2

 1.1.2. Development of Monitoring Program 2

 1.1.3. Water Shortage Conditions and Response Plan 3

 1.1.4. Well Management Plan 3

 1.1.5. Supplemental Water 3

 1.1.6. Other Groundwater Management Activities 4

 1.2. Reporting 5

 1.2.1. Description of the Nipomo Mesa Management Area Technical Group 5

 1.2.2. Coordination with NCMA and SMVMA 6

 1.2.3. Distribution 6

2. Basin Description 9

 2.1. Physical Setting 10

 2.1.1. Area 10

 2.1.2. General Land Use 10

 2.2. Climate 10

 2.3. Hydrogeology 11

 2.3.1. Geology 11

 2.3.2. Groundwater Flow Regime 14

3. Data Collection 23

 3.1. Data Collected 23

 3.1.1. Groundwater Elevations in Wells 24

 3.1.2. Water Quality in Wells 24

 3.1.3. Rainfall 25

 3.1.4. Rainfall Variability 26

 3.1.5. Streamflow 27

 3.1.6. Surface Water Usage 27

 3.1.7. Surface Water Quality 27

 3.1.8. Land Use 27

 3.1.9. Groundwater Production 29

 3.1.10. Imported Water 32

 3.1.11. Wastewater Discharge and Reuse 32

 3.2. Database Management 33

 3.3. Data and Estimation Uncertainties 33

4. Water Supply & Demand 43

 4.1. Water Supply 43

Appendix 7

4.1.1.	Groundwater Production.....	43
4.1.2.	Recycled Water	44
4.1.3.	Supplemental Water	44
4.1.4.	Surface Water Diversions.....	44
4.1.5.	Future Water Supply.....	44
4.2.	Water Demand.....	45
4.2.1.	Historical Demand.....	45
4.2.2.	Current Demand	45
4.2.3.	Potential Future Production (Demand).....	45
4.2.4.	Base Year Pooled Amount	45
5.	Hydrologic Inventory.....	46
5.1.	Rainfall and Percolation Past Root Zone	47
5.2.	Subsurface Flow	47
5.3.	Streamflow and Surface Runoff.....	47
5.4.	Groundwater Production.....	48
5.5.	Supplemental Water.....	48
5.6.	Wastewater.....	48
5.7.	Return Flow of Applied Water and Consumptive Use	49
5.8.	Change in Groundwater Storage	49
6.	Groundwater Conditions	51
6.1.	Groundwater Elevations	51
6.1.1.	Results from Key Wells.....	52
6.1.2.	Results from Coastal Monitoring Wells	52
6.1.3.	Groundwater Contours and Pumping Depressions.....	52
6.1.4.	Groundwater Gradients.....	52
6.2.	Groundwater Quality	53
6.2.1.	Results of Coastal Groundwater Quality Monitoring.....	53
6.2.2.	Results of Inland Groundwater Quality Monitoring.....	54
7.	Analyses of Water Conditions	76
7.1.	Stipulation Requirements.....	76
7.2.	Water Shortage Conditions	77
7.2.1.	Inland Criteria.....	77
7.2.2.	Coastal Criteria.....	77
7.2.3.	Status of Water Shortage Conditions.....	78
7.3.	Long-term Trends	80
7.3.1.	Climatological Trends	80
7.3.2.	Land Use Trends.....	80
7.3.3.	Stipulating Party Water Use Trends	81
7.3.4.	Trends in Basin Inflow and Outflow	81
8.	Other Considerations	85
8.1.	Institutional or Regulatory Challenges to Water Supply	85
9.	Recommendations.....	85
9.1.	Achievements from Previous NMMA Annual Report Recommendations.....	85
9.2.	Technical Recommendations	86
	References.....	88
	Appendices.....	94
	Appendix A. Monitoring Program	
	Appendix B. Water Shortage Conditions and Response Plan	
	Appendix C. Well Management Plan	
	Appendix D. Data Acquisition Protocols for Groundwater Level Measurements for the NMMA	
	Appendix E. Additional Data	

List of Figures

Figure 1-1. Santa Maria Groundwater Basin and Management Areas 7

Figure 1-2. Wells identified in the NMMA Monitoring Program 8

Figure 1-3. NMMA Water Purveyor Boundaries 9

Figure 2-1. NMMA Geology and Faults and Cross Sections 18

Figure 2-2. NMMA Geologic Cross Section A-A' 19

Figure 2-3. NMMA Geologic Cross Section B-B' 20

Figure 2-4. NMMA Geologic Cross Section C-C' 21

Figure 2-5. NMMA Geologic Cross Section D-D' 22

Figure 2-6. Base of Dune Sand Deposits 23

Figure 3-1. 2022 Spring Shallow Aquifer Groundwater Elevations..... 34

Figure 3-2. 2022 Spring Deep Aquifer Groundwater Elevations 35

Figure 3-3. 2022 Fall Shallow Aquifer Groundwater Elevations 36

Figure 3-4. 2022 Fall Deep Aquifer Groundwater Elevations 37

Figure 3-5. 2022 Locations of Wells with Water Quality Data 38

Figure 3-6. Rainfall Station Location and Water Year 2022 Annual Rainfall..... 39

Figure 3-7. Cumulative Departure from the Mean for the following rain gauges 40

Figure 3-8. Location of Stream Flow Sensors 41

Figure 3-9. 2022 Groundwater Use..... 42

Figure 3-10. Wastewater Treatment Facilities 43

Figure 4-1. Historical NMMA Groundwater Production..... 46

Figure 5-1. Schematic of the Hydrologic Inventory 50

Figure 5-2. NMMA Watershed Boundaries..... 51

Figure 6-1. Key Wells Hydrographs, South-East Portion of NMMA..... 57

Figure 6-2. Key Wells Hydrographs, North-West Portion of NMMA 58

Figure 6-3. Hydrograph for Coastal Monitoring Well Nest 11N/36W-12C 59

Figure 6-4. Hydrograph for Coastal Monitoring Well Nest 12N/36W-36L 60

Figure 6-5. 2022 Spring Shallow Aquifer Groundwater Contours 61

Figure 6-6. 2022 Spring Deep Aquifer Groundwater Contours..... 62

Figure 6-7. 2022 Fall Shallow Aquifer Groundwater Contours 63

Figure 6-8. 2022 Fall Deep Aquifer Groundwater Contours 64

Figure 6-9. Chloride in Coastal Wells 11N/36W-12C 1, 2, and 3 65

Figure 6-10. Electrical Conductivity in Coastal Wells 11N/36W-12C 1, 2, and 3 66

Figure 6-11. Chloride vs Chloride/Bicarbonate Ratio for Coastal Wells 67

Figure 6-12. Chloride vs Sodium/Chloride Ratio for Coastal Wells 68

Figure 6-13. Calcium vs Calcium/Magnesium Ratio for Coastal Wells..... 69

Figure 6-14. Calcium vs Calcium/(Bicarbonate + Sulfate) Ratio for Coastal Wells 70

Figure 6-15. Chloride vs Chloride/Boron Ratio for Coastal Wells..... 71

Figure 6-16. Major Ion Ratios for Coastal Well 12C1..... 72

Figure 6-17. Major Ion Ratio for Coastal Well 12C2 73

Figure 6-18. Major Ion Ratio for Coastal Well 12C3 74

Figure 6-19. Major Ion Ratio for Coastal Well 36L1 75

Figure 6-20. Major Ion Ratio for Coastal Well 36L2 76

Figure 7-1. Key Wells Index..... 82

Figure 7-2. Rainfall: Cumulative Departure from the Mean..... 83

Figure 7-3. NMMA Land Use – 1959 to 2020 83

Figure 7-4. Historical Land Use in the NMMA..... 84

List of Tables

Table 1-1. NMMA Technical Group	6
Table 2-1. Climate in the Nipomo Mesa Area	11
Table 3-1. 2022 Water Quality Data from Coastal Wells	25
Table 3-2. Rainfall Gauges and 2022 Rainfall Totals	26
Table 3-3. Land Use Summary	29
Table 3-4. Calendar Year 2022 Groundwater Production for Monitoring Parties	30
Table 3-5. Calendar Year 2022 Groundwater Production for Golf Courses	30
Table 3-6. Calendar Year 2022 Estimated Groundwater Production for Agriculture	31
Table 3-7. Calendar Year 2022 Estimated Groundwater Production for Other Land Uses	31
Table 3-8. Calendar Year 2022 Measured and Estimated Groundwater Production	31
Table 3-9. Calendar Year 2022 Wastewater Volumes	32
Table 6-1. Calendar Year 2022 State Water Resources Control Board GeoTracker Open Sites	56
Table 7-1. Criteria for Potentially Severe Water Shortage Conditions	78
Table 7-2. NMMA Land Use – 1959 to 2020	81
Table 7-3. Groundwater Production by Purveyor from 2008 to 2022	81

Appendix 7

Acronyms

AF	-	acre-feet
AFY	-	acre-feet per year
ALERT	-	Automated Local Evaluation in Real Time
CY	-	Calendar Year
C.E.G.	-	Certified Engineering Geologist
C.H.G.	-	Certified Hydrogeologist
CCAMP	-	Central Coast Ambient Monitoring Program
CDF	-	California Department of Forestry (now Cal Fire)
CIMIS	-	California Irrigation Management Information System
CPUC	-	California Public Utilities Commission
CU	-	consumptive use
D	-	Day
DPH	-	California Department of Public Health
DWR	-	California Department of Water Resources
ES	-	Executive Summary
Ft	-	Feet
ft ²	-	square feet
ft msl	-	feet above mean sea level
Gpd	-	gallons per day
GSWC	-	Golden State Water Company
K	-	hydraulic conductivity
MCL	-	Maximum Contaminant Level
mg/L	-	milligrams per Liter
MOU	-	memorandum of understanding
Msl	-	mean sea level
NCSD	-	Nipomo Community Services District
NCMA	-	Northern Cities Management Area
NMMA	-	Nipomo Mesa Management Area
NSWP	-	Nipomo Supplemental Water Project
P.E.	-	Professional Engineer
P.G.	-	Professional Geologist
PG&E	-	Pacific Gas & Electric
PWD	-	Public Works Department
RF	-	return flow
RP	-	reference point
RWC	-	Rural Water Company (now Golden State Water Company)
SCWC	-	Southern California Water Company (now Golden State Water Company)
SGMA	-	Sustainable Groundwater Management Act
SLO	-	San Luis Obispo
SLO PWD	-	San Luis Obispo County Public Works Department
SMGB	-	Santa Maria Groundwater Basin
SMVMA	-	Santa Maria Valley Management Area
SWP	-	State Water Project
TDS	-	Total Dissolved Solids
TG	-	Nipomo Mesa Management Area Technical Group
U.S.	-	United States
WWTF	-	wastewater treatment facility
WY	-	Water Year
Yr	-	year

Appendix 7

Abbreviations

Blacklake WWTF	-	Blacklake Reclamation Facility
Cypress Ridge WWTF	-	Cypress Ridge Sewer Company's Cypress Wastewater Treatment Facility
Judgment	-	Judgment After Trial dated January 25, 2008
Phase III	-	Santa Maria Groundwater Litigation Phase III
Program	-	Nipomo Mesa Management Area Monitoring Program
Santa Maria Groundwater Litigation	-	<i>Santa Maria Valley Water Conservation District vs. City of Santa Maria, et al.</i> Case No. 770214
Southland WWTF	-	Southland Wastewater Treatment Facility
Stipulation	-	Stipulated Judgment dated June 30, 2005
Temp	-	Temperature
Woodlands	-	Woodlands Mutual Water Company
Woodlands WWTF	-	Woodlands Mutual Water Company Wastewater Reclamation Facility

Executive Summary

This 15th Annual Report, covering calendar year 2022 for the Nipomo Mesa Management Area (NMMA), is prepared in accordance with the Stipulation and Judgment for the Santa Maria Groundwater Litigation (Lead Case No. 1-97-CV-770214). The Annual Report provides an assessment of hydrologic conditions for the NMMA based on an analysis of the data accruing each calendar year. Each Annual Report is submitted to the court annually in accordance with the Stipulation in the year following that which is assessed in the report. This Executive Summary contains three sections: ES-1 Background; ES-2 Findings; and ES-3 Recommendations.

ES-1. Background

The Court established three management areas overlying the Santa Maria Groundwater Basin (SMGB). The NMMA lies between the Northern Cities Management Area (NCMA) to the north and the Santa Maria Valley Management Area (SMVMA) to the south. The NMMA Technical Group (TG) is one of three management area committees formed to administer the relevant provisions of the Stipulation. Golden State Water Company, Nipomo Community Services District, Phillips 66, and Woodlands Mutual Water Company are responsible for appointing the members of the committee, and along with an agricultural overlying landowner, who is also a Stipulating Party, are responsible for the preparation of this Annual Report. The goal of each committee is to promote monitoring and management practices in their respective management areas so that present and future water demands are satisfied without causing long-term damage to the underlying groundwater resource.

The TG is charged with developing the technical bases for sustainable management of the surface and groundwater supplies, and prepared this 15th Annual Report– Calendar Year 2022. The TG collected and compiled data and reports from numerous sources including the NMMA Monitoring Parties, the Counties of San Luis Obispo (SLO) and Santa Barbara, the California Departments of Forestry, Water Resources, and Public Health, the State Water Resources Control Board, the U. S. Geological Survey, and the Engineers for the NCMA and SMVMA. The TG previously developed and continues to update, and maintains an electronic database to aid in the evaluation of the long-term sustainability of the NMMA portion of the SMGB. The TG reviewed these data and reports, and concluded that the development of additional data and evaluations will be on-going to aid the understanding of the hydrogeologic conditions of the NMMA and to make comprehensive recommendations for the long-term management of the NMMA.

The TG evaluated the available compiled data to reach the findings summarized in the following section of this Executive Summary. The TG recognizes that the data used in the evaluations are not equally reliable but represent what is currently available. In some cases, additional analysis will be required for an adequate characterization of the physical setting within the NMMA, which will allow development of an appropriately detailed model of the stratigraphy that defines the location and thickness of production aquifers and confining layers. Refinements in the understanding of the physical setting will improve upon estimates of groundwater in storage available for pumping to meet water demands. Such work is an important goal for the TG and mirrors the TG's desire to characterize groundwater storage in the NMMA. The TG has developed specific recommendations to address these issues for the next Annual Report.

ES-2. Findings

Presented in this section of the Executive Summary are brief descriptions of the findings by the TG for Calendar Year (CY) 2022. Presented in the body of this report are the details and bases for these findings.

1. Severe Water Shortage Conditions continue to exist in the NMMA in CY 2022 as indicated by the lowest Key Wells Index on record of 7.8 ft msl (see Section 7.2 Water Shortage Conditions).
2. The Nipomo Community Services District (NCS D) delivered 1,141 acre-feet (AF) of imported water through the NSWP in CY 2022 (see Section 3.1.10 Imported Water).
3. Consistent with Stage IV of the NMMA Water Shortage Response Stages, a total reduction of 2,423 AF (-43%) in purveyor production was accomplished in CY 2022 as compared to 2013 (see Section 7.3.3 Stipulating Party Water Use Trends).
4. There is no evidence of seawater intrusion based on coastal water quality (see Section 6.1.2 Results from Coastal Monitoring Wells).
5. Total rainfall for CY 2022 is approximately 71 percent of the long-term average. The total rainfall for Water Year (WY) 2022 (October 1, 2021 through September 30, 2022) is approximately 67 percent of the long-term average (see Section 3.1.3 Rainfall).
6. The period of analysis (1975-2022) used by the TG is roughly 7 percent “wetter” on average than the long-term record (1920-2022) indicating there is a slight bias toward overstating the amount of local water supply resulting from percolation of rainfall (see Section 5.1 Rainfall and Percolation Past Root Zone).
7. The total estimated CY 2022 groundwater production is 13,188 AF. The breakdown by user and type of use is shown in the following table (see Section 3.1.9 Groundwater Production).

Agriculture	7,296 AF
Urban/Industrial	5,892 AF
Total Production	13,188 AF

8. No surface water is diverted for water supplies in the NMMA (see Section 3.1.6 Surface Water Usage).
9. The total Waste Water Treatment Facility effluent discharged in the NMMA was 658 AF for CY 2022 (see Section 3.1.11 Wastewater Discharge and Reuse).
10. Contour maps prepared using Spring and Fall 2022 groundwater elevation data suggest regional groundwater flow is generally from east to west (toward the ocean). The contour maps also show a landward gradient from the coast in the deep aquifer, which is an indication that groundwater flow is from the coastal area toward inland areas resulting in an increased potential for seawater intrusion. There exists a persistent pumping depression in the deep aquifer in the central area of the NMMA (see Section 6.1.3 Groundwater Contours and Pumping Depressions).

Appendix 7

11. The most recently estimated acreage of land use classification, which was updated in 2020, includes: 10,596 acres of Urban; 2,988 acres of Agriculture; and, 7,957 acres of Non Irrigated land (see Section 3.1.8 Land Use).
12. Water samples collected in CY 2022 from some wells in both the shallow and deep aquifers had nitrate concentrations greater than the drinking water standard and samples from one well contained 1,2,3-Trichloropropane (1,2,3-TCP) at concentrations at or above the notification level. Shallow groundwater monitoring and remediation occurs at a near-coastal refinery, including at the site of a former leaking pipe where cleanup for metals and hydrocarbon contaminants in the shallow aquifer is ongoing (see Section 6.2.2 Results of Inland Water Quality Monitoring).
13. Stream stage data that indicate when flow is occurring are recorded at three gaging stations on Los Berros Creek, although, no rating curves are available to convert the stage data to stream flow. No stream gage exists on Nipomo Creek (see Section 2.3 Hydrogeology and Section 3.1.5 Streamflow).
14. There continues to be uncertainty in the contribution from flow in Los Berros and Nipomo Creeks to NMMA groundwater recharge. Recent evaluation of the northern area of the NMMA adjacent to Los Berros Creek suggests that the shallow aquifer in this area of the NMMA are in hydraulic communication with the Los Berros Creek alluvium.
15. Complex hydrogeology creates uncertainty about the boundaries between confined and unconfined aquifer conditions within the NMMA. Generally, confined (deep) and unconfined (shallow) aquifers are readily distinguished west of the central NMMA (see Sections 2.3.1 Geology and 2.3.2 Groundwater Flow Regime).
16. There is a lack of detailed understanding of the flow path of rainfall, applied water, and treated wastewater to specific aquifers underlying the NMMA (see Section 2.3 Hydrogeology).

ES-3. Recommendations

A list of recommendations was developed and published in each of the previous NMMA Annual Reports. The TG will address past and newly developed recommendations based on future budgets, feasibility, and priority. The recommendations are subdivided into two categories: (1) Achievements from earlier NMMA Annual Report recommendations accomplished in CY 2022, and (2) Technical Recommendations – to address the needs of the TG for data collection and compilation.

ES-3.1. Achievements from Previous NMMA Annual Report Recommendations

The TG worked to address several of the recommendations outlined in the previous Annual Reports. Achievements made during CY 2022 are as follows.

- As part of the continued operation of the NSWP, a total of 1,141 AF of water was delivered to the NMMA during the CY 2022.
- The TG reviewed the NMMA Monitoring Program and identified additional wells or monitoring points to include, in an effort to better characterize conditions in the shallow aquifer and to fill geographic data gaps associated with shallow and deep aquifers. The

Appendix 7

TG established a technical foundation for contouring shallow well groundwater elevations in the northern NMMA.

- The TG continued tracking, in part through regular communication with SLO County, groundwater management activities in groundwater basins adjacent to the SMGB upgradient of the NCMA. These activities are being implemented within the Arroyo Grande subbasin under the umbrella of the Sustainable Groundwater Management Act (SGMA).

ES-3.2. Technical Recommendations

The following technical recommendations are not organized in order of priority. The monitoring parties will determine the implementation strategies and priorities, depending upon their own particular funding constraints and authorities.

- **Supplemental Water Supplies** – Reducing pumping is the most effective method to reduce the stress on the aquifers and to allow groundwater to recover; continued operation of the NSWP (see Section 1.1.5-Supplemental Water) is another viable method to achieve these goals. The TG recommends that this project continue to be implemented consistent with the Judgment and Stipulation.
- **Subsurface Flow Estimates** – Evaluate subsurface flow along the NMMA boundaries based on groundwater gradients and hydraulic conductivities in the shallow and deep aquifers.
- **Key Wells Monitoring** – Install data loggers in all Key Wells.
- **Key Wells Index 5-Year Review** – Evaluate and review the Key Wells Index by 2025.
- **Monitoring Points** – Replace the lost monitoring wells near Oso Flaco Lake, which were buried many years ago by migrating sand dunes, and coordinate this effort with SLO County. Assist SLO County with modification of the wellhead enclosure at the 11N36W12C coastal nested wells and include an assessment of sampling equipment and confirm well depths. Continue to identify, evaluate, and select specific shallow aquifer wells for groundwater monitoring in the NMMA. Stay apprised of the fate of groundwater monitoring wells at the P66 near-coastal refinery following planned decommissioning of the facility beginning in 2023, and coordinate with SLO to continue monitoring of the 11N36W12C coastal nested wells. Consult with SLO County to incorporate additional wells, identified by the TG, into their monitoring network and activities in the future.
- **Well Reference Point Elevations** – Continue to improve the accuracy of the RP elevations using LIDAR data and other survey data.
- **Groundwater Production** – Develop a method to collect groundwater production data from all stipulating parties. Continue to update the land use classification on an interval commensurate with significant changes in land use patterns and as is practical, with the intention that the interval is more frequent than DWR’s 10-year cycle of land use classification.

Appendix 7

- **Agricultural Groundwater Production** – Continue to work with NMMA area farmers to measure groundwater production. Continue consultation with San Luis Obispo County Agriculture Department and other local experts in crop water use with specific updates to emerging crops and crop conversions. Evaluate alternative data sources such as the OpenET organization.
- **Return Flow Estimates** - Estimate the annual amount of wastewater discharged to septic systems for customers who are not connected to WWTF. Evaluate the amount of water served to parcels outside of the NMMA and the degree to which return flows from these parcels do not recharge NMMA aquifers.
- **Hydrogeologic Characteristics of NMMA** – Continue to review well screen intervals, lithology, groundwater level, and other relevant information. Improve the understanding of NMMA fault displacements and potential effects of faulting on the hydrostratigraphy and groundwater flow in the NMMA, and the regions of confined and unconfined groundwater conditions within the NMMA.
- **Stream Flow Estimates** – Develop rating curves for Los Berros Creek, and install a new stream sensor on Nipomo Creek and develop a rating curve.
- **Groundwater Modeling** – Continue to engage with users of the regional groundwater model developed for Pismo Beach and the South SLO County Sanitation District to assess efforts to revise and update the accuracy of the model.
- **SGMA** – Continue communication between the TG and SLO County with respect to the County’s groundwater management activity adjacent to the adjudicated portion of the SMGB. The TG will continue to report annual groundwater conditions to the DWR SGMA reporting site for adjudicated basins.

1. Introduction

The rights to extract water from the Santa Maria Groundwater Basin (SMGB) have been in litigation since the late 1990s resulting in three separate management areas that were established in 2008 by the Court in the Judgment After Trial (Judgment, 2008): the Northern Cities Management Area (NCMA), the Nipomo Mesa Management Area (NMMA), and the Santa Maria Valley Management Area (SMVMA). The Court directed monitoring parties of each management area to form a group of technical experts to continue to study and evaluate the characteristics and conditions of each management area and to annually present their findings to the Court in the form of an Annual Report. The NMMA Technical Group (TG) is one of three management area committees formed to administer the relevant provisions of the Stipulation. Golden State Water Company (GSWC), Nipomo Community Services District (NCSD), Phillips 66 (P66), and Woodlands Mutual Water Company (Woodlands) are responsible for appointing members of the committee, together with an agricultural overlying landowner, who is also a Stipulating Party. Golden State Water Company (formerly Southern California Water Company) acquired Rural Water Company in 2015, not including the wastewater treatment and disposal plant.

This 15th Annual Report – Calendar Year 2022 is a joint effort of the TG. The requirement contained in the Judgment for the production of an Annual Report is as follows:

“Within one hundred and twenty days after each Year, the Management Area Engineers will file an Annual Report with the Court. The Annual Report will summarize the results of the Monitoring Program, changes in groundwater supplies, and any threats to groundwater supplies. The Annual Report shall also include a tabulation of Management Area water use, including Imported Water availability and use, Return Flow entitlement and use, other Developed Water availability and use, and Groundwater use. Any Stipulating Party may object to the Monitoring Program, the reported results, or the Annual Report by motion.”

This Annual Report is organized into an executive summary, and nine sections which present: the general background of the litigation and some of the requirements imposed by the Court: a description of the basin, a summary of data collection, water supply and demand, hydrologic inventory, groundwater conditions, an analysis of water conditions, and a presentation of other considerations, recommendations; and references.

Five appendices are also included in the Annual Report: Appendix A – Monitoring Program, Appendix B – Water Shortage Conditions and Response Plan, Appendix C – Well Management Plan, Appendix D – Data Acquisition Protocols for Groundwater Level Measurements for the NMMA, and Appendix E – Additional Data. Fourteen annual reports have previously been prepared, spanning calendar years 2008 to 2021 (NMMA, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021 and 2022).

1.1. **Background**

Presented in this subsection is a brief history of the litigation process through 2008 and general discussions of activities that have been undertaken to date or are underway to manage the water resources of the NMMA.

1.1.1. History of the Litigation Process

The SMGB was the subject of litigation from 1997 to 2008. Collectively called the Santa Maria Groundwater Litigation (*Santa Maria Valley Water Conservation District vs. City of Santa Maria, et al.* Superior Court for the County of Santa Clara Case No. 770214), over 1,000 parties were involved with competing claims to pump groundwater from within the boundary of the SMGB (Figure 1-1).

The Santa Maria Valley Water Conservation District was originally concerned that banking of State Water Project (SWP) water in the groundwater basin by the City of Santa Maria would give the City of Santa Maria priority rights to the groundwater. The lawsuit was subsequently broadened to address groundwater management of the entire SMGB.

On June 30, 2005, the Stipulating Parties entered a Stipulated Judgment (Stipulation) in the case, which was approved by the Court on August 3, 2005. The Stipulation divides the SMGB into three separate management areas: the NCMA, NMMA, and the SMVMA. The Stipulation contains specific provisions with regard to rights to use groundwater, development of a Monitoring Program, development a Water Shortage Conditions and Response Plan and a Well Management Plan, the construction of the Nipomo Supplemental Water Project to convey Supplemental Water, and the formation of three management area technical groups to administer these provisions.

The TG was formed pursuant to a requirement contained in the Stipulation. Sections IV D (All Management Areas) and Section VI (C) (NMMA) contained in the Stipulation were independently adopted by the Court in the Judgment After Trial. The Judgment is dated January 25, 2008, and was entered and served on all parties on February 7, 2008 (Judgment, 2008). Pursuant to paragraph 5 of the Judgment, the TG retains the right to seek a Court Order requiring non-stipulating parties to monitor their well production, maintain records thereof, and make the data available to the Court or the Court's designee. The compilation and evaluation of existing data, and the aggregation of additional data, are ongoing processes constrained by limited budget and resources. The TG has focused its efforts on the evaluation of readily accessible data. The TG does intend to slowly integrate into its assessment new data that may be collected from stipulating parties and other sources that were not previously compiled as part of the database existing in 2008. In November 2017 the Court's current presiding judge was given a day-long ground- and aerial-based tour of the SMGB, which was planned in the months leading up to November 2017.

1.1.2. Development of Monitoring Program

In 2008, the TG developed and the Court approved the NMMA Monitoring Program (Monitoring Program) to ensure systematic collection of important information in the basin (see Appendix A). This Monitoring Program includes information such as groundwater elevations, groundwater quality, and pumping amounts. The Monitoring Program also identifies a number of wells in the NMMA to be monitored (Figure 1-2) and discusses the methods of analysis of the data.

A large areal extent within the NMMA receives water service from the major water purveyors (Figure 1-3). The majority of the lands within the NMMA obtain water by means other than from a purveyor. A fraction of these property owners are Stipulating Parties. All of the larger purveyors are also Stipulating Parties. All Stipulating Parties are obligated to make available relevant information regarding groundwater elevations, water quality, and pumping data necessary to implement the NMMA Monitoring Program.

1.1.3. Water Shortage Conditions and Response Plan

The TG developed a Water Shortage Conditions and Response Plan as part of the Monitoring Program. The water shortage conditions are characterized by two different criteria – those for Potentially Severe Water Shortage Conditions and those for Severe Water Shortage Conditions. The response to these conditions includes voluntary and mandatory actions by the parties to the Stipulation. The Court approved the Water Shortage Conditions and Response Plan on April 22, 2009 (see Appendix B).

1.1.4. Well Management Plan

The Stipulation requires the preparation of a Well Management Plan (WMP) when Potentially Severe Water Shortage Conditions or Severe Water Shortage Conditions exist prior to the completion of a Supplemental Water project. The WMP provides for steps to be taken by the NCSO, GSWC, and Woodlands, under these water shortage conditions. The WMP has no applicability to either P66 or Overlying Owners as defined in the Stipulation. The WMP was adopted by the TG in January 2010 and submitted to the Court in April 2010 with the 2009 Annual Report, (see Appendix C). On April 14, 2014, the NMMA Water Shortage Response Stages was endorsed by the TG and submitted to the Court with the 2013 Annual Report (see Appendix C).

1.1.5. Supplemental Water

The Judgment states: “The court approves the Stipulation, orders the Stipulating Parties only to comply with each and every term thereof, and incorporates the same herein as though set forth in full.” Thus, the terms of the Stipulation as herein stated must be complied with in accordance with the order of the Court. The Stipulation requires NCSO to bring Supplemental Water to the NMMA as follows:

“The NCSO agrees to purchase and transmit to the NMMA a minimum of 2,500 acre-feet of Nipomo Supplemental Water each Year. However, the NMMA Technical Group may require NCSO in any given Year to purchase and transmit to the NMMA an amount in excess of 2,500 acre-feet and up to the maximum amount of Nipomo Supplemental Water which the NCSO is entitled to receive under the MOU if the Technical Group concludes that such an amount is necessary to protect or sustain Groundwater supplies in the NMMA. The NMMA Technical Group also may periodically reduce the required amount of Nipomo Supplemental Water used in the NMMA so long as it finds that groundwater supplies in the NMMA are not endangered in any way or to any degree whatsoever by such a reduction.”

“Once the Nipomo Supplemental Water is capable of being delivered, those certain Stipulating Parties listed below shall purchase the following portions of the Nipomo Supplemental Water Yearly:

NCSO - 66.68%
Woodlands Mutual Water Company - 16.66%
SCWC - 8.33%
Rural Water Company - 8.33%”.

NCSO completed the initial phase of the planned 3,000 AFY Nipomo Supplemental Water Project (NSWP) in 2015 and began delivering water onto the NMMA on July 2, 2015. With the initiation of NSWP deliveries, a minimum purchase schedule ‘time clock’ was triggered in accordance with the NCSO and City of Santa Maria Wholesale Agreement (NCSO and City of Santa Maria, 2013).

Commencing no later than delivery year eleven (2026), NCSD is required to purchase from the City of Santa Maria (and import to the NMMA) a minimum of 2,500 AFY.

The initial phase of the NSWP included the construction of a two-mile long pipeline that traverses under the Santa Maria River, across the Santa Barbara/San Luis Obispo County boundary and interconnects the City of Santa Maria's water system to NCSD's. This interconnect provides the NMMA with its first and only means of importing water and links the NMMA via the City of Santa Maria and the State Water Project to Northern California. This pipe is capable of delivering 6,200 AFY. The License Agreement the County of Santa Barbara issued to facilitate the pipeline crossing the County's flood control levee constrains the project to a maximum delivery of 3,000 AFY.

NCSD is planning additional phases of work to ramp up capacity well ahead of the minimum purchase schedule contained in the Wholesale Agreement.

1.1.6. Other Groundwater Management Activities

The TG continues to support groundwater basin characterization activities through cooperation on with outside parties, such as providing various data, including, but not limited to, lithologic (well) logs, geophysical logs, and pump efficiency and aquifer test results.

NCSD and GSWC provided access in 2014 for aquifer testing of selected wells during execution of the groundwater basin characterization activities. The TG subsequently provided comments on draft versions of the SMGB Characterization and Planning Activities Study report, which was made available to the public and the TG as a final version in January 2016 (Fugro, 2015).

The TG has provided data in support of the technical basis for the San Luis Obispo County Public Works Department (SLO PWD) Integrated Regional Water Management (IRWM) Plan, the most recent version of which was completed in August 2020.

The TG has also supported development of a SLO County regional groundwater model, beginning in 2017. The modeled area includes the NCMA, NMMA, and a portion of the SMVMA. The TG provided model input data and a TG representative provided input via participation in frequent meetings with the groundwater modeling team. The TG also provided other feedback on the model development process in 2017 and 2018 by reviewing key documents and providing written comments to the groundwater modeling team, and provided comments and concerns during the final model calibration phase in 2019. The model was completed in 2019 (Geoscience, 2019).

SLO PWD also took a leading role with respect to initiating the implementation of SGMA in applicable groundwater basins. SGMA, which was signed into law in September 2014 and enacted beginning January 1, 2015, established a new structure for managing California's groundwater resources at a local level. SGMA requires the formation of locally-controlled groundwater sustainability agencies (GSAs) in certain groundwater basins. SGMA also requires that GSAs develop and implement a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin or subbasin, to ensure that it is operated within its sustainable yield, without causing undesirable results. In 2015, the SLO County and Flood Control District Board adopted a strategy which established community focused GSAs based on cooperative interagency and stakeholder relationships.

The SMGB is an adjudicated basin and therefore exempt from most SGMA requirements. Portions of SGMA basins that are outside of an adjudicated boundary are termed fringe areas. The TG reviewed and provided comments to the public draft documents prepared by the SLO County for basin

boundary modifications that subsequently removed some fringe areas from SGMA requirements (GSI, 2018a and 2018b; SLO, 2019b).

1.2. **Reporting**

The Annual Report is prepared and internally reviewed by the TG and is subsequently made available to the Court and public, as described below.

1.2.1. Description of the Nipomo Mesa Management Area Technical Group

The TG is composed of representatives of each of the Monitoring Parties: NCSO, GSWC, P66 (formerly named ConocoPhillips), Woodlands; and an agricultural user that is also a Stipulating Party. The agricultural overlying landowner representative is not responsible for funding a portion of the TG's efforts.

In October 2015, GSWC acquired the Rural Water Company (RWC) drinking water system, not including the wastewater treatment and disposal facilities. Because GSWC began operating the former RWC drinking water system at that time, late in the calendar year, and to provide greater clarity, attribution to RWC was made throughout the 2015 Annual Report wherever possible. In the interest of simplification, references in subsequent annual reports to RWC have been removed and replaced with references to GSWC.

The TG is responsible for developing the Monitoring Program, implementing the Monitoring Program, and preparing the Annual Report. Unanimous approval on all material issued is obtained by way of a single vote per Monitoring Party. If the TG is unable to obtain unanimous approval, the matter may be taken to the Court for resolution.

The Monitoring Parties may hire individuals or consulting firms to assist in the preparation of the Monitoring Program and Annual Reports. The Judgment describes these individuals or consulting firms as the Management Area Engineer. The Monitoring Parties' representatives to the TG, as a group, function as the Management Area Engineer (Table 1-1) and attend monthly meetings where data collection and preparation of the Annual Report are the primary focus. The Monitoring Parties have the sole discretion to select, retain, and replace the Management Area Engineer.

Table 1-1. NMMA Technical Group

Monitoring Parties	Management Area Engineer Representatives
Agricultural Overlying Landowner	Vacant in CY 2022
Golden State Water Company	Toby Moore, Ph.D., P.G., C.H.G.
	Robert Collar, P.G., C.H.G.
Nipomo Community Services District	Brad Newton, Ph.D., P.G.
Phillips 66	Norm Brown, Ph.D., P.G.
Woodlands	Rob Miller, P.E.
	Neil Currie, P.G., C.H.G.
	Tim Kershaw
Notes:	
1. Each Monitoring Party has a single vote in order to unanimously approve final work product.	
2. Agricultural Overlying Landowner Representative resigned in 2021.	

1.2.2. Coordination with Northern Cities and Santa Maria Valley Management Areas

The NMMA is bounded on the north by the NCMA and on the south by the SMVMA (Figure 1-1). The TG recognizes that collaborative technical efforts with the NCMA and SMVMA technical groups will be important to the appropriate management of the basin. Examples of collaborative efforts include:

- Sharing and evaluating technical data throughout the year, and during the preparation of Annual Reports,
- Opportunities for review and comment on technical work products,
- Sharing of protocols and standards for data collection and analysis, and
- Consideration of jointly-pursued projects and grant opportunities.

1.2.3. Distribution

The Annual Report for each calendar year (January 1 to December 31) is completed by April 30th of the following calendar year and submitted to the Court. Beginning in 2016, the Annual Report has been distributed to the California Department of Water Resources’ website for adjudicated groundwater basins pursuant to SGMA (DWR, 2019).

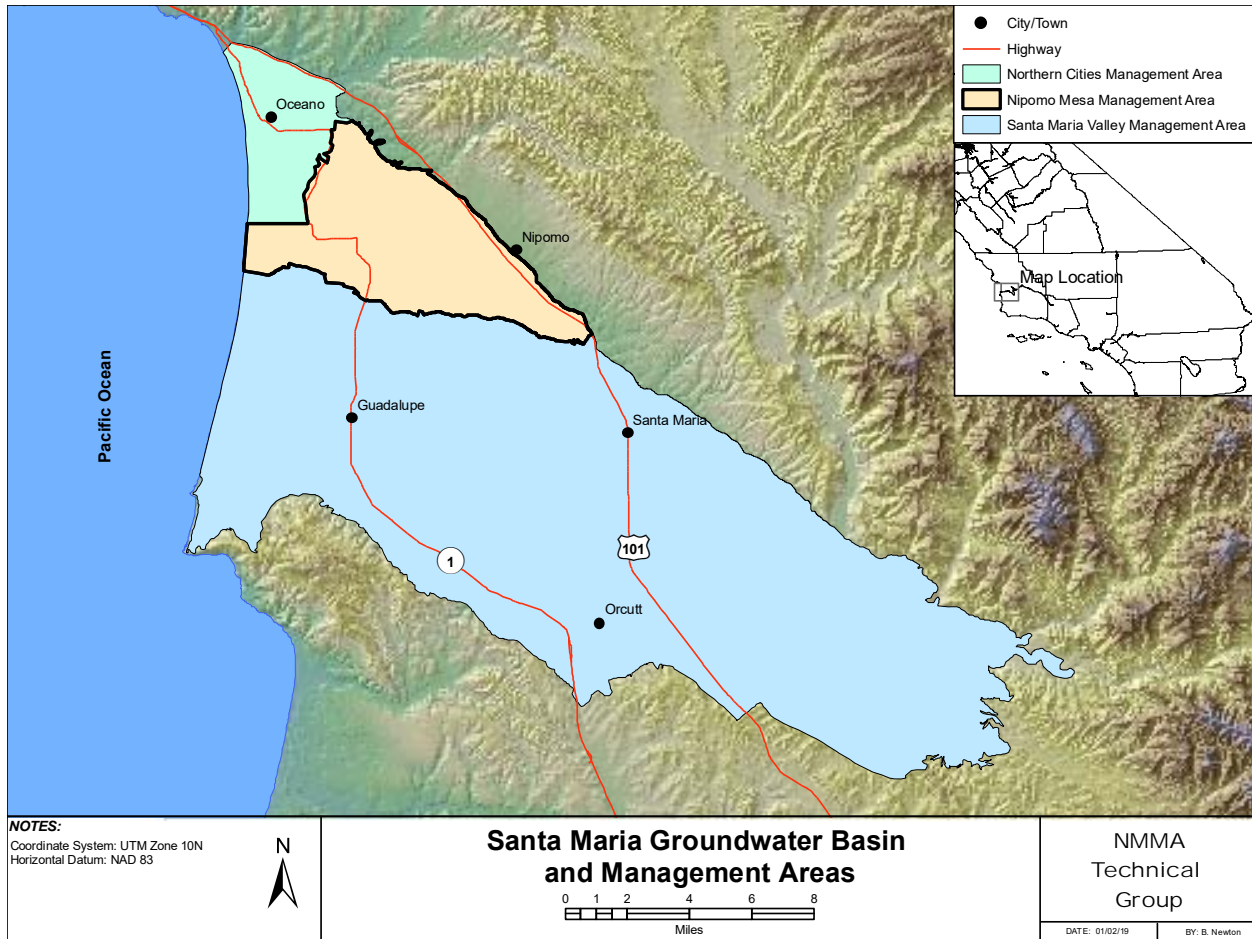


Figure 1-1. Santa Maria Groundwater Basin and Management Areas

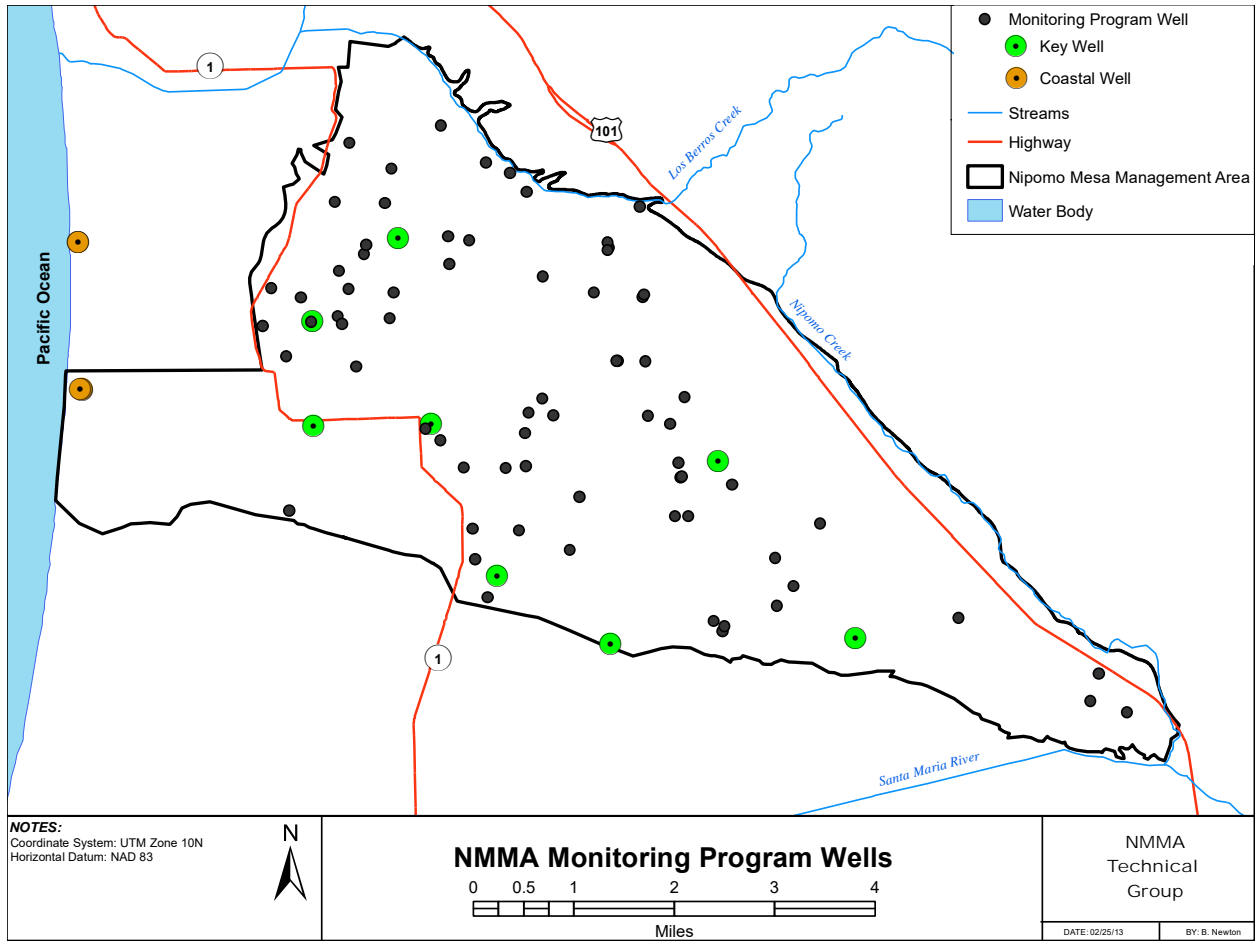


Figure 1-2. Wells identified in the NMMA Monitoring Program (NMMA, 2009)

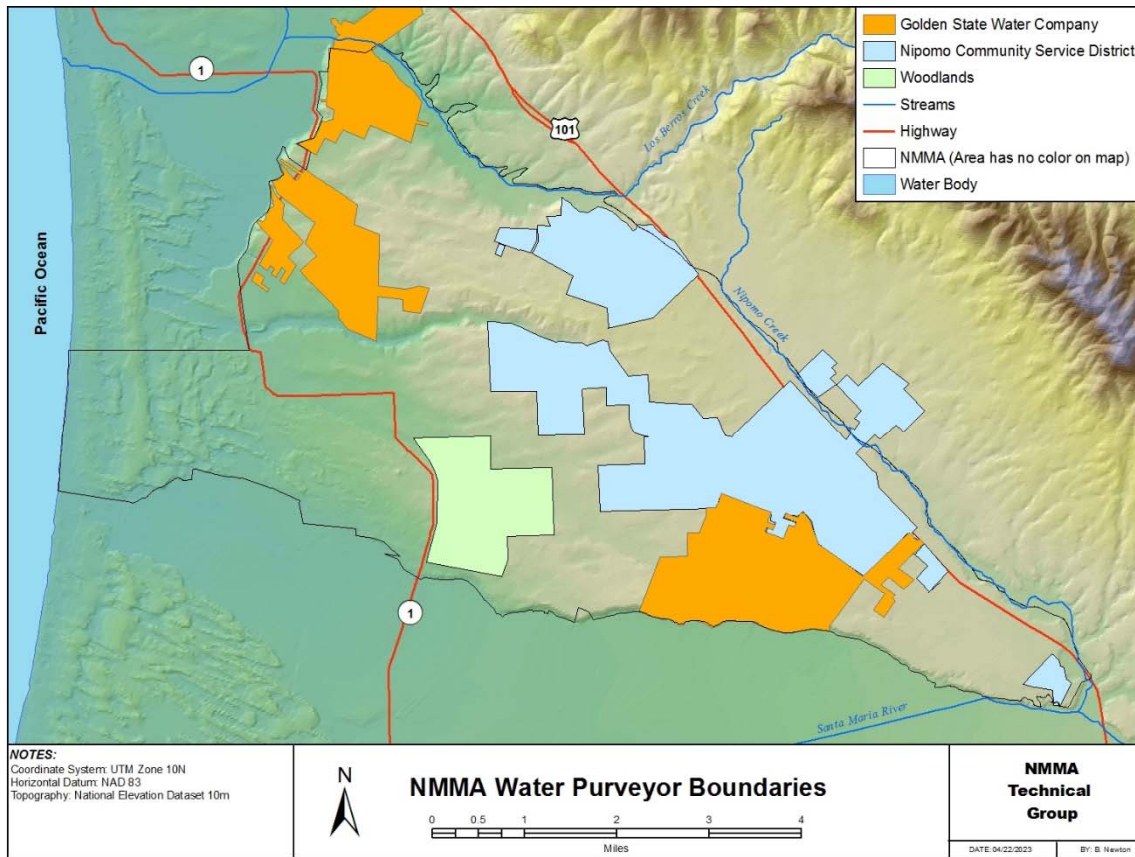


Figure 1-3. NMMA Water Purveyor Boundaries

2. Basin Description

The SMGB is bounded on the north by the San Luis and Santa Lucia mountain ranges, on the south by the Casmalia-Solomon Hills, on the east by the San Rafael Mountains, and on the west by the Pacific Ocean, and covers an area of approximately 256 square miles. The basin receives water from rainfall directly and runoff from several major watersheds drained by the Cuyama River, Sisquoc River, Arroyo Grande Creek, and Pismo Creek, as well as many minor tributary watersheds. Sediment eroded from these nearby mountains and deposited in the Santa Maria Valley formed beds of unconsolidated alluvium, averaging 1,000 feet in depth, with maximum depths up to 2,800 feet and comprise the principal production aquifers from which water is extracted to supply the regional demand. Three management areas overlying the SMGB were defined with the goal of recognizing that the development and use of groundwater, State Water Project water, surface water storage, and treatment and distribution facilities have historically been financed and managed separately.

2.1. **Physical Setting**

The NMMA has physical characteristics which are distinct from the other two management areas. It is largely a mesa area that is north of the Santa Maria River, west of the San Luis Range and south of the Arroyo Grande Creek, with a lower lying coastal environment to the west. The mesa was formed when the Santa Maria River and Arroyo Grande Creek eroded the surrounding area. The current coastal environment, which developed subsequently, is composed of beach dunes and lakes, and is a recreational area with sensitive species habitat. Hummocky topography on the mesa area reflects the older dune deposits. Black Lake Canyon is an erosional feature north-central in the NMMA and where the dune deposit thickness is exposed. Los Berros Creek valley is along the north side of the NMMA and the Nipomo Creek valley is along the east side of the NMMA.

2.1.1. **Area**

The NMMA covers approximately 33 square miles or 21,590 acres, which accounts for approximately 13 percent of the overall SMGB (164,000 acres). Approximately 13,500 acres on the NMMA, or 64 percent, is developed land requiring water pumped from the underlying aquifers to sustain the agricultural and urban development. In the 2018 Annual Report, the common boundary between the NMMA and the SMVMA was changed to follow parcels, in coordination with SMVMA Engineer.

2.1.2. **General Land Use**

Land uses include agricultural, urban (residential and commercial), and native or undeveloped areas. There are also three golf courses and one oil-processing facility. The crop types grown in the order of largest to smallest acreage were strawberries and cane berries, nursery, rotational vegetables (broccoli, lettuce, etc.) avocado and lemon, pasture, deciduous and grapes, and most recently cannabis. The most recent survey of crops was performed in 2020.

2.2. **Climate**

A Mediterranean-like climate persists throughout the area with cool moist winters and warm dry summers. During the summer months, the warm air inland rises and draws in the relatively cooler marine layer near the coastline keeping summer cooler and providing moisture for plant growth, while in the winter months the relatively warmer ocean temperature keeps the winter warmer. The average annual maximum temperature is 69 degrees Fahrenheit, and the average annual minimum temperature is 46 degrees Fahrenheit. Precipitation normally occurs as rainfall between November and April when cyclonic storms originating in the Pacific Ocean move onto the continent. The long-term (1959 to 2022) average annual rainfall reported at CDF Nipomo Rain Gauge #151.1 is 15.50 inches and is representative of the larger area of the NMMA. Rainfall variability exists across the NMMA and rainfall increases in the foothills and mountains due to the orographic (elevation) effect. The long-term average annual evapotranspiration from standard turf (a well-watered, actively growing, closely clipped grass that is completely shading the soil) is 46.3 inches, and is referred to as the reference evapotranspiration of Reference Zone 3 (Table 2-1).

Table 2-1. Climate in the Nipomo Mesa Area

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max Temp (Fahrenheit) ¹	63.3	64.3	64.8	66.9	68.3	70.6	72.8	73.2	74.4	73.5	69.2	64.3	68.8
Average Min Temp (Fahrenheit) ¹	39.0	40.9	42.0	43.5	46.8	50.1	53.1	53.6	52.2	48.1	42.6	38.7	45.9
Average Rainfall (inches) ²	3.25	3.08	2.77	1.05	0.26	0.04	0.02	0.03	0.17	0.71	1.48	2.64	15.50
Monthly Average Reference Evapotranspiration (inches) ³	1.86	2.24	3.72	4.80	5.27	5.70	5.58	5.27	4.20	3.41	2.40	1.86	46.3
Monthly Average Reference Evapotranspiration (inches) ⁴	2.18	2.57	3.50	4.56	5.02	5.03	5.00	4.46	3.72	3.27	2.29	1.85	43.45
Monthly Average Reference Evapotranspiration (inches) ⁵	2.13	2.71	3.92	4.76	5.57	5.58	5.58	5.12	4.30	3.56	2.33	1.76	47.32

Notes:

1. Data from Santa Maria Airport - Nearest long-term temperature record to the NMMA in the Western Regional Climate Center is from the Santa Maria Airport, station #47946. The average is from 1948 through 2016. Source: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7946>.
2. Data from CDF Nipomo Rain Gauge 151.1 (1959 to 2022).
3. Data from California Irrigation Management Information System (CIMIS) – Reference Zone 3 Source: http://www.cimis.water.ca.gov/App_Themes/images/etozonemap.jpg
4. Data from California Irrigation Management Information System (CIMIS) calculated from monthly evapotranspiration (ET_o) for the period of record at Station 202 Nipomo (June 2006 to December 2022), and the station is regularly over-sprayed by irrigation. Source: <http://www.cimis.water.ca.gov/cimis/data.jsp>
5. Data from California Irrigation Management Information System (CIMIS), calculated from monthly evapotranspiration (ET_o) for the period of record at Station 232 Santa Maria II (April 2011 to December 2022). Source: <http://www.cimis.water.ca.gov/cimis/data.jsp>

2.3. Hydrogeology

Groundwater management is founded upon the current understanding of the geology and the groundwater flow regime specific to the NMMA.

2.3.1. Geology

The NMMA overlies part of the northwest portion of the SMGB (Figure 1-1). The sedimentary deposits comprising the deep production aquifers of the groundwater basin underlying the NMMA include the Pliocene age Careaga Formation and the Plio-Pleistocene age Paso Robles Formation. These basin sedimentary formations are overlain by Quaternary age dune sands in the NMMA, and by the Quaternary age alluvium in Los Berros Creek valley (on the northern perimeter of the NMMA) and in Nipomo Creek valley (on the eastern perimeter of the NMMA) which, when saturated, comprise shallow

production aquifers locally. These sedimentary beds have been deposited within the Santa Maria Valley synclinal basin. The pre-Quaternary age sedimentary beds have been displaced by faults within and on the perimeter of the basin (Figure 2-1). Further information on these geologic formations and the geologic structure is available in the 2nd Annual Report – Calendar Year 2009 (NMMA, 2010). Cross sections developed by the TG characterize portions of the NMMA boundary, were prepared to advance the understanding of hydrogeology, and are plotted on the generalized geologic map (Figure 2-1).

Northwestern Boundary

The A-A' geologic cross section generally follows the northwestern boundary of the NMMA from Los Berros Creek and Nipomo Hill in the north to Black Lake Canyon and State Route 1 (Figure 2-2). The cross section was prepared based on well logs and geologic maps as a foundation for evaluating groundwater flow in this area. It was developed primarily using 19 wells distributed from north to south along, and located within roughly one half mile east (primarily) and west of the approximately 4-mile-long cross section.

The cross section generally shows the land surface, relatively permeable aquifers tapped by many wells in the area that are underlain by relatively impermeable bedrock of the Franciscan Formation, and the Oceano fault. The following geologic formations comprise aquifers within the NMMA: Younger Alluvium, Dune Sand and Older Dune Sand deposits, Paso Robles Formation (clay and gravel beds), and underlying marine sands of the Careaga Formation. The Dune Sand and Older Dune Sand Formations are collectively referred to in this report as the shallow dune sand aquifer or more simply as the shallow aquifer. The Paso Robles Formation and Careaga Formation are collectively referred to in this report as the “deep aquifer,” where confined by overlying relatively low permeable clay rich deposits near the base of the Older Dune Sand Formation and top of the Paso Robles Formation.

The base of the Older Dune Sand Formation slopes to the southwest from where it laps onto the Nipomo Hill bedrock at an elevation of more than 100 feet above sea level to an elevation of about 100 feet below sea level at the southern end of the cross section (Figure 2-6). The Paso Robles and Careaga Formation beds also slope to the southwest from Nipomo Hill toward Black Lake Canyon, where the base of these formations drops to an elevation of at least about 400 feet below sea level but is not well defined.

The relatively impermeable bedrock is comprised of the Cretaceous and Jurassic age Franciscan Complex rock and older sedimentary beds (early Pliocene age Sisquoc Formation). Very few wells produce groundwater from the bedrock in the NMMA. Franciscan Complex bedrock is exposed on the lower slope of Nipomo Hill at Los Berros Road and remains at relatively shallow depths, within a few hundred feet of the land surface, toward the south to Woodland Hills Road. Older sedimentary beds that thicken toward the coast, have low permeability and underlie the principal aquifers. These older sedimentary beds, though not as impermeable as the Franciscan Complex rock, contain poorer quality groundwater than the overlying Paso Robles and Careaga Formations comprising the principal production aquifers.

Southern Boundary

The B-B' geologic cross section generally follows the southern boundary of the NMMA and is based on available subsurface information from exploratory oil well logs, water well logs, published geology and hydrogeologic reports, and geophysical surveys (Figure 2-3). The aquifers depicted extend both to the south and north of the SMVMA - NMMA boundary and groundwater flow can be expected to occur across this boundary. Groundwater flow may be impeded by geologic features including near-vertical boundaries such as faults and near-horizontal aquitards that are illustrated on this cross section.

The stratigraphy in this area is similar to that described for the A-A' cross section. Here the thickness of the deep aquifer is much greater, on the order of 500 feet in many places. The shallow dune sand aquifer, overlying the deep aquifer, increases in saturated thickness from approximately 50 feet on the east to 300 feet on the west.

Cross section B-B' shows the land surface, the relatively permeable aquifers utilized by many wells in the area, and the underlying, relatively impermeable, undifferentiated Tertiary sedimentary beds. Younger Alluvium, Older Dune Sand Formation, Paso Robles Formation (clay and gravel beds), and underlying marine sands of the Careaga Formation contain aquifers. The base of the Older Dune Sand slopes toward the coast, from where it laps onto the Franciscan bedrock east of the Wilmar Avenue fault near Highway 101 at an elevation of more than 100 feet above sea level to an elevation of about 100 feet below sea level at the western end of the cross section (Figure 2-6). The Paso Robles and Careaga Formation beds also slope toward the coast, where the base of these formations is at an elevation of at least about 800 feet below sea level. The Oceano, Santa Maria River, and Wilmar Avenue faults appear to displace the basin sediments with an apparent upward offset to the east.

Northern Boundary

Geologic cross section C-C' generally follows the northern edge of the Nipomo Mesa, from Nipomo Hill at the west end to Summit Station at the east end, along the Los Berros Creek valley (Figure 2-4). The cross section was prepared based on well logs and geologic maps as a foundation for understanding basin characteristics and to evaluate groundwater flow from the Los Berros Creek alluvium into aquifers within the NMMA. The cross section shows the water-bearing formations above the underlying bedrock.

The water-bearing formations in contact along cross section C-C' include the Los Berros Alluvium, Older Dune Sand Formation, and unconfined strata of the Paso Robles Formation. The underlying Careaga Formation appears to be absent or very thin in this area. The base of the Dune Sand slopes to the southwest, orthogonal to cross section C-C', from where it laps onto the Nipomo Hill bedrock at an elevation of more than 100 feet above sea level, to near El Campo Road at an elevation of about 50 feet above sea level (Figure 2-6). The base of the Paso Robles Formation from El Campo Road to Pomeroy Road is 50-100 feet below sea level and rises east from Pomeroy Road to an elevation of more than 150 feet above sea level.

The bedrock along cross section C-C' is primarily the Cretaceous age Franciscan Assemblage rock, although drilling logs identify "blue clay" and "shale" that could be more recent low permeability consolidated sedimentary beds of the Sisquoc and possibly the Monterey Formations.

The TG's understanding of the subsurface conditions indicated by a review of geologic maps (Hall, 1974; DWR, 1970; and DWR, 2002) and well completion reports suggests that the base of the permeable sediments in the Nipomo Hill area is approximately 100 feet above sea level. This interpretation differs from the 2015 SMGB characterization study (Fugro, 2015) which represents the base of the permeable sediments in this area to be much deeper (100 feet below sea level or deeper).

Eastern Boundary

Geologic cross section D-D', close to the eastern boundary of the NMMA from the Santa Maria River valley to Los Berros Creek valley, illustrates the uplifted basin sediments resting on predominantly Franciscan Assemblage bedrock (Figure 2-5). Basin sediments along this cross section include Older Dune Sands Formation, Paso Robles Formation, and a relatively thin section of the Careaga Formation. The base of the basin sediments is at an elevation of about 150 feet above sea level from Los Berros

Creek to where Highway 101 veers to the east off of the cross section alignment. Southeast of this location, the base of the basin sediments deepens to an elevation of about 50 feet above sea level.

The potentially water-bearing formations along cross section D-D' include the Older Dune Sand Formation, clay and gravel beds of the Paso Robles Formation, and a thin (20-50 feet thick) marine sand unit of the Careaga Formation. The Dune Sands deposits are typically unsaturated and the Paso Robles Formation terrestrial sedimentary beds are only partially unsaturated and tend to be fine grained. The Careaga sands are saturated.

Differentiation of Older Dune Sand Formation from Paso Robles Formation

The geologic map (Figure 2-1) shows that Dune Sand and Older Dune Sand Formation extend over the entire NMMA, except for the Los Berros Creek valley and a small area in Black Lake Canyon. The Dune Sand Formation includes active sand dunes whereas the Older Dune Sand Formation is comprised of typically very fine to medium grained sands with some interbedded older soil horizons and inter-dune silts and clays. The elevation of the contact between Older Dune Sand Formation and the Paso Robles Formation was determined in each well where possible (Figure 2-6).

The geologic cross sections in the Santa Maria Groundwater Basin Characterization and Planning Activities Study illustrate that the Older Dune Sand Formation deepen toward the southwest. Beneath the Older Dune Sand Formation, these cross sections also show that there are clayey sediments that separate the shallow dune sand aquifer from the deeper Paso Robles Formation aquifers in most areas (Fugro, 2015).

Faulting

The Oceano fault (U.S. Geological Survey and California Geological Survey, 2006) trends northwest-southeast as it crosses the NMMA boundary near Woodland Hills Road and Kip Lane. Vertical offset of the Paso Robles and Careaga Formations and the Older Dune Sand Formation along the northwestern boundary of the NMMA is approximately 150 feet (Figure 2-2). A seismic (geophysical) survey line transecting the NMMA suggests that the Oceano fault displaced Older Dune Sand Formation (PG&E, 2014), but the nature of offset of the Paso Robles Formation and the Older Dune Sand Formation along the southern boundary of the NMMA, if any, is not known (Figure 2-3). Vertical offset of the Tertiary - Quaternary contact is estimated to be 250-415 feet and an even greater offset is observed at the top of the Franciscan Assemblage (Hanson et al, 1994). The PG&E fault maps for the Offshore Geologic Mapping Study show the offshore Oceano fault as comprised of two splays near the coastline, which extend onshore through the NMMA: the Oceano fault and the Santa Maria River fault. Offset along the Oceano fault has relatively down-dropped aquifers on the southwest side of the structure. The Santa Maria River fault strand is shown to split off of the Oceano fault about ½ mile east of the coast and diverges north from the Oceano fault as it crosses the NMMA (PG&E, 2014).

Offshore, a boundary or change to the groundwater basin may be closer to shore than previously understood. Formerly, the basin limit was considered to be the Hosgri fault, which is about 10 miles offshore. However, the PG&E study recognizes the Shoreline fault, about four miles west of the coastline, as an active fault with significant displacement of basin sediments (PG&E, 2014).

2.3.2. Groundwater Flow Regime

Groundwater flows within the NMMA from recharge sources toward areas of groundwater discharge. Groundwater flow is controlled by factors such as:

- Hydraulic head (e.g., recharge and pumping),
- Impediments to flow (e.g., aquitard),
- Preferential flow paths (e.g., buried gravel channel deposits), and
- Geology (e.g., geologic facies and bedding, contacts, and faults).

Groundwater elevation hydrographs show measured groundwater elevations over time within the specific aquifers tapped by a well and are site-specific for specific times. Groundwater elevation measurements within an aquifer are mapped and interpreted to develop groundwater contours (see Section 6.1.3 Groundwater Contours and Pumping Depressions). Groundwater contour maps provide an interpreted understanding of the hydraulic head conditions within specific aquifer zones.

The following paragraphs present our current understanding of the groundwater flow regime. This understanding includes groundwater flow along the boundaries of the NMMA and groundwater flow within the NMMA.

Groundwater Flow at the NMMA Boundary

The NMMA area encompasses only part of the SMGB. Groundwater flow between adjacent portions of the basin can be expected to occur, but less subsurface flow is likely to occur along bedrock basin edges than between areas where there is continuity of the aquifers.

The eastern boundary of the NMMA is approximately coincident with Nipomo Creek in Nipomo Valley (Figure 2-5). Groundwater recharge from the creek may occur through the shallow alluvial deposits but minimal subsurface inflow into the NMMA area occurs from the bedrock underlying the creek.

The northern boundary of the NMMA is coincident with the northern edge of the Los Berros Creek valley alluvium – Paso Robles Formation boundary within Los Berros Creek valley (Figure 2-4). The alluvium receives recharge from Los Berros Creek and groundwater flow from these alluvium to sedimentary deposits to the south on the mesa is highly likely, given the lack of lithologic or continuous structural features in the area that could significantly influence groundwater flow. Formations north of the Los Berros Creek valley include sedimentary deposits and underlying Franciscan Complex, where groundwater flow from these formations to the NMMA is likely minor.

The northwest boundary of the NMMA is at the base of the mesa along the Cienega Valley of Arroyo Grande Creek. Groundwater flow across this boundary can occur, and may be affected by the Oceano and Santa Maria River faults. There is no appreciable surface runoff from the bedrock outcrop at Nipomo Hill. Rainfall on Nipomo Hill likely infiltrates and flows in the shallow subsurface into the adjacent shallow aquifer. A cross section along the north edge of the mesa was developed to aid in characterization of the subsurface geology (Figure 2-2). Flow from the shallow dune sand aquifer recharges the dune lakes west of this boundary. Hydrogeologic parameters and groundwater level contour maps are the basis for evaluation of the amount of groundwater flow that occurs across this interface between the NMMA and the NCMA (see Section 5.2 Subsurface Flow).

The western boundary of the NMMA is a combination of the east-west R3 administrative line (San Luis Obispo County land use zoning) from the Cienega Valley to the coast and south along the coastline. Groundwater flow has historically occurred from land to the ocean across this boundary. This boundary is particularly important because a reversal of flow across this boundary may result in seawater intrusion.

Along the coastal portion of the NMMA, there is a potential for seawater intrusion to occur. The risk of seawater intrusion into NMMA water supply aquifers is a function of the groundwater elevation, the depth of the aquifers, the structural geology and stratigraphy, and the location of a seawater-fresh groundwater interface. It is not known if the aquifers are exposed on the seafloor along the coastal portion of the NMMA (PG&E, 2014). The nearest known aquifer exposure on the seafloor occurs to the north of the NMMA area. A further risk of seawater intrusion to NMMA water supply could exist along vertical migration pathways in a near coastal zone or lateral intrusion from the adjacent management areas. Seawater intrusion is minimized where offshore gradients exist, and could occur most rapidly if the onshore aquifers are pumped in excess of fresh water replenishment.

The southern boundary of the NMMA is at the base of the mesa along the Santa Maria River Valley. Groundwater flow across this boundary can occur and may be impeded by the Oceano fault. A cross section along this boundary has been developed to aid in characterization of the subsurface geology. Hydrogeologic parameters, if available, may then be used, along with groundwater level contour maps, to estimate the amount of flow that occurs at this interface between the NMMA and the SMVMA.

Groundwater from the shallow dune sand aquifer has been observed to discharge into the streams that follow the base of the mesa on the northwest, southeast and southwest, including: an irrigation drainage ditch in the Cienega Valley west of Halcyon Road, Nipomo Creek downstream of Nipomo, the base of the mesa from Nipomo Creek to Division Road, and Little Oso Flaco Creek west of Highway 1 (Althouse and Meade, 2012). Groundwater discharges as springs from the shallow dune sand aquifer, into drainages north of the Summit Station Road area, and along the southern slope of Nipomo Creek Valley.

Groundwater flow within the NMMA

Groundwater flow within the NMMA is influenced by geologic features, hydraulic gradients, and recharge and discharge points. Aquitards in the western portion of the NMMA are both thicker and more laterally continuous, restricting vertical groundwater flow between the shallow and deep aquifers. Discontinuous aquitards in the central and eastern NMMA may locally inhibit such vertical migration of groundwater, create localized areas of relatively shallow perched aquifers, or influence semi-confined groundwater conditions in transition areas between more areally-extensive unconfined and confined conditions. Recharge sources include major point sources (Los Berros Creek, stormwater runoff basins, and wastewater percolation ponds) and distributed recharge sources (septic systems, percolation of rainfall, and irrigation return flows). Discharge locations include pumping wells, areas of springs and seeps, and phreatophyte consumption.

Previous geological studies identify multiple faults that transect the NMMA (Figure 2-1). The faults and the offset of beds could impede flow within basin sedimentary deposits. Recent investigations further explore the possibility that these faults could act as leaky barriers to groundwater flow (Fugro, 2015; Geoscience, 2018).

Aquitards that influence vertical migration of groundwater between aquifers can have varying thicknesses and hydraulic conductivities as demonstrated in the geologic cross sections (Figure 2-2, Figure 2-3, Figure 2-4, Figure 2-5). A significant aquitard exists in the western portion of the NMMA underneath the base of the Older Dune Sand formation that, in places together with other aquitards in the stratigraphic architecture, confines groundwater in underlying aquifers. Groundwater may be perched or unconfined above the aquitard. Some leakage is likely to occur where the aquitard hydraulic conductivity permits, particularly where the aquitard has limited thickness.

Appendix 7

The extent and thickness of the aquitards have been defined based on well logs and correlations or inferred based on groundwater levels. For example, there are well-documented, laterally-extensive aquitards separating a near-surface unconfined aquifer from deeper confined aquifers in the coastal portion of the NMMA, but these aquitards are less areally contiguous and thick in the central NMMA and may be altogether absent in portions of the eastern NMMA. Aquitard extent and variations in permeability were interpreted for a regional groundwater flow model, including the NMMA, though an aquitard separating the shallow and deeper aquifers is likely less ubiquitous than modeled (Fugro, 2015; Geoscience, 2018).

Shallow aquifer groundwater elevations reflect unconfined or perched groundwater conditions, depending on the local and underlying hydrostratigraphy. In the western NMMA, unconfined groundwater exists above a regional aquitard and the unconfined and confined aquifers are essentially hydraulically separated. In the eastern NMMA, unconfined conditions may be associated with recharge areas for the deeper aquifers that are confined in the western portion of the NMMA. Perched and semi-confined aquifers in the east and central NMMA create hydrologic complications in these areas, and are not always readily described in the context of distinct confined or unconfined zones.

As described previously, where shallow aquifer groundwater reaches the ground surface, groundwater discharges to springs and creeks. Groundwater discharge is observed within and adjacent to the NMMA, in Black Lake Canyon, Little Oso Flaco Creek, and in the nearby coastal dune lakes. The standing water in these surface water features reflects the groundwater elevation in the shallow aquifer. The water levels in these surface water features have been intermittently monitored and can be used to represent the shallow aquifer groundwater elevation. Perched groundwater occurs locally where fine-grained lenses occur within the shallow aquifer. Perching layers and relatively high groundwater elevation have been observed in the southeastern portion of the NMMA and in the northern portion of the NMMA, north of Halcyon Road, among other possible locales within the NMMA.

Groundwater flow from the Los Berros Creek alluvium toward the NMMA can occur where the alluvium overlies or is in contact with the NMMA shallow and deep aquifers along the southern edge of the Los Berros Valley. The TG is evaluating the nature of groundwater connection and flow between Los Berros Valley alluvium and the adjacent NMMA aquifers.

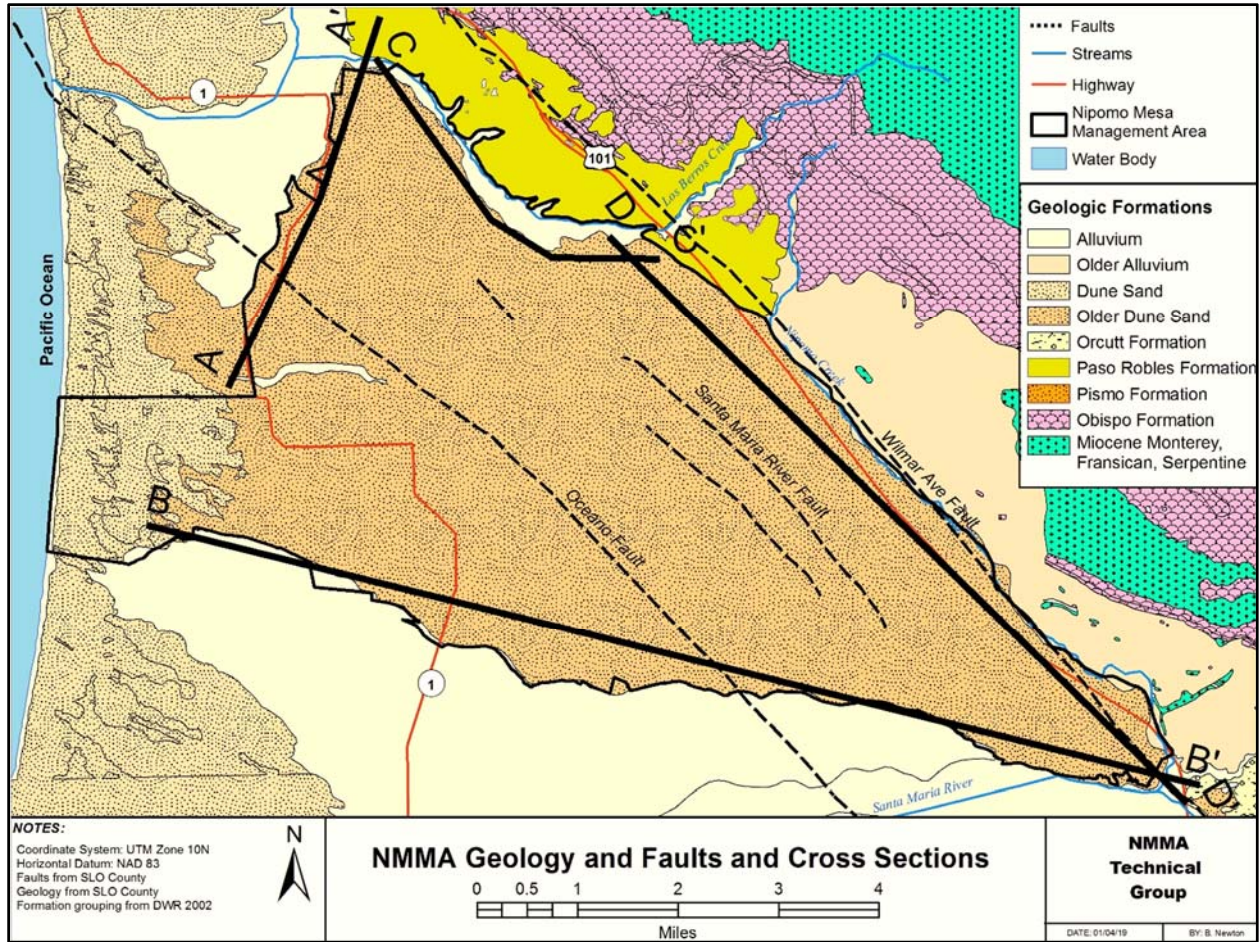


Figure 2-1. NMMA Geology and Faults and Cross Sections

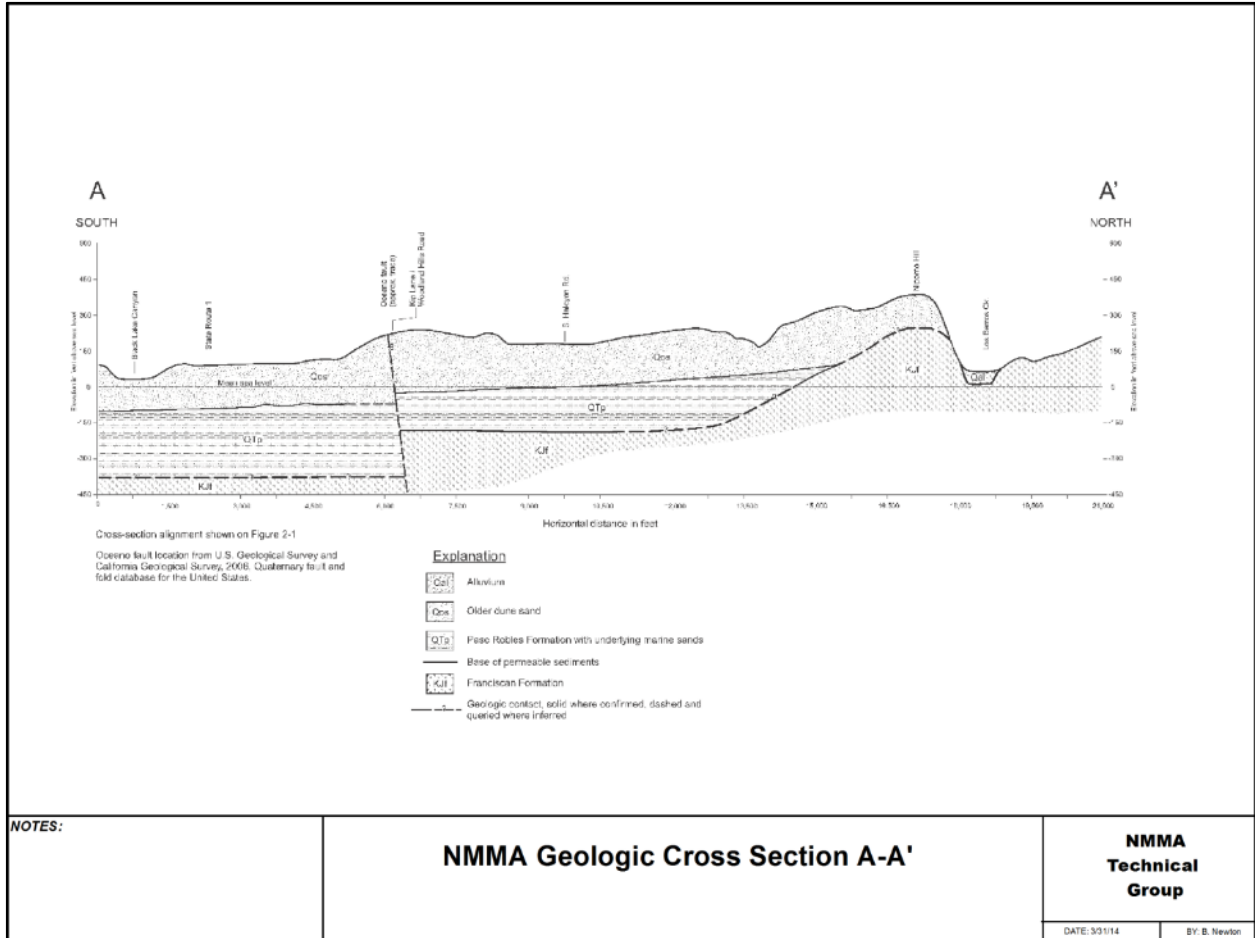


Figure 2-2. NMMA Geologic Cross Section A-A'

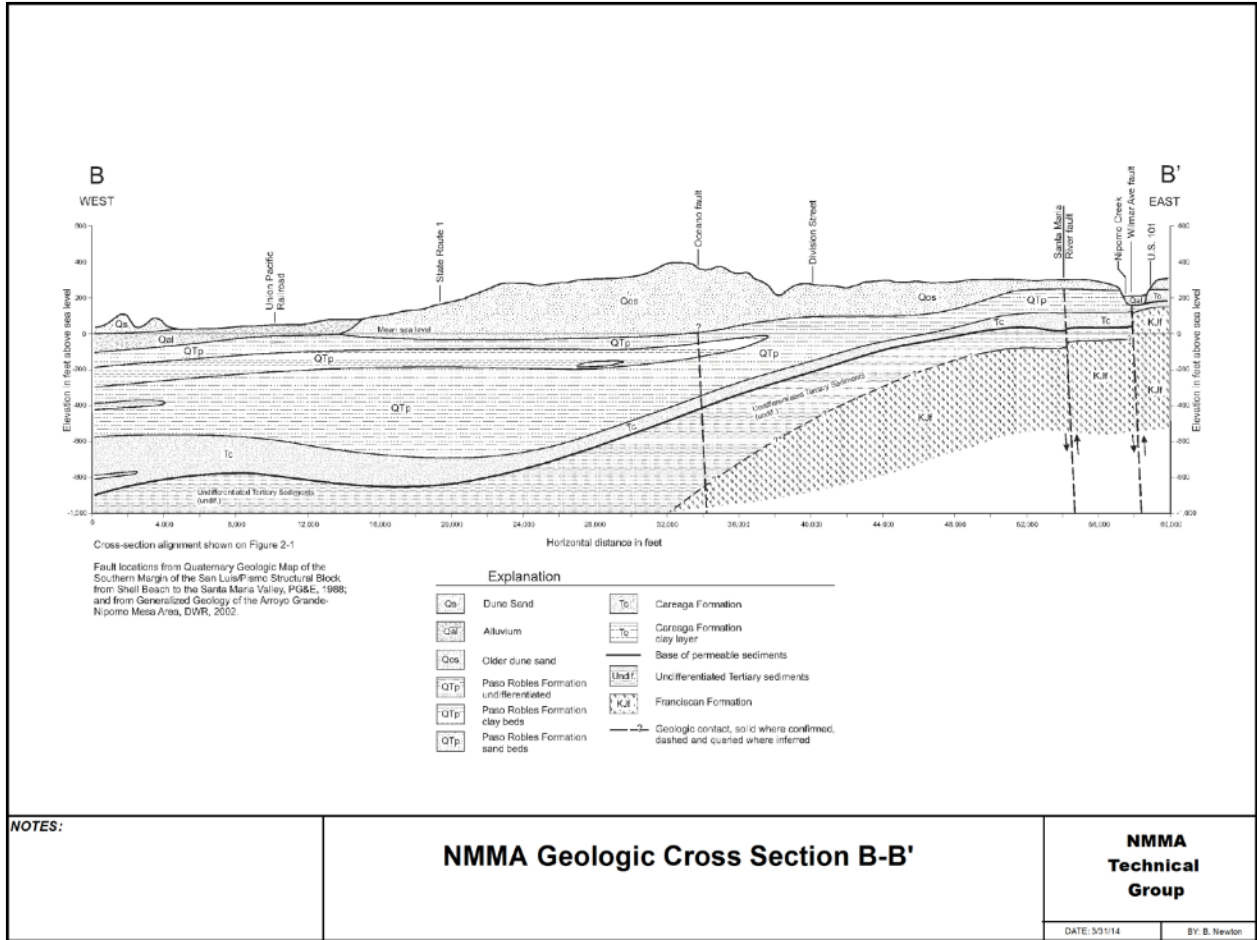


Figure 2-3. NMMA Geologic Cross Section B-B'

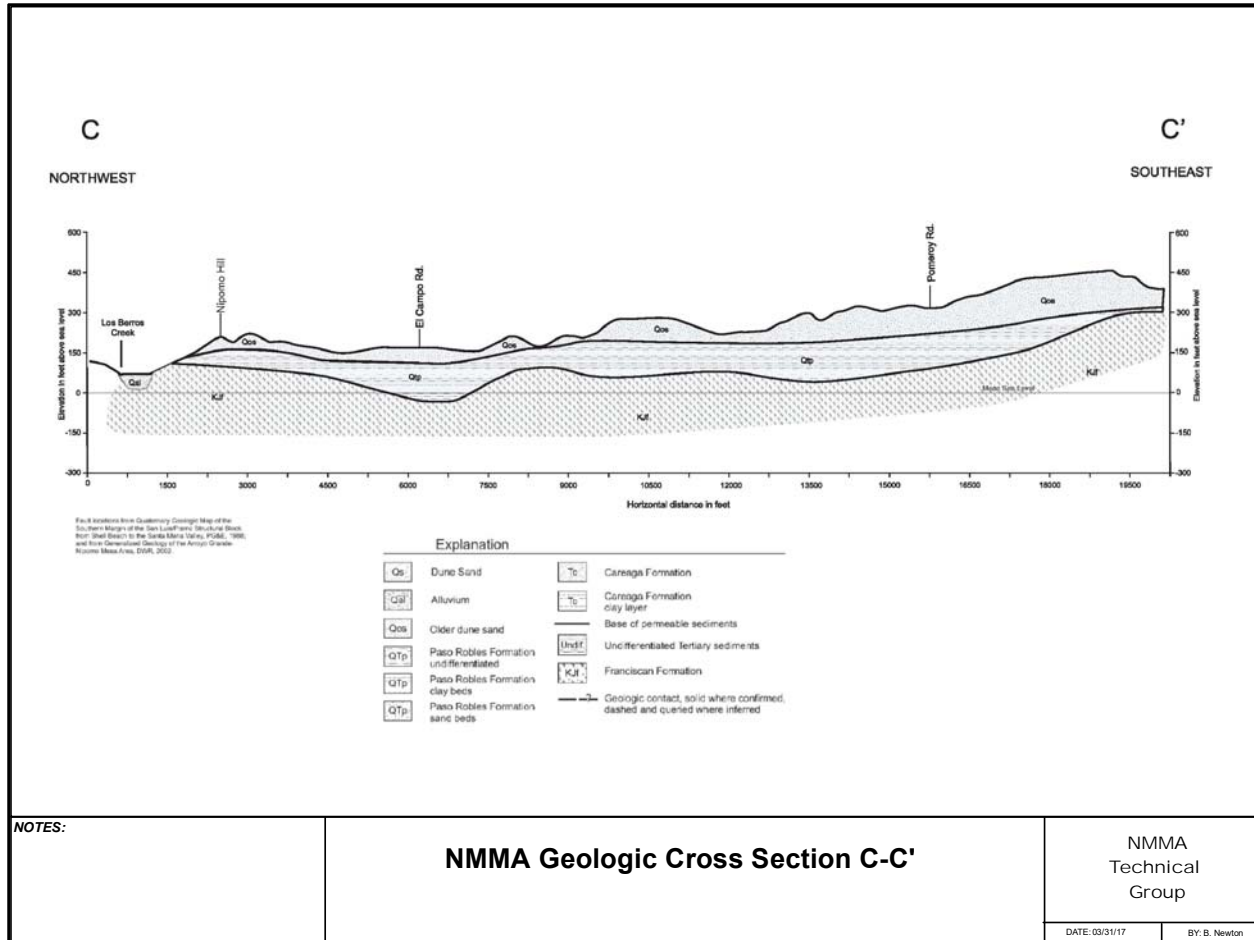


Figure 2-4. NMMA Geologic Cross Section C-C'

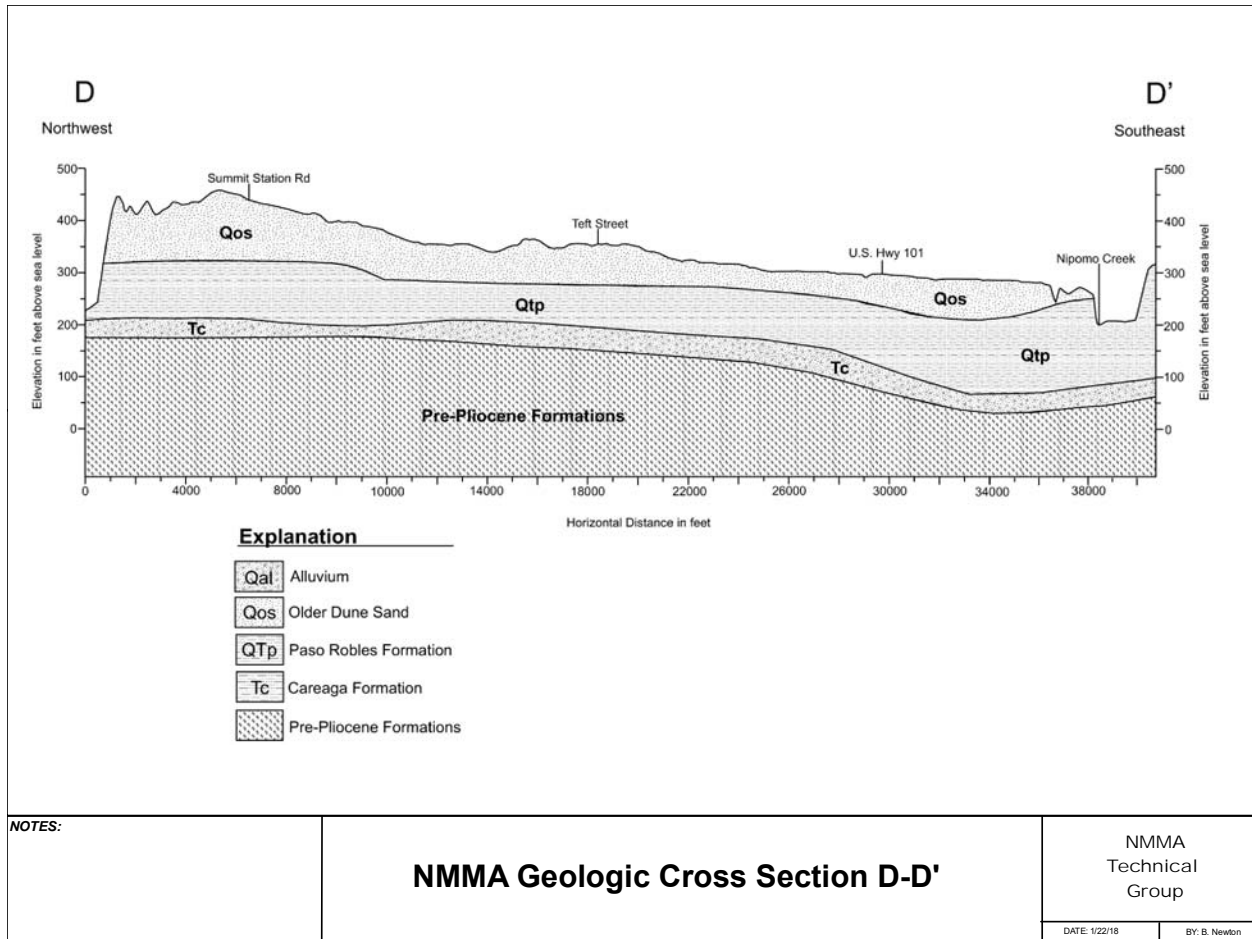


Figure 2-5. NMMA Geologic Cross Section D-D'

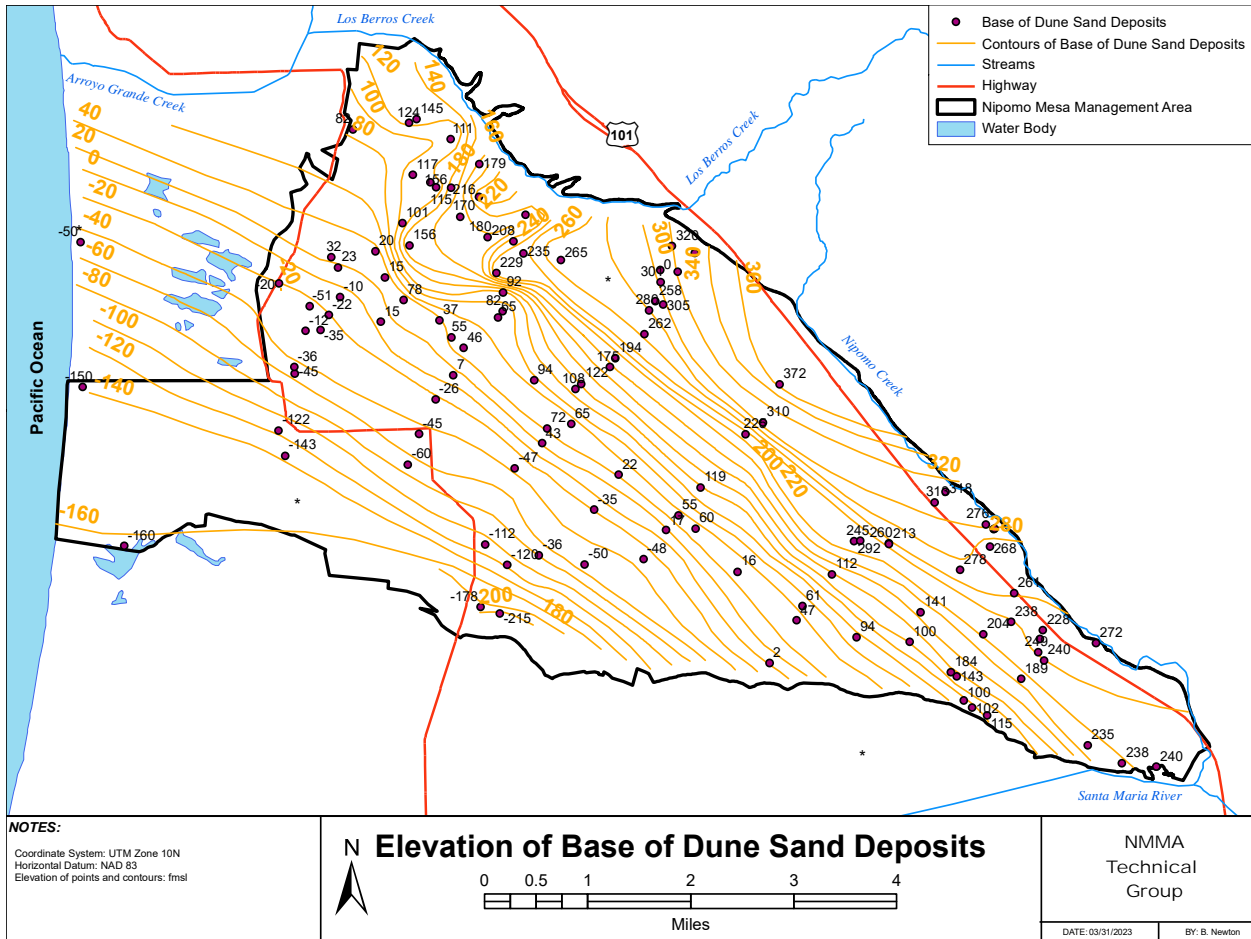


Figure 2-6. Elevation of Base of Dune Sand Deposits

3. Data Collection

The TG is monitoring and analyzing water conditions in the NMMA in accordance with the requirements of the Judgment. The Stipulating Parties are required to provide monitoring and other production data at no charge, to the extent that such data are readily available. The TG has developed protocols concerning measuring devices in order to obtain consistency with the Monitoring Programs of other Management Areas. Discussions of these subjects are presented in the following subsections of this 15th Annual Report– Calendar Year 2022.

3.1. Data Collected

The data presented in this section of the Annual Report were measured during the calendar year (CY) 2022 and are the subject of this Annual Report. Groundwater elevations, water quality, rainfall, surface water, land use, groundwater production and wastewater discharge data were compiled and are presented in the following sections.

3.1.1. Groundwater Elevations in Wells

Groundwater elevation is determined by measuring the depth to water in a well from a reference point at the top of the well casing. The reference point and depth to water data are collected from each agency and input into a TG database that includes groundwater elevation determinations. The date, depth to water, measuring agency, pumping condition, and additional comments are recorded. When the database is updated with new data, an entry is posted in the database log describing the changes that have been made to the database. The groundwater elevation measurements are subjected to Quality Assurance Quality Control procedures adopted by the TG in part by reviewing historical hydrographs to determine if the measurements are within the historical range for the given well.

The accuracy of the groundwater elevations depends on measurement protocols, the reference point and whether pumping drawdown has sufficiently recovered to represent a static water level in that well. The TG surveyed the elevation for all the reference points at each Key Well in February of 2009. Additional elevation surveys for all monitoring program wells are scheduled for the continued improvement of groundwater elevations accuracy. Furthermore, protocol standards were developed by the TG regarding the length of time for well shut down before a groundwater elevation measurement is taken, and a notation of whether nearby wells are known to be concurrently pumping.

The management area engineers have compared construction, location, reference point elevation, and depth to water measurements for wells near their common boundary as an ongoing practice since the first annual report. In 2017, engineers from the TG and NCMA Monitoring Parties conducted a focused study to compare construction, location, reference point elevation, and depth to water measurements for wells near the boundary between the management areas to identify any inconsistencies. These differences within the management area engineers' databases were reconciled, and these conditions are reviewed each year. This process improves consistency between groundwater elevation contours across and close to the boundary shared by the NMMA and NCMA.

In 2021, the TG evaluated the existing County of San Luis Obispo database to assess whether the depth to water measurements from any wells could represent shallow aquifer conditions. Wells identified during this effort have been included by the TG in the database of shallow wells in the NMMA and are presented in both the Spring 2022 (Figure 3-1) and Fall 2022 (Figure 3-3) maps for the shallow aquifer.

Depth-to-water measurements were collected in April and October of 2022 by the County of San Luis Obispo, NCSD, P66, Woodlands, and GSWC. The Santa Maria Valley Water Conservation District also collected depth-to-water measurements in CY 2022 (Figure 3-1, Figure 3-2, Figure 3-3, Figure 3-4).

3.1.2. Water Quality in Wells

Water quality of the NMMA during CY 2022 is summarized from a wide range of data sources, including:

- California State Water Resources Control Board Division of Water Quality records of water supply system groundwater sources and environmental monitoring sites (GeoTracker GAMA database),
- State Water Resources Control Board site assessments, remediation project reports, and related materials (GeoTracker database),
- NPDES Permit Monitoring and Reporting data, and
- Other NMMA groundwater monitoring data.

Appendix 7

Data reported in this Annual Report are derived from samples obtained using standard professional sampling protocols and analyzed at certified laboratories. The TG maintains these data in a digital database. In the NMMA, historical data from approximately 150 wells can be used to map groundwater quality conditions. In some cases, water quality records consist of only one or two sampling events from a well, and only a few water quality parameters, such as total dissolved solids or chloride. In other cases, such as wells within potable water systems or for environmental testing, regular groundwater quality testing for a wide range of constituents is conducted.

Groundwater quality in wells near the ocean is of considerable importance because this is the most likely area where intrusion of seawater would first be detected. The coastal nested wells, 11N36W12C01, 12C02, and 12C03, are monitored under agreement with SLO PWD and allow quarterly water quality sampling of general mineral and physical water quality constituents, subject to access constraints for the protection of endangered species (Table 3-1). In addition to monitoring this coastal site for water quality, the TG has assessed the cost of updating coastal monitoring near the former nested wells 11N36W13K02 through 13K06 adjacent to Oso Flaco Lake and recommends replacement of these wells.

Table 3-1. 2022 Water Quality Data from Coastal Wells

Coastal Well	Date	Cl (mmoles/L)	HCO ₃ (mmoles/L)	Na (mmoles/L)	Ca (mmoles/L)	Mg (mmoles/L)	SO ₄ (mmoles/L)	B (mmoles/L)
11N36W12C01S	1/27/2022	1.35	3.77	3.35	2.99	1.65	3.85	0.020
	4/18/2022	1.24	3.77	2.26	3.74	1.44	4.06	ND
	10/26/2022	2.14	5.08	4.78	2.39	2.14	3.64	0.076
	12/16/2022	1.38	4.43	4.78	2.22	2.02	4.47	0.060
11N36W12C02S	1/27/2022	1.27	3.77	3.65	3.74	2.18	5.10	0.020
	4/18/2022	1.35	3.61	3.35	3.49	2.02	4.68	0.019
	10/26/2022	1.44	3.61	3.39	3.49	2.10	4.89	0.017
11N36W12C03S	1/27/2022	2.70	4.75	4.00	2.29	1.56	2.29	0.025
	4/18/2022	2.65	4.92	4.17	2.49	1.60	2.29	0.026
	10/26/2022	2.73	4.26	3.96	2.09	1.48	2.29	0.023
Seawater		544.9	2.38	467.5	10.4	53.3	28.1	0.41

Water quality data are collected from a variety of wells such as environmental monitoring wells that are screened in the unconfined shallow aquifers, and purveyor water supply wells of which many are completed in deep aquifers. Monitoring of shallow groundwater is conducted at a near-coastal refinery, in the vicinity of wastewater treatment facility discharges, in areas where a shallow aquifer is separately utilized, and from wells that provide agricultural irrigation supply. In CY 2022, water quality data results were available from 107 groundwater monitoring and water supply wells drawing from deep and shallow groundwater aquifers, and 30 environmental monitoring wells screened in and above the shallow aquifer (Figure 3-5).

3.1.3. Rainfall

There are seven active rainfall gauges available to estimate the NMMA rainfall (Figure 3-6). Four gauges are part of the ALERT Storm Watch System: Nipomo East (728), Nipomo South (730), Los Berros (4620), and Oceano (795). One gauge is a California Irrigation Management Information System (CIMIS), CIMIS Nipomo (202). The other two gauges are active volunteer gauges and include Mehlschau (38), and Nipomo CDF (151.1). The data are collected by the SLO PWD, the San Luis Obispo County Fire Department, and CIMIS. The TG obtains these data from CIMIS and SLO PWD at the beginning of the calendar year for the rainfall data from the preceding year. SLO PWD staff collects volunteer gauge data once each year in the month of July for the previous year, July through June. Rainfall data are compiled on a water year and calendar year basis. A water year (WY) typically begins

Appendix 7

October 1st and ends September 30st of the following year, and the year referenced is that of September (i.e., WY 2003 is defined as October 1, 2002, through September 30, 2003). For the volunteer gauges, data collected from July 2022 to December 2022 are unavailable until July 2023, when County staff collects and compiles the rainfall data.

The WY 2022 rainfall total is 67 percent of the long-term average and CY 2022 rainfall total is 71 percent of the long-term average (Table 3-2, see Note 2). Rainfall measurements within the NMMA (728, 730, and 795) made during WY 2022 range from 9.72 inches to 11.13 inches and during CY 2022 range from 9.62 to 12.33 inches. Reference evapotranspiration for WY 2022 is 49.8 inches, which is a slight decrease from WY 2021.

Table 3-2. Rainfall Gauges and 2022 Rainfall Totals

Name	Period of Record	Period of Record Mean	Water Year 2022 ¹	WY Percent of Normal ²	Calendar Year 2022	CY Percent of Normal ²
Nipomo East (728)	2005-2022	14.67	11.13	71%	12.33	79%
Nipomo South (730)	2005-2022	12.70	9.72	62%	9.62	62%
Oceano (795)	2005-2022	12.07	10.40	67%	11.37	73%
Los Berros (4620)	2014-2022	15.09	13.48	86%	11.44	73%
CIMIS Nipomo (202)	2006-2012	13.74	ED	ED	ED	ED
Nipomo CDF (151.1)	1958-2022	15.63	10.75 ⁴	69%	6.26 ⁴	40%
Mehlschau (38) ³	1920-2022	16.49	ND ³	ND	ND ³	ND

Notes:

- ND - Data are not reported.
- ED - Data reported are indicative of irrigation overspray with daily reported amounts ranging from 0.01 to 0.03 from spring into summer or data is not available.
- 1. Water Year is defined as Oct. 1 of previous year through Sept. 30 of the current year.
- 2. Percent of Normal, calculated using the period of record annual mean for gauge #151.1.
- 3. Volunteer gauge data are collected in July of the year and therefore are missing the remaining months (July through December) of that year.
- 4. Data reported are missing measurements.

3.1.4. Rainfall Variability

Quantifying the temporal and spatial variability is critical where rainfall is a large portion of the water supply. Spatial variability in the volume of rainfall across the NMMA is apparent when comparing the WY 2022 rainfall totals from these gauges. The WY 2022 total rainfall ranged from 9.72 inches (Nipomo South #730) to 11.13 inches (Nipomo East #728). Temporal variability is also an important consideration, particularly between storms. Two storms with the same total rainfall can have a vastly different impacts to water supply, for instance, if one storm occurred over a week and the other occurred over a day.

Climatic trends and interannual variability also impact the water supply to the NMMA. The cumulative departure from the mean was prepared for two rain gauge stations, Mehlschau #38 and Nipomo CDF #151.1, over the period from WY 1975 to WY 2022 (Figure 3-7). Periods of wetter than average and drier than average conditions are coincident at both gauges.

3.1.5. Streamflow

Currently, there are some records of streamflow near the NMMA boundary. The following sensors collect stream stage data: the Los Berros #757 streamflow sensor is located 0.8 miles downstream from Adobe Creek and 3.7 miles north of Nipomo on Los Berros Road, the Valley Road #731 streamflow sensor is located on at the Valley Road bridge over Los Berros Creek, and the Los Berros Creek #4660 streamflow sensor is located at Quailwood Lane bridge downstream of State Route 101. The stage data at these gauges are compiled by SLO PWD. Nipomo Creek streamflow is not currently gauged. Cachuma Resource Conservation District and San Luis Resource Conservation District maintain the Oso Flaco #312OFC20 streamflow sensor located between the Oso Flaco Lakes on Oso Flaco Creek (Figure 3-8).

3.1.6. Surface Water Usage

There are no known diversions of surface water within the NMMA.

3.1.7. Surface Water Quality

There are no surface water quality data presented in this annual report.

3.1.8. Land Use

Land use data historically have been collected for the NMMA by the DWR at approximately ten year intervals from 1959 to 1996. DWR periodically performs land use surveys of the Southern Central Coast area (which includes the NMMA). DWR has not updated the land use for the South Central Coast area (which includes the NMMA) since 1996.

The 2007 NMMA land use was classified by applying the DWR methodology to a June 2007 one-foot resolution aerial photograph. Land use was classified into four main categories based on the methodology used by DWR in 1996; agriculture, urban, golf course and native vegetation (undeveloped lands). Agricultural lands for 2009 were further subdivided using the San Luis Obispo County Agriculture Commissioner survey of the 2009 crop types and acreage for San Luis Obispo County. The major crops grown in the NMMA are strawberries and cane berries, nursery plants, vegetable rotational, and avocados.

Urban lands were classified following the DWR methodology with additional sub categories based on San Luis Obispo County land use categories from land use zoning maps. The categories for urban include (1) Commercial-Industrial; (2) Commercial-office, (3) Residential Multi-family; (4) Residential-Single Family; (5) Residential-Suburban; (6) Residential-Rural; (7) Recreational grass; (8) Vacant. Golf courses were classified separately from Agricultural or Urban Lands.

Native vegetation lands were classified following the 1996 DWR methodology. The DWR methodology classified all undeveloped land as native vegetation and includes groves of non-native eucalyptus and fields of non-native grasses. The lands classified as native vegetation were further broken down into two categories: grasses; and trees and shrubs; to better estimate deep percolation of rainfall required for the hydrologic inventory (see Section 5 Hydrologic Inventory).

The land use acreage was surveyed and updated in 2013 by performing aerial imagery analysis, observations made by NMMA TG engineer representatives, and assessing San Luis Obispo County pesticide purchase records. The update indicates that an increase in agriculture usage occurred from 2009 to 2013. The largest increase occurred in areas of the NMMA planted with strawberries and cane berries.

Appendix 7

The second largest increase in agriculture usage occurred in areas planted with vegetable rotational. In addition to agriculture, golf course acreage increased. In 2015, agricultural land use was updated to track the emerging cane berry crop and expanding strawberry acreage. In 2016, the golf course area irrigated was updated (Table 3-3). Some of the greenhouses and agricultural lands have been converted to grow cannabis. The square footage of greenhouse cannabis grows and the water use impacts of this conversion have yet to be determined. The 2016 SLO County Ordinance requires that all cannabis cultivation operations provide a detailed water management plan and that any water use shall be offset from a prior use at a 1:1 ratio and that under severe water decline shall be offset at least at a 2:1 ratio as documented in a County approved Water Conservation Program. The water use of these operations is to be reported to the County. In 2020, the agriculture and golf course land use acreages were surveyed and updated by performing aerial imagery analysis. This update includes a correction in golf course area, and modest increases in acreage for grape and deciduous, vegetable rotational, and berries while there was a commensurate decrease in recreational grass, pasture, and non-irrigated farmland.

The land use acreage for Urban is 10,596 acres; for Agriculture is 2,988 acres; and for Non Irrigated is 7,957 acres. Sub-categorical land use acreage is also defined and will subsequently be utilized to compute the groundwater production and consumptive use of water for each subcategory (Table 3-3).

Table 3-3. Land Use Summary

Land Use Category	Year of Data	Acreage
Urban		
Commercial – Industrial	2007	472
Commercial – Office	2007	118
Golf Course	2020	611
Residential Multi-family	2007	24
Residential Single Family	2007	821
Residential Suburban	2007	3,597
Residential Rural	2012	4,829
Recreational Grass	2020	124
Urban Total	2020	10,596
Agriculture		
Grape and Deciduous	2020	135
Pasture	2020	17
Vegetable Rotational	2020	425
Avocado and Lemon	2020	340
Berries	2020	1,621
Nursery	2020	366
Non-irrigated Farmland	2020	84
Agriculture Total	2020	2,988
Non Irrigated		
Native Vegetation	2018	7,232
Urban Vacant	2007	716
Water Surface	2007	9
Non Irrigated Total	2018	7,957
Total Land Use		21,541

3.1.9. Groundwater Production (Reported and Estimated)

The groundwater production data presented in this section of the Annual Report were collected for CY 2022. Where groundwater production records were unavailable, the groundwater production was estimated for CY 2022 (Figure 3-9).

Reported Groundwater Production

Individual landowners, public water purveyors, and industry all rely on groundwater pumping from the aquifers underlying the NMMA. Data were requested by the TG from the public water purveyors and individual pumpers and incorporated in this calendar year CY 2022 Annual Report. Stipulating Parties to the Judgment are required to provide monitoring and other production data at no charge, to the extent that such data have been generated and are readily available.

Monitoring Parties provided production records that report a total of 3,808 acre feet (AF) of groundwater produced from the principal production aquifers in CY 2022 (Table 3-4).

Table 3-4. Calendar Year 2022 Groundwater Production for Monitoring Parties

Monitoring Parties	Production (AFY)
NCS D	748
G S W C	1,210
Woodlands (less Golf Course and Vineyard)	750
P66	1,100
Total	3,808

Estimated Production

Groundwater produced for golf course irrigation in CY 2022 was 995 AF. An estimated value of 43.7 inches of golf course irrigation was calculated based on the soil water balance model. However, in CY 2022 only 21.9 inches of irrigation was applied, in addition to 11 inches of rainfall. The total amount of water applied to golf courses is the combination of groundwater and treated wastewater that is used for irrigation. Monarch Dunes reports a blending ratio of five parts groundwater to one part reclaimed wastewater for irrigation on 238 acres of golf course. Total estimated irrigation on Monarch Dunes is 434 AF in CY 2022, of which 381 AF is deep aquifer groundwater production and 52 AF is reclaimed wastewater. The Woodlands provides sufficient reclaimed wastewater to meet the golf course irrigation blending ratio (see Section 3.1.11 Wastewater Discharge and Reuse). The Cypress Ridge golf covers 191 acres with a total estimated 348 AF of golf course irrigation in CY 2022, of which 321 AF is groundwater production and 19 AF is reclaimed wastewater. The Blacklake golf course covers 182 acres, with a total estimated amount of golf course irrigation of 332 AF in CY 2022, of which 293 AF is groundwater production and 39 AF is reclaimed wastewater.

Table 3-5. Calendar Year 2022 Groundwater Production for Golf Courses

Golf Course	Production (AFY)
Monarch Dunes	381
Cypress Ridge	321
Blacklake	293
Total	995

The CY 2022 estimated groundwater production for irrigating agricultural crops in the NMMA is 7,296 AF, computed by a soil water balance model on a daily time-step by multiplying the crop area and the crop specific water demand met by either soil moisture, rainfall, or groundwater production, thus developing the unit production for CY 2022 (Table 3-6). Drip irrigation is the dominant mechanism for watering crops, and therefore, an irrigation efficiency parameter is deemed not necessary to estimate groundwater production for agriculture in the NMMA. Daily time steps are critically important in this climate when relatively warm dry windy conditions persist during winter months and are only interrupted by storms that occur over a few days. The crop specific water demand was re-evaluated in conjunction with the 2015 Land Use update (see Section 3.1.8 Land Use). The change in crop coefficients used for this estimate is presented in an appendix to this Annual Report (see Appendix E). Berry crops continue to account for the largest portion (64% in CY 2022) of the total annual agricultural groundwater production (Table 3-6).

Table 3-6. Calendar Year 2022 Estimated Groundwater Production for Agriculture

Crop Type	Area (Acres)	Production (AFY)
Grape and Deciduous	117	124
Pasture	17	54
Vegetable Rotational	425	973
Avocado and Lemon	340	844
Berries	1,621	4,683
Nursery	366	618
Non-irrigated Farmland	84	0
Total	2,988	7,296

Groundwater production for urban use was estimated for other land uses including rural landowners not served by a purveyor. The estimated production for the other land uses is 1,089 AF for CY 2022 (Table 3-7).

Table 3-7. Calendar Year 2022 Estimated Groundwater Production for Other Land Uses

Land Use Type	Water Use Area (acres)	Production (AFY)
451RS Zoned Parcels	172	452
616 RR Zoned Parcels	243	637
Total	415	1,089

Combining the estimates of groundwater production for Stipulating Parties (Table 3-4), for golf courses (Table 3-5), for agriculture (Table 3-6), and for other land uses (Table 3-7) results in an estimated total groundwater production of 13,188 AF for CY 2022 (Table 3-8).

Table 3-8. Calendar Year 2022 Measured and Estimated Groundwater Production

Measured	
	Production (AFY)
NCSD	748
GSWC	1,210
Woodlands	750
P66	1,100
Golf Course	995
Subtotal	4,803
Estimated	
Other Land Uses	1,089
Agriculture	7,296
Total NMMA Production	13,188

3.1.10. Imported Water

Nipomo Supplemental Water Project (NSWP) water is currently the only source of imported water delivered onto the NMMA. NSWP began delivering water to the NMMA on July 2, 2015 and continued to deliver water through December 31, 2022. A total of 1,141 AF of NSWP water was delivered during the CY 2022.

3.1.11. Wastewater Discharge and Reuse

Six wastewater treatment facilities (WWTF) discharge treated effluent within the NMMA. Four of the WWTFs are the Southland Wastewater Works (Southland WWTF), the Blacklake Reclamation Facility (Blacklake WWTF), Cypress Ridge Wastewater Treatment Facility (Cypress Ridge WWTF), and the Woodlands Mutual Water Company Wastewater Reclamation Facility (Woodlands WWTF) (Figure 3-10). The GSWC iron and manganese removal treatment facilities at La Serena and Osage groundwater production wells discharge treatment filter backwash to percolation ponds. The total wastewater discharge in the NMMA was 658 AF for CY 2022 (Table 3-9).

Table 3-9. Calendar Year 2022 Wastewater Volumes

WWTF	Influent (AFY)	Effluent (AFY)	Re-use
Southland	546	475 ⁽¹⁾	Infiltration
Blacklake ⁽²⁾	47	39 ⁽¹⁾	Irrigation
Cypress Ridge	48	27	Irrigation and Infiltration ⁽³⁾
Woodlands	Not Reported	103	Irrigation
La Serena	Not Applicable	12 ⁽⁴⁾	Infiltration
Osage	Not Applicable	2 ⁽⁴⁾	Infiltration
Total		658	

Notes:

1. Effluent was estimated as the sum of Influent - Evaporation from Aeration Ponds - 10% of Influent to account for biosolid removal. For the Nipomo Mesa CY 2022, the annual evapotranspiration measured at CIMIS 232 gage is 49.01 inches and the rainfall measured at Gauge 795 gage is 11.37 inches (CIMIS, 2022 and SLO DPW, 2022). This results in a net evaporation from a pond of 37.73 inches in CY 2022.
2. No data were available for CY 2022. The values presented are estimates based on data available for recent years and historical trends.
3. The amount of wastewater discharged from the WWTF includes process losses of 3% relative to the influent wastewater stream. Re-used effluent includes 19 AFY withdrawn from lined golf course ponds for irrigation, after evaporative losses from 6.3 acres of ponds, and 8 AFY discharged to an unlined infiltration basin, after minor evaporative losses (see footnote 1 for evaporation rate).
4. GSWC's La Serena and Osage iron and manganese removal facilities treat water from GSWC's La Serena #1 and Osage #1 wells. Filter backwash water is discharged to percolation ponds, where it infiltrates into the groundwater basin and a negligible amount is lost to evaporation.

3.2. ***Database Management***

The database of monitoring data is an entirely digital database and is maintained as a confidential document. The database is broken into seven tables or datasets: groundwater elevation, groundwater production, wastewater treatment, stream flow, groundwater quality, climate, and land use.

NCSD's technical representative is currently designated as the database steward and is responsible for maintaining and updating the digital files and for distributing any updated files to other members of the TG. A "change log" is maintained for each database. The date and nature of the change, along with any special features, considerations or implications for linked or related data are recorded in the change log. The Stipulation and Judgment require that absent a Court order or written consent, the confidentiality of well data from individual owners and operators is to be preserved.

3.3. ***Data and Estimation Uncertainties***

Uncertainties arise from errors in measurements, missing measurements, and inaccurate methodologies and generalizing assumptions. For example, rainfall is measured at a few locations across the NMMA. However, it is well known that the spatial and temporal variability in rainfall deposition in a storm is much greater than that which the density of rainfall gauges can represent. Existing estimates of ground surface elevation from USGS topographic maps across the NMMA have been shown to deviate from engineering survey values by as much as 20 feet. This affects the accuracy of groundwater elevations and contours. There exists missing data from both groundwater elevations and rainfall records. Estimations are made to fill in these data gaps with the understanding that the accuracy of these estimates is reduced. Derivatives from these data therefore contain inaccuracies. Precision issues arise when interpretations are made from data, in that individuals make decisions during the process of interpreting data that are subjective and therefore not documentable. For example, aerial image classification is a subjective process as is the preparation of groundwater elevation contours. Estimations are made for parameters, such as crop coefficients, that are not measurable or very difficult to measure. The methodologies used to make estimates represent a simplified numerical representation of the environment and are based on assumptions defining these simplifications. Quantifying the uncertainty in data or data derivatives is a rigorous and ongoing process.

The measured groundwater production values are reliable and are considered precise to the tens place for NCSD, GSWC, and Woodlands, and the hundreds place for P66. The estimated production values are less reliable and precise for the rural residence groundwater production. The unit production factors used to estimate the rural residence groundwater production were developed for the NCSD Water and Sewer Master Plan. For the estimated agricultural production, there are no measured data available in the NMMA to verify the precision or reliability of the agricultural production.

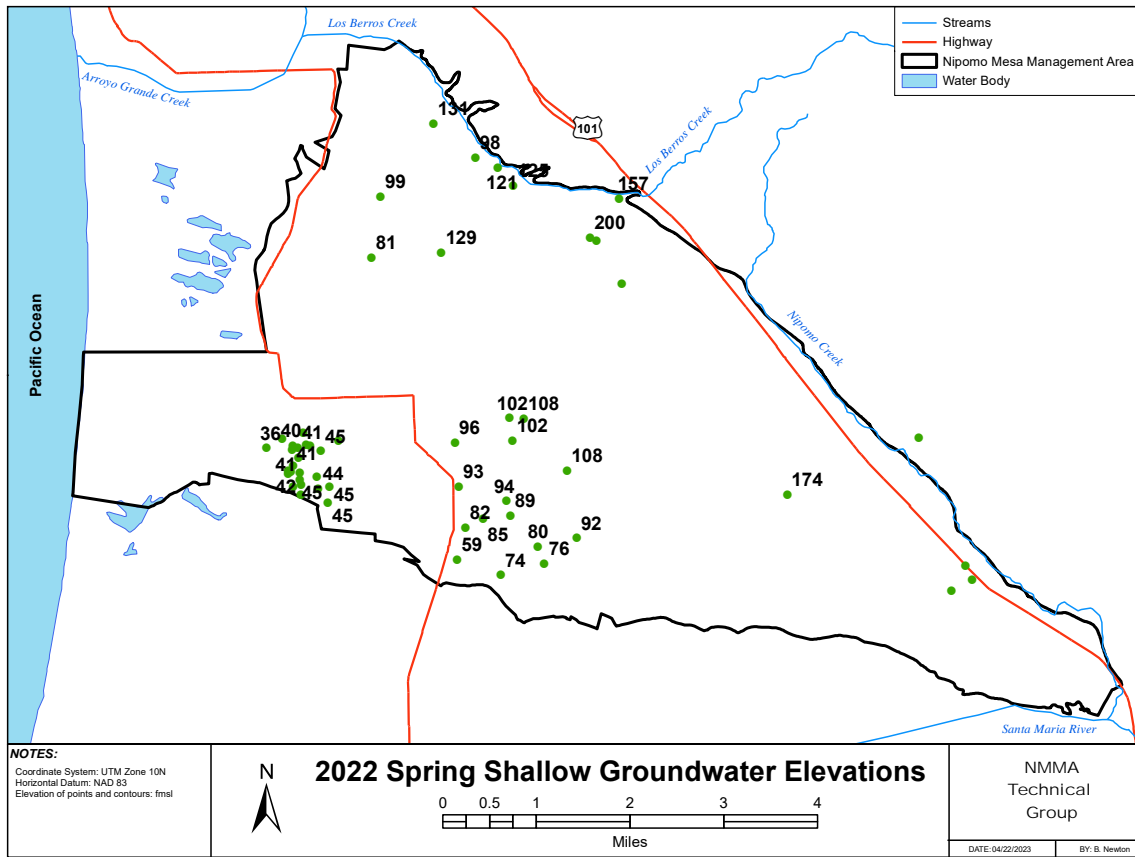


Figure 3-1. 2022 Spring Shallow Aquifer Groundwater Elevations

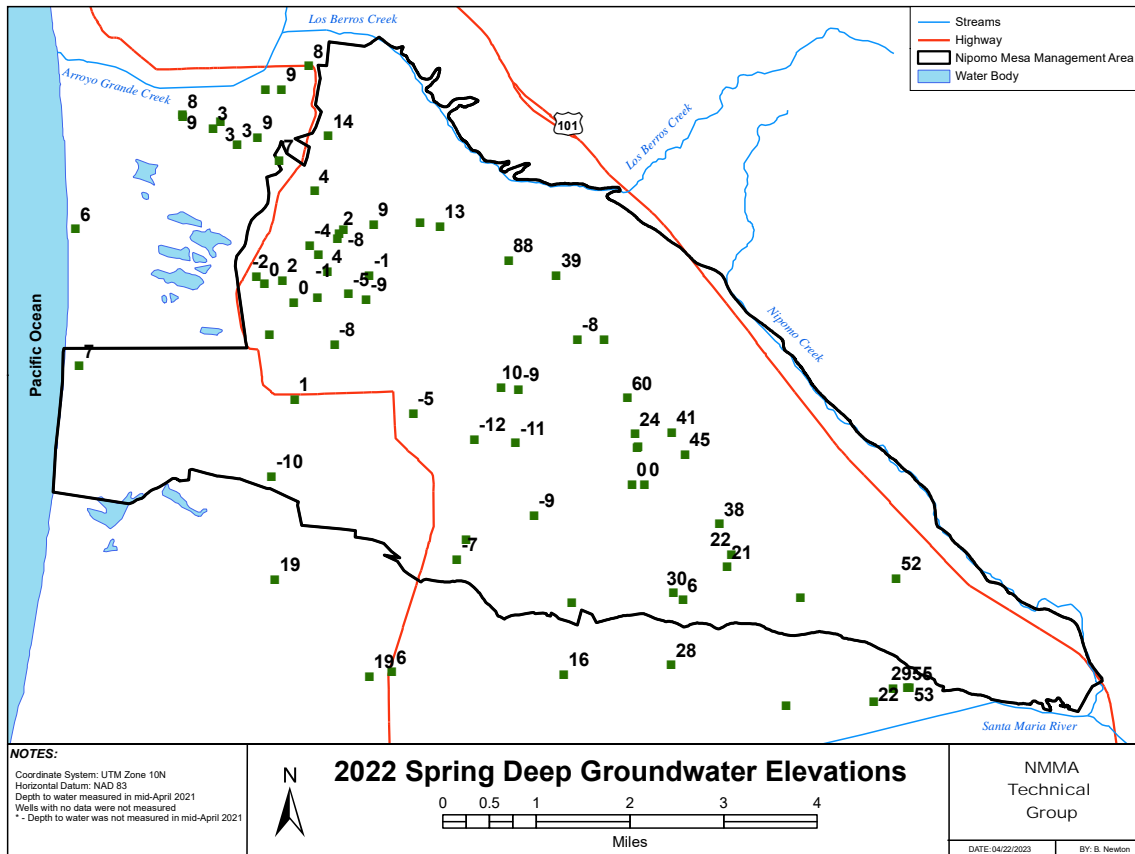


Figure 3-2. 2022 Spring Deep Aquifer Groundwater Elevations

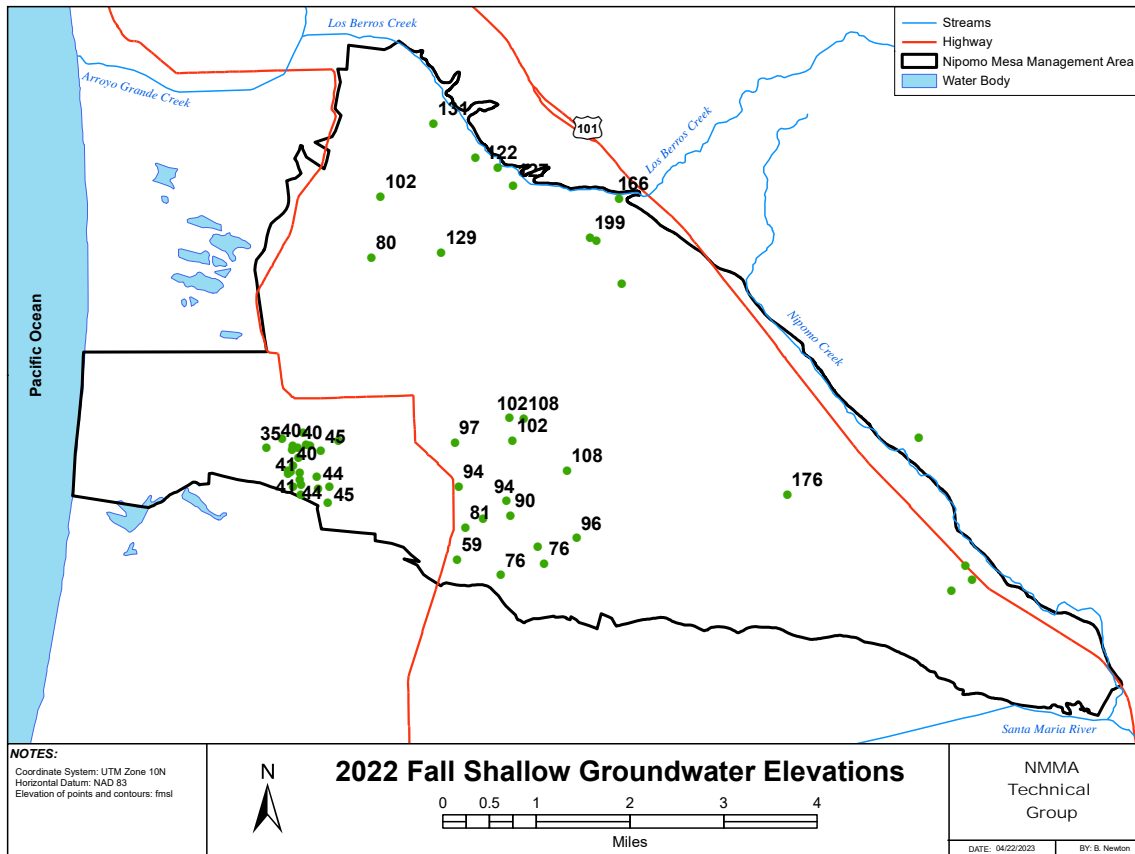


Figure 3-3. 2022 Fall Shallow Aquifer Groundwater Elevations

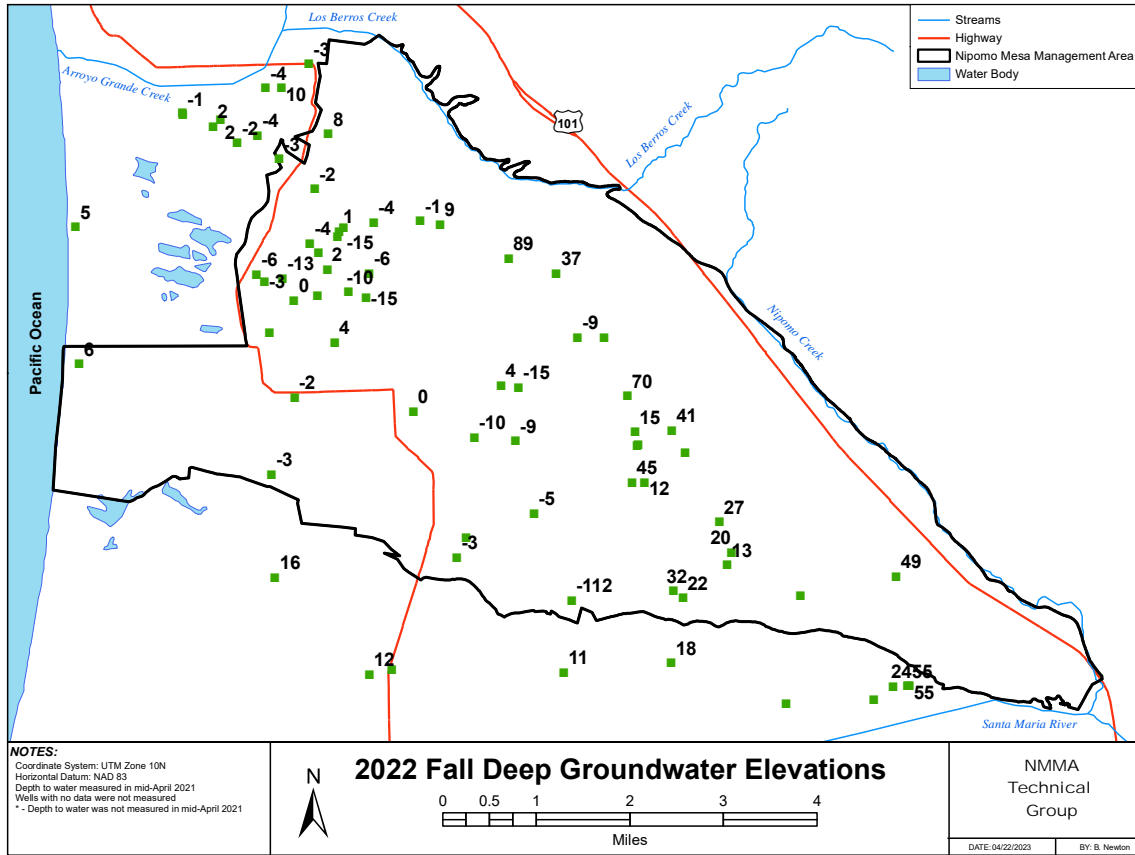


Figure 3-4. 2022 Fall Deep Aquifer Groundwater Elevations

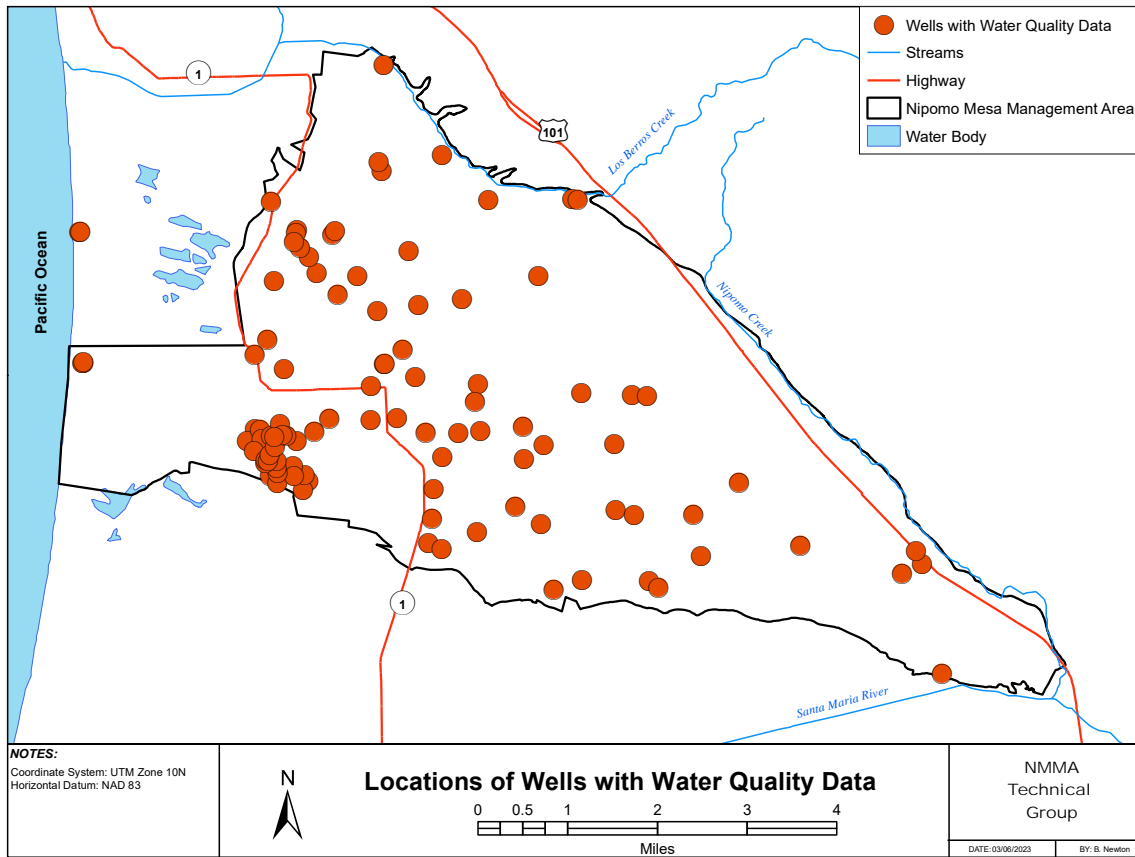


Figure 3-5. 2022 Locations of Wells with Water Quality Data

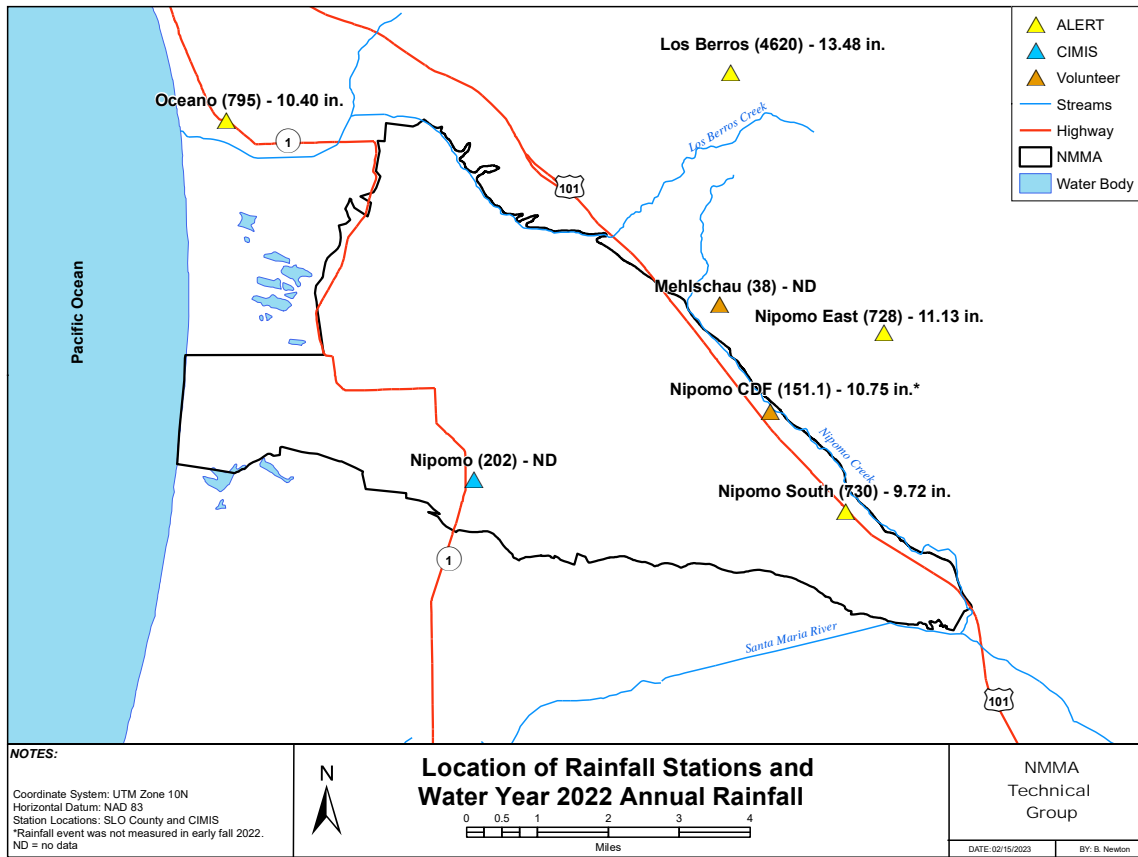


Figure 3-6. Rainfall Station Location and Water Year 2022 Annual Rainfall

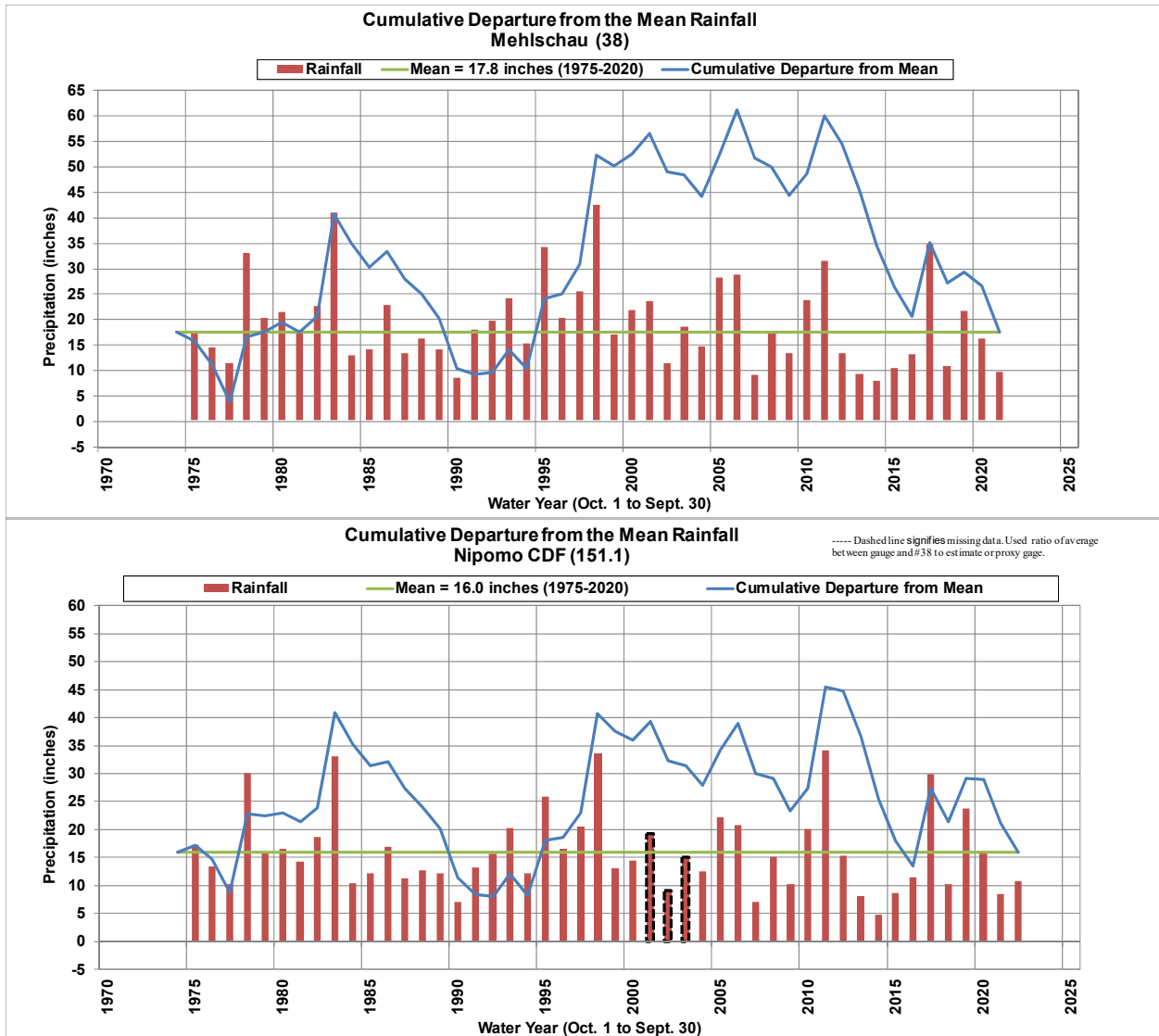


Figure 3-7. Cumulative Departure from the Mean for the following rain gauges: Mehlschau (38) and Nipomo CDF (151.1)

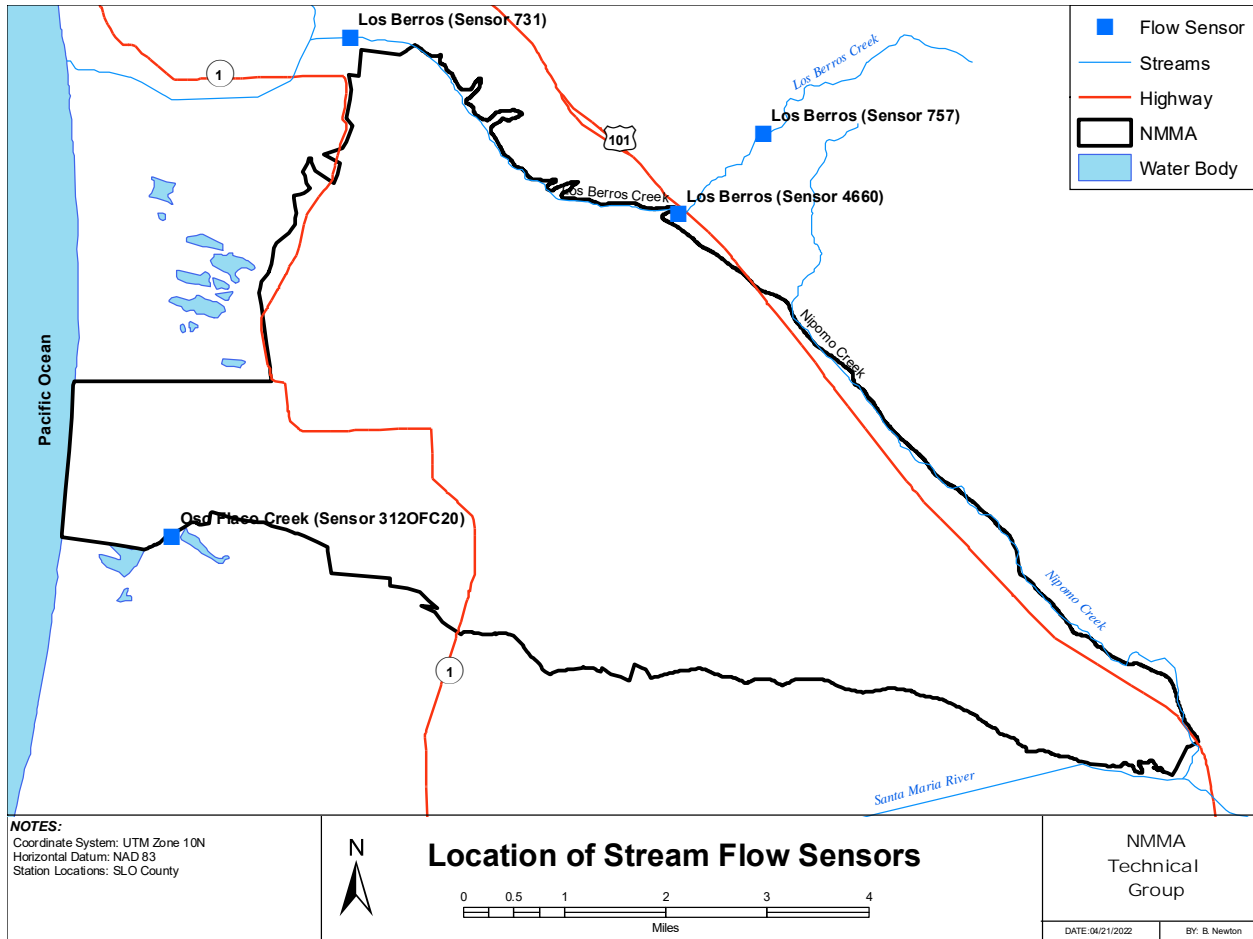


Figure 3-8. Location of Stream Flow Sensors

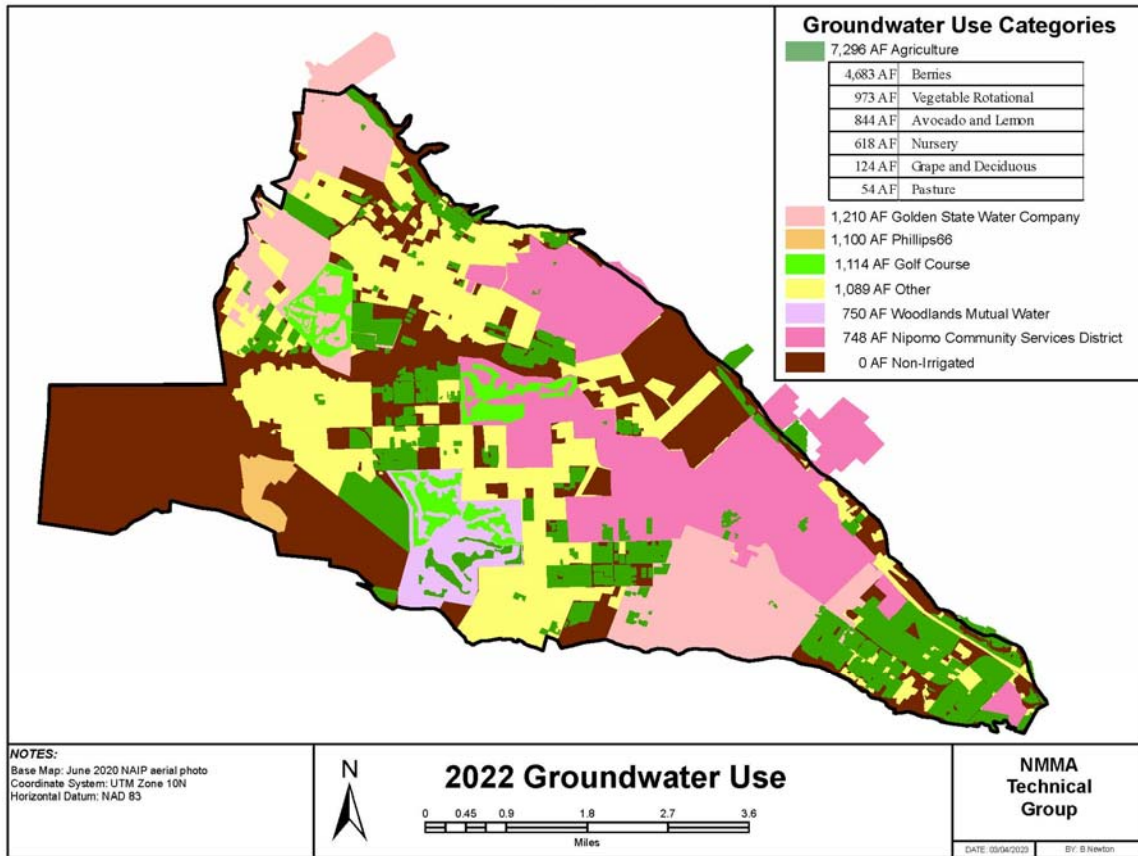


Figure 3-9. 2022 Groundwater Use

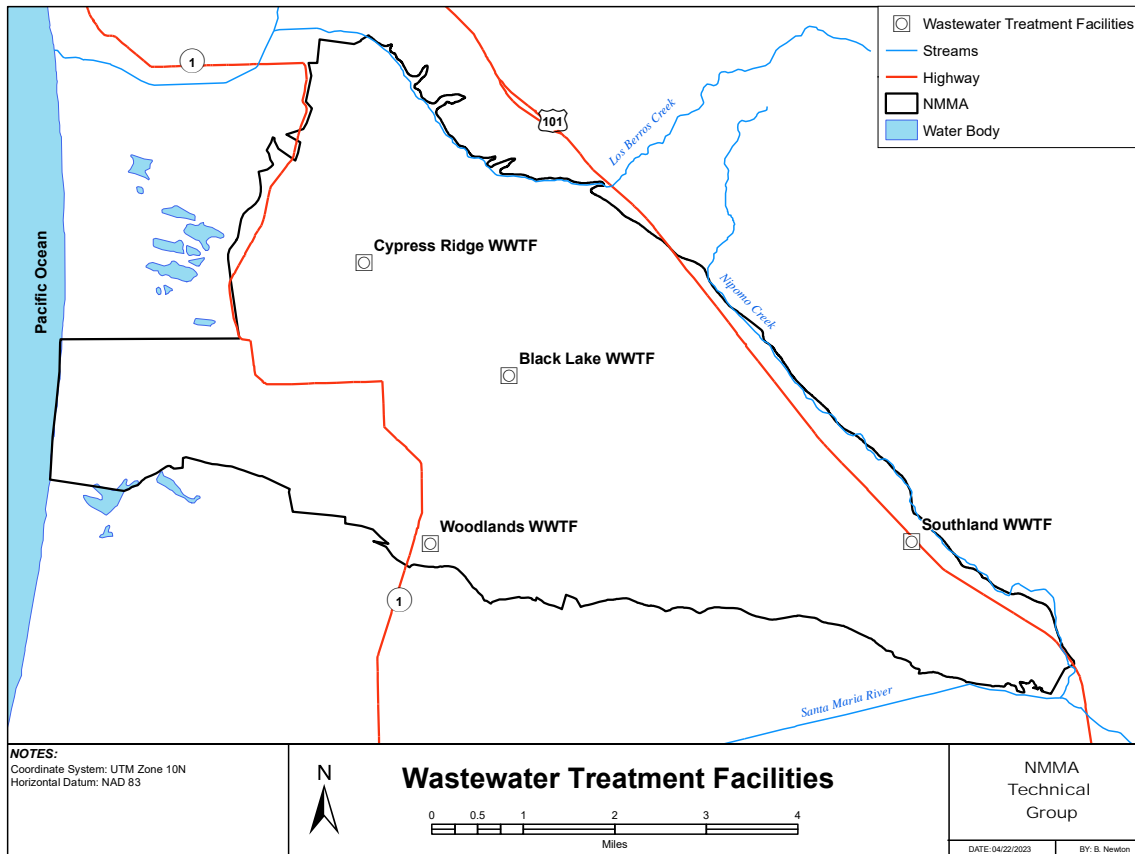


Figure 3-10. Wastewater Treatment Facilities

4. Water Supply & Demand

Presented in this section are discussions of the various components of current and projected estimates of water supplies and demands for the NMMA.

4.1. Water Supply

In addition to Supplemental Water delivered, water supplies supporting activities within the NMMA are met primarily from groundwater production with a minor amount of recycled water. No surface water diversions exist. Supplemental Water, as defined by the Stipulation, has been developed and Phase I deliveries began on July 2, 2015. A brief description of the groundwater production, recycled water, Supplemental Water, and surface water diversion is presented in the following sections.

4.1.1. Groundwater Production

Groundwater pumping was not differentiated between various strata, shallow or deep aquifers in previous annual reports. The specifics of shallow and deep aquifer production are better known by the

TG for purveyor wells which produce primarily from the deep aquifers until 2017 when Woodlands began producing from the shallow aquifer. This information is not available for many more private wells in the NMMA.

Shallow Aquifers

Domestic production by rural landowners was estimated to be about 1,089 AFY (Table 3-7). The majority of this production may be from shallow aquifers. A portion of the estimated 995 AF of golf course pumping may be from shallow aquifers (Table 3-5). A portion of the estimated 7,296 AF of agricultural pumping may also be from shallow aquifers (Table 3-6). The Woodlands shallow aquifer irrigation wells produced an estimated 169 AF for vineyard irrigation and buffer landscape in CY 2022 (Table 3-4, Table 3-6).

Deep Aquifers

Production from wells used for public drinking water and industrial water is predominantly pumped from the deep aquifers (primarily the Paso Robles Formation), although some limited amount of production may also occur from shallow aquifers. This pumping is estimated to be about 3,808 AF (Table 3-4). In addition, a portion of the estimated 995 AF of golf course pumping by Woodlands, Cypress Ridge, and Blacklake Golf Courses may also be from the deep aquifers (Table 3-5). Also, a portion of the estimated 7,296 AF of agricultural pumping may also be from the deep aquifers (Table 3-6).

4.1.2. Recycled Water

Wastewater effluent from the golf course developments at Blacklake Village, Cypress Ridge, and Woodlands is recycled and utilized for golf course irrigation. The amounts of recycled water used in CY 2022 for irrigation at Blacklake Village, Cypress Ridge and Woodlands are 39 AF, 19 AF, and 103 AF, respectively (Table 3-9).

4.1.3. Supplemental Water

Nipomo Supplemental Water Project delivered 1,141 AF of water to the NMMA in CY 2022 (see Section 3.1.10 Imported Water).

4.1.4. Surface Water Diversions

There are no known surface water diversions within the NMMA.

4.1.5. Future Water Supply

The Stipulation (VI.E.5.) states all new urban uses shall provide a source of supplemental water to offset the water demand associated with the development. Currently, the only source of supplemental water dedicated to new urban uses is the 500 AFY of capacity NCS D added to the NSWP. Woodlands level of participation in the NSWP is considered their projected build out demand.

NCS D has committed to holding approval of new (since the date of the Judgment) water connections to the 500 AFY of capacity unless and until the District defines and acquires additional sources of supplemental water.

In September 2015, the County of San Luis Obispo adopted Ordinance 3307 which allows new urban development within the NMMA without imposing a requirement that the development project offset its water demand with a source of supplemental water. Instead, Ordinance 3307 requires the project proponent to offset the estimated new water demand of the project through some form of demand offset approved by the County (e.g., plumbing retrofit or participation in a County approved conservation program). By not requiring a source of supplemental water to offset project demand, this new County development approval process allows new groundwater uses for new development projects potentially inconsistent with the provisions in the Stipulation applicable to the NMMA water purveyors. The development approval process applied through Ordinance 3307 is concerning as it may allow for increased groundwater production within the NMMA, contrary to the groundwater management efforts of the NMMA water purveyors and TG.

4.2. **Water Demand**

The water demands in the NMMA include urban (residential, commercial, industrial), golf course, and agricultural demands. The TG used a variety of methods to estimate the water demands of the respective categories (see Section 3.1.9 Groundwater Production).

4.2.1. **Historical Demand**

The historical data from 1975 to 2008 were compiled from available information. The TG has continued the historical data compilation with information from Annual Reports from 2008 to present. The historical demand estimated for urban (including golf course and industrial) and agricultural land uses has been steadily increasing since 1975, with urban accounting for the largest increase in total volume and percentage (Figure 4-1).

4.2.2. **Current Demand**

The estimated demand is 13,188 AF for CY 2022, based on annual groundwater production records provided by the water purveyors on the Nipomo Mesa, estimated groundwater production by land use area, and recycled water use (see Section 3.1.9 Groundwater Production (Reported and Estimated) and Section 3.1.11 Wastewater Discharge and Reuse). This amount of demand represents a decrease from the previous year due to reduced irrigation and an increase in imported water through the NSWP.

4.2.3. **Potential Future Production (Demand)**

The projected future demand for NCS D is an increase from 2,293 AFY in CY 2010 to 3,400 AFY in 2030 (NCS D, 2011 see Table 21 and 23). The P66 refinery expects future production to be similar to recent years' production amounts of approximately 1,100 AFY. The projected water demand for Woodlands at build-out, according to the Woodlands Specific Plan Environmental Impact Report, is 1,600 AFY (SLO, 1998). The projected water demand for GSWC at full build-out of the current Nipomo system service area is estimated to potentially increase to approximately 1,940 AFY in 2030 (GSWC, 2008). Currently, no estimates of potential future production for agriculture or GSWC's Cypress Ridge system service area have been developed.

4.2.4. **Base Year Pooled Amount**

The Stipulation (VI.D.2.b.i) requires the determination of the highest pooled amount of groundwater production previously collectively used in a year by Overlying Owners other than Woodlands and P66. The quantification of the highest pooled amount pursuant to this subsection shall be

determined at the time the mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is reached. The TG developed a technically responsible and consistent method to determine the pooled amount and any individual's contribution to the pooled amount. That method is as follows: identify those parcels that are included in the Stipulation and Judgment dated January 25, 2008 and that are located within the NMMA boundary and are not located within the service areas of the NCSD, GSWC, Woodlands, and P66. For each of such parcels, the highest pooled amount of groundwater production will be ascertained in any given year that yields the highest volume of production. This quantity for each parcel shall be determined either by the parcel owner's records of metered wells or, if the wells are unmetered, by an estimate of the production based upon other records that may be available, such as utility records. In the absence of utility records or any other reliable resource, this quantity shall be estimated based upon established industry data consistent with the sum of Agricultural demand and Rural Housing demand as presented in the Annual Report. The Stipulation (VI.A.5) conditions the enforcement of a reduction in their current use of Groundwater to no more than 110% of that highest pooled amount, upon the full implementation of the Nipomo Supplemental Water Project, including the Yearly use of at least 2,500 acre-feet of Nipomo Supplemental Water (subject to the provisions of Paragraph VI(A)(2)) within the NMMA. The method of reducing pooled production to 110% is to be prescribed by the TG and approved by the Court.

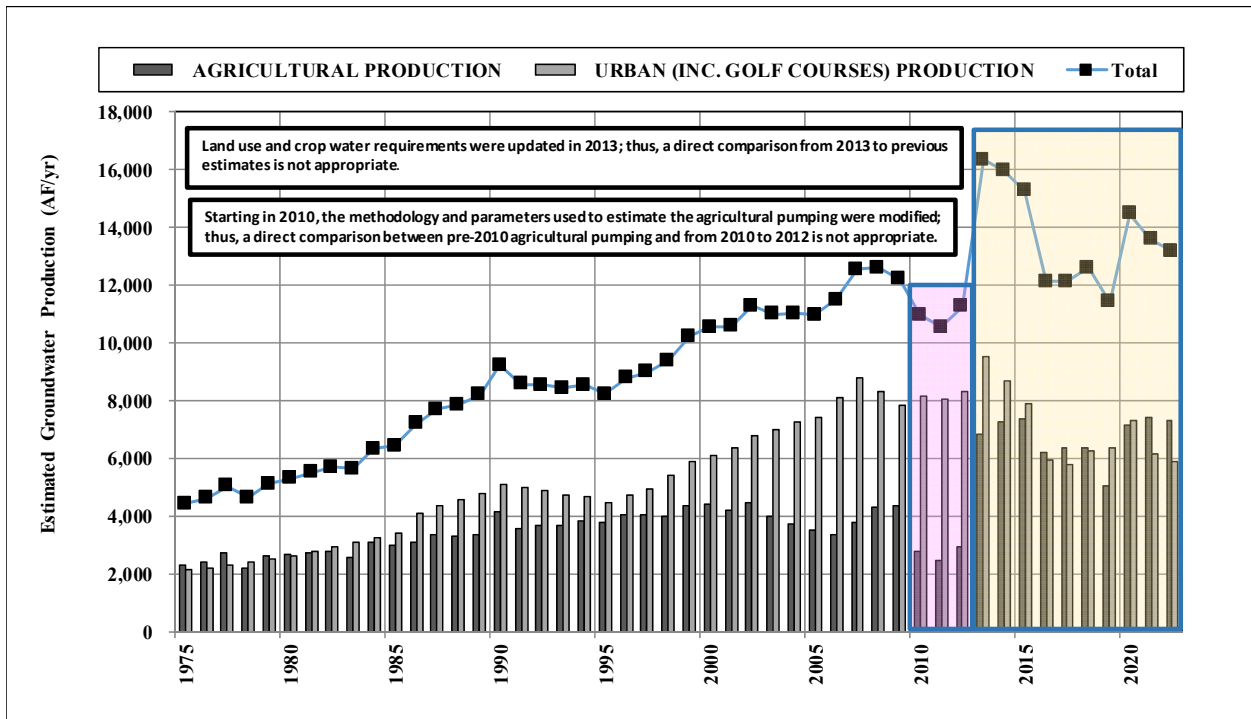


Figure 4-1. Historical NMMA Groundwater Production

5. Hydrologic Inventory

The hydrologic inventory accounts for the volumes of water that flow in to and out of the aquifers in the NMMA resulting in the change in storage. A conceptual schematic depicts the inflows and

outflows to the aquifers underlying the NMMA (Figure 5-1). The hydrologic inventory can be formalized in the following equation:

$$\text{Change in Storage } (\Delta S) = \text{Inflow} - \text{Outflow}.$$

The components of the CY 2022 hydrologic inventory are presented and discussed in the following sections. The primary sources of inflow are groundwater (i.e., subsurface flow across the boundaries of the NMMA) inflow, rainfall, wastewater, and return flow. The primary outflows are groundwater production and groundwater outflow. Supplemental Water is also discussed as a potential future source of inflow.

5.1. **Rainfall and Percolation Past Root Zone**

Rainfall measurements made during CY 2022 range from 9.62 to 12.33 inches. The CY 2022 rainfall is 71 percent of the average long-term annual rainfall (Table 3-2, see Note 2). Rainfall on the NMMA infiltrates the soil surface and is either stored in the soil profile until it is evaporated or transpired by overlying vegetation, or percolates downward into shallow or deep aquifers. Rainfall on hardscape surfaces flows to local depressions where infiltration occurs. Locally rainfall may generate runoff from the NMMA to places adjacent to the NMMA boundary; however, the amount of runoff out of the NMMA is negligible. The TG estimates that the portion of rainfall that percolates past the root zone was 1,540 AF in CY 2022 (see Appendices E).

5.2. **Subsurface Flow**

Subsurface flow is the volume of water that flows into and out of the NMMA groundwater system. The areas with the highest potential for subsurface flow are at the north boundary with Los Berros Valley alluvium (cross section C-C'), the northwestern boundary with the NCMA (cross section A-A'), the southern boundary with the SMVMA (cross section B-B'), and the coastline. Contours of groundwater elevations in this report (see Section 6.1.4 Groundwater Gradients) suggest that there is both flow in to and out of the boundaries of the NMMA with other management areas and along the coast.

The nature and extent of the confining layer(s) beneath the NMMA and the extent to which faults in the NMMA may act as impediments to subsurface flow are not well understood. The TG has not yet quantified the subsurface flows for CY 2022 (see Section 9 Recommendations).

5.3. **Streamflow and Surface Runoff**

Streamflow and surface runoff are the volumes of water that flow into and out of the NMMA through surface water channels or as overland flow. Streamflow includes water within the Los Berros Creek, Nipomo Creek, Oso Flaco Creek, and Black Lake Creek (Figure 5-2). Surface runoff occurs during major rainfall events and could occur in locations where local conditions near the NMMA boundary are sufficient to promote overland flow out of the area, and where shallow subsurface flow contributes to streamflow that is conveyed out of the NMMA, or to coastal dune lakes where it evaporates. This may occur in the following areas (Figure 5-2):

- Los Berros Creek streamflow into and out of the NMMA,
- Nipomo Creek streamflow into and out of NMMA,
- Black Lake Canyon streamflow out of the NMMA,
- Oso Flaco Creek streamflow into and out of NMMA,

- Surface runoff from steep bluffs adjacent to Arroyo Grande Valley, and
- Surface runoff from steep bluffs adjacent to Santa Maria River Valley.

The volume of streamflow which enters and leaves the NMMA is only partially understood. The TG continues to analyze where it might be appropriate for SLO County to install temporary or permanent stream sensor sites to determine the volume of water that percolates beneath streams in the NMMA (see Section 3.1.5 Streamflow).

5.4. **Groundwater Production**

The groundwater production component of the Hydrologic Inventory is calculated using metered production records where available and estimated from land use data where measurements are unavailable. The CY 2022 groundwater production is approximately 13,188 AF (Table 3-8).

5.5. **Supplemental Water**

Supplemental Water is the volume of water produced outside the NMMA and delivered to the NMMA through the NSWP. Supplemental water was delivered to the NMMA in CY 2022. The total amount of Supplemental Water delivered during the CY 2022 was 1,141 AF.

5.6. **Wastewater**

Wastewater discharges include wastewater effluent discharged by the six wastewater treatment facilities located within the NMMA, and ocean discharge of treated wastewater from the P66 near-coastal refinery. The WWTFs include the Southland WWTF, the Blacklake WWTF, the Cypress Ridge WWTF, the Woodlands WWTF, and La Serena and Osage (GSWC). Discharges from septic tanks are estimated where centralized sewer service is not provided.

The Southland WWTF discharges treated wastewater into infiltration basins (see Section 3.1.11 Wastewater Discharge and Reuse). A portion of the water percolates and returns to the groundwater system and the remaining portion evaporates. The estimated percolation from Southland WWTF is 475 AF.

GSWC produced 673 AF of groundwater for their Nipomo system customers, where a small number of customers are connected to the Southland WWTF. The amount of groundwater produced that was delivered to customers connected to the Southland WWTF was 103 AF in CY 2022. The remaining GSWC Nipomo system customers discharged an estimated 251 AF of wastewater to septic systems. GSWC's La Serena and Osage iron and manganese removal treatment facilities treat water from GSWC's La Serena and Osage wells. Filter backwash water is discharged to percolation ponds, where water infiltrates into the basin. La Serena discharged 12 AF and Osage discharged 2 AF. The total WWTF effluent to infiltration basins in the NMMA was 497 AF (Table 3-9). Discharge to septic systems by customers who are not connected to the wastewater treatment facilities has not yet been estimated for all parcels.

The treated effluent from Blacklake WWTF (39 AF), Cypress Ridge WWTF (19 AF) is used for golf course irrigation, and Woodlands WWTF (103 AF) is used to irrigate golf course, vineyard, and landscaping. The estimated amount of wastewater discharge from indoor use by rural residences outside of NCSD's, GSWC's, and the Woodlands' systems is 183 AF. The wastewater discharged in septic systems percolates downward and may recharge the shallow aquifers, the deep aquifers, or become shallow subsurface flow outside the NMMA.

5.7. ***Return Flow of Applied Water and Consumptive Use***

Return flow is defined as the amount of recharge to the aquifers resulting from applied water that percolates past the root zone to recharge the aquifer(s). This functional definition differs somewhat from that used in the Stipulation to apportion the right to use water that was imported to the basin. However, the physical process of recharge by return flow of applied water is the same regardless of where the water originated.

The TG currently assumes that, all groundwater produced for outdoor use is attributable to sustaining plant life and replenishing soil profile storage, and that only rainfall generates percolation. Rural residences produced 203 AF of groundwater for indoor use in CY 2022. The estimated amount of return flow in CY 2022 from indoor use by rural residences is 183 AF, which is 90 percent of the 203 AF estimated indoor water use of rural residents plus 251 AF of estimated return flow from indoor water use in GSWC's Nipomo system. This does not include some discharge to septic systems by customers who are not connected to the wastewater treatment facilities. There is no return flow from Phillips 66's groundwater production. The estimated total return flow from applied water, which includes at least 434 AF from indoor use and 497 AF from infiltration at WWTPs, is at least 931 AF in CY 2022.

The estimated consumptive use of water in the NMMA, computed by subtracting the total return flow (931 AF) from the groundwater production (13,188 AF), is 12,257 AF in CY 2022.

5.8. ***Change in Groundwater Storage***

The change in groundwater storage from the hydrologic inventory reflects the difference between inflow and outflow for a period of time. Typically, this change in storage is compared to a change in storage computed from groundwater contours, cross-checking the results of each. Storage changes from groundwater contours are typically calculated by measuring change in groundwater elevation and multiplying that change by a storage factor (i.e., the specific yield of aquifer sediments), and the aquifer area. The TG's current understanding of conditions within the NMMA precludes calculating change in groundwater storage from groundwater contours at this time for the management area.

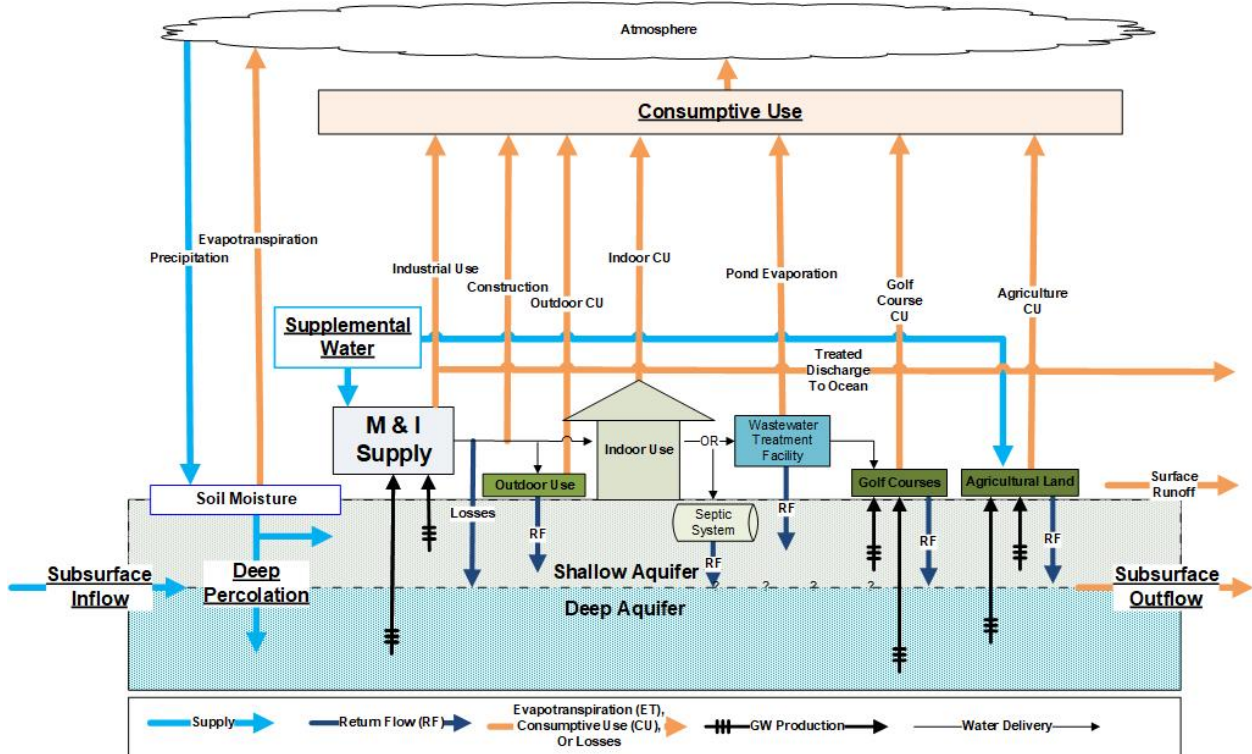


Figure 5-1. Schematic of the Hydrologic Inventory

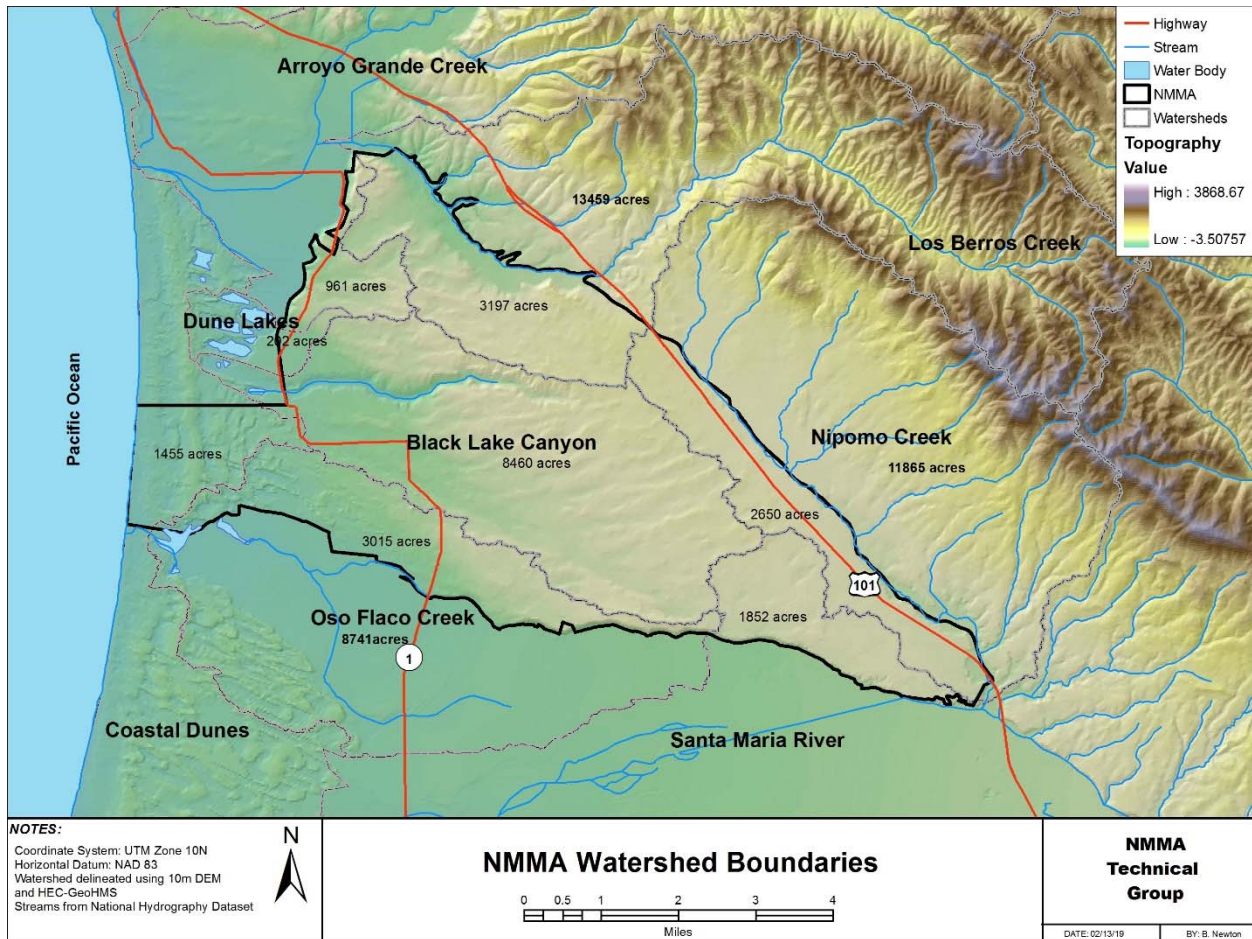


Figure 5-2. NMMA Watershed Boundaries

6. Groundwater Conditions

Groundwater conditions are primarily characterized by measurements of groundwater elevations and groundwater quality, and interpretations such as groundwater elevation contours, groundwater gradients, and historical trends in groundwater elevations and water quality.

6.1. Groundwater Elevations

Groundwater elevations are analyzed using several methods. Hydrographs (graphs of groundwater elevation through time) for wells within and adjacent to the NMMA were updated through CY 2022. Hydrographs were constructed for a number of wells, including the wells used to calculate the Key Wells Index and both sets of coastal monitoring wells. The key wells are combined to produce the Key Wells Index which represents groundwater levels beneath the NMMA as a whole (see Appendix B and Section 7.2.1). In coastal monitoring wells, groundwater elevations were graphed for each well completion within a nested site to compare to sea level. Finally, the aggregate of groundwater elevation measurements was used to construct groundwater contour maps for the Spring and Fall of 2022.

6.1.1. Results from Key Wells

Individual hydrographs were prepared for the key wells (Figure 6-1, Figure 6-2). These eight wells are used to calculate the Key Wells Index. Following a below normal precipitation year in WY 2022, groundwater elevations decreased from WY 2021 elevations in most key wells.

6.1.2. Results from Coastal Monitoring Wells

The elevation of groundwater in the coastal monitoring wells is very important because it is required to determine whether there is an onshore or offshore gradient to the ocean. Groundwater elevations in the nested coastal wells 12C and 36L were slightly lower in Spring 2022 as compared to Spring 2021 (Figure 6-3, Figure 6-4).

6.1.3. Groundwater Contours and Pumping Depressions

Groundwater elevation data representing both deep and shallow groundwater level elevations were plotted on separate maps for Spring and Fall of 2022 and contoured by the TG, so that seasonal high and low groundwater elevation conditions could be analyzed together with overall NMMA groundwater elevations (Figure 6-5, Figure 6-6, Figure 6-7, Figure 6-8).

The Los Berros Alluvium is in places in contact with the Paso Robles formation. This suggests the Los Berros Creek may be a source of local recharge along the northern boundary of the NMMA. Based on the improved understanding of the hydrogeology near Los Berros Creek, groundwater elevation contours for the shallow aquifer in the northern NMMA (north of Black Lake Canyon) have now been developed.

Surface water elevations of the dune lakes within and immediately adjacent to the NMMA are likely hydraulically connected with shallow aquifers (dune sands and alluvial deposits). There is no formal monitoring of the dune lake water levels at this time and therefore they were not used in the contouring of the shallow dune sand aquifer groundwater levels.

Spring and Fall 2022 shallow aquifer groundwater contours generally reflect groundwater flow to the west. Groundwater elevations for select wells illustrate that spring to fall water level fluctuations are typically less than a few feet and there is a relatively stable long-term trend since 2008.

Spring and Fall 2022, deep aquifer groundwater elevation contours exhibit similarly low overall groundwater level conditions as Spring and Fall 2021, consistent with continuing drought conditions. The pumping depression within the inland portion of the NMMA continues to be expressed in both Spring and Fall 2022 deep aquifer groundwater elevation contours (Figure 6-6, Figure 6-8).

6.1.4. Groundwater Gradients

Groundwater gradient direction and magnitude can be calculated directly from the groundwater elevation contour maps; however, numerical computations are not presented here because local structural and stratigraphic controls on the NMMA groundwater flow regime are not sufficiently understood. The discussion of gradients is separated into coastal groundwater gradients that could affect potential seawater intrusion and gradients to and from adjacent management areas.

Coastal Gradients

Shallow dune sand aquifer groundwater contours in both Spring and Fall 2022 show a seaward gradient in the western NMMA.

Contour maps prepared using Spring and Fall 2022 groundwater elevation data suggest regional groundwater flow is generally from east to west (toward the ocean). There exists a persistent pumping depression in the deep aquifer in the central area of the NMMA. The deep aquifer groundwater divide that historically separated the coastal area from inland areas was a transient feature formed in part because of the inland pumping depression. Although deep aquifer groundwater elevations at the southern coastal monitoring wells are above those defined for water shortage conditions, having such a landward gradient from coastal to inland increases the potential for seawater intrusion. This groundwater gradient condition reflects, at least in part, the current severe drought.

Gradients between Adjacent Management Areas

Along the southern boundary of the NMMA, the shallow aquifer groundwater gradient indicates flow to the southwest toward the boundary with the SMVMA and toward the ocean (Figure 6-5, Figure 6-7). The deep aquifer groundwater gradient along the southern boundary of the NMMA indicates flow in to and out of the NMMA boundary with the SMVMA (Figure 6-6, Figure 6-8).

Along the northern boundary of the NMMA, the deep aquifer groundwater elevation contours between the NMMA and the NCMA indicate that the gradient between the management areas remains relatively flat in both Spring and Fall 2022.

6.2. Groundwater Quality

Water quality is a concern for all groundwater producers, although the specific concerns vary by water use. Water quality is somewhat different in different portions of the NMMA because:

- The source of recharge varies for different portions of the aquifer system,
- Groundwater can develop different mineral signatures from the rock it flows through, and
- Percolation of surface water can mobilize constituents of concern and carry these into the aquifers.

Water quality conditions in the NMMA during CY 2022 exhibit much of the same variability as observed in prior years. The following sections describe coastal water quality and inland water quality conditions.

6.2.1. Results of Coastal Groundwater Quality Monitoring

There is no evidence of seawater intrusion based on coastal groundwater quality. Quarterly coastal groundwater quality monitoring within the NMMA boundary is currently conducted at the nested wells site 11N36W12C01, 12C02, and 12C03, but the TG is also aware of published data for coastal groundwater quality conditions in the NCMA, at nested wells site 12N36W36L01 and 36L02. Limited historical groundwater quality data are also available for other coastal monitoring wells south of the NMMA near Oso Flaco Lake, and from other coastal monitoring sites north of the 36L well. Chloride concentrations in the coastal wells are less than 100 mg/L, and do not show evidence of significant change over time (Figure 6-9). Coastal water quality monitoring at 11N36W12C01, 12C02, and 12C03 in CY 2022 also shows consistent results with respect to other common water quality characteristics such as total dissolved solids (TDS) and electrical conductivity (Figure 6-10). Values for these constituents

confirm relatively high dissolved ion content in groundwater, but at historically consistent values that are mostly within limits for existing uses.

Starting in 2018, the TG expanded the suite of ions analyzed that can be indicators of seawater intrusion. A series of charts display historical concentrations of major ions in groundwater from the coastal monitoring wells (Figure 6-11 through Figure 6-20). Two types of charts are included: major ion ratios compared to typical seawater (Figures 6-11 through 6-15), and time series of major ions (Figure 6-16 through 6-20). The purpose of presenting these data is to help document any significant changes in NMMA coastal groundwater chemistry. Major ion concentrations as well as ratios of different ions can be used to help determine if salinization of an aquifer is occurring and, if so, whether the source is seawater, sediments, or other factors.

There are no trends or changes in recent years that would suggest the onset of any contamination by a saline water source or seawater. Together with the historical chloride and electrical conductivity data, ion ratios of groundwater sampled in the coastal monitoring wells show that there are currently no ionic indicators of seawater intrusion.

6.2.2. Results of Inland Groundwater Quality Monitoring

In general, the quality of groundwater from NMMA wells is suitable for its existing uses and meets US EPA requirements for those intended uses. Exceptions include locally contaminated shallow groundwater where surface discharges or leaching have produced elevated concentrations of water quality constituents of concern. Examples include an ongoing remediation effort at the near-coastal refinery (in the, locally unused, shallow aquifer), areas of nitrate contamination, and a few water supply wells with constituents of concern including 1,2,3-Trichloropropane (1,2,3-TCP), iron, and manganese.

Groundwater from inland wells has a wide range of groundwater quality composition and can be variable, both between wells with similar groundwater elevations drawing water from the same aquifer, and over time within a single well. Chloride and TDS concentrations in samples from inland deep aquifer groundwater wells have been relatively constant over time, while groundwater in some shallow dune sand aquifer wells exhibits elevated nitrate concentrations or increasing salinity. During CY 2022, 107 water supply wells and groundwater monitoring wells drawing from deep and/or shallow groundwater aquifers, and 30 environmental monitoring wells screened in and above the shallow aquifer were sampled at least once for water quality; many were sampled multiple times during the year for many water quality constituents. The water quality components evaluated vary by well and sampling periods depending on the purpose of sampling regulatory requirements and availability of physical access to the well for sampling.

Nitrate

Elevated nitrate concentrations in groundwater generally result from anthropogenic causes. Nitrate is mainly a potable water concern (as compared to a concern for irrigation water).

For wells known to be representative of the deep, principal producing aquifer, nitrate is the predominant groundwater quality constituent of concern. Nine wells have nitrate concentrations in groundwater above the drinking water MCL for nitrate, with an additional three environmental wells above the MCL in the shallow aquifer, and three additional monitoring points for effluent or pond water in hydraulic connection with the shallow aquifer.

Wells with elevated nitrate concentrations in groundwater exist throughout the NMMA. Groundwater produced from wells with nitrate concentrations above the MCL may be treated to reduce

nitrate concentrations, blended with other sources to reduce nitrate concentrations, or used exclusively for irrigation where nitrate is not a concern.

In the shallow aquifer, high nitrate concentrations in groundwater are observed in monitoring wells near the Southland wastewater facility and in environmental monitoring wells at the P66 refinery, as well as in holding ponds associated with agricultural groundwater pumping. These locations are monitored and are not known to have an impact on drinking water supplies.

Chloride

A primary concern for both drinking water and irrigation use is high chloride concentrations. Depending upon the crop, chloride concentrations well below the secondary MCL of 500 mg/L can cause leaf burn, plant stunting, and plant death. Elevated chloride concentrations can occur in groundwater, especially in shallow or unconfined aquifers, from the recharge of return flows and tidal influence.

In CY 2022, chloride concentrations measured in coastal monitoring wells and in deep aquifer water supply wells were below 100 mg/L, with little change from previous years. Chloride concentrations up to 183 mg/L were observed in groundwater from shallow monitoring wells near industrial and wastewater facilities, well below the secondary MCL of 250 mg/L.

Total Dissolved Solids (TDS)

In CY 2022, concentrations of TDS were mostly at or below 1,000 mg/L, the California recommended secondary standard, for municipal supply wells. TDS concentrations for the deep aquifer in CY 2022 varied considerably, from 170 to 1,100 mg/L. In the shallow aquifer, TDS concentrations in CY 2022 ranged between 130 and 1,100 mg/L. One supply well for agricultural and industrial purposes had a TDS concentration just above 2,500 mg/L but the majority of samples from groundwater wells in the NMMA had TDS concentrations below 750 mg/L during CY 2022.

Hydrocarbons and Trace Metals

Two local sites of known or potential soil and shallow groundwater contamination are described by environment assessments or ongoing monitoring activity within the NMMA. The open sites are regulated by the RWQCB and are subject to corresponding monitoring, assessment or other action (Table 6-1).

Other Constituents of Concern

Other groundwater quality constituents of potential concern have been recorded for the NMMA groundwater monitoring during CY 2022, including:

- Elevated iron and manganese concentrations in groundwater in excess of secondary drinking water maximum contaminant levels are known for a few wells in the southern NMMA; any groundwater from these wells being used for drinking water is treated and/or blended prior to use.
- The NMMA has a water supply well that pumps groundwater with 1,2,3-TCP concentrations slightly higher than the notification level of 5 ng/L; groundwater from this well is treated and blended prior to use.
- Arsenic and other metals have been measured in shallow groundwater at the near-coastal refinery, as well as in some groundwater wells in the NMMA, below the drinking water MCL.

Appendix 7

These and other water quality constituents exist locally in groundwater at monitored wells in the NMMA, and are being monitored and managed with the oversight of local, regional and state regulatory agencies.

Table 6-1. Calendar Year 2022 State Water Resources Control Board GeoTracker Open Sites

Site Name	Address	Status	Notes
Conoco Phillips Line 300	Tefft St at Carrillo St	Open; Site Assessment	Petroleum hydrocarbon impacts to soil and shallow groundwater adjacent to two petroleum pipelines (Phillips 66 & Unocal). No cleanup actions required as of 2022.
Phillips 66 Refinery, Santa Maria Facility	2555 Willow Rd	Open; Site Assessment and Interim Remedial Action	Metals, petroleum hydrocarbon and related organic contaminants in vicinity of former coke pile and slops line. LNAPL recovery from soils and shallow aquifer ongoing. Proposed decommissioning and demolition of facility with continuing soil and shallow groundwater remediation as needed.
<i>Source: http://geotracker.waterboards.ca.gov</i>			

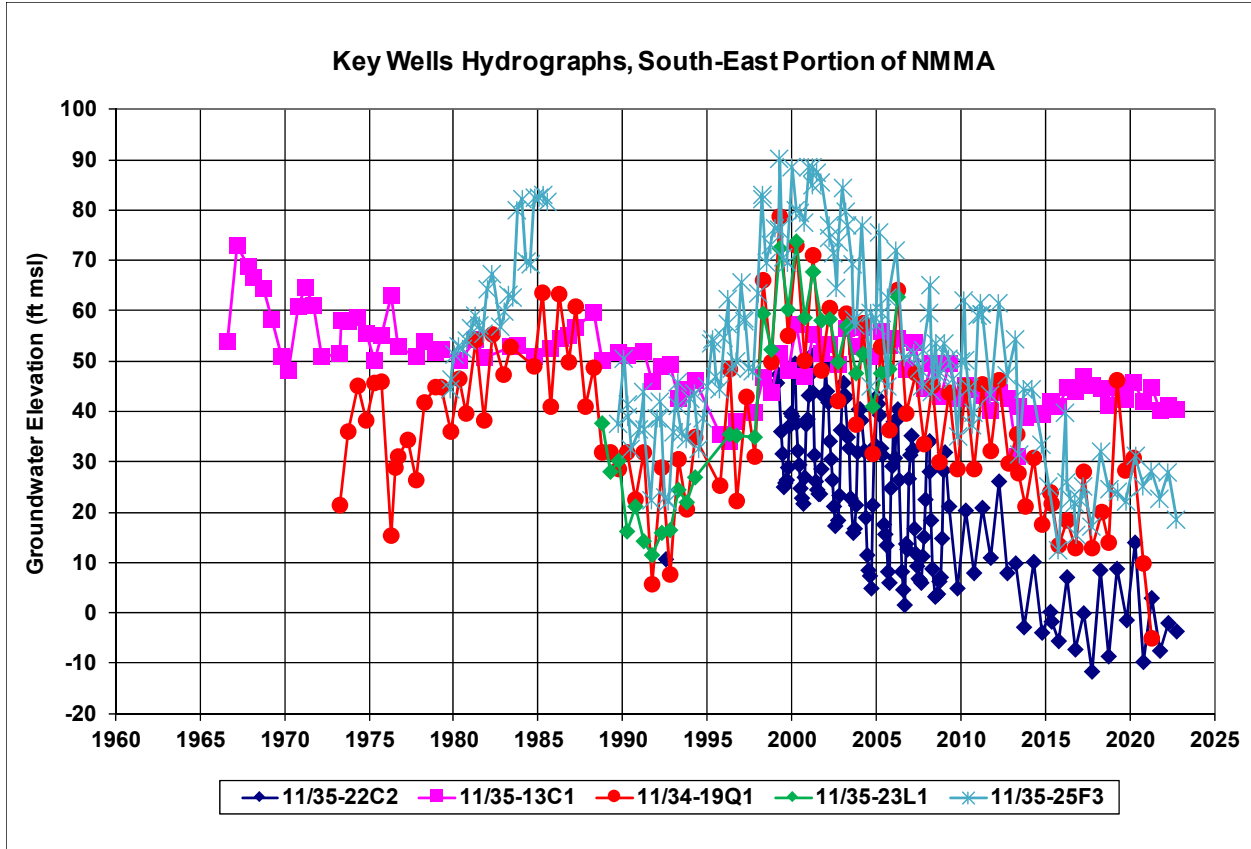


Figure 6-1. Key Wells Hydrographs, South-East Portion of NMMA

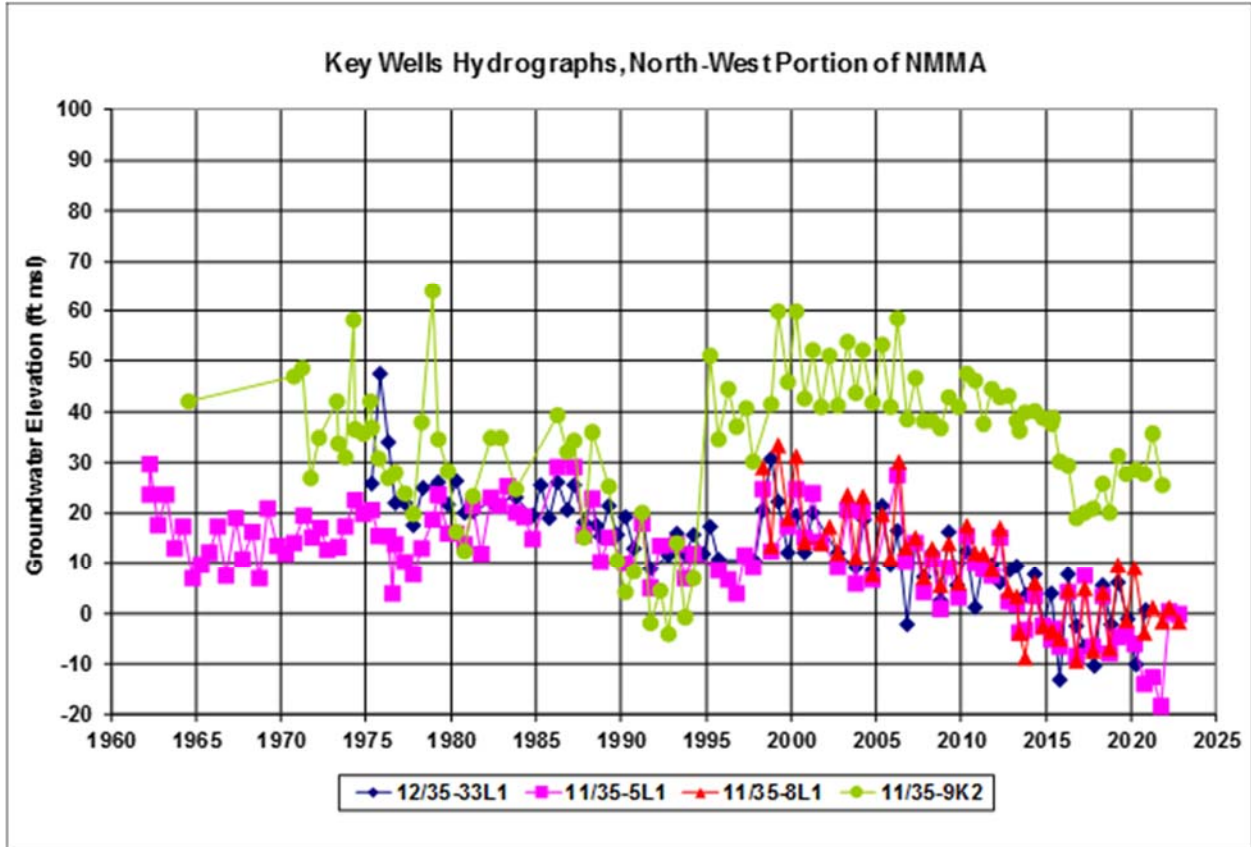


Figure 6-2. Key Wells Hydrographs, North-West Portion of NMMA

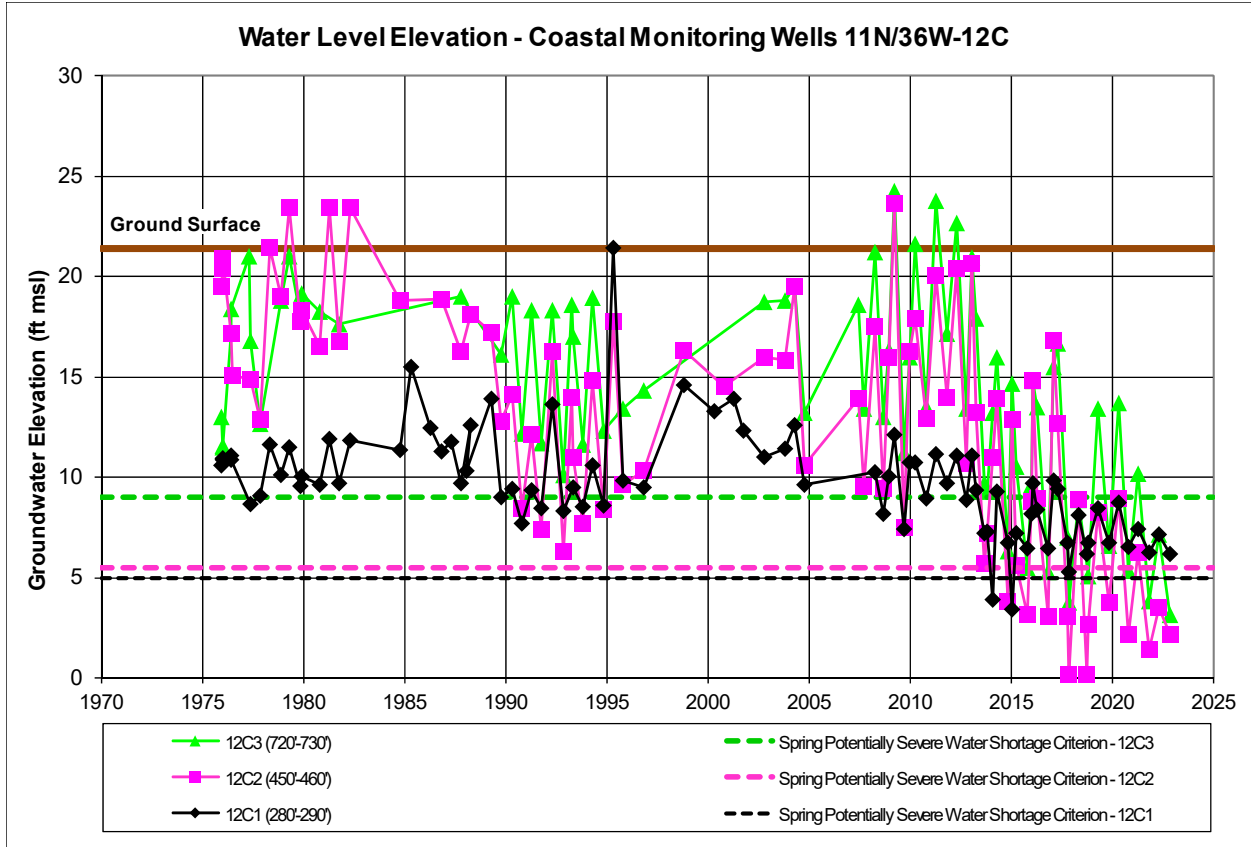


Figure 6-3. Hydrograph for Coastal Monitoring Well Nest 11N/36W-12C Note: Water levels measured under artesian flow prior to 2008 were observed without measuring the hydraulic head and recorded as a default value of 2 feet above the casing.

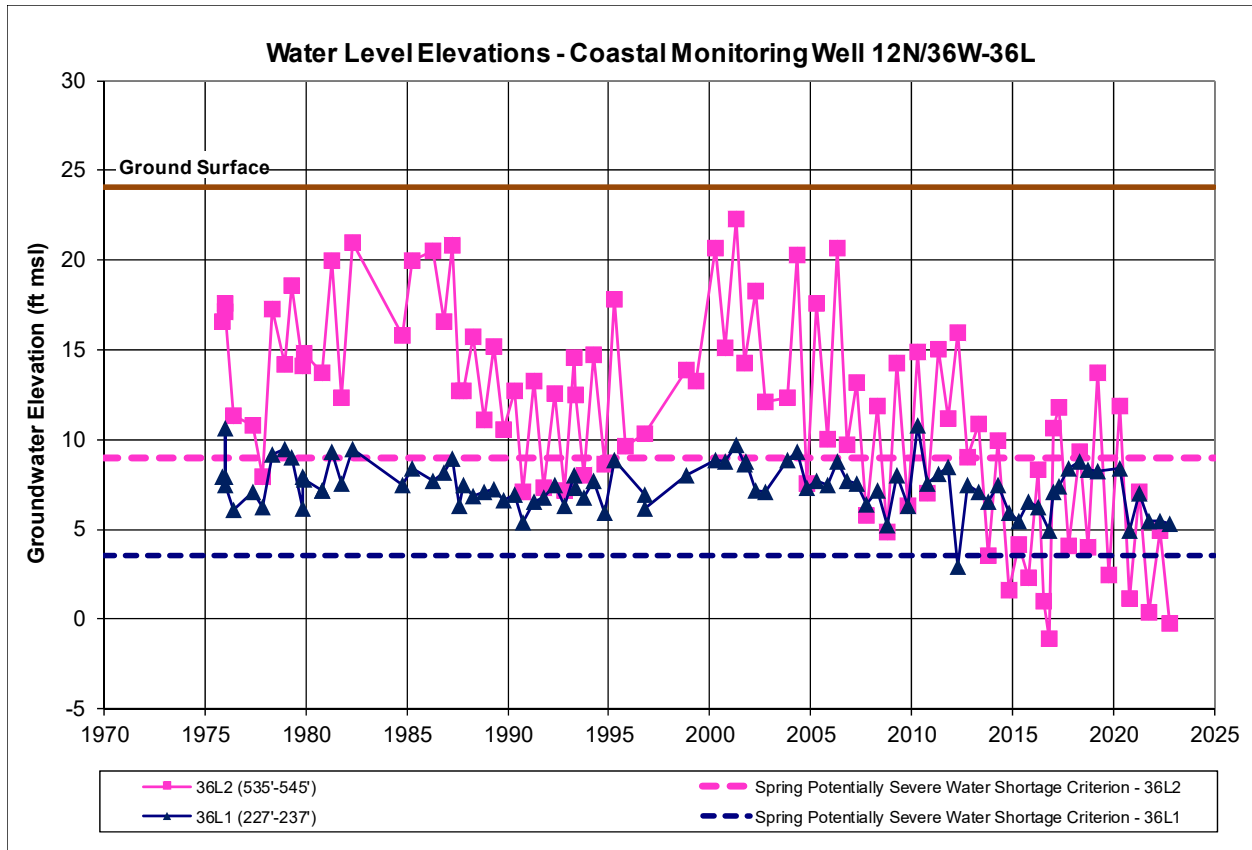


Figure 6-4. Hydrograph for Coastal Monitoring Well Nest 12N/36W-36L

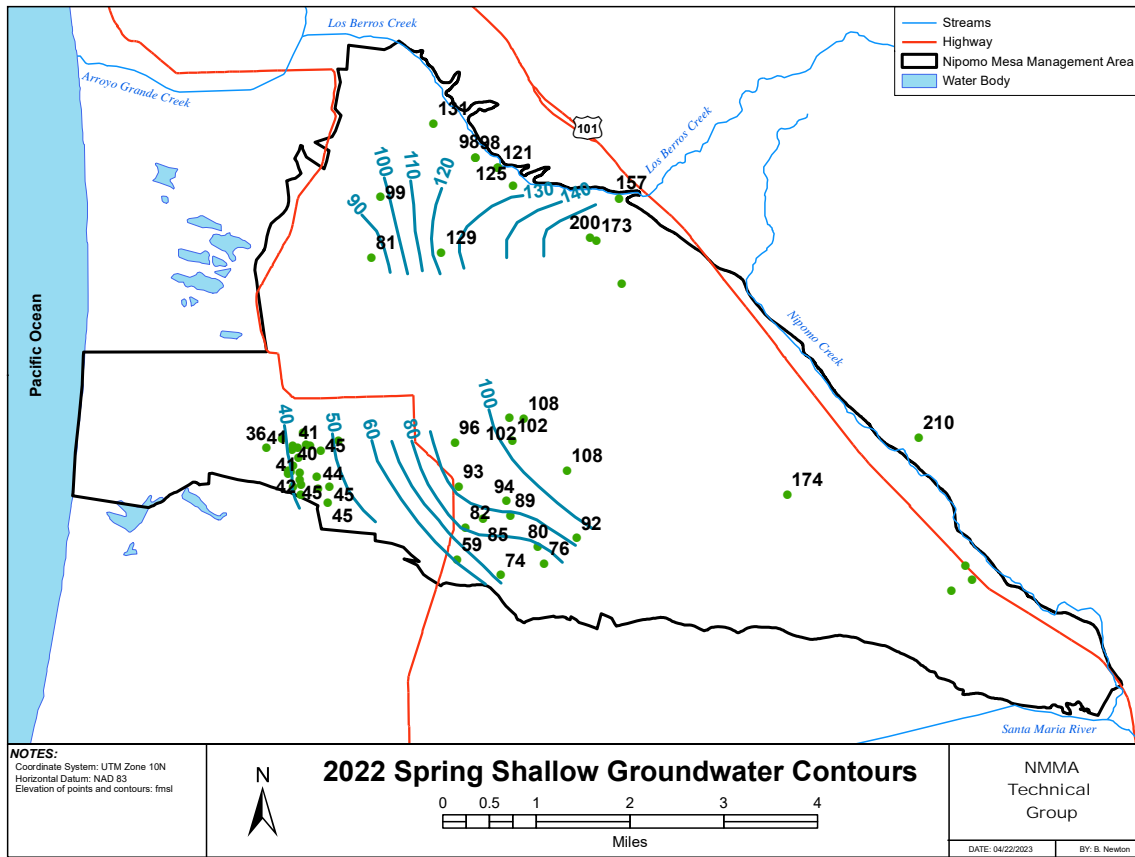


Figure 6-5. 2022 Spring Shallow Aquifer Groundwater Contours

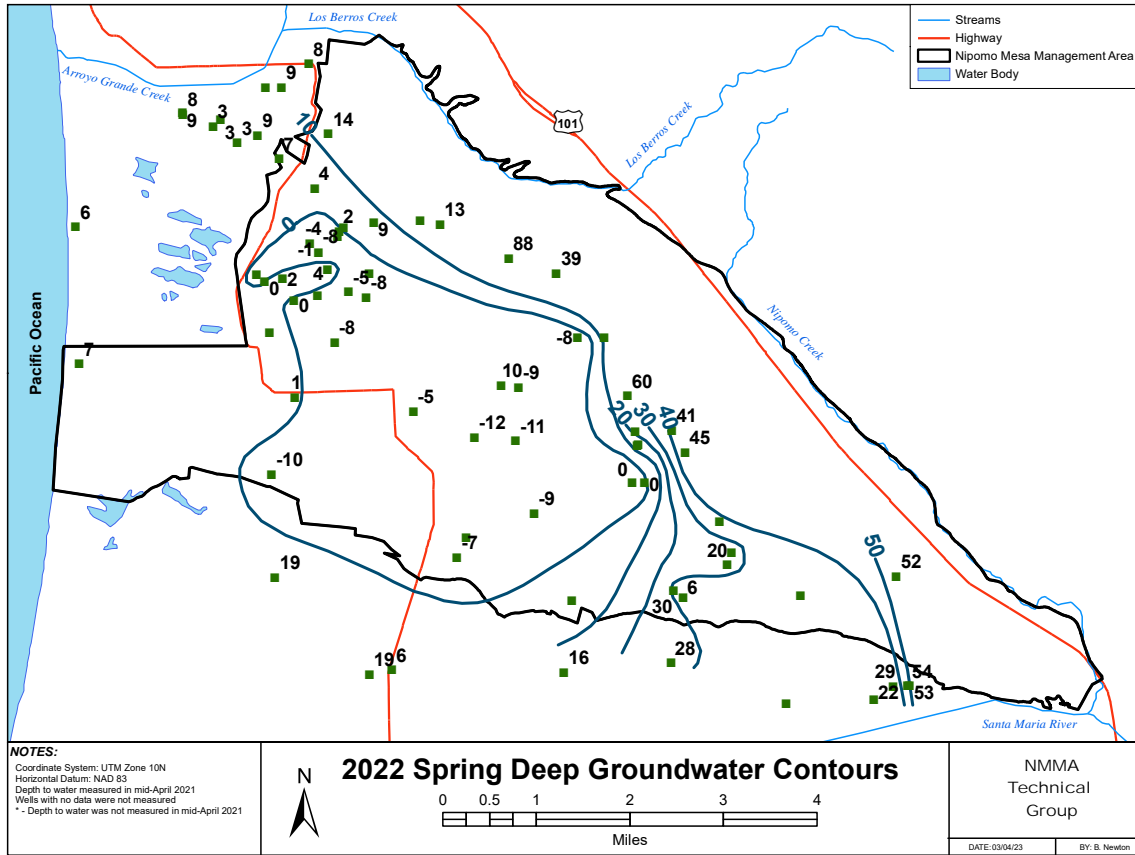


Figure 6-6. 2022 Spring Deep Aquifer Groundwater Contours

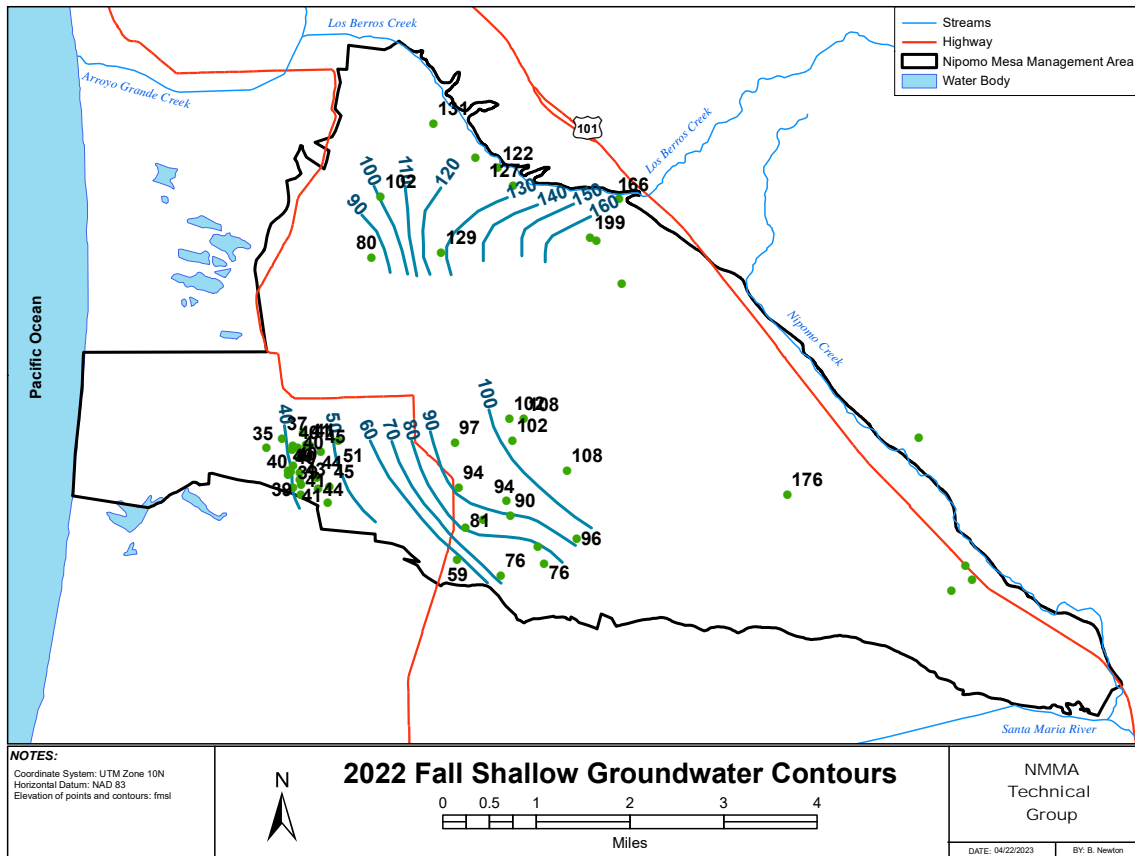


Figure 6-7. 2022 Fall Shallow Aquifer Groundwater Contours

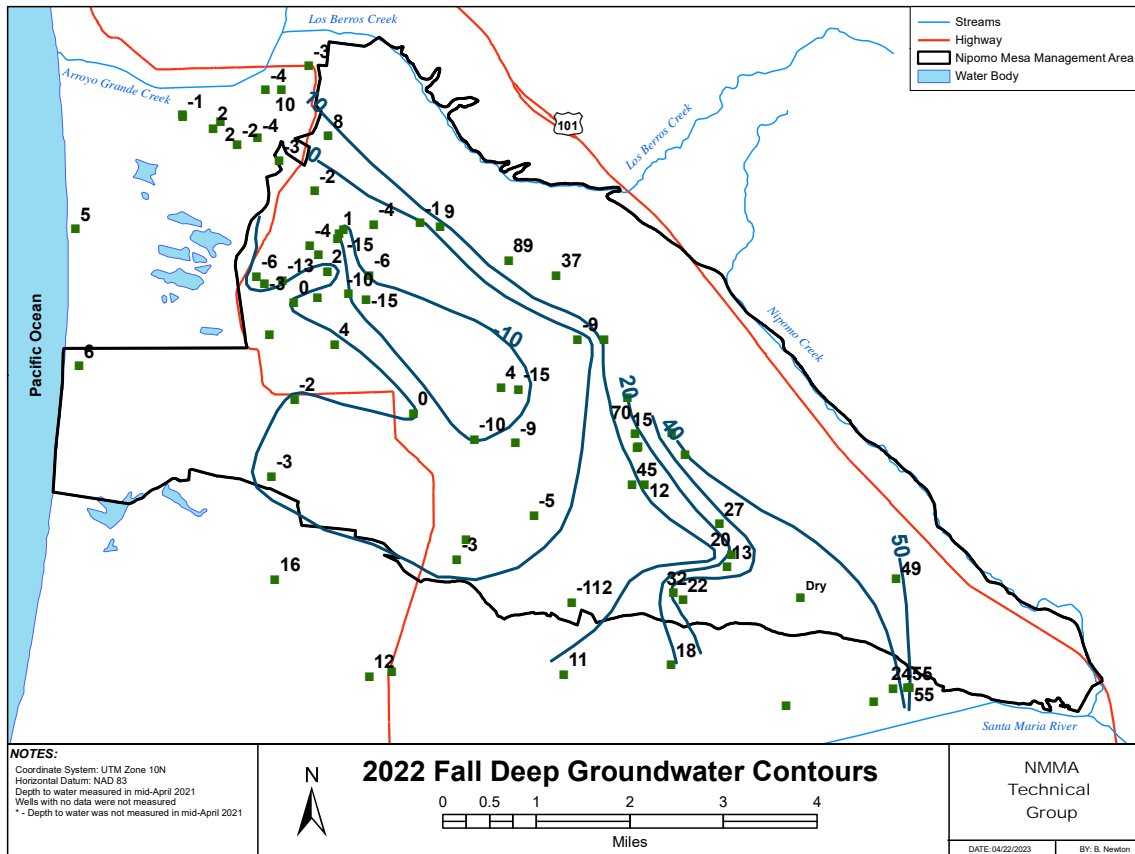


Figure 6-8. 2022 Fall Deep Aquifer Groundwater Contours

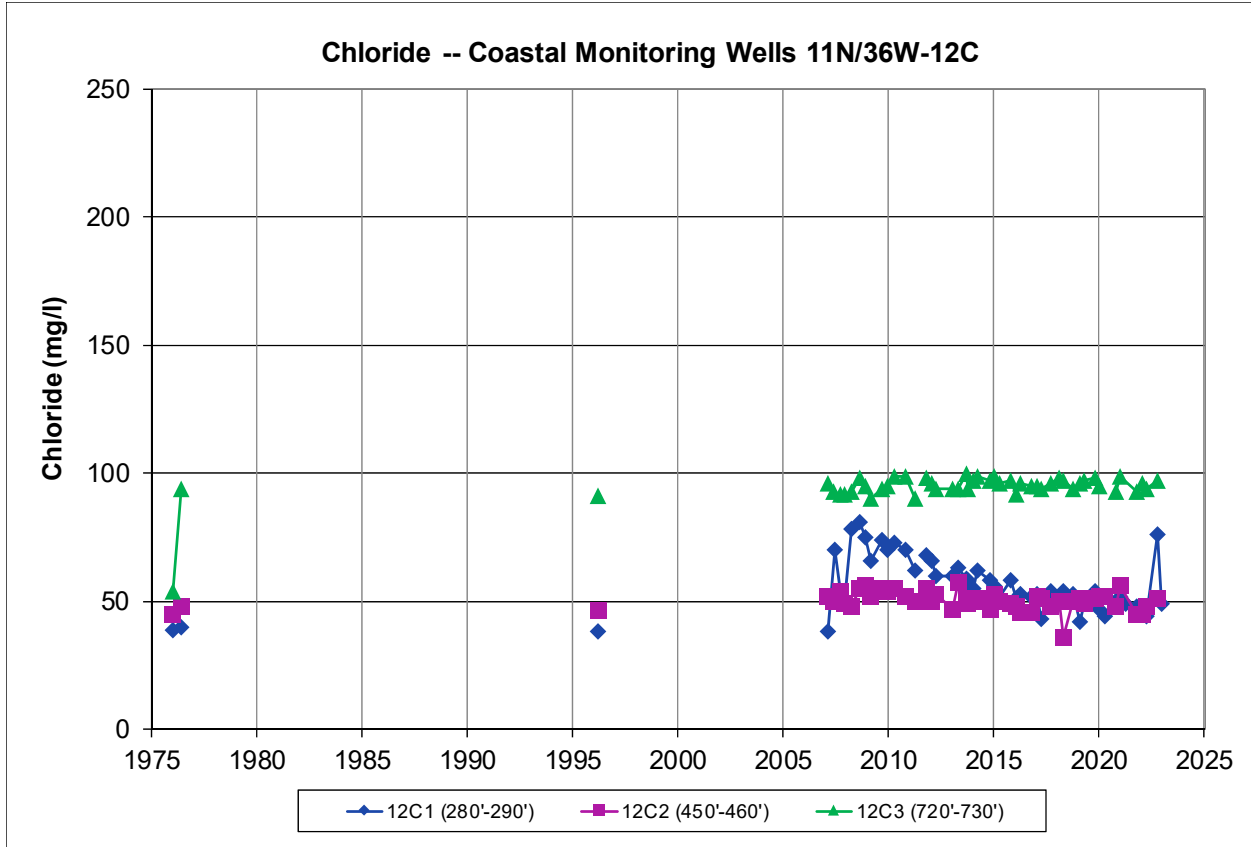


Figure 6-9. Chloride in Coastal Wells 11N/36W-12C 1, 2, and 3

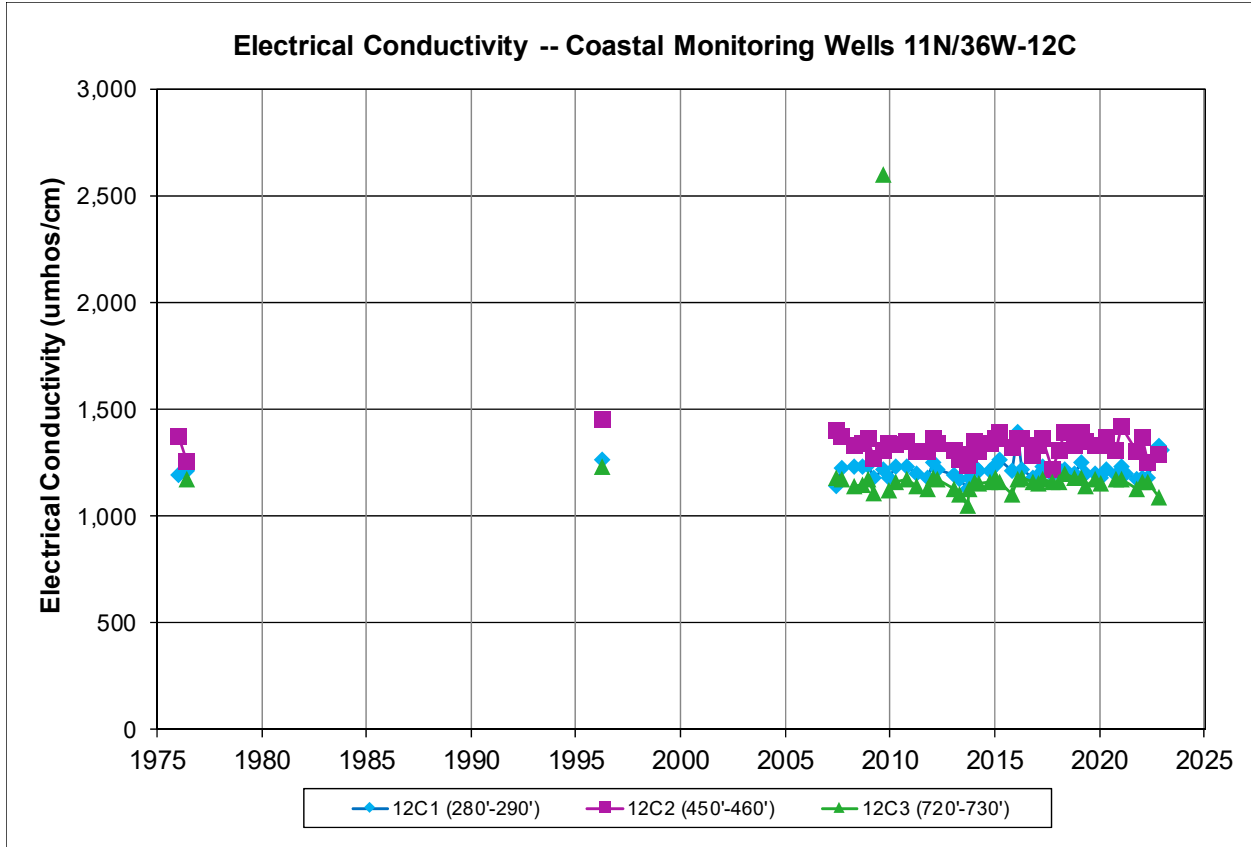


Figure 6-10. Electrical Conductivity in Coastal Wells 11N/36W-12C 1, 2, and 3

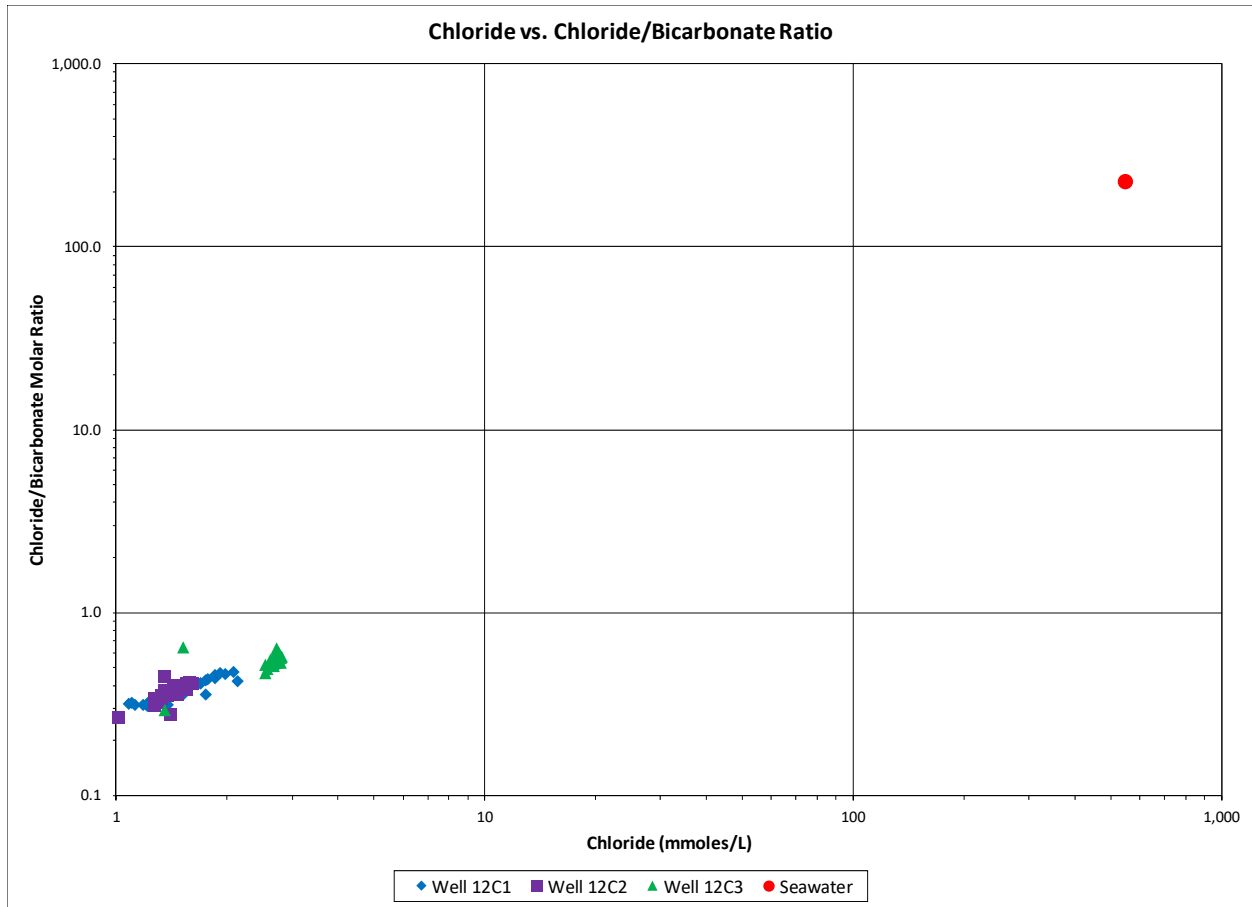


Figure 6-11. Chloride vs Chloride/Bicarbonate Ratio for Coastal Wells

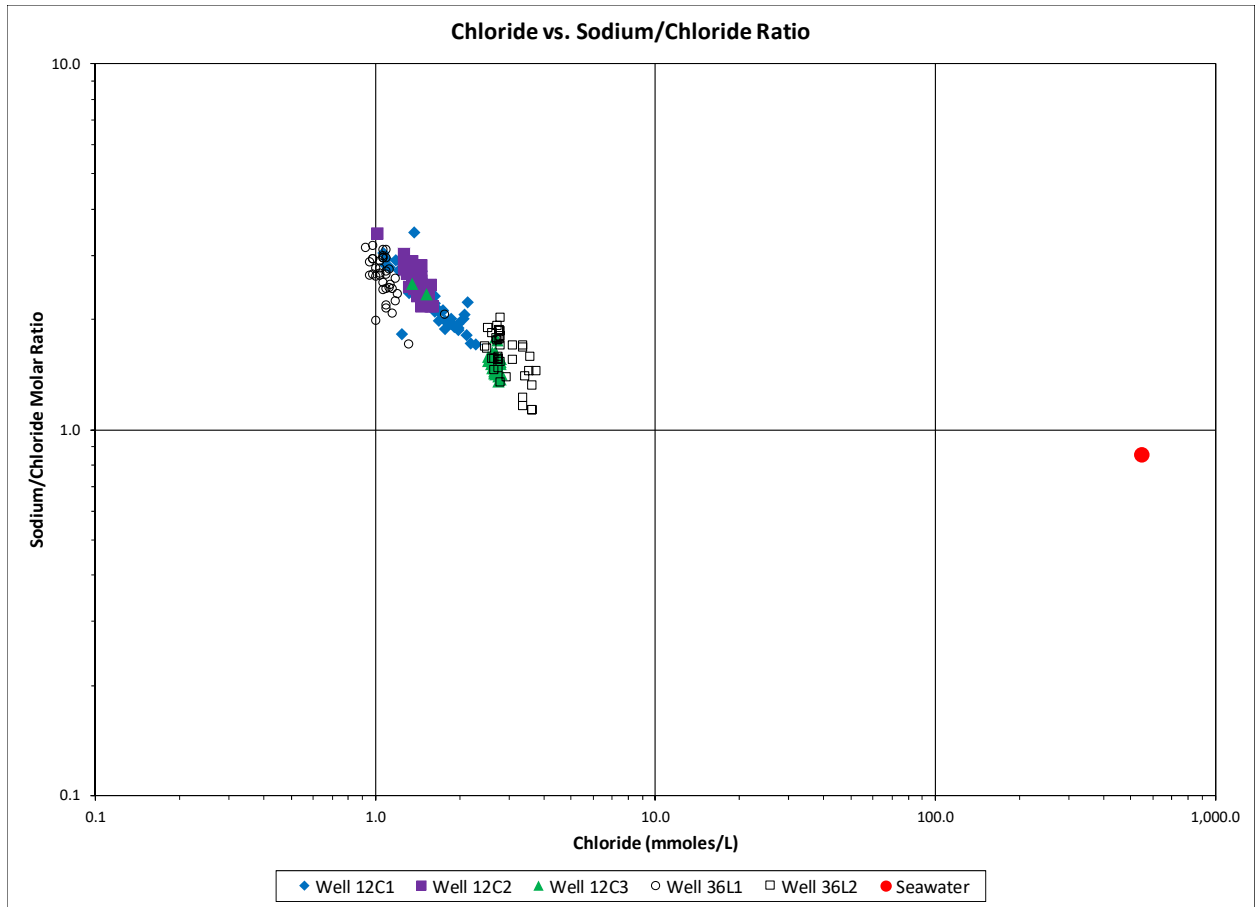


Figure 6-12. Chloride vs Sodium/Chloride Ratio for Coastal Wells

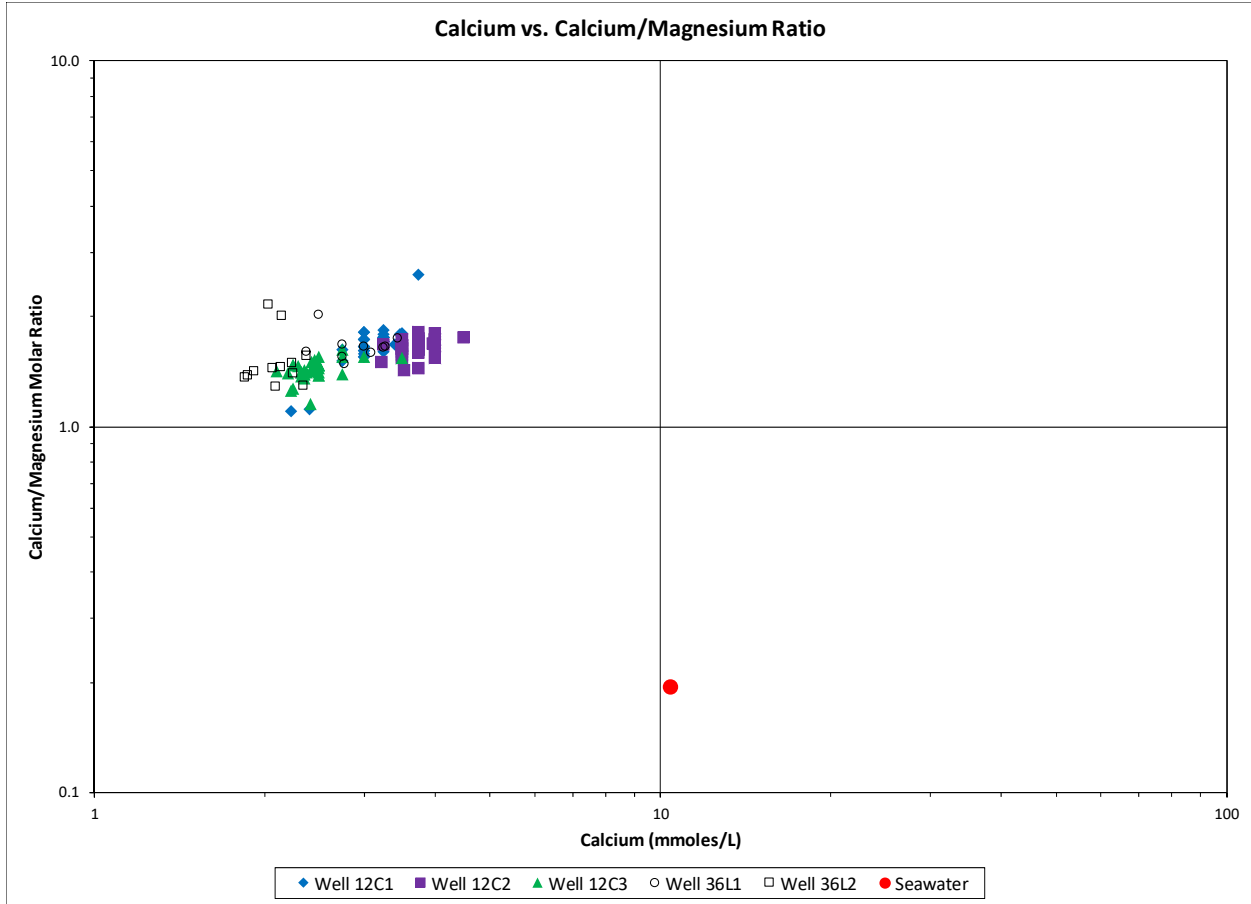


Figure 6-13. Calcium vs Calcium/Magnesium Ratio for Coastal Wells

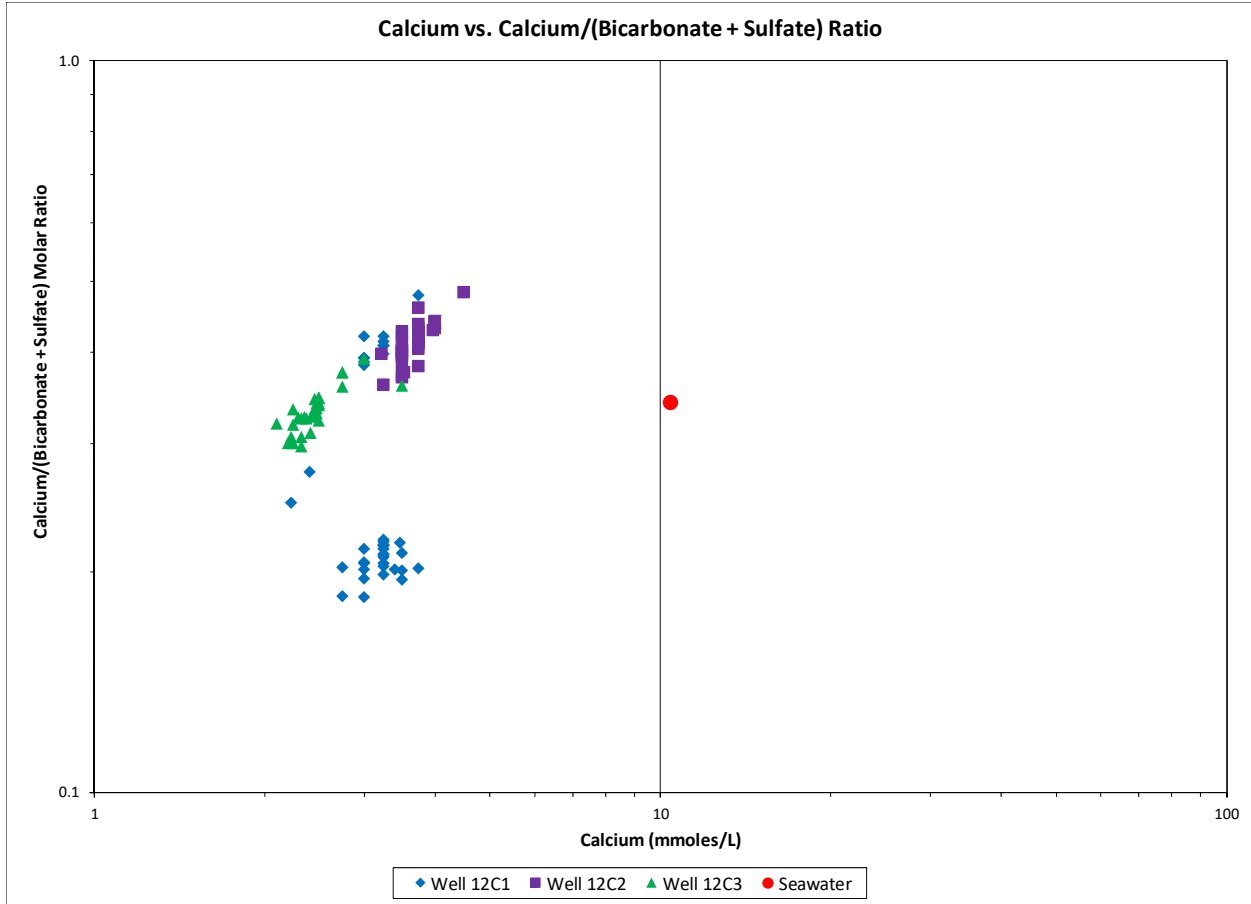


Figure 6-14. Calcium vs Calcium/(Bicarbonate + Sulfate) Ratio for Coastal Wells

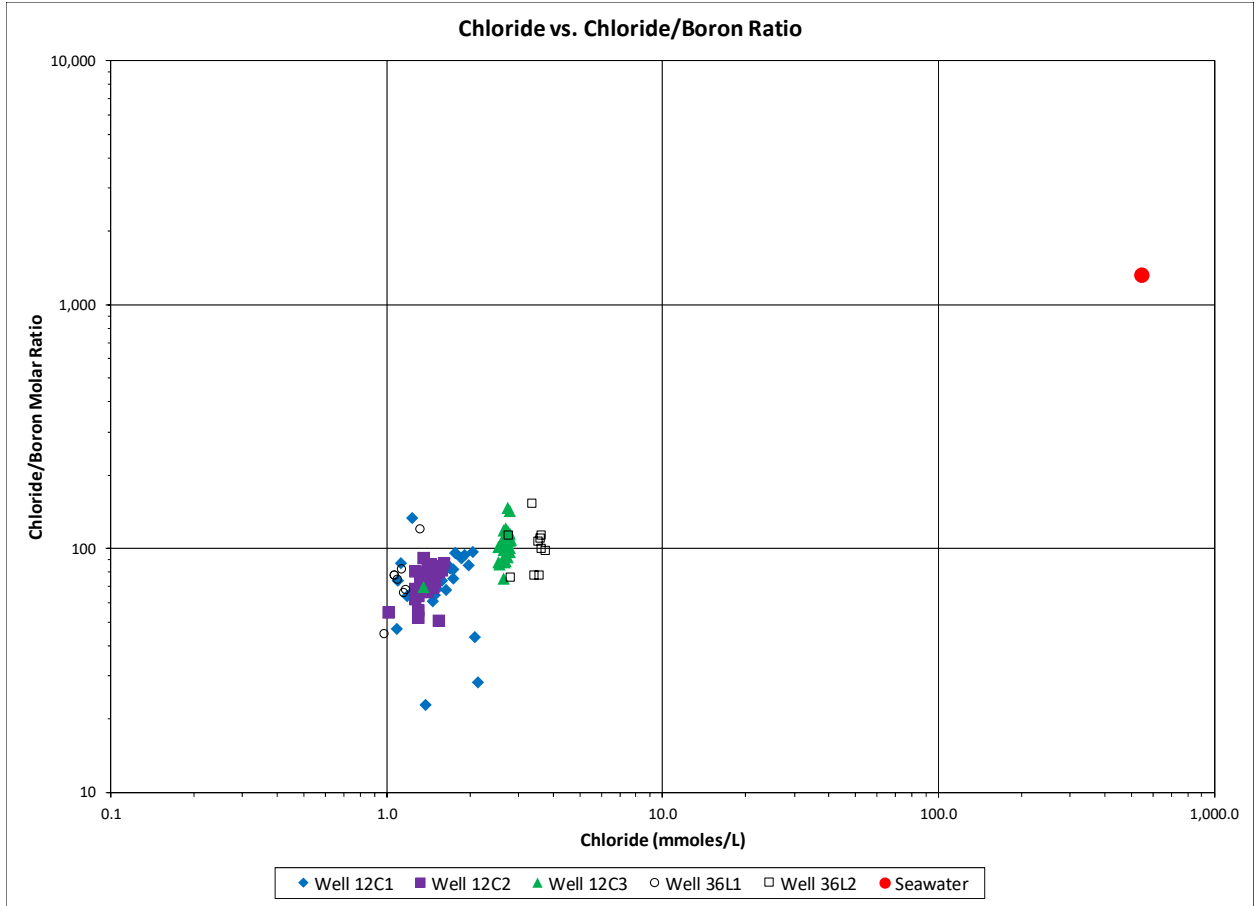


Figure 6-15. Chloride vs Chloride/Boron Ratio for Coastal Wells

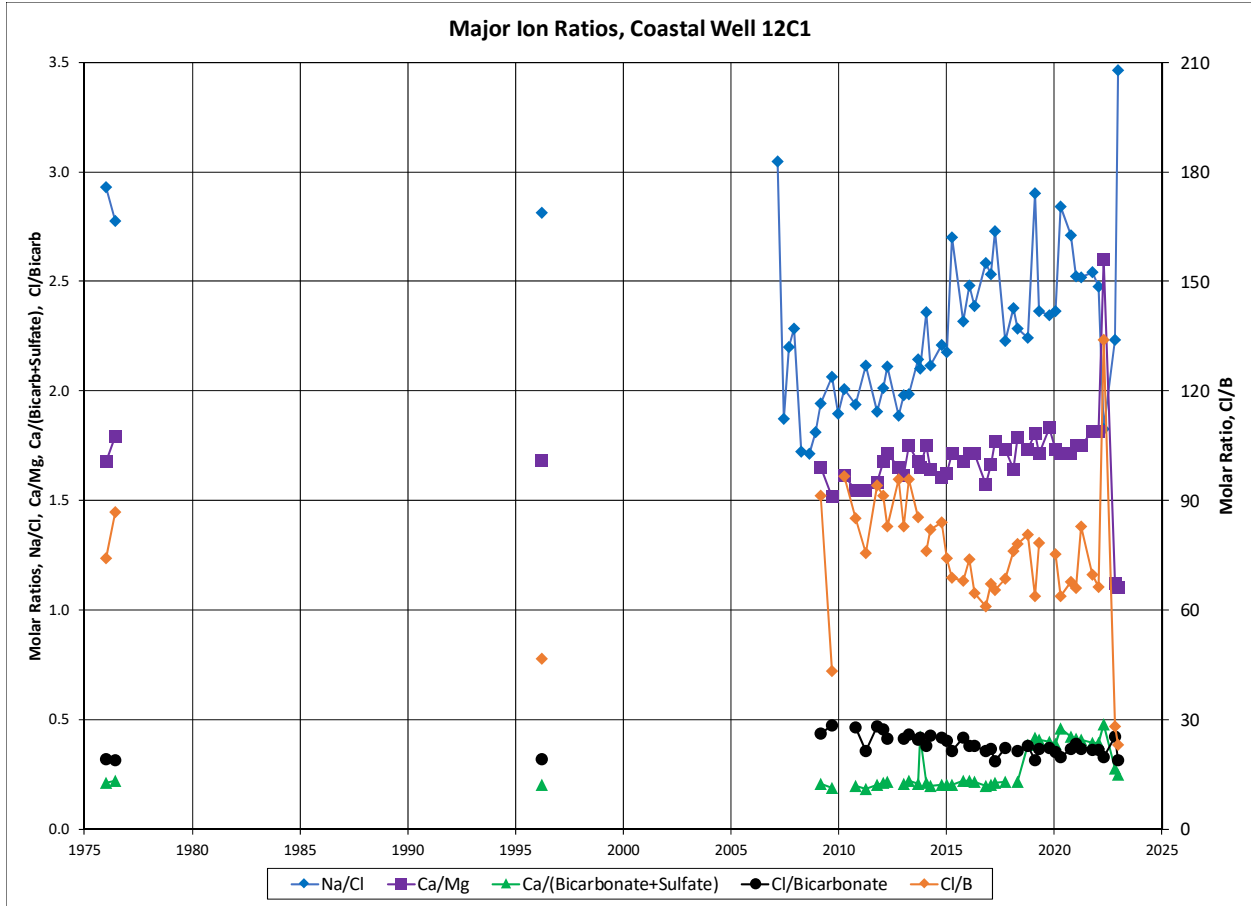


Figure 6-16. Major Ion Ratios for Coastal Well 12C1

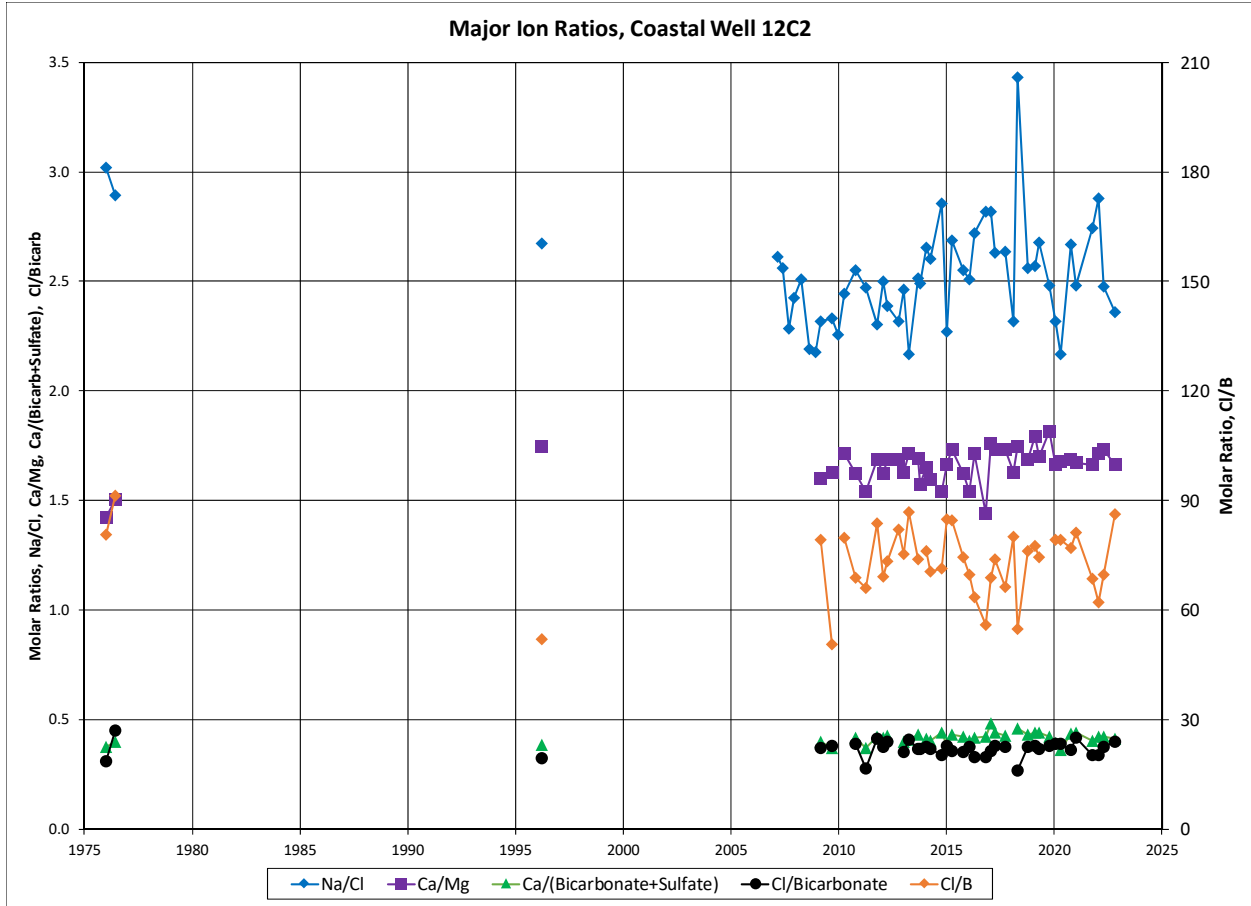


Figure 6-17. Major Ion Ratio for Coastal Well 12C2

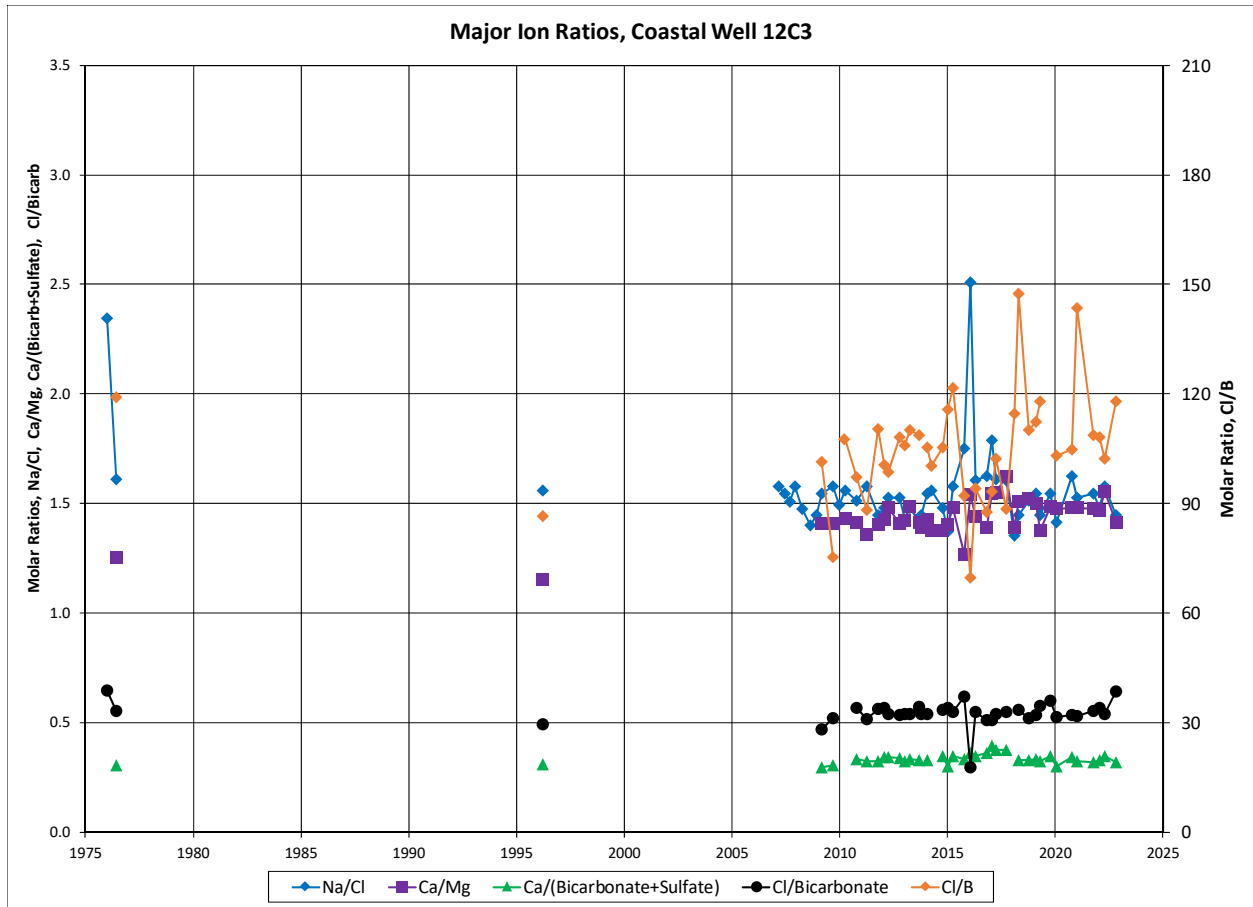


Figure 6-18. Major Ion Ratio for Coastal Well 12C3

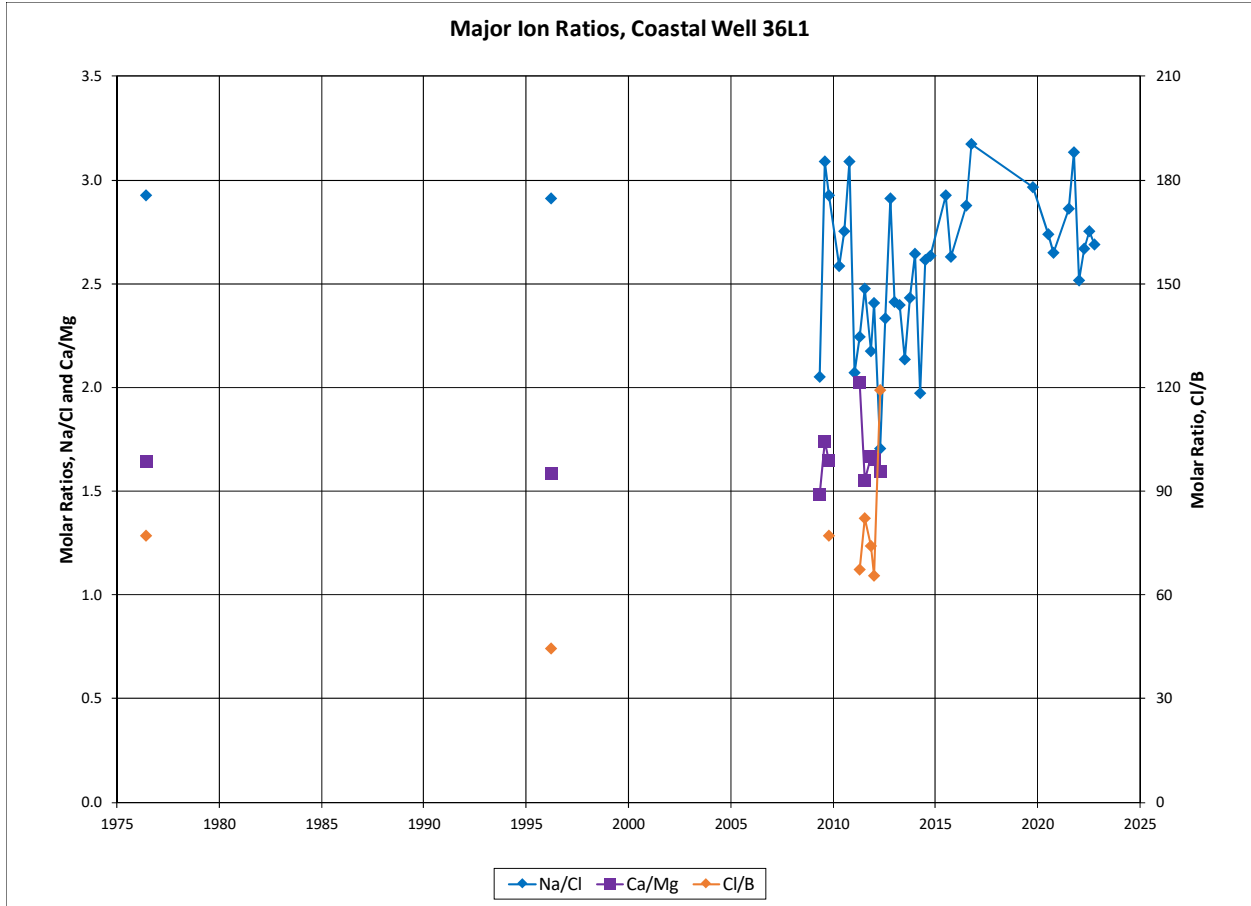


Figure 6-19. Major Ion Ratio for Coastal Well 36L1

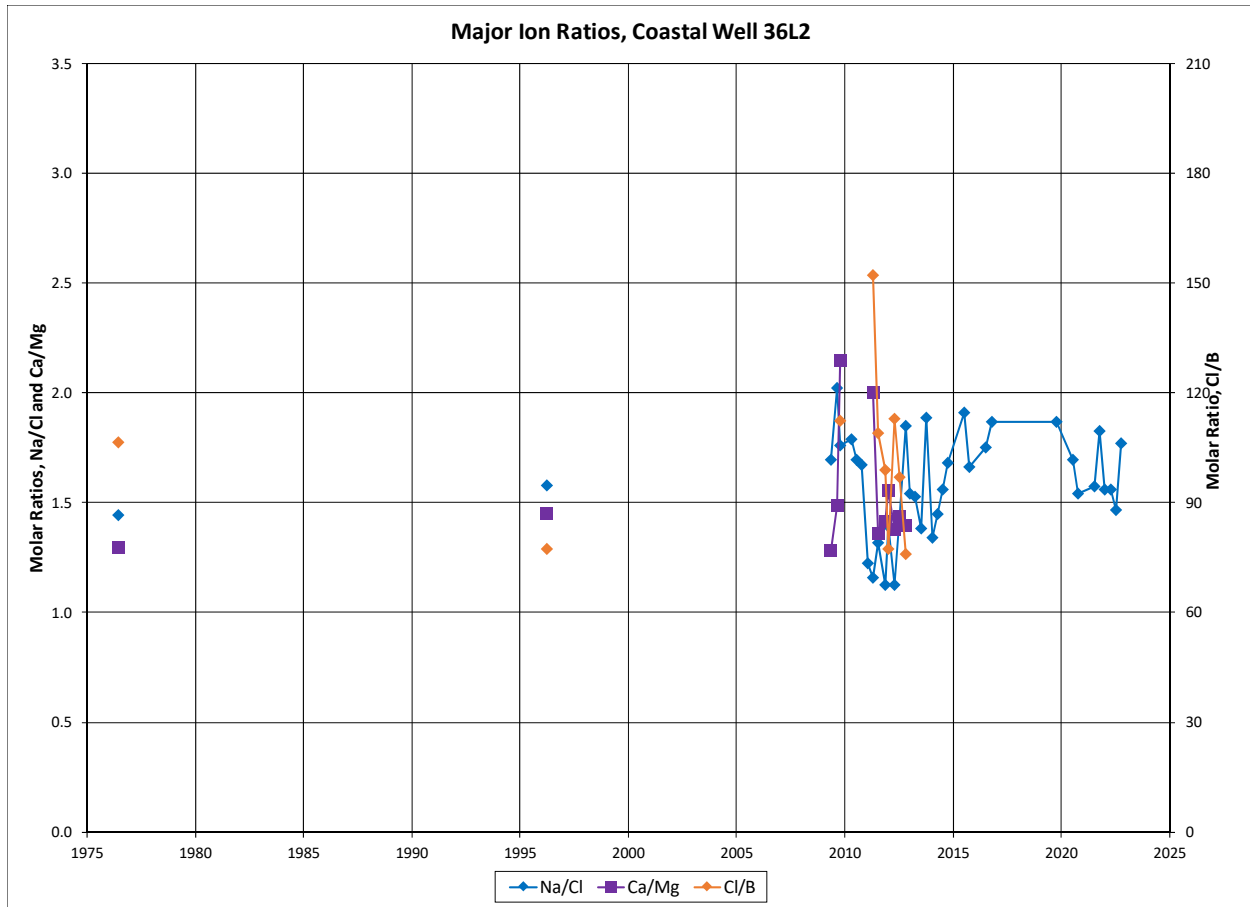


Figure 6-20. Major Ion Ratio for Coastal Well 36L2

7. Analyses of Water Conditions

Stipulation requirements, water shortage conditions, and long-term trends are presented in the following sections.

7.1. Stipulation Requirements

The Stipulation requires the determination of the water shortage condition as part of the Annual Report. Water shortage conditions are characterized by criteria designed to reflect that groundwater levels beneath the NMMA as a whole are at a point at which a response would be triggered to avoid further declines in groundwater levels (Potentially Severe), and to declare that the lowest historical groundwater levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached (Severe).

Potentially Severe Water Shortage Conditions

The Stipulation, page 25, defines Potentially Severe Water Conditions as follows:

Caution trigger point (Potentially Severe Water Shortage Conditions)

(a) *Characteristics.* The NMMA Technical Group shall develop criteria for declaring the existence of Potentially Severe Water Shortage Conditions. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation. Such criteria shall be designed to reflect that water levels beneath the NMMA as a whole are at a point at which voluntary conservation measures, augmentation of supply, or other steps may be desirable or necessary to avoid further declines in water levels.

Severe Water Shortage Conditions

The Stipulation, page 25, defines Severe Water Conditions as follows:

Mandatory action trigger point (Severe Water Shortage Conditions)

(a) *Characteristics.* The NMMA Technical Group shall develop the criteria for declaring that the lowest historic water levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation.

7.2. Water Shortage Conditions

7.2.1. Inland Criteria

The inland criterion for water shortage conditions is the Key Wells Index. The CY 2022 Key Wells Index was the lowest on record since 1975, at 7.8 ft msl, indicating Severe Water Shortage Conditions (Figure 7-1).

Key Wells Index

The Key Wells Index indicates trends in groundwater elevations within inland areas of the NMMA, and is intended to reflect whether there is a general balance between inflows and outflows in the NMMA. There was a decrease in the Key Wells Index in CY 2022, which continues to meet the criteria for Severe Water Shortage Conditions (Figure 7-1). Groundwater elevations in several of the wells that make up the Key Wells Index have generally declined since about 2000 (see Section 6.1.1 Results from Key Wells).

7.2.2. Coastal Criteria

The coastal criteria for water shortages conditions are based on water elevations and water quality in coastal wells, 12C1, 12C2, 12C3, 36L1, and 36L2. Coastal groundwater quality has not exceeded the chloride concentration criteria in CY 2022. Coastal groundwater elevations decreased in CY 2022, below the elevation criteria, indicating Potentially Severe Water Shortage Conditions in Spring 2022 (Table 7-1).

Table 7-1. Criteria for Potentially Severe Water Shortage Conditions

Well	Perforations Elevations (ft msl)	Aquifer	Spring 2022 Elevations (ft msl)	Elevation Criteria (ft msl)	Highest 2022 Chloride (mg/L)	Chloride Concentration Criteria (mg/L)
11N/36W-12C1	-261 to -271	Paso Robles	7.11	5.0	76	250
11N/36W-12C2	-431 to -441	Pismo	3.47	5.5	51	250
11N/36W-12C3	-701 to -711	Pismo	7.13	9.0	97	250
12N/36W-36L1	-200 to -210	Paso Robles	5.50	3.5	37	250
12N/36W-36L2	-508 to -518	Pismo	4.93	9.0	93	250

7.2.3. Status of Water Shortage Conditions

The Key Wells Index remains below the Severe Water Shortage Conditions in CY 2022. Exiting the Severe Water Shortage Conditions requires two consecutive years where the Key Wells Index is above the level of Severe Water Shortage Conditions.

The responses discussed in the Stipulation are set forth as follows:

VI(D)(2b) Responses [Severe Water Shortage Conditions]. As a first response, subparagraphs (i) through (iii) shall be imposed concurrently upon order of the Court. The Court may also order the Stipulating Parties to implement all or some portion of the additional responses provided in subparagraph below.

(i) For Overlying Owners other than Woodlands Mutual Water Company and ConocoPhillips (now Phillips 66), a reduction in the use of Groundwater to no more than 110% of the highest pooled amount previously collectively used by those Stipulating Parties in a Year, prorated for any partial Year in which implementation shall occur, unless one or more of those Stipulating Parties agrees to forego production for consideration received. Such forbearance shall cause an equivalent reduction in the pooled allowance. The base Year from which the calculation of any reduction is to be made may include any prior single Year up to the Year in which the Nipomo Supplemental Water is transmitted. The method of reducing pooled production to 110% is to be prescribed by the NMMA Technical Group and approved by the Court. The quantification of the pooled amount pursuant to this subsection shall be determined at the time the mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is reached. The NMMA Technical Group shall determine a technically responsible and consistent method to determine the pooled amount and any individual’s contribution to the pooled amount. If the NMMA Technical Group cannot agree upon a technically responsible and consistent method to determine the pooled amount, the matter may be determined by the Court pursuant to a noticed motion.

(ii) ConocoPhillips (now Phillips 66) shall reduce its Yearly Groundwater use to no more than 110% of the highest amount it previously used in a single Year, unless it agrees in writing to use less Groundwater for consideration received. The base Year from which the calculation of any reduction is to be made may include any prior single Year up to the Year in which the Nipomo Supplemental Water is transmitted. ConocoPhillips (now Phillips 66) shall have discretion in determining how reduction of its Groundwater use is achieved.

Appendix 7

(iii) *NCSD, RWC, SCWC, and Woodlands (if applicable as provided in Paragraph VI(B)(3) above) shall implement those mandatory conservation measures prescribed by the NMMA Technical Group and approved by the Court.*

(iv) *If the Court finds that Management Area conditions have deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further mandatory limitations on Groundwater use by NCSD, SCWC, RWC and the Woodlands. Mandatory measures designed to reduce water consumption, such as water reductions, water restrictions and rate increases for the purveyors, shall be considered.*

(v) *During Severe Water Shortage Conditions, the Stipulating Parties may make agreements for temporary transfer of rights to pump Native Groundwater voluntary following, or the implementation of extraordinary conservation measures. Transfer Native Groundwater must benefit the Management Area and be approved by the Court.*

Nipomo Mesa groundwater management options to address water shortage conditions include responses required under the Stipulation as well as other possible groundwater management actions to address a range of resource concerns associated with the current Severe Water Shortage Condition. TG concerns directly relating to groundwater conditions include:

- Depressed groundwater elevations, both as measured by the Key Wells Index and in specific portions of the management area;
- An onshore gradient for a large area of the coastal and central portions of the NMMA.

Potential actions to address the above concerns include a range of projects and activities already in place, in progress, or contemplated for future consideration. Many of these possibilities have been reviewed previously in water supply evaluations (SAIC, 2006; Kennedy-Jenks, 2001; Bookman-Edmonston, 1994).

Existing actions in the NMMA reviewed by the TG include

- Consistent with Stage IV of the NMMA Water Shortage Response Stages, a total reduction of 2,423 AF (-43%) in purveyor production was accomplished in CY 2022 as compared to 2013.
- Continued progress in CY 2022 on the NSWP (see Section 1.1.5 Supplemental Water).

Potential actions to be reviewed by the TG include

- Increased development of reclaimed water for certain NMMA water supply needs in lieu of pumping from the deep aquifers.

Different management options have different potential capacity to reduce demand or increase supply, and each has its own technical considerations. By way of example, and assuming regulatory agency approval and the establishment of an appropriate cost benefit that meets the requirements of California's Proposition 218 or the California Public Utilities Commission (CPUC), wastewater effluent that is not already reclaimed may be discharged in locations where wastewater effluent would have a beneficial effect on the deep aquifers and in areas closer to the coast.

Areas of special concern with regard to Severe Water Shortage Conditions have special significance if they experience beneficial results from projects to manage groundwater demands and overall supply. For example, the coastal portion of the NMMA has a component of landward groundwater flow in the deep aquifers and is potentially threatened by seawater intrusion. Actions that maintain a healthy seaward component of flow protect the basin from potential seawater intrusion. Similarly, the pumping depression in the central portion of the NMMA has long-standing groundwater levels below sea level and is a pronounced feature of the principal production aquifers in the NMMA (Figure 6-6, Figure 6-8). Allowing water levels to rebound in this area would also help to reestablish and maintain protective groundwater gradients.

7.3. **Long-term Trends**

Long-term trends in climate, land use, and water use are presented in the following sections.

7.3.1. **Climatological Trends**

Climatological trends have been identified through the use of cumulative departure from mean analyses. A cumulative departure from the mean represents the accumulation, since the beginning of the period of record, of the differences (departures) in annual total rainfall volume from the mean value for the period of record. Each year's departure is added to or subtracted from the previous year's cumulative total, depending on whether that year's departure was above or below the mean annual rainfall depth. When the slope of the cumulative departure from the mean is negative (i.e., downward), the sequence of years is drier than the mean, and conversely when the slope of the cumulative departure from the mean is positive (i.e., upward), the sequence of years is wetter than the mean. The cumulative departures from the mean were computed for the rainfall station Mehlschau (38), which has the longest rainfall record for the NMMA (Figure 7-2).

Historical rainfall records for the Nipomo Mesa begin in 1920. There are three significant long-term dry periods in the record, from 1921 to 1934, from 1944 to 1951, and from 1984 to 1991. Long-term dry periods have occurred in the last 90 years that are longer in duration than the 1987 to 1992 drought (Figure 7-2). Between each large dry period, three wet periods have occurred. These wet periods are from 1935 to 1943, from 1977 to 1983, and from 1994 to 2001.

The period of analyses (1975-2022) used by the TG is roughly 7 percent "wetter" on average than the long-term record (1920-2022) indicating a slight bias toward overestimating the amount of local water supply resulting from percolation of rainfall.

7.3.2. **Land Use Trends**

The DWR periodically has performed land use surveys of the South Central Coast of California, which includes the NMMA: in 1958, 1969, 1977, 1985, and 1996. A land use survey for only the NMMA was performed by the TG in 2007 based on 2007 aerial photography (see Section 3.1.8 Land Use). The most recent survey occurred in 2013 by performing aerial imagery analysis, reviewing observations made by NMMA TG engineer representatives, and assessing San Luis Obispo County pesticide purchase reports. Based on these surveys, land use in the NMMA has changed dramatically over the past half-century (Table 7-2, Figure 7-3, and Figure 7-4). Urban development has replaced native vegetation over the past 20 years, changing by a factor of two. Total agriculture acreage has approximately doubled from 1959 (see Section 3.1.8 Land Use).

Table 7-2. NMMA Land Use – 1959 to 2020 (acres)

	1959	1968	1977	1985	1996	2007	2013	2014	2020
Agricultural	1,600	2,000	2,000	2,200	2,000	2,600	2,970	2,970	2,988
Urban	300	700	2,200	3,300	5,800	10,200	10,460	10,670	10,596
Native	19,200	18,400	16,900	15,600	13,300	8,300	7,670	7,460	7,957
Total	21,100	21,100	21,100	21,100	21,100	21,100	21,100	21,100	21,541

7.3.3. Stipulating Party Water Use Trends

Consistent with Stage IV of the NMMA Water Shortage Response Stages, a total reduction of 2,423 AF (-43%) in production was accomplished in CY 2022 as compared to 2013. NCS D reduced groundwater production in CY 2022 by 72%, GSWC reduced groundwater production by 38%, and Woodlands increased groundwater production by 23%, as compared to 2013 (Table 7-3).

Table 7-3. Groundwater Production by Purveyor from 2008 to 2022

Groundwater Production (AFY)															
Purveyors	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NCS D	2,700	2,560	2,370	2,488	2,472	2,646	2,224	1,626	1,087	999	1,003	901	1,008	935	748
GSWC	1,380	1,290	1,060	1,043	1,103	1,169	940	786	1,340	1,292	1,316	1,193	1,332	1,294	1,210
Woodlands	540	810	850	864	857	1,016	856	871	1,029	1,088	1,366	1,066	1,131	1,248	1,245
RWC	900	880	720	728	763	795	688	651	*	*	*	*	*	*	*
Total	5,520	5,540	5,000	5,123	5,195	5,626	4,708	3,934	3,456	3,379	3,684	3,160	3,471	3,477	3,203

Notes:
 * GSWC production includes RWC production from 2016 to present
 Woodlands production includes shallow aquifer production from 2016 to present

7.3.4. Trends in Basin Inflow and Outflow

The estimated groundwater production is 13,188 AF for CY 2022, which is about 2 and half times the groundwater production in 1975 (Figure 4-1), confirming a trend of increased groundwater production over the last 44 years, although there was a downward trend since 2013 due to conservation by urban users in the face of prolonged drought. The estimated consumptive use of water for urban, agricultural and golf course, and industrial use for CY 2022 is 12,257 AF (Section 5.7).

Contours of groundwater elevations suggest that there is likely some inflow of groundwater from the SMVMA, a flat gradient between NCMA and NMMA, and likely landward groundwater flow from the coastal zone.

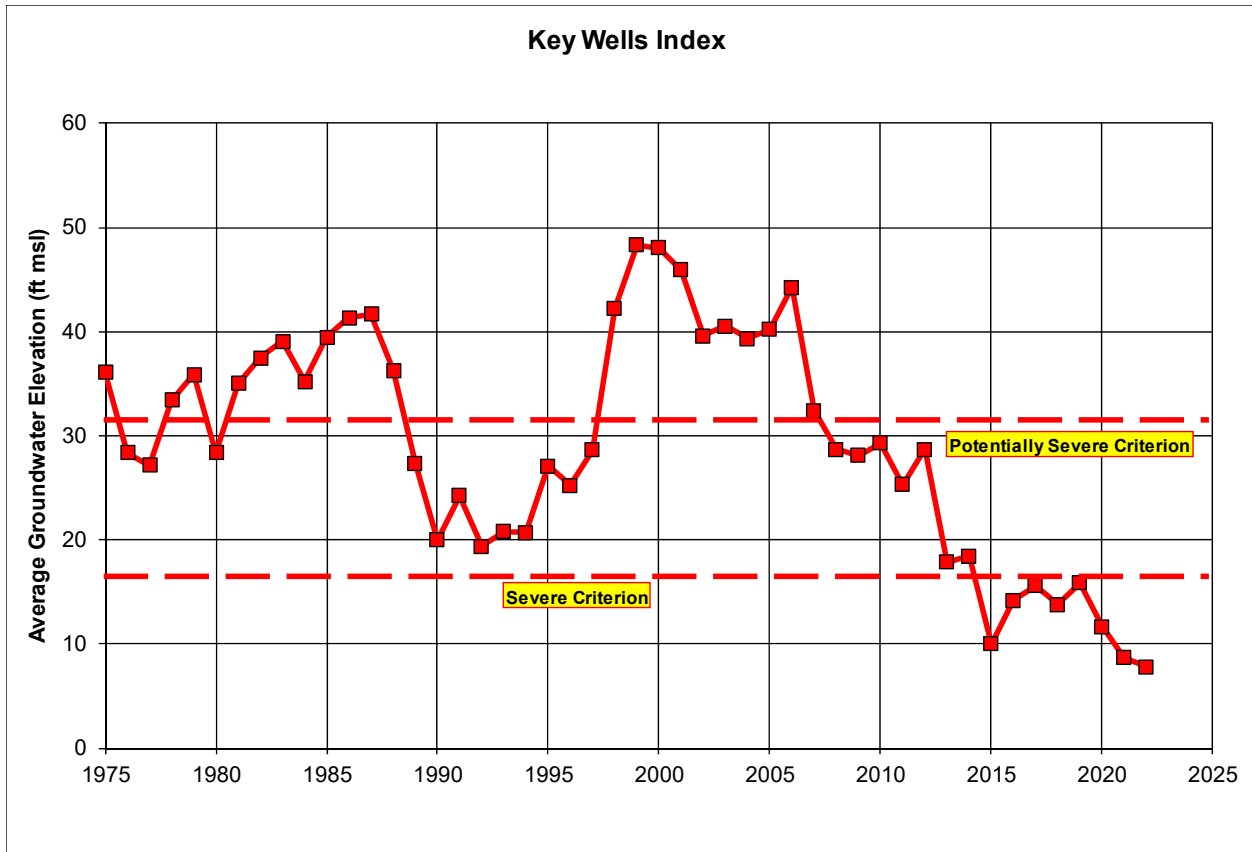


Figure 7-1. Key Wells Index *The upper dashed line is the criterion for Potentially Severe Water Shortage Conditions and the lower dashed line is the criterion for Severe Water Shortage Conditions.*

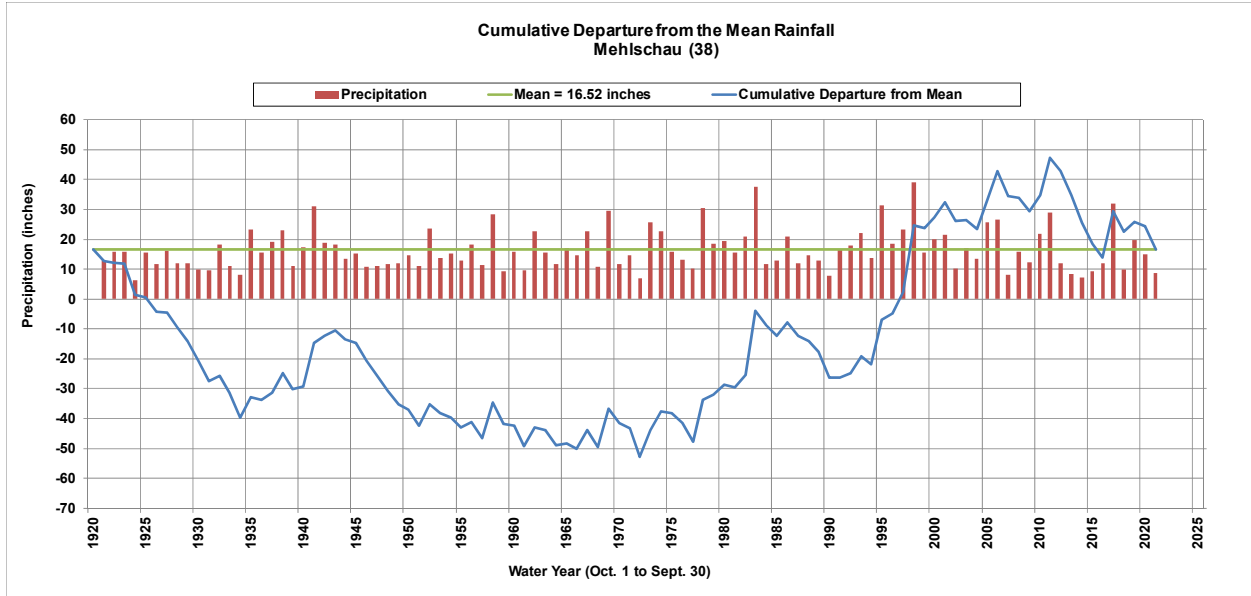


Figure 7-2. Rainfall: Cumulative Departure from the Mean – Rainfall Gauge Mehlschau (38).

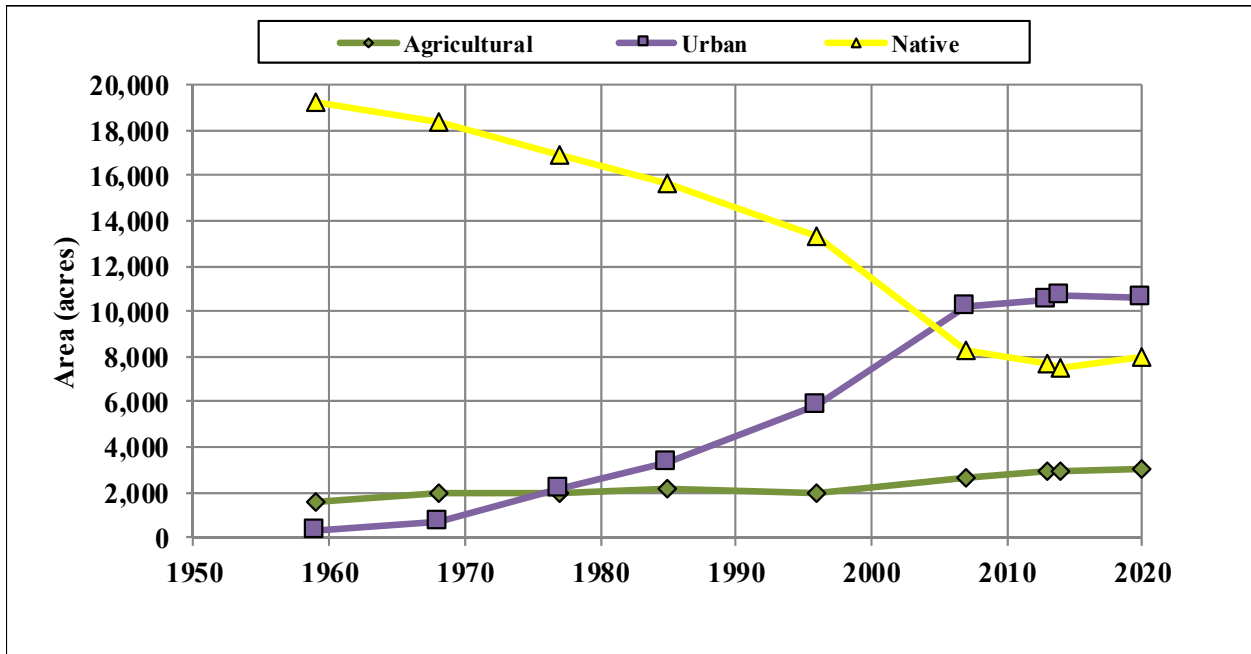


Figure 7-3. NMMA Land Use – 1959 to 2020

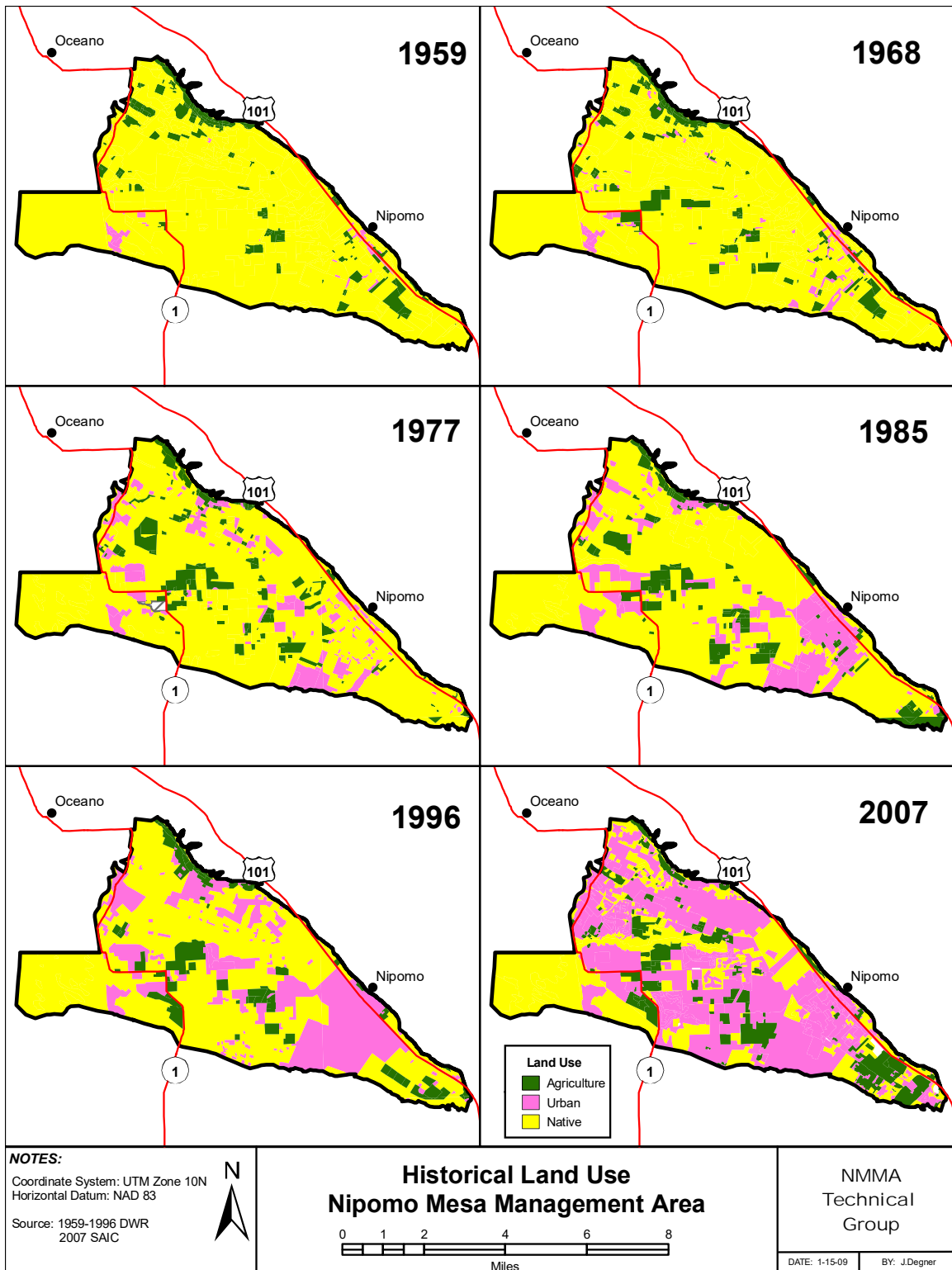


Figure 7-4. Historical Land Use in the NMMA

8. Other Considerations

8.1. *Institutional or Regulatory Challenges to Water Supply*

Several types of entities and individual landowners extract water from aquifers underlying the NMMA to meet water demands and no single entity is responsible for the delivery and management of available water supplies. Each entity must act in accordance with the powers and authorities granted under California law.

The powers and authorities for Woodlands and NCS D are set forth in the California Water Code. The CPUC regulates GSWC. This diversity of the public water purveyors' powers and the locations of their respective service areas (Figure 1-3) must be taken into account in attempting to develop consistent water management strategies that can be coupled with enforceable measures to ensure timely compliance with recommendations made by the TG, or mandatory Court orders. This is particularly true when there are legal requirements relating to the timing of instigating changes in water rates, implementation of mandatory water conservation practices, or forcing a change in pumping patterns, which may require an entity to deliver water to a location outside its service area.

A cooperative effort among the purveyors and other parties is the only expedient means to meet these institutional and regulatory challenges relating to the water supply and overall management of the NMMA. The purveyors developed a WMP in CY 2010 which outlines steps to take in "potentially severe water shortage conditions," as well as in "severe water shortage conditions" (see Appendix B). The WMP identifies a list of recommended water use restrictions to limit prohibited, nonessential and unauthorized water uses. For each condition, the WMP also identifies both voluntary and mandatory actions such as conservation goals, shifts in pumping patterns, and potential additional use and pumping restrictions.

9. Recommendations

A list of recommendations was developed and published in each of the previous NMMA Annual Reports. The TG will address past and newly developed recommendations, based on future budgets, feasibility, and priority. The recommendations are subdivided into two categories: (1) Achievements from earlier NMMA Annual Report recommendations accomplished in CY 2022, and (2) Technical Recommendations – to address the needs of the TG for data collection and compilation.

9.1. *Achievements from Previous NMMA Annual Report Recommendations*

The TG worked to address several of the recommendations outlined in the previous Annual Reports. Achievements made during CY 2022 are as follows.

- As part of the continued operation of the NSWP, a total of 1,141 AF of water was delivered to the NMMA during the CY 2022.
- The TG reviewed the NMMA Monitoring Program and identified additional wells or monitoring points to include, in an effort to better characterize conditions in the shallow aquifer and to fill geographic data gaps associated with shallow and deep aquifers. The

TG established a technical foundation for contouring shallow well groundwater elevations in the northern NMMA.

- The TG continued tracking, in part through regular communication with SLO County, groundwater management activities in groundwater basins adjacent to the SMGB upgradient of the NCMA. These activities are being implemented within the Arroyo Grande subbasin under the umbrella of SGMA.

9.2. **Technical Recommendations**

The following technical recommendations are not organized in order of priority, because the monitoring parties, considering their own particular funding constraints and authorities, will determine the implementation strategies and priorities.

- **Supplemental Water Supplies** – Reducing pumping is the most effective method to reduce the stress on the aquifers and to allow groundwater to recover; continued operation of the NSWP (see Section 1.1.5-Supplemental Water) is another viable method to achieve these goals. The TG recommends that this project continue to be implemented consistent with the Judgment and Stipulation.
- **Subsurface Flow Estimates** – Evaluate subsurface flow along the NMMA boundaries based on groundwater gradients and hydraulic conductivities in the shallow and deep aquifers.
- **Key Wells Monitoring** – Where possible, install data loggers in all Key Wells. Identify wells to replace Key Well -09K02 whose owner has withdrawn access privileges, and Key Well -09Q01 which has been dry for the last few monitoring events.
- **Key Wells Index 5-Year Review** – Evaluate and review the Key Wells Index by 2025.
- **Monitoring Points** – Replace the lost monitoring wells near Oso Flaco Lake, which were buried many years ago by migrating sand dunes, and coordinate this effort with SLO County. Assist SLO County with modification of the wellhead enclosure at the 11N36W12C coastal nested wells and include an assessment of sampling equipment and confirm well depths. Continue to identify, evaluate, and select specific shallow aquifer wells for groundwater monitoring in the NMMA. Stay apprised of the fate of groundwater monitoring wells at the P66 near-coastal refinery following planned decommissioning of the facility beginning in 2023, and coordinate with SLO to continue monitoring of the 11N36W12C coastal nested wells. Consult with SLO County to incorporate additional wells, identified by the TG, into their monitoring network and activities in the future.
- **Well Reference Point Elevations** – Continue to improve the accuracy of the reference points (RP) elevations using LIDAR data and other survey data. Survey the RP elevations and horizontal coordinates of wells as necessary.
- **Groundwater Production** – Develop a method to collect groundwater production data from all stipulating parties. Continue to update the land use classification on an interval commensurate with significant changes in land use patterns and as is practical, with the

Appendix 7

intention that the interval is more frequent than DWR's 10-year cycle of land use classification.

- **Agricultural Groundwater Production** – Continue to work with NMMA area farmers to measure groundwater production. Continue consultation with San Luis Obispo County Agriculture Department and other local experts in crop water use with specific updates to emerging crops and crop conversions. Evaluate alternative data sources such as the OpenET organization.
- **Return Flow Estimates.** Estimate the annual amount of wastewater discharged to septic systems for customers who are not connected to WWTF. Evaluate the amount of water served to parcels outside of the NMMA and the degree to which return flows from these parcels do not recharge NMMA aquifers.
- **Hydrogeologic Characteristics of NMMA** –Continue to review well screen intervals, lithology, groundwater level, and other relevant information. Evaluate NMMA fault displacements and potential effects of faulting on the hydrostratigraphy and groundwater flow in the NMMA, and the regions of confined and unconfined groundwater conditions within the NMMA.
- **Stream Flow Estimates** – Develop rating curves for Los Berros Creek, and install a new stream sensor on Nipomo Creek and develop a rating curve.
- **Groundwater Modeling** – Continue to engage with users of the regional groundwater model developed for Pismo Beach and the South SLO County Sanitation District to assess efforts to revise and update the accuracy of the model.
- **SGMA** – Continue communication between the TG and SLO County with respect to the County's groundwater management activity adjacent to the adjudicated portion of the SMGB. The TG will continue to report annual groundwater conditions to the DWR SGMA reporting site for adjudicated basins.

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Appendix 7

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Appendices

Appendix A: Monitoring Program

Nipomo Mesa Monitoring Program

Prepared by

Nipomo Mesa Management Area Technical Group

August 2008

Table of Contents

1 INTRODUCTION 3
 1.1 Background 3
 1.2 Judgment 3
 1.3 Technical Group 5
 1.4 Objectives Of Monitoring Program 6
 1.5 Reporting Requirements 6
2 MONITORING PARAMETERS 7
 2.1 Groundwater Elevations 7
 2.2 Groundwater Quality 8
 2.3 Precipitation 9
 2.4 Streamflow 9
 2.5 Surface Water Quality and Usage 9
 2.6 Land and Water Uses Impacting NMMA Water Balance 10
 2.7 Groundwater Pumping (Measured) 10
 2.8 Groundwater Pumping (Estimated) 10
 2.9 Wastewater Discharge and Reuse 11
3 DATA ANALYSIS & WATER SHORTAGE TRIGGERS 11
 3.1 Data Analysis 11
 3.2 Water Shortage Triggers 12
APPENDIX – MONITORING POINTS 13

1 INTRODUCTION

1.1 Background

This Monitoring Program is a joint effort of the Nipomo Mesa Management Area (“NMMA”) Technical Group (“Technical Group”). The Technical Group was formed pursuant to a requirement contained in the 2005 Stipulation (“Stipulation”) for the Santa Maria Basin Adjudication. Sections IV D (All Management Areas) and Section VI (C) (Nipomo Mesa Management Area) contained in the Stipulation were independently adopted by the Court in the Judgment After Trial¹ (herein “Judgment”). The Monitoring Program is a key component of the portions of the Judgment that involve the NMMA and forms the basis for subsequent analyses of the basin to be included in Annual Reports for the NMMA.

This Monitoring Program includes a discussion of the various parameters to be monitored within the NMMA, and a discussion of data analysis methods and water shortage triggers. The Monitoring Program provides a permanent foundation for the type of information to be regularly monitored and collected. However, the Technical Group is expected periodically to evaluate and update the Monitoring Program to ensure it provides comprehensive information sufficient to assess the integrity of water resources within the NMMA. For example, the Technical Group may change or expand monitoring points or types of data to be collected and otherwise periodically amend the Monitoring Program. Material amendments will be submitted for court approval.

1.2 Judgment

As a component of the physical solution for the Santa Maria groundwater basin, the Judgment requires the development and implementation of comprehensive monitoring and reporting in each of three Management Areas in the basin – Northern Cities Management Area, Nipomo Mesa Management Area, and Santa Maria Valley Management Area (Figure 1). For each of these Management Areas the Judgment specifies:

“A Monitoring Program shall be established in each of the three Management Areas to collect and analyze data regarding water supply and demand conditions. Data collection and monitoring shall be sufficient to determine land and water uses in the Basin, sources of supply to meet those uses, groundwater conditions including groundwater levels and quality, the amount and dispositions of Developed Water supplies, and the amount and disposition of any sources of water supply in the Basin.

¹ The Judgment is dated January 25, 2008 and was entered and served on all parties on February 7, 2008. This Monitoring Program is to be submitted for court approval on or before August 6, 2008.

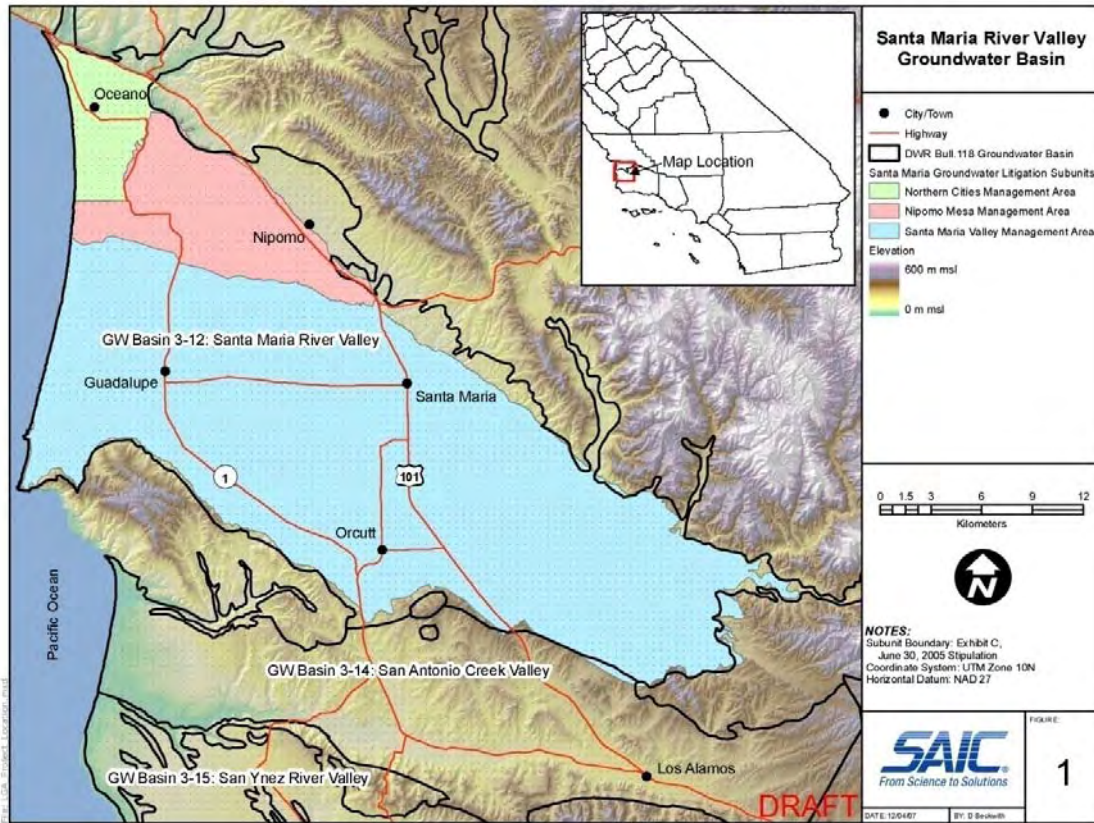


Figure 1. Santa Maria groundwater basin location map.

Within one hundred and eighty days after entry of judgment, representatives of the Monitoring Parties from each Management Area will present to the Court for its approval their proposed Monitoring Program.”

The Judgment also requires the NMMA and the Santa Maria Valley management area technical committees to submit for court approval the criteria that trigger responses to "potentially severe and severe shortage conditions" that are specified in the Judgment.

An additional requirement of the Judgment is an Annual Report:

“Within one hundred and twenty days after each Year, the Management Area Engineers will file an Annual Report with the Court. The Annual Report will summarize the results of the Monitoring Program, changes in groundwater supplies, and any threats to Groundwater supplies. The Annual Report shall also include a tabulation of Management Area water use, including Imported Water availability and use, Return Flow entitlement and use, other Developed Water availability and use, and Groundwater use. Any Stipulating Party may object to the Monitoring Program, the reported results, or the Annual Report by motion.”

Each Management Area Monitoring Plan will provide the basis for the preparation of the annual reports and the data to support the evaluations for the potentially severe and severe water shortage conditions relevant to the NMMA and the Santa Maria Valley management area.

1.3 Technical Group

The NMMA Technical Group is designated as the Monitoring Party for the NMMA.

Membership

The NMMA Technical Group is designated in the Judgment as including representatives appointed by Nipomo Community Services District, Southern California Water Company (now known as Golden State Water Company), ConocoPhillips, Woodlands Mutual Water Company, and an agricultural overlying owner who is also a Party to the Stipulation. The service areas of purveyors in the Technical Group are indicated in Figure 2.

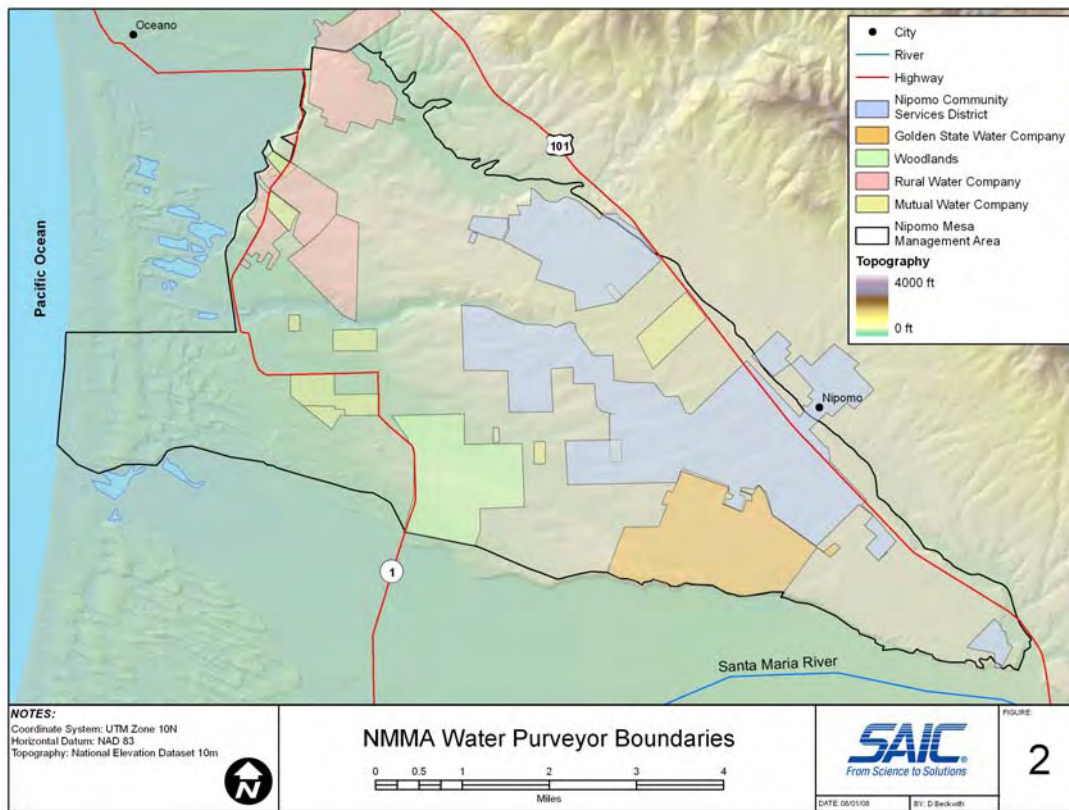


Figure 2. Water purveyors within the NMMA.

Appendix 7

Role

The Technical Group is responsible for preparing the Monitoring Program, conducting the Monitoring Program, and preparing the Annual Reports. The Technical Group may hire individuals or consulting firms to assist in the preparation of the Monitoring Program and Annual Reports (the Judgment describes these individuals or consulting firms as the “Management Area Engineer”). The Technical Group has the sole discretion to select, retain, and replace the Management Area Engineer.

To assist the Technical Group in monitoring and analyzing water conditions in the NMMA, Stipulating Parties are required to provide monitoring and other production data at no charge, to the extent that such data have been generated and are readily available. The Technical Group is required to adopt rules and regulations concerning measuring devices that are consistent with the Monitoring Programs of other Management Areas when feasible.

If the Technical Group is unable to agree on any aspect of the Monitoring Program, the matter may be taken to the Court for resolution.

Cost Sharing

The Technical Group functions are to be funded by contribution levels negotiated by Nipomo Community Services District, Golden State Water Company, Rural Water Company, ConocoPhillips, and Woodlands Mutual Water Company. In-lieu contributions through engineering services may be provided, subject to agreement by those parties. The budget of the Technical Group shall not exceed \$75,000 per year without prior approval of the Court.

1.4 Objectives Of Monitoring Program

The objectives of the Monitoring Program are to establish appropriate data collection criteria and analytical techniques to be used within the NMMA so that groundwater conditions, changes in groundwater supplies, threats to groundwater supplies, water use, and sources of water can be documented and reported on an annual basis. In addition, data developed through the Monitoring Program will be relied upon to provide the criteria for potentially severe and severe water shortage conditions.

1.5 Reporting Requirements

The Monitoring Program shall be presented for Court approval consistent with the Judgment. The Annual Report shall be submitted to the Court by April 30 of each year (April 29 on leap years).

2 MONITORING PARAMETERS

To satisfy the objectives of the Monitoring Program (section 1.4), data need to be collected from a variety of sources. The data to be collected include:

- Groundwater elevations measured in wells
- Water quality measured in wells
- Precipitation
- Streamflow
- Surface water usage
- Surface water quality
- Land use to the extent differential uses impact the NMMA water budget
- Groundwater pumping (measured)
- Groundwater pumping (estimated)
- Wastewater discharge and reuse amounts and locations

2.1 Groundwater Elevations

The San Luis Obispo County Department of Public Works, the U.S. Geological Survey, the California Department of Water Resources, and some groundwater users within the NMMA periodically gather groundwater elevation data on a large number of wells within the NMMA. Various members of the NMMA Technical Group already maintain these data in digital databases.

Current monitoring of groundwater elevations is conducted primarily by the County of San Luis Obispo, and additionally by Nipomo Community Services District, ConocoPhillips, Woodlands, Golden State Water Company, and Rural Water Company. The Monitoring Program will include compilation of groundwater elevations for a large number (93 initially) of groundwater wells located throughout the NMMA. Typically, groundwater elevations are measured during the fall and spring of each year. The initial list of the wells to be included in the Monitoring Program are shown in the Appendix.

The extensive current monitoring of groundwater elevations within the NMMA is sufficient to provide initial information on groundwater trends. However, there are four additional issues that the Technical Group will consider for further monitoring or analysis over the first years of implementation of the Monitoring Program:

Appendix 7

- Additional existing coastal nested monitoring wells will be considered for inclusion in the groundwater elevation monitoring program. These include the 13K2-K6 nested site near Oso Flaco Lake (currently not being monitored) and the 36L1-L2 nested site in the coastal dunes west of Black Lake Canyon (outside the NMMA, currently monitored for groundwater elevations by SLO County).
- The wells used in the Monitoring Program will be investigated as necessary to ensure that the aquifer penetrated by the wells is verified.
- Additional wells may be added as necessary to the Monitoring Program in a phased approach to fill in data gaps recognized during preparation of the Annual Reports.
- The Technical Group may recommend that additional dedicated monitoring well(s) need to be installed at critical locations where no other information is available.

2.2 Groundwater Quality

As an element of compliance with their drinking water reporting responsibilities, public water purveyors within the NMMA have historically gathered and reported groundwater quality data (filed with the California Department of Public Health). In addition, the U.S. Geological Survey, the California Department of Water Resources, and SLO County have also gathered some water quality data within the NMMA. Members of the NMMA Technical Group maintain these data in digital databases.

Of considerable importance is groundwater quality in wells near the ocean, the most likely site where any intrusion of seawater would first be detected. Because there was no current monitoring of groundwater quality in any of the coastal nested monitoring wells, the Monitoring Program will include the following:

- Coastal nested monitoring well site 11N/36W-12C (west of the ConocoPhillips refinery) is now monitored under agreement with SLO County and provides quarterly water quality sampling. Samples are collected for chloride, sulfate, and sodium lab analyses and pH, EC, and temperature are measured in the field.

Regular sampling and analyses of groundwater quality is an important component of the Monitoring Program, because of the potential threat of seawater intrusion at the coastline and potential water quality changes caused by pumping stress in other portions of the NMMA and the basin as a whole. Water quality does not change as rapidly as groundwater elevations, so quality monitoring does not have to be as frequent. With the addition of the coastal nested monitoring data, current water quality monitoring appears to be adequate. However, four aspects of the Monitoring Program will be further evaluated to ensure the ongoing adequacy of the Monitoring Program:

Appendix 7

- The Technical Group will arrange to receive water quality monitoring results from purveyors within the NMMA, either directly from the purveyors or annually from the Department of Public Health.
- Coastal nested monitoring well site 12C will be evaluated to determine whether current quarterly sampling can be reduced in frequency (or field testing substituted for laboratory analysis), thus allowing funding for water quality monitoring of additional nested site 13K2-K6 near Oso Flaco Lake (not sampled for three decades) and the 36L1-L2 nested site in the coastal dunes west of Black Lake Canyon (last sampled 12 years ago).
- Each well used for monitoring of groundwater elevations will be tested once for general minerals (if such testing is not already conducted) as budgeting allows. This testing will help further define particular aquifer characteristics.
- A water quality monitoring contingency plan will be developed in the event that there are indications of seawater intrusion in coastal monitoring wells. This contingency plan will consider triggers for increased sampling, both in frequency and in added analytes (e.g., iodide, strontium, boron, oxygen/hydrogen isotopes).

2.3 Precipitation

There is a wide choice of existing precipitation stations that can be used to estimate rainfall within the NMMA. Two gauges are part of the ALERT Storm Watch System, Nipomo East (728) and Nipomo South (730). Other gauges include Simas (201.1), Black Lake (222), Runels Ranch (42.1), Oceano Wastewater Plant (194), Nipomo Mesa (152.1), Peny Ranch (175.1), Mehlschau (38), NCS D Shop (223), Nipomo CDF (151.1), and CIMIS Nipomo #202 Station. As part of the analysis for the Annual Reports, data from an appropriate subset of these gauges will be used to estimate precipitation each year.

2.4 Streamflow

Streamflow can be important both as an input and an output of the water balance for an area. Currently, streamflow within the NMMA is partially gauged. The Los Berros Creek gauge (Sensor 757) is located 0.8 miles downstream from Adobe Creek and 3.7 miles north of Nipomo on Los Berros Road. This station is located approximately where Los Berros Creek conveys water out of the NMMA.

Nipomo Creek is not currently being monitored and is observed to convey water out of the NMMA during some of the year. The Technical Group will consider whether monitoring of Nipomo Creek or any other surface water monitoring is necessary or appropriate.

2.5 Surface Water Quality and Usage

There has been limited surface water monitoring of the dune lake complex and in Black Lake Canyon by the San Luis Obispo Land Conservancy and others. The

Appendix 7

Technical Group will evaluate whether this monitoring is sufficient and will obtain this and any additional related data as necessary and appropriate.

It is not known whether there are surface water diversions within the NMMA. The Technical Group will investigate this issue and determine whether additional monitoring is necessary and appropriate.

2.6 Land and Water Uses Impacting NMMA Water Balance

Land uses within the NMMA include agricultural, residential/commercial, and undeveloped areas. Land use surveys can be useful both in developing an overall water balance assessment and as an aide to estimate water use when such use is not directly measured. The most common method of conducting a land use survey is to obtain current digital aerial photography, classify the land uses, and create GIS mapping of the various land use classifications. In some cases, field checking is also required to confirm information obtained from aerial photography.

Where necessary, water use may be established based on the various types of land use within the NMMA. Information may be obtained from both published data (including San Luis Obispo County WPA-6) and any information compiled from existing stations installed in and around the NMMA that monitor climate data (CIMIS). This is described in greater detail in Section 2.8.

2.7 Groundwater Pumping (Measured)

Individual landowners, public water purveyors, and industry all rely on groundwater pumping from the NMMA. To the extent users measure their volume of use, these data will be reported to the Technical Group on an annual basis. Stipulating Parties to the Judgment are required to provide monitoring and other production data at no charge, to the extent that such data have been generated and are readily available.

Pursuant to paragraph 5 of the Judgment, the Technical Group retains the right to seek a Court Order requiring non-stipulating parties to monitor their well production, maintain records thereof, and make the data available to the Court or the Court's designee.

2.8 Groundwater Pumping (Estimated)

Some groundwater users do not measure the volume of their groundwater production, and thus, this increment of groundwater pumping will have to be estimated each year. There are several methods of estimating groundwater pumping when totalizing meters are not installed. For cooperating pumpers, electrical records for pumping can be used, with the most accuracy obtained when the wells are tested regularly for pump efficiency.

Another method of estimating agricultural pumping is through self-reporting or surveys of crop type and irrigated acreage. For agriculture, water use can then be

Appendix 7

estimated using calculations that include crop water demand, effective precipitation, evapotranspiration, irrigation efficiency, and leaching requirements. An active California Irrigation Management Information System (CIMIS) station is located in the southern portion of the Woodlands within the NMMA and provides a useful reference for Nipomo Mesa evapotranspiration. A second active station is located adjacent to the Sisquoc River, above Tepusquet Creek.

For municipal or mixed rural lands, estimates will be based on acreage and development type. In some urban lands, a “unit water use” can be derived from average water consumption recorded from comparable or historical conditions.

To develop a complete picture of groundwater withdrawals for Nipomo Mesa, the Technical Group will develop methods for estimating unmetered groundwater pumping that will likely include some combination of those discussed above.

2.9 Wastewater Discharge and Reuse

Four wastewater treatment facilities discharge treated effluent within the NMMA and include the following: NCS D’s Southland Wastewater Treatment Facility in the eastern portion of Nipomo Mesa, NCS D’s wastewater treatment plant at Blacklake Village, Cypress Ridge’s wastewater treatment facility, and the Woodland’s wastewater treatment facilities. The Monitoring Program will include an annual compilation of wastewater treatment plant discharges, any reuse of the treated water (quantities and locations), and available water quality parameters.

3 DATA ANALYSIS & WATER SHORTAGE TRIGGERS

The primary purpose of the Monitoring Program is to detect changes in groundwater conditions that indicate current and future water supply problems within the NMMA. Although the determination of methods of data analysis and subsequent triggers that can indicate negative water supply conditions are not elements of the Monitoring Program, initial assessment of these issues are the responsibility of the Technical Group. A short discussion of potential methodologies follows.

3.1 Data Analysis

The focus of data analysis is to help detect and predict whether any conditions exist that could harm the aquifer, either by excessive drawdown or by degrading water quality. In evaluating the Monitoring Program data, the Technical Group will establish methodologies to use monitoring data to define the “health” of the basin. Among the methodologies that the Technical Group will evaluate in developing potentially severe and severe water shortage triggers are:

Appendix 7

- **Coastal monitoring wells** – trends in water quality and groundwater elevations. Establish criteria to recognize both the potential for seawater intrusion and evidence of actual seawater intrusion.
- **Coastal groundwater gradient** – the direction and magnitude of groundwater flow either towards the ocean or in a landward direction. Establish criteria to recognize conditions that could cause seawater intrusion.
- **NMMA-wide groundwater elevation contouring** – establish groundwater flow directions, detect areas of increased drawdown, determine how pumping patterns are affecting the basin and the effects of any changes in the location of pumping that may serve to mitigate negative impacts.
- **Key wells** – indicator wells in key areas that track changes in groundwater elevations and water quality. Establish criteria to determine whether monitored changes could potentially be harmful to the aquifers.
- **Groundwater in storage** – calculation of changes of groundwater in storage and consideration of changes of groundwater storage over time can be used to analyze trends in the basin hydrologic balance.

3.2 Water Shortage Triggers

The Stipulation requires that water level and water quality criteria are to be established that will trigger responses to potential water shortages (the potentially severe and severe water shortage conditions). The Technical Group will rely on the Monitoring Program data and protocol in establishing the proposed criteria for these triggers. The triggers points will be presented for court approval, as required in the Stipulation, prior to or concurrent with the filing of the first Annual Report in 2009. Annual Reports will include an assessment of basin conditions relative to the proposed trigger points.

APPENDIX – MONITORING POINTS

The monitoring points shown on Figure A-1 and in Table A-1 are the 93 initial wells that the NMMA Technical Group determined would provide information to evaluate the health of the Nipomo Mesa portion of the Santa Maria basin. Many of the wells indicated are currently being monitored (see Table A-1), with the remainder planned to be monitored prior to preparation of the first Annual Report.

As discussed in the main text of this Monitoring Program, wells will be added and/or dropped in subsequent years as the basin is evaluated annually. The addition and/or subtraction of monitoring wells will be based on data gaps, areas of special concern that require more monitoring, and data redundancy. Information from some of the wells listed in Table A-1 that are monitored by the County of San Luis Obispo may not be available because of privacy concerns – this issue will be addressed prior to preparation of the first Annual Report.

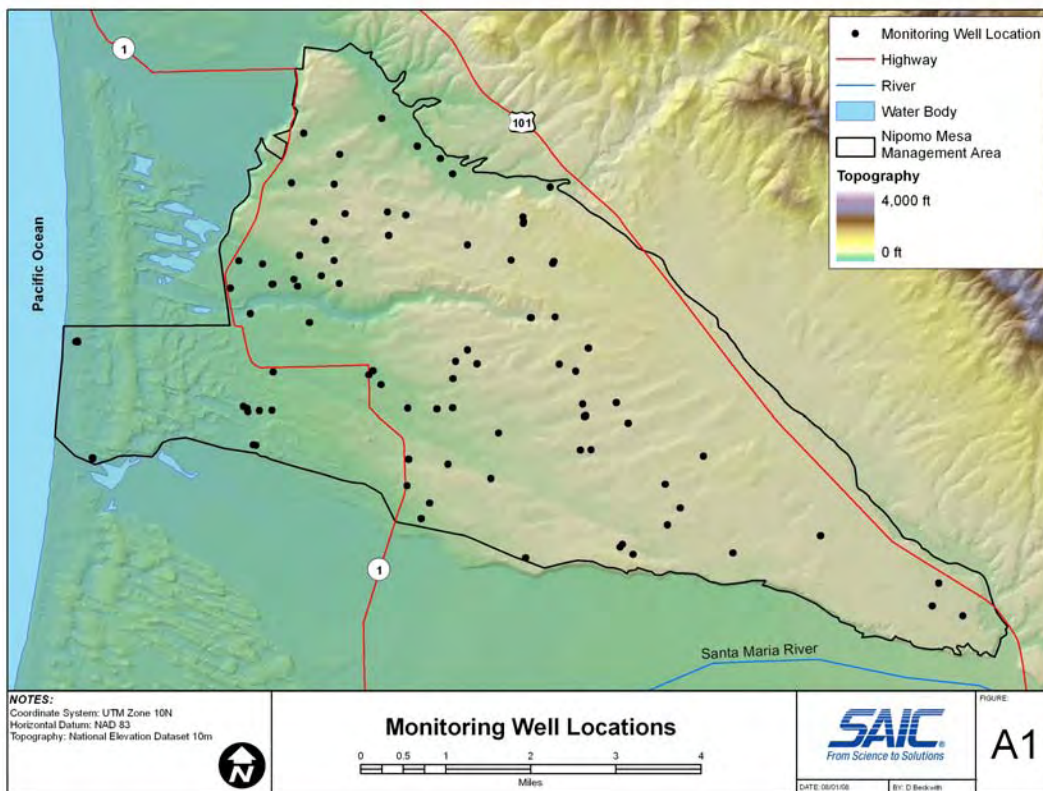


Figure A-1. Locations of monitoring points listed in Table A-1.

Appendix B: Water Shortage Conditions and Response Plan

Nipomo Mesa Management Area
Water Shortage Conditions and Response Plan

Nipomo Mesa Management Area
Technical Group

April 2009

Appendix 7

Final 4/13/09

The Santa Maria basin was divided into three management areas as a result of the adjudication of the Santa Maria groundwater basin. The June 30, 2005 Stipulation (“Stipulation”), the terms of which are incorporated into the Court’s Judgment dated January 25, 2008 (“Judgment”), established the boundaries of the Nipomo Mesa Management Area (“NMMA”), and provided for a technical group (NMMA Technical Group) to oversee management of the NMMA. As part of the Stipulation, the Technical Group was tasked to develop a Monitoring Program that shall include the setting of well elevations and groundwater quality criteria that trigger the responses set forth in Paragraph VI(D) of the Stipulation.

The NMMA Technical Group prepared a Monitoring Program dated August 5, 2008 that was submitted to the Court in accordance with the Judgment. This Water Shortage Conditions and Response Plan is an addendum to the Monitoring Program and completes the Monitoring Program requirements as defined in the Stipulation.

This document is divided into three sections:

- I. Water Shortage Conditions Nipomo Mesa Management Area,
- II. Response Plan for Potentially Severe and Severe Water Shortage Conditions, and
- III. Discussion of Criteria for Potentially Severe and Severe Water Shortage Conditions.

I. Water Shortage Conditions Nipomo Mesa Management Area

Water shortage conditions are characterized by criteria designed to reflect that groundwater levels beneath the NMMA as a whole are at a point at which a response would be triggered to avoid further declines in groundwater levels (Potentially Severe), and to declare that the lowest historic groundwater levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached (Severe).

Groundwater levels beneath the NMMA as a whole impact the cost of pumping, the quality of groundwater pumped, and the overall flow of fresh water to the ocean that balances potential seawater intrusion. Lowering of groundwater levels below certain thresholds is to be curtailed by importing supplemental water, increasing conservation, and decreasing consumptive use of groundwater produced.

The NMMA Technical Group has developed criteria for declaring the existence of Potentially Severe and Severe Water Shortage Conditions. These criteria represent the conditions in both coastal and inland wells, and depend upon measurements of groundwater elevation and groundwater quality.

While this Response Plan relies on quantitative measurements of groundwater levels, the Technical Group acknowledges these measurements are subject to many variables so that

Appendix 7

Final 4/13/09

any given measurement may only be accurate within a percentage range; no given measurement is exact or precise. For example, water level measurements obtained from groundwater production wells may be influenced by a range of factors, including but not limited to temperature, the method, protocol, and equipment used to obtain the measurement, the condition of the well, the time allowed for water levels in a previously producing well to equilibrate, and any nearby wells that remain pumping while the measurements are taken. As well, the historic data used as the basis to set action levels for Severe and Potentially Severe Water Shortage Conditions may be influenced by these and other factors. Finally, while there is sufficient historical data to reliably set Severe and Potentially Severe Water Shortage Conditions criteria, as more data is gathered pursuant to the NMMA Monitoring Plan, the Technical Group expects its understanding of NMMA characteristics will become increasingly more sophisticated and accurate. As a result of these considerations, the Technical Group acknowledges and expects that it will recommend modifications to the Severe and Potentially Severe Water Shortage Conditions criteria as more data are obtained on a consistent basis and as the Technical Group's understanding of the NMMA characteristics improves over time.

Seawater intrusion is a condition that could permanently impair the use of the principal producing aquifer to meet water demands of the NMMA. For coastal areas, the criteria described here are set either to indicate conditions that, if allowed to persist, may lead to seawater intrusion or increasing chloride concentrations, or that actual seawater intrusion has occurred.

Monitoring Wells

As with the NMMA Monitoring Plan, primary data for this Water Shortage Conditions and Response Plan is derived from a select group of wells located within the NMMA. Identification of these wells and the selection criteria are as follows.

Coastal sentinel wells, installed by the Department of Water Resources in the 1960s, are monitored to characterize any condition for the advancement of seawater into the freshwater aquifer. Specifically, the groundwater elevation and concentration of indicator constituents are evaluated to determine the threat or presence of seawater intrusion to the fresh water aquifer. These coastal monitoring wells are as follows:

Appendix 7
Final 4/13/09

Coastal Well	Perforation Elevation (ft msl)	Aquifer
11N/36W-12C1	-261 to -271	Paso Robles
11N/36W-12C2	-431 to -441	Pismo
11N/36W-12C3	-701 to -711	Pismo
12N/36W-36L1	-200 to -210	Paso Robles
12N/36W-36L2	-508 to -518	Pismo

For inland areas, criteria for water shortage conditions are based on annual Spring groundwater elevation measurements made in key wells located inland from the coast (the “Key Wells Index”). The inland Key Wells are as follows:

Key Wells
11N/34W-19
11N/35W-5
11N/35W-8
11N/35W-9
11N/35W-13
11N/35W-22
11N/35W-23
12N/35W-33

Potentially Severe Water Shortage Conditions

The Stipulation, page 25, defines Potentially Severe Water Conditions as follows:

Caution trigger point (Potentially Severe Water Shortage Conditions)¹

(a) Characteristics. The NMMA Technical Group shall develop criteria for declaring the existence of Potentially Severe Water Shortage Conditions. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation. Such criteria shall be designed to reflect that water levels beneath the NMMA as a whole are at a point at

¹ The multiple citations to and partial restatements of the Stipulation are intended to provide context to this Water Shortage Conditions and Response Plan. However, neither the restatement of a portion of the Stipulation herein, nor the omission of a portion of a quotation from the Stipulation, is intended to override or alter the mutual obligations and requirements set forth in the Stipulation.

Appendix 7

Final 4/13/09

which voluntary conservation measures, augmentation of supply, or other steps may be desirable or necessary to avoid further declines in water levels.

Inland Areas: The NMMA Technical Group set the criteria for a Potentially Severe Water Shortage Condition to the elevation of groundwater as determined by the Key Wells Index. If the Spring groundwater elevations indicate that the Key Wells Index is less than 15 feet above the Severe Water Shortage criterion (equal to **31.5 ft msl²**), the Technical Group will notify the Monitoring Parties of the current data, and evaluate the probable causes of this low level as described below. If the Key Wells Index continues to be lower than **31.5 ft msl** in the following Spring, the Technical Group will report to the Court in the Annual Report that Potentially Severe Water Shortage Conditions are present and provide its recommendations regarding the appropriate response measures. During the period a Potentially Severe Water Shortage Condition persists, the NMMA Technical Group shall include in each Annual Report an assessment of the hydrologic conditions and any additional recommended response measures. A discussion of how the groundwater elevations criteria were determined is presented in discussion Section III. Potentially Severe Water Shortage Conditions will no longer be considered to exist when: 1) the Key Well Index is above the Potentially Severe criterion of 31.5 ft msl for two successive Spring measurements, or 2) the Key Well Index is 5 ft or higher above the Potentially Severe criterion (which calculates to 36.5 ft msl) in any Spring measurement. Alternatively, the NMMA Technical Group may determine that the Potentially Severe Water Shortage Condition no longer exists when the Key Well Index is above the Potentially Severe criterion of 31.5 ft msl and conditions warrant this conclusion.

The Key Well Index criteria for Potentially Severe Water Shortage Conditions may be modified in the future by the Technical Group as more data are developed on the accuracy of measured data and Key Well construction or condition.

Coastal Areas: The NMMA Technical Group set the coastal criteria for a Potentially Severe Water Shortage Condition using both groundwater surface elevation and groundwater quality measured in the coastal monitoring wells, as presented in the table below. The groundwater elevation criteria are discussed in Section III. The groundwater quality portion of the coastal criteria is set at **250 mg/L** chloride. There is no water quality criterion for the shallow alluvium. Potentially Severe Water Shortage Conditions are determined if either the Spring groundwater elevation drops below the criteria elevation, or chloride concentration exceeds the criteria concentration, in any of the coastal monitoring wells subject to the Response Plan data analysis and verification described below.

² The decimal point does not imply the accuracy of the historical low calculation.

Appendix 7

Final 4/13/09

The NMMA Technical Group will report to the Court in the Annual Report that Potentially Severe Water Shortage Conditions are present and provide its recommendations regarding the appropriate response measures. During the period a Potentially Severe Water Shortage Condition persists, the Technical Group shall include in each Annual Report an assessment of the hydrologic conditions and any additional recommended response measures.

When Spring groundwater elevations or groundwater quality subsequently improves so that the criteria threshold for two successive measurements are no longer exceeded, Potentially Severe Water Shortage Conditions will no longer be considered to exist. Alternatively, the Technical Group may determine that the Potentially Severe Water Shortage Condition no longer exists when the Spring groundwater elevation or groundwater quality criteria threshold are no longer exceeded in a single measurement and conditions warrant this conclusion.

The coastal threshold criteria for Potentially Severe Water Shortage Conditions may be modified in the future by the Technical Group as more data are developed on the accuracy and extent of the coastal data, including the potential for inclusion of additional coastal monitoring wells into the Monitoring Plan.

Criteria for Potentially Severe Water Shortage Conditions, Coastal Area				
Well	Perforation Elevation (ft msl)	Aquifer	Elevation Criteria (ft msl)	Chloride Concentration Criteria (mg/L)
11N/36W-12C1	-261 to -271	Paso Robles	5.0	250
11N/36W-12C2	-431 to -441	Pismo	5.5	250
11N/36W-12C3	-701 to -711	Pismo	9.0	250
12N/36W-36L1	-200 to -210	Paso Robles	3.5	250
12N/36W-36L2	-508 to -518	Pismo	9.0	250

Severe Water Shortage Conditions

The Stipulation, page 25, defines Potentially Severe Water Conditions as follows:

Mandatory action trigger point (Severe Water Shortage Conditions)

(a) Characteristics. The NMMA Technical Group shall develop the criteria for declaring that the lowest historic water levels beneath the NMMA as a whole

Appendix 7
Final 4/13/09

have been reached or that conditions constituting seawater intrusion have been reached. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation.

Inland Areas: A Severe Water Shortage Condition exists when the Key Wells Index is less than **16.5 feet msl**, using Spring groundwater elevation measurements. The Mandatory Response Plan will remain in effect until groundwater elevations as indicated by the Key Wells Index are 10 ft above the Severe criterion (which calculates to **26.5 feet msl**). Alternatively, the NMMA Technical Group may determine that the Severe Water Shortage Condition no longer exists when the Key Well Index is above the Severe criterion of 16.5 ft msl and conditions warrant this conclusion.

The criteria for Severe Water Shortage Conditions may be modified in the future by the Technical Group as more data are developed on the accuracy of measured data and Key Well construction or condition.

Coastal Areas: The NMMA Technical Group set the coastal criteria for Severe Water Shortage Condition to the occurrence of the chloride concentration in groundwater greater than the drinking water standard in any coastal monitoring well. Thus, the coastal criterion for a Severe Water Shortage Condition is the chloride concentration exceeding **500 mg/L** in any of the coastal monitoring wells. If the criterion is exceeded, an additional sample will be collected and analyzed from that well as soon as practicable to verify the result. The response triggered by the measurement will not be in effect until the laboratory analysis has been verified. If the chloride concentration subsequently improves above the criterion threshold for two successive Spring measurements, Severe Water Shortage Conditions will no longer be considered to exist. Alternatively, the Technical Group may determine that the Severe Water Shortage Condition no longer exists when groundwater quality criteria threshold are no longer exceeded in a single measurement and conditions warrant this conclusion.

The coastal threshold criteria for Severe Water Shortage Conditions may be modified in the future by the Technical Group as more data are developed on the accuracy and extent of the coastal data, including the potential for inclusion of additional coastal monitoring wells into the Monitoring Plan.

II. Response Plan for Potentially Severe and Severe Water Shortage Conditions (*"Response Plan"*)

Introduction

This Response Plan is triggered by criteria designed to reflect either Potentially Severe Water Shortage Conditions or Severe Water Shortage Conditions. Nothing in this Response Plan is intended to, nor shall operate so as to reduce, limit or change the rights, duties, and responsibilities of the parties to this Response Plan as those rights, duties, and responsibilities are stated in the Stipulation and the Judgment.

1. Potentially Severe Water Shortage Conditions

The responses required by the Stipulation are set forth as follows:

VI(D)(1b) Responses [Potentially Severe]. If the NMMA Technical Group determines that Potentially Severe Water Shortage Conditions have been reached, the Stipulating Parties shall coordinate their efforts to implement voluntary conservation measures, adopt programs to increase the supply of Nipomo Supplemental Water³ if available, use within the NMMA other sources of Developed Water or New Developed Water, or implement other measures to reduce Groundwater use.⁴

VI(A)(5). ...In the event that Potentially Severe Water Shortage Conditions or Severe Water Shortage Conditions are triggered as referenced in Paragraph VI(D) before Nipomo Supplemental Water is used in the NMMA, NCS D, [GSWC⁵], Woodlands and RWC agree to develop a well management plan that is acceptable to the NMMA Technical Group, and which may include such steps as imposing conservation measures, seeking sources of supplemental water to serve new customers, and declaring or obtaining approval to declare a moratorium on the granting of further intent to serve or will serve letters.⁶

³ A defined term in the parties' Stipulation. The following terms, when used in this Response Plan, are terms whose definitions are found in the Stipulation and that definition is specifically incorporated herein and adopted as the meaning of these terms: "Developed Water," "Groundwater," "Native Groundwater," "New Developed Water," "Nipomo Supplemental Water," "Nipomo Supplemental Water Project," "Stipulating Parties" and "Year."

⁴ Ibid at p.25.

⁵ Name changed from Southern California Water Company (SCWC) in 2005.

⁶ Ibid at p.22.

Appendix 7

Final 4/13/09

The Response Plan shall be implemented when the Potentially Severe Water Shortage Conditions occur within the NMMA. The Response Plan is a combination of technical studies to better determine the nature of the threat, water supply and demand actions to mitigate overall conditions in the NMMA, and compliance with the Stipulation and the Judgment. The Response Plan includes, where applicable, the following:

1. Coastal Groundwater Elevation and/or Groundwater Quality Conditions:
 - a. Verify that the measurement is not an anomaly by retesting at the site(s) of exceedence as soon as practicable and again in the following month.
 - b. Characterize the extent of either low groundwater elevation(s) or increased chloride concentration(s) near the coast, which might include adding and/or installing additional monitoring points.
 - c. Identify, to the extent practical, factors that contributed to the low groundwater elevations in coastal monitoring wells.
 - d. Investigate whether increased chloride concentration(s) indicate intrusion of seawater or other causes through chemistry/geochemistry studies.
2. Inland Groundwater Elevation Condition:
 - a. Verify that the measurement is not an anomaly by retesting at the site(s) of exceedence as soon as practicable and again in the following month.
 - b. Characterize the extent of the area where groundwater elevation(s) have decreased sufficiently to lower the Key Wells Index.
 - c. Identify factors that contributed to the low groundwater elevation(s) in coastal monitoring wells.
3. Implement sections VI(D)1(b) and VI(A)(5) of the Stipulation, as reproduced above.
4. When either the groundwater quality or groundwater elevation conditions are confirmed, the following provisions apply to the Response Plan for Potentially Severe Water Shortage Conditions:
 - a. ConocoPhillips shall have the right to the reasonable and beneficial use of Groundwater on the property it owns as of the date of the Stipulation located in the NMMA without limitation.⁷

⁷ Ibid at p. 23.

Appendix 7
Final 4/13/09

- b. Overlying Owners that are Stipulating Parties that own land located in the NMMA as of the date of the Stipulation shall have the right to the reasonable and beneficial use of Groundwater on their property within the NMMA without limitation.⁸
- c. Woodlands shall not be subject to restriction in its reasonable and beneficial use of Groundwater, provided it is concurrently using or has made arrangements for other NMMA parties to use within the NMMA, the Nipomo Supplemental Water allocated to Woodlands. Otherwise, Woodlands shall be subject to reductions equivalent to those imposed on NCSD, GSWC, and RWC.⁹

2. Severe Water Shortage Conditions

The responses required by the Stipulation are set forth following:

VI(D)(1b) Responses [Severe]. As a first response, subparagraphs (i) through (iii) shall be imposed concurrently upon order of the Court. The Court may also order the Stipulating Parties to implement all or some portion of the additional responses provided in subparagraph (iv) below.

(i) For Overlying Owners other than Woodlands Mutual Water Company and ConocoPhillips, a reduction in the use of Groundwater to no more than 110% of the highest pooled amount previously collectively used by those Stipulating Parties in a Year, prorated for any partial Year in which implementation shall occur, unless one or more of those Stipulating Parties agrees to forego production for consideration received. Such forbearance shall cause an equivalent reduction in the pooled allowance. The base Year from which the calculation of any reduction is to be made may include any prior single Year up to the Year in which the Nipomo Supplemental Water is transmitted. The method of reducing pooled production to 110% is to be prescribed by the NMMA Technical Group and approved by the Court. The quantification of the pooled amount pursuant to this subsection shall be determined at the time the mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is reached. The NMMA Technical Group shall determine a technically responsible and consistent method to determine the pooled amount and any individual's contribution to the pooled amount. If the NMMA Technical Group cannot agree upon a technically responsible and consistent method to determine the pooled amount, the matter may be determined by the Court pursuant to a noticed motion.

⁸ Ibid.

⁹ Ibid at p. 23.

Appendix 7
Final 4/13/09

(ii) *ConocoPhillips shall reduce its Yearly Groundwater use to no more than 110% of the highest amount it previously used in a single Year, unless it agrees in writing to use less Groundwater for consideration received. The base Year from which the calculation of any reduction is to be made may include any prior single Year up to the Year in which the Nipomo Supplemental Water is transmitted. ConocoPhillips shall have discretion in determining how reduction of its Groundwater use is achieved.*

(iii) *NCSD, RWC, SCWC, and Woodlands (if applicable as provided in Paragraph VI(B)(3) above) shall implement those mandatory conservation measures prescribed by the NMMA Technical Group and approved by the Court.*

(iv) *If the Court finds that Management Area conditions have deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further mandatory limitations on Groundwater use by NCSD, SCWC, RWC and the Woodlands. Mandatory measures designed to reduce water consumption, such as water reductions, water restrictions, and rate increases for the purveyors, shall be considered.*

(v) *During Severe Water Shortage Conditions, the Stipulating Parties may make agreements for temporary transfer of rights to pump Native Groundwater, voluntary fallowing, or the implementation of extraordinary conservation measures. Transfer of Native Groundwater must benefit the Management Area and be approved by the Court.¹⁰*

The following Response Plan for Severe Water Shortage Conditions is premised on the assumption that the Nipomo Supplemental Water Project within the NMMA is fully implemented and yet Severe Water Shortage Conditions exist.

If either the coastal or inland criteria occur for Severe Water Shortage Conditions within the NMMA, a Response Plan shall be implemented. The Response Plan is a combination of technical studies to better determine the nature of the threat, water supply and demand actions to mitigate overall conditions in the NMMA that triggered a Response Plan, and compliance with the terms of the Stipulation and the Judgment. It includes, where applicable, the following NMMA Technical Group actions:

1. Groundwater Quality Condition:
 - a. Verify data.

¹⁰ Ibid at pp. 25-27.

Appendix 7
Final 4/13/09

- b. Investigate whether increased chloride concentration(s) indicate intrusion of seawater or result from other causes through chemistry/geochemistry studies.
 - c. Characterize the extent of the increase in chloride concentration(s), which may include adding additional monitoring points and/or installing new monitoring points.
 - d. Given information from sections (a) and (b) above, identify the factors that may have caused the groundwater quality degradation.
2. Groundwater Elevation Condition:
- a. Verify that the measurement is not an anomaly by retesting at the site(s) of exceedence as soon as practicable and again in the following month.
 - b. Characterize the extent of the area where groundwater elevation(s) have decreased sufficiently to lower the Key Wells Index.
 - c. Identify the factors that contributed to the low groundwater elevation(s) in key wells.
3. As a first response, the NMMA Technical Group shall request the Court to order concurrently sections VI(D)(1b)(i) through (iii) of the Stipulation, as reproduced above.
4. Prepare a semi-annual report on the trend in chloride concentration for the Court. If chloride concentration(s) continue to increase at the coastline, request the Court to implement section VI(D)(1b)(iv) of the Stipulation, as reproduced above.
5. During Severe Water Shortage Conditions, the Stipulating Parties may make agreements for temporary transfer of groundwater pumping rights in accordance with section VI(D)(1b)(v) of the Stipulation, as reproduced above.

III. Discussion of Criteria for Potentially Severe and Severe Water Shortage Conditions

1. Water Shortage Conditions as a Whole

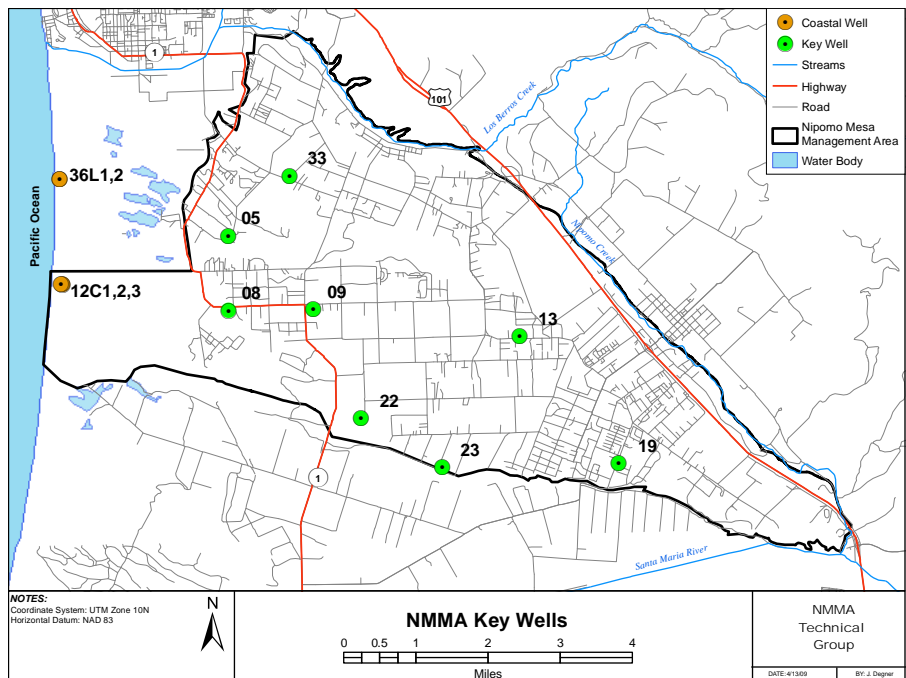
The Stipulation established that the Severe Water Shortage Conditions is characterized by the lowest historic groundwater levels beneath the NMMA as a whole. The NMMA Technical Group selected the data from eight inland key wells to represent the whole of the NMMA. These wells are listed in the following tabulation and are shown on the

Appendix 7

Final 4/13/09

figure entitled “NMMA Key Wells”. The average Spring groundwater elevation of these key wells is used to calculate the Key Wells Index (“Index”).

Key Wells For Inland Criterion
11N/34W-19
11N/35W-5
11N/35W-8
11N/35W-9
11N/35W-13
11N/35W-22
11N/35W-23
12N/35W-33



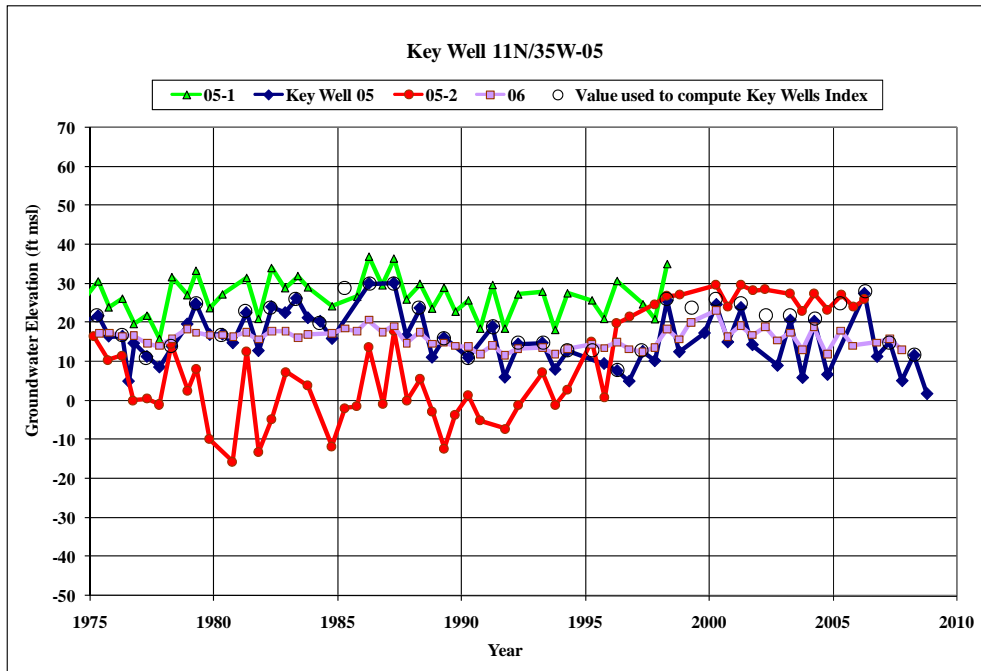
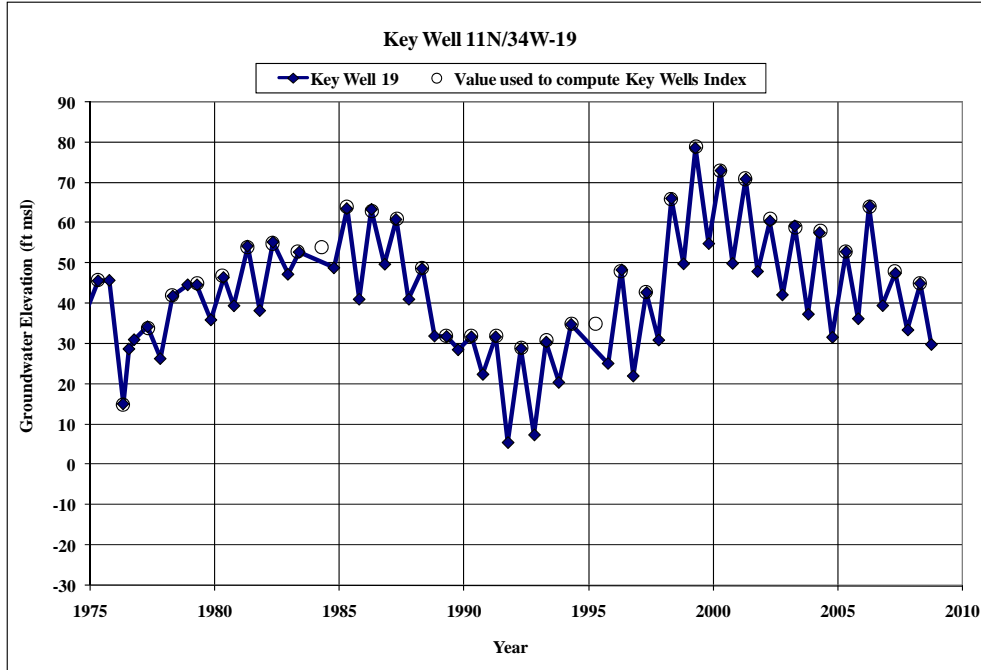
The Index was calculated annually using Spring groundwater elevation measurements from 1975 to 2008. The Key Wells were selected to represent various portions of the groundwater basin within the NMMA. The following charts display the hydrographs for each Key Well and surrounding wells. The open circles represent the actual Spring value for that year or a correlation of that value for each year that was used to compute the Index.

When there was no Spring groundwater elevation measurement for a particular year, the value was determined by either 1) interpolating between Spring measurements in adjacent years or 2) computing the Spring elevation by taking the Fall measurements in adjacent years and increasing the value by the typical increase in groundwater elevations

Appendix 7

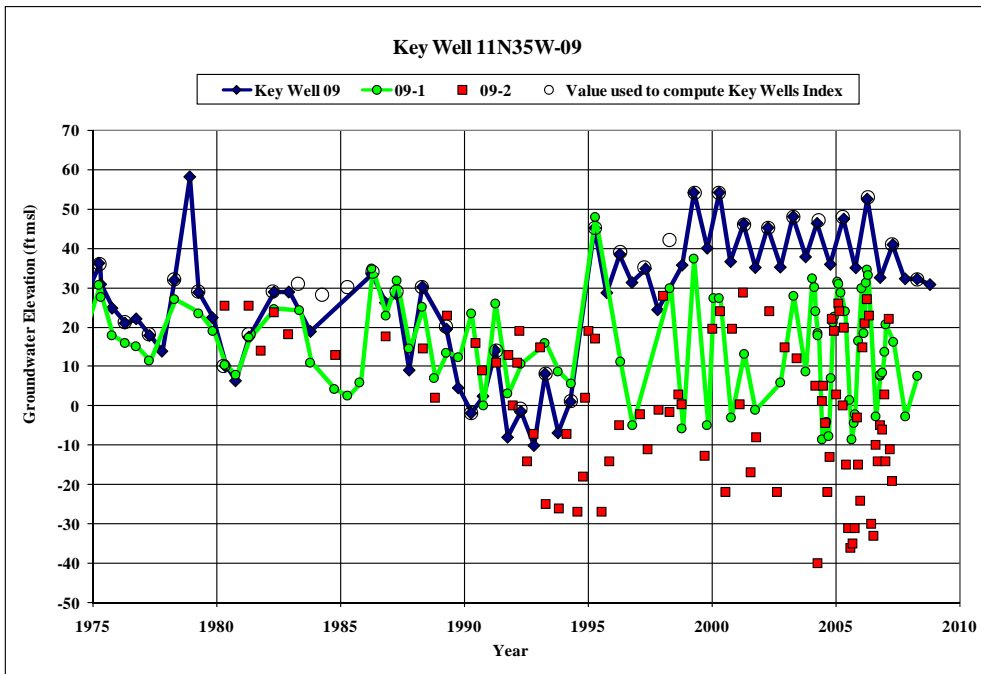
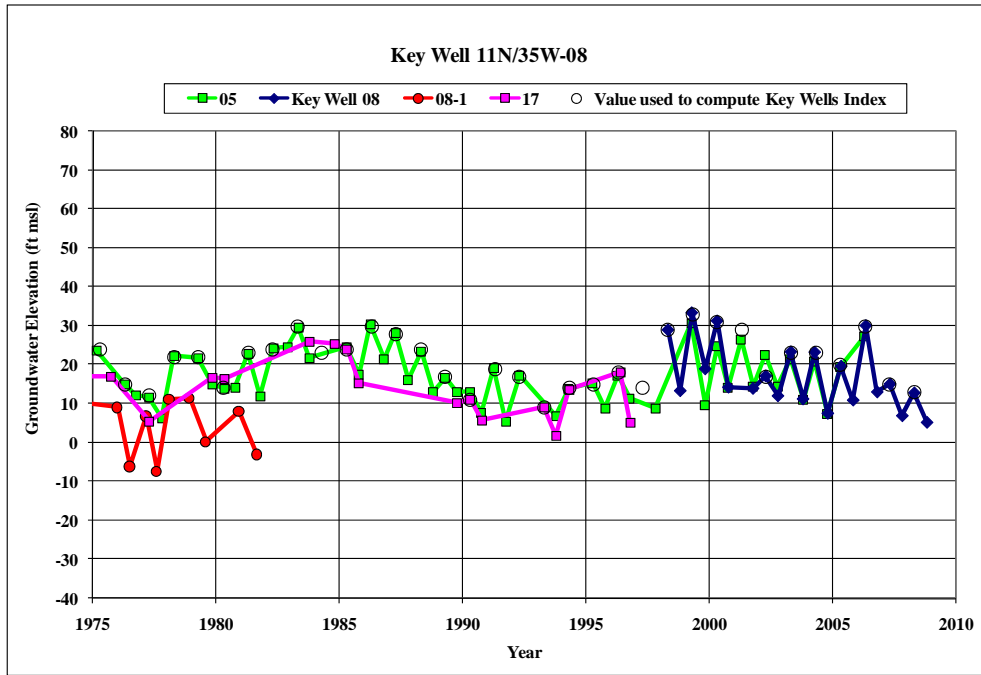
Final 4/13/09

between Spring and Fall measurements in that well. If there is a significant data gap in the record for a particular well (e.g., 22 well below), a nearby well was used to fill the gap.



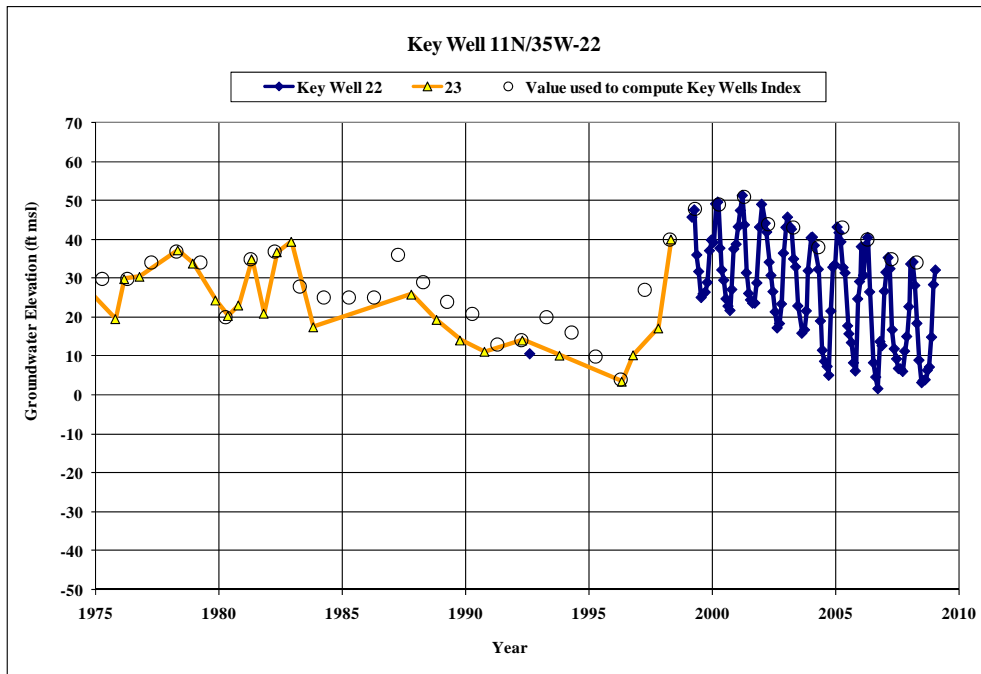
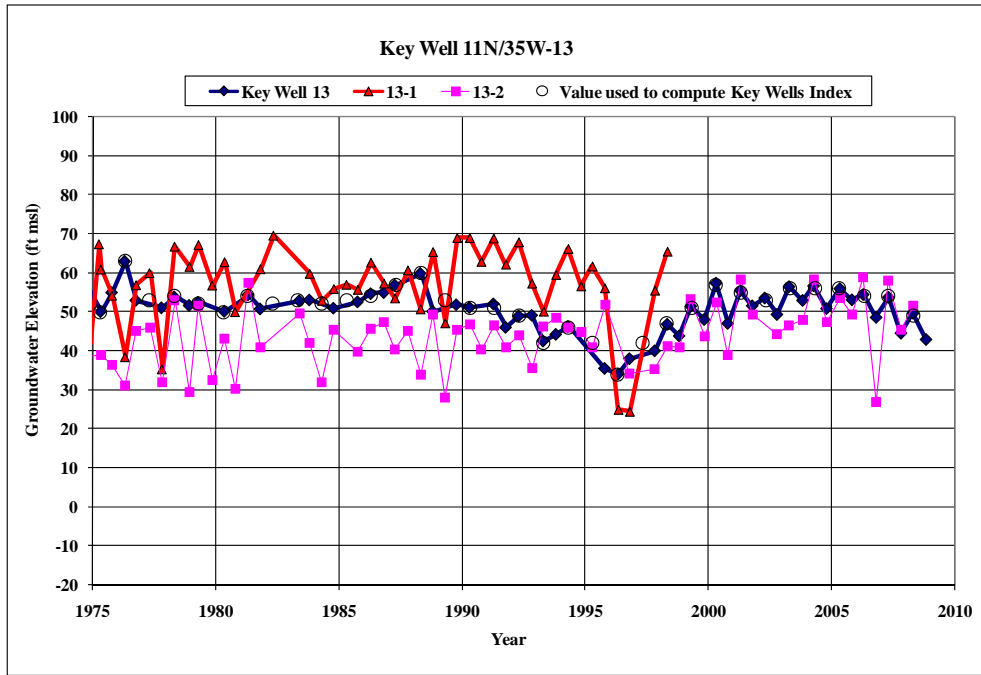
Appendix 7

Final 4/13/09



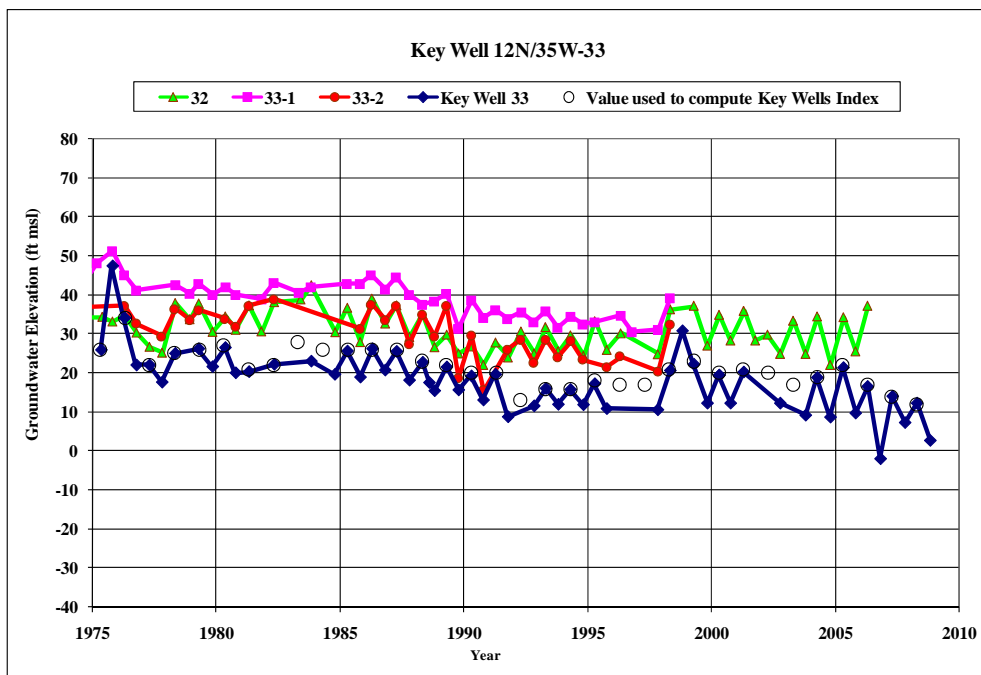
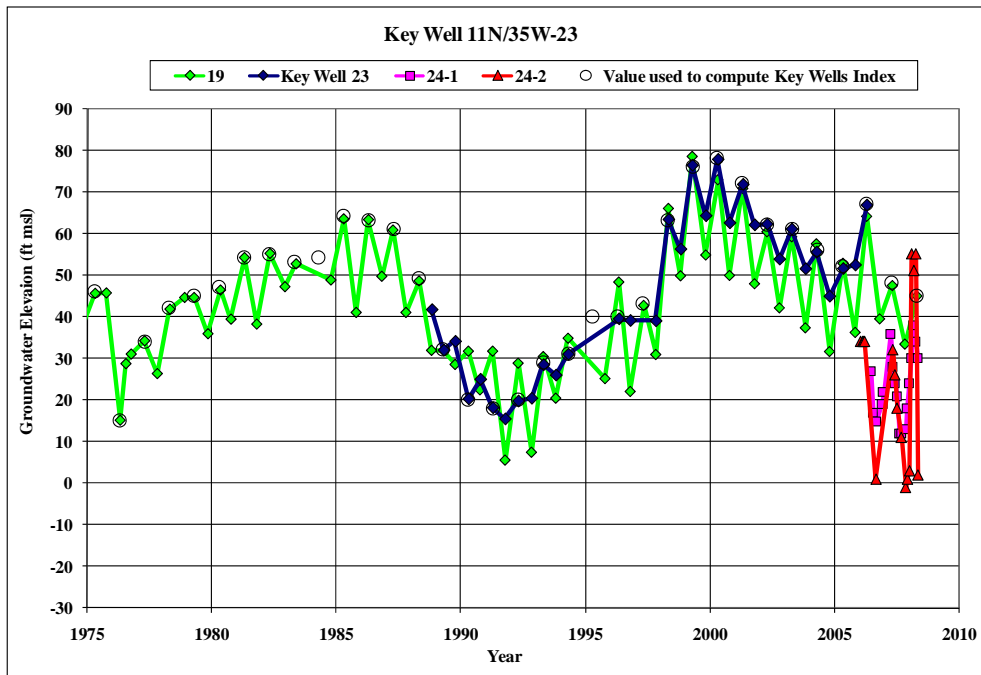
Appendix 7

Final 4/13/09



Appendix 7

Final 4/13/09



In selecting the eight key wells, the following criteria were applied so that the wells generally represent the NMMA as a whole:

- (1) The wells are geographically distributed.
- (2) No single well overly influences the Index.

Appendix 7

Final 4/13/09

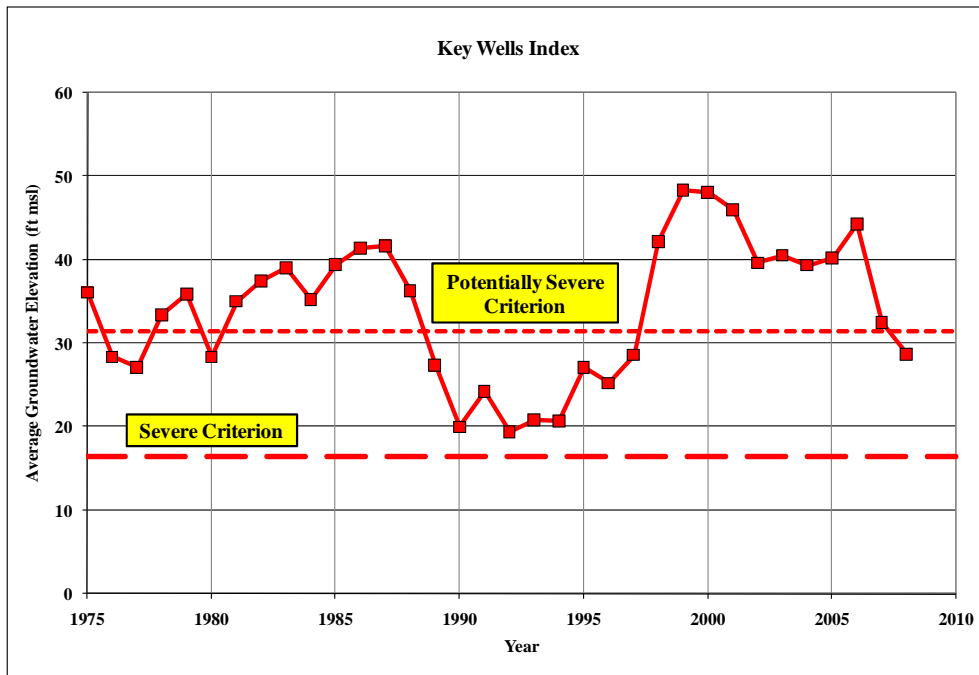
The first criterion was met in the selection of the wells. To meet the second criterion, groundwater elevations from each well were normalized so that any well where elevations were on the average higher or lower than the other wells did not overly influence the overall Index. This normalization was accomplished by dividing each Spring groundwater elevation measurement by the sum of all the Spring groundwater elevation data for that well.

The Index was defined for each year as the average of the normalized Spring groundwater data from each well. The lowest value of the Index could be considered the “historical low” within the NMMA. The sensitivity of that “historical low” was tested by examining the effect of eliminating a well from the Key Wells Index. Eight separate calculations of the Index from 1975 to 2008 were made by excluding the data from one of the eight wells, and computing the average value for each year from the remaining wells’ normalized Spring groundwater data.

The criterion for a Potentially Severe Water Shortage Conditions should provide for enough time before the Severe criterion occurs to allow pumpers time to implement voluntary measures to mitigate a falling Key Wells Index. Based on the assumption that two years is adequate for this early warning, then the historical Index can be used to determine the potential rate of fall of the Index. The maximum drop in the historical Index over a two-year period was about 15 feet, during the last two years of the 1986-1991 drought. Thus, the criterion for Potentially Severe Water Shortage Conditions is set at 15 feet above the Severe Water Shortage Condition criterion, which calculates to **31.5 ft msl**. The Key Wells Index for all eight wells, which will be computed each year in the future, will be compared to the Potentially Severe and Severe criteria discussed above. The Index through 2008 is shown below.

Appendix 7

Final 4/13/09



Key Wells Index for the period 1975 to 2008. Upper dashed line is criterion for Potentially Severe Water Shortage Conditions and lower dashed line is criterion for Severe Conditions.

The Index generally tracks wet and dry climatic cycles, indicating the importance of natural recharge in the NMMA. Significant deviations from this climatic tracking could occur if supplemental water deliveries reduced pumping, if overlying land use changed the return flows to the aquifer, or if there was a large change in groundwater extractions in addition to those resulting from the introduction of the Supplemental Water.

A. Seawater Intrusion Criteria for Potentially Severe Water Shortage Conditions

The criteria for potentially severe conditions in coastal areas are either gradient conditions that could pull seawater into the principal aquifer, or threshold chloride concentrations detected in coastal monitoring wells. Whereas chloride is the principal indicator for the groundwater quality portion of this criteria, other groundwater quality constituents may be considered for future refinement of this criteria.

To avoid seawater contamination, groundwater elevations in the coastal monitoring wells must be sufficiently high to balance higher-density seawater (about 2.5 of extra head is required for every 100 ft of ocean depth of an offshore outcrop of the aquifer). Thus, if an aquifer is penetrated at 100 ft below sea level in a coastal well, it is assumed that groundwater elevations in that aquifer must be at least 2.5 ft above sea level to counteract the higher density of seawater. Although offshore outcrop areas are not currently defined, it is assumed that some hydraulic connection between the onshore aquifers and seawater at the sea floor is possible or even probable.

Appendix 7

Final 4/13/09

Historical groundwater elevation data from these coastal wells indicate that groundwater elevations have not always been higher than the theoretical elevations of fresh water to balance sea water, described in the preceding paragraph. It is not known to what extent (if any) that seawater has advanced toward the land during the periodic depression of groundwater elevation, nor has any groundwater quality data supported the indication that seawater has contaminated the fresh water aquifer at the coastal monitoring well locations. Thus, coastal groundwater elevation criteria must take into account the periodic depression of groundwater elevations. To accommodate these fluctuations and until further understanding is developed, the coastal criteria are presented in the table below, based on the lower of 1) historical low groundwater elevations in the coastal monitoring wells or 2) a calculation of 2.5 ft of elevation for every 100 ft of aquifer depth in the well. If the historical low elevation is used, the value is reduced by one foot and rounded to the nearest half-foot. Similarly, if a calculated value is the lower option, it is rounded to the nearest half-foot. The results of these criteria are indicated in the following table.

Criteria for Potentially Severe Water Shortage Conditions							
Well	Perforations Elevation (ft msl)	Aquifer	Historic Low (ft msl)	2.5' per 100' Depth (ft msl)	Elevation Criteria (ft msl)	Highest Chloride (mg/L)	Chloride Concentration Criteria (mg/L)
11N/36W-12C1	-261 to -271	Paso Robles	5.8	6.5	5.0	81	250
11N/36W-12C2	-431 to -441	Pismo	6.3	10.8	5.5	55	250
11N/36W-12C3	-701 to -711	Pismo	10.1	17.5	9.0	98	250
12N/36W-36L1	-200 to -210	Paso Robles	4.3	5.7	3.5	38	250
12N/36W-36L2	-508 to -518	Pismo	10.1	13.4	9.0	127	250

The groundwater quality portion of the criteria is set at 250 mg/L chloride. There is no groundwater quality criterion for the shallow alluvium. Although there is no assumption that seawater intrusion has occurred at this concentration, the cause of the rise in chloride concentration must be investigated and appropriate mitigation measures taken. Thus, Potentially Severe Water Shortage Conditions are established if either the groundwater elevation or groundwater quality criteria are met.

B. Seawater Intrusion Criteria for Severe Water Shortage Conditions

One criterion for Severe Water Shortage Conditions is the occurrence of conditions that result in chloride concentration(s) in groundwater greater than the drinking water standard in any of the coastal monitoring wells.

Appendix 7

Final 4/13/09

A principal threat for such occurrence is from seawater intrusion. The first evidence of seawater intrusion can occur very quickly or may involve a slower and more subtle change. Because the rate of change for chloride concentrations during seawater intrusion is difficult to predict for the NMMA, the criterion is set to the Maximum Contaminant Level for chloride in drinking water.

The Nipomo Mesa Technical Group set the coastal criterion for Severe Water Shortage Conditions at a chloride concentration at or above **500 mg/L** in any of the coastal monitoring wells. If the criterion is exceeded, an additional sample will be collected and analyzed from that well as soon as practically possible to verify the result. The Severe Water Shortage Condition will not be in effect until the laboratory analysis has been verified.

Appendix C: Well Management Plan

Appendix 7

NMMA PURVEYOR

NMMA WELL MANAGEMENT PLAN¹

Adopted January 21, 2010

Stage 1: Potentially Severe Water Shortage Conditions

- Potentially Severe Water Shortage Conditions Triggered²;
- Voluntary measures urged by Water Purveyors (NCSD, GSWC, Woodlands, and RWC). See list of “Recommended Water Use Restrictions;”
- Voluntary evaluation of sources of new supplemental water;
- Voluntary purveyor conservation goal of 15% (Baseline to be suggested by the NMMA TG);
- Voluntary/Recommended public information program;
- Voluntary evaluation and implementation of shifting pumping to reduce GW depressions and/or protect the seaward gradient. This includes the analysis and establishment of a potential network of purveyor system interties to facilitate the exchange of water;

¹ This Well Management Plan is required by the terms of the Stipulation (page 22). The Well Management Plan provides for steps to be taken by the NCSD, GSWC, Woodlands and RWC under a factual scenario where Nipomo Supplemental Water (a defined term in the Stipulation) has not been “used” in the NMMA (page 22). The Well Management Plan, therefore, has no applicability to either ConocoPhillips or Overlying Owners as defined in the Stipulation (page 22).

² Water shortage conditions are characterized by criteria designed to reflect that groundwater levels beneath the NMMA as a whole are at a point at which a response would be triggered to avoid further declines in the groundwater levels (potentially severe), and to declare that the lowest historic groundwater levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached (severe). See current version of Water Shortage Conditions and Response Plan – appendix to Annual Report.

Adopted January 20, 2010

Stage 2: Severe Water Shortage Conditions

- Severe Water Shortage Conditions Triggered and Nipomo Supplemental Water has been used in the NMMA (see footnote 1)³;
- Overlying landowners other than Woodlands and ConocoPhillips shall reduce groundwater use to no more than 110% of the highest pooled base year prior to the transmittal of Nipomo supplemental water. The NMMA TG will determine a technically responsible and consistent method to determine the pooled amount and an individual's contribution (To be determined when trigger occurs). The method of reducing pooled production to 110% is to be prescribed by the TG and approved by the court. Landowners may consider using less water for consideration received;
- ConocoPhillips shall reduce its yearly groundwater use to no more than 110% of the highest amount it used in a single year prior to the transmittal of Nipomo supplemental water. ConocoPhillips may consider using less water for consideration received and has discretion to determine how its groundwater reduction is achieved;
- Water Purveyors (NCSD, GSWC, Woodlands, and RWC) shall implement mandatory conservation measures. Where possible, institute mandatory restrictions with penalties;
- The mandatory conservation goals will be determined by the NMMA TG when the Severe water shortage trigger is reached. Annually, should conditions worsen; the NMMA TG will re-evaluate the mandatory conservation goal;
- Measures may include water reductions, additional water restrictions, and rate increases. GSWC and RWC shall aggressively file and implement⁴ a schedule 14.1 mandatory rationing plan with the CPUC consistent with the mandatory goals;
- Penalties, rates, and methods of allocation under the rationing program shall be at the discretion of each entity and its regulating body;

³ [see comment at footnote #1] Water shortage conditions are characterized by criteria designed to reflect that groundwater levels beneath the NMMA as a whole are at a point at which a response would be triggered to avoid further declines in the groundwater levels (potentially severe), and to declare that the lowest historic groundwater levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached (severe). See current version of Water Shortage Conditions and Response Plan (appendix to Annual Report).

⁴ CPUC has the authority to set rates and allow mandatory conservation actions. As CPUC regulated entities, GSWC and RWC cannot implement such programs without CPUC approval.

Adopted January 20, 2010

- Aggressive voluntary public information program which includes discussions with high use water users such as school districts, parks, and golf courses to seek voluntary reductions in potable water irrigation;

Adopted January 20, 2010

List of Recommended Water Use Restrictions

The following provisions are examples of what may be considered prohibited, nonessential, and/or unauthorized water use:

- 1) Prohibit nonessential and unauthorized water use, including but not limited to:
 - a) Use of potable water for more than minimal landscaping, as defined in the landscaping regulated of the jurisdiction or as described in Article 10.8 of the California Government Code in connection with new construction;
 - b) Use through any meter when the company has notified the customer in writing to repair a broken or defective plumbing, sprinkler, watering or irrigation system and the customer has failed to effect such repairs within five business days;
 - c) Use of potable water which results in flooding or runoff in gutters or streets;
 - d) Individual private washing of cars with a hose except with the use of a positive action shut-off nozzle. Use of potable water for washing commercial aircraft, cars, buses, boats, trailers, or other commercial vehicles at any time, except at commercial or fleet vehicle or boat washing facilities operated at a fixed location where equipment using water is properly maintained to avoid wasteful use;
 - e) Use of potable water washing buildings, structures, , driveways, patios, parking lots, tennis courts, or other hard-surfaced areas, except in the cases where health and safety are at risk;
 - f) Use of potable water to irrigate turf, lawns, gardens, or ornamental landscaping by means other than drip irrigation, or hand watering without quick acting positive action shut-off nozzles, on a specific schedule, for example: 1) before 9:00 a.m. and after 5:00 p.m.; 2) every other day; or 3) selected days of the week;
 - g) Use of potable water for watering streets with trucks, except for initial wash-down for construction purposes (if street sweeping is not feasible), or to protect the health and safety of the public;
 - h) Use of potable water for construction purposes, such as consolidation of backfill, dust control, or other uses unless no other source of water or other method can be used.

Adopted January 20, 2010

- i) Use of potable water for construction purposes unless no other source of water or other method can be used;
- j) Use of potable water for street cleaning;
- k) Operation of commercial car washes without recycling at least 50% of the potable water used per cycle;
- l) Use of potable water for watering outside plants, lawn, landscape and turf areas during the hours of 9:00 am to 5:00 pm;
- m) Use of potable water for decorative fountains or the filling or topping off of decorative lakes or ponds. Exceptions are made for those decorative fountains, lakes, or ponds which utilize recycled water;
- n) Use of potable water for the filling or refilling of swimming pools.
- o) Service of water by any restaurant except upon the request of a patron; and
- p) Use of potable water to flush hydrants, except where required for public health or safety.

Appendix 7

NMMA WATER SHORTAGE RESPONSE STAGES

Endorsed by NMMA Technical Group April 14, 2014

STAGE	GROUNDWATER SUPPLY CONDITION	RESPONSE - GENERAL DESCRIPTION*	DURATION of RESTRICTION
I	Always in place.	Voluntary measures and outreach to encourage best water management practices and conservation.	Always in place.
II	Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	Goal: voluntary 20% reduction in groundwater production – supported with aggressive public outreach and customer communications.	Until Potentially Severe Water Shortage Condition does not exist.
III	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	Goal: 30% reduction in groundwater production – supported with mandatory conservation restrictions.	Until Severe Water Shortage Conditions no longer exist pursuant to NMMA criteria.**
IV	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion.	Goal: 50% reduction in groundwater production – supported with mandatory conservation restrictions.	Until Severe Water Shortage Conditions no longer exist pursuant to NMMA criteria.
V	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion.	Goal: 60% reduction in groundwater production – supported with mandatory conservation restrictions.	Until Severe Water Shortage Conditions no longer exist pursuant to NMMA criteria.

* This is a general descriptor. Detailed response to meeting the applicable goal is the responsibility of each NMMA purveyor. The NMMA parties acknowledge that Golden State Water Company and Rural Water Company must obtain CPUC approval and hold public hearings before implementing any aspect of this water shortage response.

Appendix 7

** The Technical Group may determine Severe Water Shortage Conditions no longer exists when groundwater quality criteria threshold are no longer exceeded in a single measurement.

General Notes

1. Potentially Severe and Severe Water Shortage Conditions, Key Well Index and Coastal Area Criteria are defined in the NMMA Water Shortage Conditions Response Plan, April 13, 2009.
2. Reductions goals are to be based on average usage, prior to the delivery of supplemental water, as follows:
 - a. For Woodlands Mutual Water Company – based on average same month production for a single year prior to declaration of Stage III.
 - b. For Nipomo CSD, Golden State Water Company and Rural Water Company – based on average same month production for the five years prior to declaration of Stage III. Individual purveyors may use other baselines in their respective responses if dictated by their respective regulatory bodies.
3. Each NMMA purveyor will implement programs to meet the reduction levels.
4. When drought Stage III or higher is in effect, Managers will meet monthly to report previous months production and coordinate efforts.
5. The Technical Group may revisit and revise this response plan should conditions change and after the full implementation of the Nipomo Supplemental Water deliveries.

**Appendix D: Data Acquisition Protocol for Groundwater
Level Measurement for the Nipomo Mesa Management Area**

Appendix 7

Data Acquisition Protocol for Groundwater Level Measurement for the Nipomo Mesa Management Area

Introduction

The purpose of this memorandum is to establish a protocol for measuring and recording groundwater levels for Nipomo Mesa Management Area (NMMA) wells, and to describe various methods used for collecting meaningful groundwater data. Static groundwater levels obtained for the NMMA monitoring program are determined by measuring the distance to water in a non-pumping well from a measuring point that has been referenced to sea level. Subtracting the distance to water from the elevation of the measuring point determines groundwater surface elevations above or below sea level. This is represented by the following equation:

$$E_{GW} = E_{MP} - D$$

Where:

E_{GW}	=	Elevation of groundwater above mean sea level (feet)
E_{MP}	=	Elevation above sea level at measuring point (feet)
D	=	Depth to water (feet)

Groundwater elevation data can be used to construct groundwater contour maps, determine groundwater flow direction and hydraulic gradients, show locations of groundwater recharge, determine amount of water in storage, show changes in groundwater storage over time, and identify other aquifer characteristics. Miss-representation of aquifer conditions result from errors introduced during water level measurements, from a changed measuring point, during data recording, from equipment problems, or from using inappropriate measuring equipment or techniques for a particular well.

In an effort to minimize such errors and to standardize the collection of groundwater data, the U.S. Geological Survey (U.S.G.S.) has conducted extensive investigations into methods for measuring groundwater levels. In conjunction with several other federal agencies, the U.S.G.S. published the "National Handbook of Recommended Methods for Water-Data Acquisition" (1977); "Introduction to Field Methods for Hydrologic and Environmental Studies, (2001); and several Stand-alone Procedure Documents (GWPD, 1997). Excerpts from these publications relating to water-level measurements are attached. The following protocol for obtaining and reporting accurate data, including a discussion of potential errors associated with several measurement techniques, are based on these U.S.G.S. documents.

Well Information

To give the most meaningful value to the data obtained in the NMMA monitoring program, each well file should include as much information as is available. Table 1 below lists important well information to be maintained in a well file or in a field notebook. Additional information that should be available to the person collecting water-level data should include a description of access to the

Appendix 7

property and the well, the presence and depth of cascading water, or downhole obstructions that could interfere with a sounding cable. San Luis Obispo County Department of Public Works maintains well cards on the wells in the County monitoring network.

Table 1
Well File Information

Well Completion Report	Hydrologic Information	Additional Information to be Recorded
Well name	Map showing basin boundaries and wells	Township, Range, and ¼ ¼ Section
Well Owner	Name of groundwater basin	Latitude and Longitude (Decimal degrees)
Drilling Company	Description of aquifer	Assessor's Parcel Number
Location map or sketch	Confined, unconfined, or mixed aquifers	Description of well head and sounding access
Total depth	Pumping test data	Measuring point & reference point elevations
Perforation interval	Hydrographs	Well use and pumping schedule if known
Casing diameter	Water quality data	Date monitoring began
Date of well completion		Land use

Types of Wells

The monitoring program is likely to include several types of wells with various means of access and pumping schedules. It is important to understand the characteristics of each well type and its downhole conditions to best determine monitoring schedules and appropriate measuring technique. Below is a brief summary of well types and their pumping characteristics. A more detailed description of these well types is included in the attached “National Handbook of Recommended Methods for Water-Data Acquisition”.

Existing Wells

These include abandoned wells, irrigation wells, public supply wells, and domestic wells. Existing wells provide convenient and inexpensive measuring sites; however, they should be carefully evaluated to show that they can provide accurate data under static conditions with reliable access.

Abandoned wells are often in poor condition and may have partially collapsed casing or accumulated sediments. Damaged casing may also result in cascading water. An undamaged well with the pump removed, however, can provide easy access and reliable water-level data.

Irrigation wells are generally pumped on a regular schedule, allowing static water-level measurements to be taken during known non-pumping periods. Seasonal changes in the pumping schedules should also be noted when planning monitoring events.

Public supply wells may be part of a monitoring program if sufficient information regarding their operations is available. Hydrographs showing periods of pumping and recovery should be obtained to determine the best time to measure static water levels.

Appendix 7

Domestic wells are generally pumped frequently and for short durations, making it difficult to monitor during static conditions. Determining when the lowest domestic water use occurs during the day can facilitate monitoring schedules.

Observation Wells

These wells are designed for specific sites and depths in known hydrogeologic conditions to supply desired information. Typically, there is no permanent pump, making measurements relatively easy.

Piezometers

A piezometer is a small diameter observation well designed to measure the hydraulic head within a small zone. It should have a very short screen and filter pack interval so it can represent the hydraulic head at a single point within the aquifer.

Access to Supply Wells

Access into a well to obtain a water level measurement depends on pump types and wellhead construction. For turbine-pump wells, there is typically an opening between the pump column and the casing either through a port or between the base plate and the casing. The filter-pack fill tube should not be confused with a casing vent or sounding access pipe. In some wells, there is no access for a downhole measuring tape; however, the well may be equipped with an air-line measuring system.

Access to submersible wells is generally through a small diameter plug located in the plate on top of the casing. In wells where there is no sounding tube, caution should be used during water level measurements to minimize the chance of the sounding tape becoming entangled with the power cable. Additional information and wellhead diagrams regarding supply well access is found in the attached “National Handbook of Recommended Methods for Water-Data Acquisition”.

Measuring Points and Reference Points

Measuring point (MP) elevations are the basis for determining groundwater elevations relative to sea level. The MP is generally that point on the well head that is the most convenient place to measure the water level in a well. In selecting an MP, an additional consideration is the ease of surveying either by Global Positioning System (GPS) or by leveling.

The MP must be clearly defined, well marked, and easily located. If permissible, the point should be labeled with the letters MP and an arrow. A description, sketch, and photograph of the point should be included in the well file.

Appendix 7

The Reference Point (RP) is a surveyed point established near the wellhead on a permanent object. It serves as a benchmark by which the MP can be checked or re-surveyed if the MP is changed. The RP should be marked, sketched, photographed, and described in the well file.

All MPs and RPs for the NMMA monitored wells should be surveyed using the same horizontal and vertical datum by a California licensed surveyor to the nearest tenth of one foot vertically, and the nearest one foot horizontally. The surveyor's report should be maintained in the project file.

In addition to the MP and RP survey, the elevation of the ground surface adjacent to the well should also be surveyed and recorded in the well file. Because the ground surface adjacent to a well is rarely uniform, the average surface level should be estimated. This average ground surface elevation is referred to in the U.S.G.S. Procedural Document (GWPD-1, 1997) as the Land Surface Datum (LSD).

Water-Level Data Collection

Prior to beginning the field work, the field technician should review each well file to determine which well owners require notification of the upcoming site visit, or which well pumps need to be turned off to allow for water level recovery. Because groundwater elevations are used to construct groundwater contour maps and to determine flow direction, all water level measurements should be collected within a 24-hour period or within as short a period as possible. Weather and groundwater conditions are least likely to change significantly during a short period for data collection. For an individual well, the same measuring method and the same sounder should be used during each sampling event where practical.

Prior to taking a measurement, the length of time since a pump has been operating should be determined. If possible, a domestic well should be allowed to recover at least one half hour prior to measuring, whereas an irrigation or public well should recover a minimum of eight hours prior to measuring. If the well is capped but not vented, remove the cap and wait several minutes before measurement to allow water levels to equilibrate to atmospheric pressure.

When there is doubt about whether water levels in a well are continuing to recover, repeated measurements should be made. Or, if an electric sounder is being used, it is possible to hold the sounder level at one point just above the known water level and wait for a signal that would indicate rising water. For each well, the general schedule of pump operation should be determined and noted.

When lowering a graduated steel tape (chalked tape) or electric tape in a well without a sounding tube in an equipped well, the tape should be played out slowly by hand to minimize the chance of the tape end becoming caught in a downhole obstruction. The tape should be held in such a way that any change in tension will be felt. When withdrawing a sounding tape, it should also be brought up slowly so that if an obstruction is encountered, tension can be relaxed so that the tape can be lowered again before attempting to withdraw it around the obstruction.

All water level measurements should be made to an accuracy of 0.1 feet. The field technician should make at least two measurements. If measurements of static levels do not agree within 0.1 feet , the

Appendix 7

technician should continue measurements until the reason for the disparity is determined, or the measurements are within 0.1 feet.

Where groundwater levels are found to be above ground surface, a sensitive pressure gage can be used to determine the height above the measuring point or a sealed well could have a manometer tube that would show the height above ground surface. A manometer tube may not be high enough to measure the water level if the groundwater is under more than 5 feet of pressure.

Record Keeping in the Field

The information recorded in the field is often the only remaining evidence of the conditions at the time of the monitoring event. It is important that the field book be protected carefully and that it contains the name of the field technician and appropriate contact information. Because the field book contains original tables of multiple monitoring events, copies of the tables should be made following each monitoring event. The data can be further protected by entering the data electronically as soon as practicable.

All field notes must be recorded during the time the work is being done in the field. Accurate documentation of field conditions cannot be made after the field technician has returned to the office. Because much of the data will be reviewed by office staff, and because more than one field technician may participate in the monitoring program, it is essential that notes be intelligible to anyone without requiring a verbal explanation. As a means to support field information, sketches or digital photos attached to field notes should be encouraged.

All field notes should be made with a sharp pencil with lead appropriate for the conditions. Erasures should not be made when recording data. A single line should be drawn through an error without obscuring its legibility, and the correct value or information should be written adjacent to it or in a new row below it.

During each monitoring event it is important to record any conditions at a well site and its vicinity that may affect groundwater levels, or the field technician's ability to obtain groundwater levels. Table 2 lists important information to record, however, additional information should be included when appropriate. Table 3, The Water Level Measurement Form, is a suggested format for recording field data.

Table 2
Information Recorded at Each Well Site

Well name	Property access conditions	Downhole obstructions
Name and organization of field technician	Changes in land use	Presence of oil in well
Date & time (time in 24-hour notation)	Changes in MP	Cascading water
Measurement method used	Nearby wells in use	Equipment problems
Sounder used	Weather conditions	Physical changes in wellhead
Most recent sounder calibration	Recent rainfall events	Comments

Appendix 7

Measurement Techniques

Four standard methods of obtaining water levels are discussed below. The chosen method depends on site and downhole conditions, and the equipment limitations. In all monitoring situations, the procedures and equipment used should be documented in the field notes and in final reporting. Additional detail on manual methods of water level measurement is included in the attached U.S.G.S. Stand-Alone Procedure Documents and the “National Handbook of Recommended Methods for Water-Data Acquisition”. The attached “Introduction to Field Methods for Hydrologic and Environmental Studies” includes a discussion of pressure transducers.

Graduated Steel Tape

This method uses a graduated steel tape with a brass or stainless steel weight attached to its end. The tape is graduated in feet. The approximate depth to water should be known prior to measurement.

- Chalk the lower few feet of the tape by applying blue carpenter’s chalk.
- Lower the tape to just below the estimated depth to water so that a few feet of the chalked portion of the tape is submerged. Be careful not to lower the tape beyond its chalked length.
- Hold the tape at the MP and record the tape position (this is the “hold” position and should be at an even foot);
- Withdraw the tape rapidly to the surface;
- Record the length of the wetted chalk mark;
- Subtract the wetted chalk number from the “hold” position number and record this number in the “Depth to Water below MP” column;
- Perform a check by repeating the measurement using a different MP hold value;
- All data should be recorded to the nearest 0.01 foot;
- Disinfect the tape by pouring a small amount of chlorine bleach on a clean cloth and wiping down the portion of the tape that was submerged below the water surface.

The graduated steel tape is generally considered to be the most accurate method for measuring static water levels. Measuring water levels in wells with cascading water or with condensing water on the well casing causes potential errors, or can be impossible. The tape should be calibrated against another steel tape that is maintained in the office and is used only for calibration.

Electric Tape

An electric tape operates on the principle that an electric circuit is completed when two electrodes are submerged in water. Most electric tapes are mounted on a hand-cranked reel equipped with batteries and an ammeter, buzzer or light to indicate when the circuit is closed. Tapes are graduated in either one-foot intervals or in hundredths of feet depending on the manufacturer. Like graduated steel tapes, electric tapes are attached with brass or stainless steel weights.

- Check the circuitry of the tape before lowering the probe into the well by dipping the probe into water and observe if the ammeter needle or buzzer/light signals that the circuit is closed;
- Lower the probe slowly and carefully into the well until the signal indicates that the water surface has been reached;

Appendix 7

- Place a finger or thumb on the tape at the MP when the water surface is reached;
- If the tape is graduated in one-foot intervals, partially withdraw the tape and measure the distance from the MP mark to the nearest one-foot mark to obtain the depth to water below the MP. If the tape is graduated in hundredths of a foot, simply record the depth at the MP mark as the depth to water below the MP;
- Make all readings using the same needle deflection point on the ammeter scale (if equipped) so that water levels will be consistent between measurements;
- Make check measurements until agreement shows the results to be reliable;
- All data should be recorded to the nearest 0.01 foot;
- Disinfect the tape by pouring a small amount of chlorine bleach on a clean cloth and wiping down the submerged portion of the tape;
- Periodically check the tape for breaks in the insulation. Breaks can allow water to enter into the insulation creating electrical shorts that could result in false depth readings.

The electric tape may give slightly less accurate results than the graduated steel tape. Errors can result from signal “noise” in cascading water, breaks in the tape insulation, or tape stretch. Electric tape products graduated in hundredths of a foot generally give more accurate results than electric tapes graduated in one-foot intervals. This accuracy difference is due to less stretch and ease of measurement in the tapes graduated in hundredths of a foot. All electric tapes should be calibrated periodically against a steel tape that is maintained in the office and used only for calibration.

Air Line

The air line method is usually used only in wells equipped with pumps. This method typically uses a 1/8 or 1/4-inch diameter, seamless copper tubing, brass tubing, or galvanized pipe with a suitable pipe tee for connecting an altitude or pressure gage. Plastic tubing may also be used, but is considered less desirable. An air line must extend far enough below the water level that the lower end remains submerged during pumping of the well. The air line is connected to an altitude gage that reads directly in feet of water, or to a pressure gage that reads pressure in pounds per square inch (psi). The gage reading indicates the length of the submerged air line.

The formula for determining the depth to water below the MP is: $d = k - h$ where d = depth to water; k = constant; and h = height of the water displaced from the air line. In wells where a pressure gage is used, h is equal to 2.31 ft/psi multiplied by the gage reading. The constant value for k is approximately equivalent to the length of the air line.

- Calibrate the air line by measuring an initial depth to water (d) below the MP with a graduated steel tape. Use a tire pump, air tank, or air compressor to pump compressed air into the air line until all the water is expelled from the line. When all the water is displaced from the line, record the stabilized gage reading (h). Add d to h to determine the constant value for k .
- To measure subsequent depths to water with the air line, expel all the water from the air line, subtract the gage reading (h) from the constant k , and record the result as depth to water (d) below the MP.

The air line method is not as accurate as a graduated steel tape or electric tape. Measurements with an altitude gage are typically accurate to approximately 0.1 foot, and measurements using a pressure

Appendix 7

gage are accurate to the nearest one foot at best. Errors can occur with leaky air lines, or when tubing becomes clogged with mineral deposits or bacterial growth.

Submersible Pressure Transducers

Electrical pressure transducers make it possible to collect frequent and long-term water-level or pressure data from wells. These pressure-sensing devices, installed at a fixed depth in a well, sense the change in pressure against a membrane. The pressure changes occur in response to changes in the height of the water column in the well above the transducer. To compensate for atmospheric changes, transducers may have vented cables or they can be used in conjunction with a barometric transducer that is installed in the same well or a nearby observation well above the water level.

Transducers are selected on the basis of expected water-level fluctuation. The smallest range in water levels provides the greatest measurement resolution. Accuracy is generally 0.01 to 0.1 percent of the full scale range.

Retrieving data in the field is typically accomplished by downloading data through a USB connection to a portable “lap-top” computer. A site visit to retrieve data should involve several steps designed to safeguard the data and the continued useful operation of the transducer:

- Inspect the wellhead and check that the transducer cable has not moved or slipped;
- Ensure that the instrument is operating properly;
- Measure and record the depth to water with a graduated steel or electric tape;
- Document the site visit, including all measurements and any problems;
- Retrieve the data and document the process;
- Review the retrieved data by viewing the file or plotting the original data;
- Recheck the operation of the transducer prior to disconnecting from the computer.

A field notebook with a checklist of steps and measurements should be used to record all field observations and the current data from the transducer. It provides an historical record of field activities. In the office, maintain a binder with field information similar to that recorded on the field notebook so that a general historical record is available there and can be referred to before and after a field trip.

Summary and Recommendations

Static groundwater levels obtained for the NMMA monitoring program are determined by measuring the distance to water from wellhead MPs that have been surveyed using an accepted sea level-based datum. Subtracting the distance to water from the elevation of an MP determines groundwater surface elevations above or below sea level. The following items should be considered important to creating and maintaining a successful monitoring program:

- All wells should be surveyed by a licensed surveyor;

Appendix 7

- Three survey points should be set for each well: the MP on the wellhead, the RP on a nearby permanent object, and the adjacent ground surface;
- The points should be surveyed to the nearest tenth of one foot vertically, and the nearest one foot horizontally;
- A one-inch diameter water-level sounding tube should be installed in each NMMA monitoring program well;
- Static water levels should always be measured to the nearest 0.01 feet from the same measuring point, using the same measuring techniques for each well;
- Measurement techniques using graduated steel tapes, electric tapes graduated in hundredths of feet, or pressure transducers should be considered appropriate for the monitoring program;
- Because of its lower accuracy and higher potential for errors than other methods, the air-line method should not be used in the program;
- Thorough and accurate field documentation and complete project files are essential to a successful monitoring program.

Appendix E: Additional Data and Maps

Appendix 7

To estimate the annual amount of pumped groundwater used for crop irrigation in the NMMA, land use data are used together with crop water use estimates and local climate data. A spreadsheet model with a daily time step keeps track of various parameters, including evapotranspiration, precipitation, soil moisture, crop water requirements, and related information, to estimate how much irrigation water is required for a crop and, during wet periods, how much precipitation is recharged to the aquifer.

The model estimates a crop's water requirement, otherwise known as the evapotranspirative requirement (ET_C), based on the local weather and a crop coefficient (K_C), and keeps track of soil moisture. The crop coefficient is an estimated value that accommodates seasonal conditions such as growth stage and canopy cover. Reference evapotranspiration (ET_O) values used in the model are obtained from a California Irrigation Management Information System (CIMIS) station in Nipomo, which provides daily meteorological data.

Crop Water Requirement:

$$ET_C = K_C * ET_O \quad \text{where}$$

ET_C = crop evapotranspirative requirement

K_C = crop coefficient

ET_O = reference evapotranspiration (data from Nipomo CIMIS station)

The model then keeps track of the amount of water on a daily time-step that is needed to grow the crop, and whether that water first comes from precipitation (P) and then from soil water. When the total amount of soil water is reduced to half or less of the soil's water-holding capacity (calculated together with the crop's rooting depth), it is assumed that application of water via irrigation (AW_T) will occur to replenish the soil water.

Crop Evapotranspiration of Applied Water:

$$AW_T = ET_C - P \quad \text{where}$$

AW_T = total applied crop water

P = precipitation

The NMMA TG modified the methodology used to estimate the annual amount of pumped groundwater used for crop irrigation and parameter values used in the model calculation in 2010. The crop coefficients, K_C , and land use areas were subsequently updated in 2013 compared to those used in 2012 (this Annual Report; see Tables 1 and 2 below).

Appendix 7

Table 1: Crop Coefficients (K_c) assigned to Land Use categories for 2012.

Crop Coefficient (K_c)	Native			Agriculture						Golf Course	
	Grasses	Trees and Shrubs	Deciduous	Pasture	Vegetable Rotational	Avocado and Lemon	Strawberries	Nursery	Un-irrigated Ag Land	Golf Course	Urban
1	0.42	0.89	1.33	1.33	1.33	0.40	0.18	0.50	1.33	0.60	0.42
2	0.42	1.33	0.31	0.31	1.00	0.50	0.36	0.50	0.31	0.60	0.42
3	0.42	1.26	0.58	1.00	1.00	0.55	0.56	0.50	0.13	0.60	0.42
4	0.42	1.49	0.72	1.00	1.00	0.55	0.65	0.50	0.08	0.60	0.42
5	0.42	1.47	0.83	1.00	0.51	0.60	0.68	0.50	0.03	0.60	0.42
6	0.00	1.67	0.90	1.00	0.01	0.65	0.69	0.50	0.01	0.60	0.42
7	0.00	1.64	0.96	1.00	0.49	0.65	0.35	0.50	0.00	0.60	0.42
8	0.00	1.38	0.96	1.00	1.00	0.65	0.05	0.50	0.05	0.60	0.42
9	0.42	1.63	0.92	1.00	1.00	0.60	0.13	0.50	0.13	0.60	0.42
10	0.42	1.28	0.81	1.00	1.00	0.55	0.12	0.50	0.12	0.60	0.42
11	0.42	0.95	0.54	0.54	0.54	0.55	0.54	0.50	0.54	0.60	0.42
12	0.42	0.87	1.20	1.20	1.20	0.50	1.20	0.50	1.20	0.60	0.42

Table 2: Crop Coefficients (K_c) assigned to Land Use categories for 2013.

Crop Coefficient (K_c)	Native			Agriculture						Golf Course	
	Grasses	Trees and Shrubs	Grape	Pasture	Vegetable Rotational	Avocado and Lemon	Strawberries and cane berries	Nursery	Un-irrigated Ag Land	Golf Course	Urban
1	0.42	0.89	0.00	0.54	0.65	0.54	0.78	0.65	1.33	1.00	0.42
2	0.42	1.33	0.00	0.54	0.65	0.31	0.78	0.65	0.31	1.00	0.42
3	0.42	1.26	0.00	1.00	0.65	0.58	0.78	0.65	0.13	1.00	0.42
4	0.42	1.49	1.00	1.00	0.65	0.72	0.78	0.65	0.08	1.00	0.42
5	0.42	1.47	1.00	1.00	0.65	0.83	0.78	0.65	0.03	1.00	0.42
6	0.00	1.67	1.00	1.00	0.65	0.90	0.78	0.65	0.01	1.00	0.42
7	0.00	1.64	0.00	1.00	0.65	0.96	0.78	0.65	0.00	1.00	0.42
8	0.00	1.38	0.00	1.00	0.65	0.96	0.78	0.65	0.05	1.00	0.42
9	0.42	1.63	0.00	1.00	0.65	0.92	0.78	0.65	0.13	1.00	0.42
10	0.42	1.28	0.00	1.00	0.65	0.81	1.00	0.65	0.12	1.00	0.42
11	0.42	0.95	0.00	0.54	0.65	0.54	0.78	0.65	0.54	1.00	0.42
12	0.42	0.87	0.00	0.54	0.65	0.54	0.78	0.65	1.20	1.00	0.42

The golf course, nursery, and pasture K_c values (Table 2) were calculated from measured irrigation in portions of the NMMA. Strawberry and cane berry, vegetable rotational, and citrus and avocado K_c values were derived from known water demands for these crops in nearby coastal regions.

Appendix 8: 2020 NCSD Urban Water Management Plan



Nipomo Community Services District



2020 Urban Water Management Plan

Final December 2021

Prepared for:

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Nipomo Community Services District
2020 Urban Water Management Plan
Final December 2021

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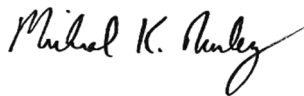
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Table of Contents

CHAPTER 1 INTRODUCTION AND OVERVIEW 1-1

 New Requirements for 2020 Update 1-1

 1.1 UWMP Organization 1-2

 1.2 UWMP in Relation to Other Efforts 1-4

 1.3 UWMPs and Grant or Loan Eligibility..... 1-4

CHAPTER 2 PLAN PREPARATION 2-1

 New Requirement for 2020 Update 2-1

 2.1 Plan Preparation 2-1

 2.2 Basis for Preparing a Plan 2-1

 2.2.1 Public Water Systems2-1

 2.2.2 Suppliers Serving Multiple Service Areas/Public Water Systems2-1

 2.3 Regional Planning..... 2-1

 2.4 Individual or Regional Planning and Compliance..... 2-1

 2.4.1 Regional UWMP2-1

 2.4.2 Regional Alliance.....2-2

 2.5 Fiscal or Calendar Year and Units of Measure 2-2

 2.5.1 Fiscal or Calendar Year.....2-2

 2.5.2 Reporting Complete 2020 Data2-2

 2.5.3 Units of Measure2-2

 2.6 Coordination and Outreach 2-2

 2.6.1 Wholesale and Retail Coordination2-2

 2.6.2 Coordination with Other Agencies and the Community2-3

 2.6.3 Notice to Cities and Counties.....2-3

CHAPTER 3 SYSTEM DESCRIPTION..... 3-1

 New Requirements for 2020 Update 3-1

 3.1 General Description 3-1

 3.2 Service Area Boundary Maps 3-1

3.3 Service Area Climate 3-1

3.4 Service Area Population and Demographics 3-6

 3.4.1 Service Area Population 3-6

 3.4.2 Other Social, Economic, and Demographic Factors 3-8

3.5 Land Uses within Service Area 3-10

CHAPTER 4 WATER USE CHARACTERIZATION 4-1

 New Requirements for 2020 Update 4-1

 4.1 Non-Potable Versus Potable Water Use 4-1

 4.2 Past, Current, and Projected Water Use by Sector 4-1

 4.2.1 Water Use Sectors Listed in Water Code 4-1

 4.2.2 Water Use Sectors in Addition to Those Listed in Water Code 4-2

 4.2.3 Past Water Use 4-2

 4.2.4 Distribution System Water Loss 4-2

 4.2.5 Current Water Use 4-2

 4.2.6 Projected Water Use 4-3

 4.2.7 Characteristic Five-Year Water Use 4-5

 4.3 Worksheets and Reporting Tables 4-5

 4.4 Water Use for Lower Income Households 4-5

 4.5 Climate Change Considerations 4-6

CHAPTER 5 SBX7-7 Baselines, Targets, and 2020 Compliance 5-1

 New Requirements for 2020 Update 5-1

 5.1 Guidance for Wholesale Suppliers 5-1

 5.2 SB X7-7 Forms and Summary Tables 5-1

 5.2.1 SB X7-7 Verification Form (Baselines and Targets) 5-1

 5.2.2 SB X7-7 2020 Compliance Form 5-1

 5.2.3 Submittal Tables 5-1 and 5-2 5-1

 5.2.4 Regional UWMP/Regional Alliance 5-1

 5.3 Baseline and Target Calculations for 2020 UWMPs 5-1

 5.3.1 Supplier Submitted 2015 UMWP, No Change to Service Area 5-1

- 5.3.2 Supplier Did Not Submit 2015 UWMP 5-1
- 5.3.3 Supplier Newly Subject to UWMP Requirements..... 5-1
- 5.3.4 Distribution Area Expansion 5-2
- 5.3.5 Distribution Area Contraction..... 5-2
- 5.3.6 Large Partial Customers Become Whole Customers 5-2
- 5.4 Methods for Calculating Population and Gross Water Use 5-2
 - 5.4.1 Service Area Population..... 5-2
 - 5.4.2 Gross Water Use 5-2
- 5.5 2020 Compliance Daily Per-Capita Water Use (GPCD) 5-2
 - 5.5.1 2020 Adjustments for Factors Outside of Supplier’s Control 5-3
 - 5.5.2 Special Situations 5-3
 - 5.5.3 If Supplier Does Not Meet 2020 Target 5-3
- 5.6 Regional Alliance..... 5-3
- CHAPTER 6 WATER SUPPLY CHARACTERIZATION 6-1
 - New Requirements for 2020 Update 6-1
 - 6.1 Water Supply Analysis Overview 6-1
 - 6.2 Water Supply Characterization 6-1
 - 6.2.1 Purchased or Imported Water 6-1
 - 6.2.2 Groundwater..... 6-2
 - 6.2.3 Surface Water 6-6
 - 6.2.4 Stormwater 6-6
 - 6.2.5 Wastewater and Recycled Water 6-6
 - 6.2.6 Desalinated Water Opportunities..... 6-11
 - 6.2.7 Water Exchanges and Transfers 6-11
 - 6.2.8 Future Water Projects..... 6-11
 - 6.2.9 Summary of Existing and Planned Sources of Water..... 6-11
 - 6.2.10 Special Conditions..... 6-13
 - 6.3 Submittal Tables..... 6-13
 - 6.4 Energy Intensity 6-13

CHAPTER 7 WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT 7-1

 New Requirements for 2020 Update 7-1

 7.1 Introduction 7-1

 7.2 Water Service Reliability Assessment 7-1

 7.2.1 Service Reliability - Constraints on Water Sources 7-3

 7.2.2 Service Reliability - Year Type Characterization..... 7-3

 7.2.3 Water Service Reliability 7-5

 7.2.4 Description of Management Tools and Options..... 7-7

 7.3 Drought Risk Assessment..... 7-7

 7.3.1 Data, Methods, and Basis for Water Shortage Condition..... 7-7

 7.3.2 DRA Individual Water Source Reliability..... 7-7

 7.3.3 Total Water Supply and Use Comparison 7-7

CHAPTER 8 WATER SHORTAGE CONTINGENCY PLAN 8-1

 8.1 Water Supply Reliability Analysis..... 8-1

 8.2 Annual Water Supply and Demand Assessment Procedures 8-1

 8.2.1 Decision- Making Process 8-1

 8.2.2 Data and Methodologies 8-1

 8.3 Six Standard Water Shortage Levels 8-1

 8.4 Shortage Response Actions..... 8-4

 8.4.1 Demand Reduction 8-4

 8.4.2 Supply Augmentation 8-4

 8.4.3 Operational Changes 8-5

 8.4.4 Additional Mandatory Restrictions..... 8-5

 8.4.5 Emergency Response Plan 8-5

 8.4.6 Seismic Risk Assessment and Mitigation Plan 8-5

 8.4.7 Shortage Response Action Effectiveness..... 8-6

 8.5 Communication Protocols..... 8-6

 8.6 Compliance and Enforcement..... 8-6

 8.7 Legal Authorities 8-6

8.8 Financial Consequences of WSCP 8-6

8.9 Monitoring and Reporting 8-6

8.10 WSCP Refinement Procedures 8-6

8.11 Special Water Feature Distinction 8-6

8.12 Plan Adoption, Submittal and Availability 8-6

CHAPTER 9 DEMAND MANAGEMENT MEASURES 9-1

New Requirements for 2020 Update 9-1

9.1 Demand Management Measures for Wholesale Suppliers 9-1

9.2 Existing Demand Management Measures for Retail Suppliers..... 9-1

 9.2.1 Water Waste Prevention Ordinances 9-1

 9.2.2 Metering 9-1

 9.2.3 Conservation Pricing 9-1

 9.2.4 Public Education and Outreach 9-1

 9.2.5 Programs to Assess and Manage Distribution System Real Loss 9-2

 9.2.6 Water Conservation Program Coordination and Staffing Support 9-2

 9.2.7 Other Demand Management Measures 9-2

9.3 Reporting Information 9-3

 9.3.1 Implementation Over the Past Five years 9-3

 9.3.2 Implementation to Achieve Water Use Targets 9-3

9.4 Water Use Objectives (Future Requirements) 9-3

CHAPTER 10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION 10-1

New Requirements 10-1

10.1 Inclusion of all 2015 Data 10-1

10.2 Notice of Public Hearing 10-1

 10.2.1 Notice to Cities and Counties 10-1

 10.2.2 Notice to the Public 10-1

10.3 Public Hearing and Adoption 10-1

 10.3.1 Public Hearing 10-1

 10.3.2 Adoption 10-2

10.4 Plan Submittal 10-2

 10.4.1 Submitting a UWMP and Water Shortage Contingency Plan to DWR.....10-2

 10.4.2 Electronic Data Submittal10-2

 10.4.3 Submitting a UWMP to the California State Library10-2

 10.4.4 Submitting a UWMP to Cities and Counties10-2

10.5 Public Availability 10-2

10.6 Notification to Public Utilities Commission 10-2

10.7 Amending an Adopted UWMP or Water Shortage Contingency Plan 10-3

 10.7.1 Amending a UWMP10-3

 10.7.2 Amending a Water Shortage Contingency Plan10-3

List of Tables

Table 1-1: Water Code Changes Since 2015 UWMP 1-3

Table 2-1 Retail Only: Public Water Systems..... 2-1

Table 2-2 Plan Identification..... 2-2

Table 2-3: Supplier Identification 2-2

Table 2-4 Retail: Water Supplier Information Exchange 2-3

Table 2-5 Agency Coordination 2-3

Table 3-1: Growth Scenario 1 Population Estimate..... 3-6

Table 3-1a: Growth Scenario 2 Population Estimate..... 3-7

Table 3-2: Developed Land Use Summary within Service Area 3-10

Table 3-3: Land Uses Not Currently Served by the District 3-12

Table 4-0: Retail: Historical Water Usage 4-2

Table 4-1: Retail: Demands for Potable Water - Actual..... 4-3

Table 4-1a: Historical Use Rates (GPCD)..... 4-3

Table 4-2: Retail: Demands for Potable Water - Projected..... 4-4

Table 4-3: Retail: Total Water Demands (AF) 4-4

Table 4-4: Retail: 12 Month Water Loss Audit Reporting..... 4-4

Table 4-5 Retail Only: Inclusion in Water Use Projections 4-5

Table 4-6: Low-income Residential Demand Projections 4-6

Table 5-1 Baselines and Targets Summary 5-2

Table 5-2: 2020 Compliance 5-2

Table 6-0a : Wholesale Water Agreement Delivery Schedule..... 6-2

Table 6-0b: NSWP Replenishment Agreement Allocation (AFY) 6-2

Table 6-0c: NMMA Water Shortage Response Stages..... 6-5

Table 6-1: Retail: Groundwater Volume Pumped 6-6

Table 6-2 Retail: Wastewater Collected Within Service Area in 2020..... 6-7

Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2020 6-7

Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area..... 6-10

Table 6-5 Retail: 2015 UWMP Recycled Water Use Projection Compared to 2020 Actual..... 6-10

Table 6-6 Retail: Methods to Expand Future Recycled Water Use..... 6-10

Table 6-7 Retail: Expected Future Water Supply Projects or Programs 6-11

Table 6-8 Retail: Water Supplies — Actual..... 6-12

Table 6-9 Retail: Water Supplies — Projected..... 6-12

Table 7-0: Climate Change Vulnerability Screening..... 7-2

Table 7-1 Retail: Basis of Water Year Data 7-3

Table 7-2 Retail: Normal Year Supply and Demand Comparison 7-5

Table 7-3 Retail: Single Dry Year Supply and Demand Comparison 7-5

Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison..... 7-6

Table 8-1: Water Shortage Contingency Plan Levels 8-2

Table 8-2 Demand Reduction Actions 8-4

Table 8-3: Supply Augmentation and Other Actions 8-5

Table 10-1 Retail: Notification to Cities and Counties..... 10-1

List of Figures

Figure 3-1: District Location Map 3-3

Figure 3-2: District Service Area Map 3-4

Figure 3-3: District Annexation Map..... 3-5

Figure 3-4: Service Area 20-year Population and Growth Rate Chart 3-7

Figure 3-5: Land Uses within Service Area..... 3-11

Figure 6-1: Santa Maria Groundwater Basin and Management Areas..... 6-3

Figure 6-2: Septic System Prohibition Boundary 6-8

Figure 7-1: District Historic Rainfall Data..... 7-5

Figure 8-1: Comparison for the District’s 2015 Shortage Levels and the 2020 WSCP Mandated Shortage Levels..... 8-3

Appendices

Appendix A - 13th Annual Nipomo Mesa Management Area Annual Report

Appendix B - DWR Population Tool Results

Appendix C - SB X7-7 Verification Form submitted for the 2015 UWMP

Appendix D - SB X7-7 2020 Compliance Form

Appendix E - Wholesale Water Supply Agreement

Appendix F - Supplemental Water Management and Groundwater Replenishment Agreement

Appendix G - Final Santa Maria River Valley Groundwater Basin Judgement

Appendix H - Board Resolution 2014-1335 Water Shortage Response and Management Plan

Appendix I - Consumer Confidence Report

Appendix J - Water Shortage Contingency Plan

Appendix K - 60 Day Notification to Cities and Counties

Appendix L - Newspaper Notification

Appendix M - Adoption Resolution

Appendix N - 2020 UWMP Checklist

Appendix O - UWMP Water Code

Bibliography

The following reports, studies, and other material were reviewed during preparation of this Urban Water Management Plan update.

- 1) City of Santa Maria 2020 Urban Water Management Plan adopted June 2021 and prepared by the City of Santa Maria.
- 2) 2020 Urban Water Management Plans Guidebook for Urban Water Suppliers dated March 2020 and prepared by the California Department of Water Resources.
- 3) Nipomo Mesa Management Area 13th Annual Report (NMMA TG Annual Report) Calendar Year 2020 dated April 2021 and prepared by NMMA Technical Group.
- 4) 2050 Regional Growth Forecast for San Luis Obispo County Population, Housing, and Employment Projections for San Luis Obispo Council of Governments dated June 2017 and prepared by Beacon Economics.
- 5) House Element 2014-2019 - County of San Luis Obispo General Plan Adopted June 17, 2014 and prepared by the San Luis Obispo County Department of Planning and Building.
- 6) Nipomo Community Services District 2015 Urban Water Management Plan dated June 2016 and prepared by Michael K. Nunley and Associates, Inc.
- 7) San Luis Obispo County 2040 Population, Housing & Employment Forecast for San Luis Obispo Council of Governments dated August 11, 2011 and prepared by AECOM.
- 8) Nipomo Mesa Management Area Water Shortage Conditions and Response Plan dated April 2009 and prepared by NMMA Technical Group.

List of Acronyms

AB - Assembly Bill	IRWMP - Integrated Regional Water Management Plans
ADU – Accessory Dwelling Unit	KWI – Key Wells Index
AF – Acre-Foot	MG – Million Gallons
AFY – Acre-Feet per Year	MGY – Million Gallons per Year
AMI – Advanced Metering Infrastructure	NA – Not Applicable
AWIA – America’s Water Infrastructure Act	NCMA - Northern Cities Management Area
AWWA – American Water Works Association	NCS D - Nipomo Community Services District
BMP – Best Management Practice	NMMA – Nipomo Mesa Management Area
CASGEM – California Statewide Groundwater Elevation Monitoring Program	NMMA TG – Nipomo Mesa Management Area Technical Group
CA – California	NMWCA – Nipomo Mesa Water Conservation Area
CD – Compact Disc	PWS – Public Water System
CII – Commercial, Industrial, Institutional, water use sectors	Report – NMMA TG’s Annual Report
CIMIS – California Irrigation Management Information System	RRA – Risk and Assessment
City – City of Santa Maria	RUWMP – Regional Urban Water Management Plan
CUWCC – California Urban Water Conservation Council	SB – Senate Bill
CWC – California Water Code	SWRCB – State Water Resources Control Board
DACs – Disadvantaged Communities	SLOCOG – San Luis Obispo Council of Governments
DMMs – Demand Management Measures	SLO-PD - San Luis Obispo Planning and Development
DOF – Department of Finance	SOI- Sphere of Influence
DRA – Drought Risk Assessment	SQ FT – Square Feet
DU – Dwelling Unit	SMVMA - Santa Maria Valley Management Area
DWR – Department of Water Resources	NSWP - Nipomo Supplemental Water Project
eARDWP - Electronic Annual Reports to the Drinking Water Program (SWRCB)	SB X7-7 – Senate Bill Seven of the Senate’s Seventh Extraordinary Session of 2009
ETo - Reference Evapotranspiration	UMWP - Urban Water Management Plan
GIS - Geographic Information System	US EPA - United States Environmental Protection Agency
GPCD - Gallons per Capita per Day	WMWC - Woodlands Mutual Water Company
GSA - Groundwater Sustainability Agency	WRF - Water Reclamation Facility
GSWC - Golden State Water Company	WSCP - Water Shortage Contingency Plan
GSWCCR – Golden State Water Company Cypress Ridge	WSS - WaterSense Specification
HECW - High-Efficiency Clothes Washer	WUE - Water Use Efficiency
HET/DFT - High-Efficiency Toilet	WWTP - Wastewater Treatment Plant
ID - Identifier	

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CHAPTER 1 INTRODUCTION AND OVERVIEW

This report comprises the 2020 Urban Water Management Plan (UWMP) update for the Nipomo Community Services District (District). The District is located in Nipomo, California, an unincorporated community in southern San Luis Obispo County. The District serves portions of the Nipomo community and the greater Nipomo Mesa. The District is an independent Special District formed and operated pursuant to Government Code §61000 et seq. The District provides water, wastewater, solid waste, landscape maintenance, street lighting, and drainage services to its customers pursuant to Government Code §61600(a), (b), and (c). The District does not have land planning authority, which is retained by the County of San Luis Obispo (County); however, County land use planning authority is subordinated to resource limitations such as water and sewer capacity as established by the District.

The UWMP is a valuable planning document used for the following purposes:

- Meet a statutory requirement of the California Water Code (CWC)
- Provide a key source of information for Water Supply Assessments (WSAs) and Written Verifications of Water Supply required by SB 610 and SB 221
- Support regional long-range planning documents including County General Plans
- Provide a standardized methodology for water utilities to assess their water resource needs and availability
- Serve as a critical component of developing Integrated Regional Water Management Plans (IRWMPs)

As a part of the California Water Code, the California Urban Water Management Planning Act (UWMP Act) requires all urban water suppliers with more than 3,000 connections or distributing more than 3,000 acre feet per year (AFY) to complete an UWMP every five years ending in '5' and '0'. The UWMP Act is administered by the California Department of Water Resources (DWR), who is responsible for developing guidance for preparation of the UWMPs, reviewing the submitted plans for completeness, compiling the data for statewide and regional analysis, and publishing the documents online for public access.

In 2020, the District produced approximately 1,267 acre-feet (AF) of water, imported 781 AF of supplemental water from the City of Santa Maria, and had 4,300 customer connections. The District adopted its first UWMP in January 2004. Since the first adopted UWMP in 2004, the District has completed and submitted the 2005, 2010, and 2015 updates.

New Requirements for 2020 Update

The following new requirements have been identified in the 2020 Urban Water Management Plan Guidebook for Urban Water Suppliers and have been addressed in the District's 2020 UWMP update:

- Five Consecutive Dry-Year Water Reliability Assessment
- Drought Risk Assessment
- Seismic Risk
- Energy Use Information
- Water Loss Reporting for Five Years
- Water Shortage Contingency Plan (WSCP)
- Groundwater Supplies Coordination
- Lay Person Description

1.1 UWMP Organization

This UWMP update was prepared based on guidance from the final draft of the California Department of Water Resources (DWR) “2020 Urban Water Management Plan Guidebook for Urban Water Suppliers” dated March 2021 and follows the recommended chapter formatting identified in the guidebook and briefly described below.

Chapter 1 – UWMP Introduction and Lay Description: This chapter identifies changes since the 2015 UWMP, fundamentals of the 2020 UWMP, and the required lay description of the District and its service area. Some subsequent chapters also include an initial lay description.

Chapter 2 – Plan Preparation: This chapter provides information on processes used to develop the UWMP, including efforts in coordination and outreach.

Chapter 3 – System Description: This chapter includes maps of the service area, an explanation of the service area and climate, and detail on the public water system.

Chapter 4 – Water Use Characterization: This chapter provides a description and quantification of the current and projected water uses within the District’s service area.

Chapter 5 – Conservation Target Compliance: This chapter describes the District’s compliance with the 2020 per-capita water conservation mandate, presents the District’s 2020 per-capita target value that was adopted in the 2015 UWMP, and compliance with per-capita target based upon actual 2020 customer water use.

Chapter 6 – Water Supply Characterization: This chapter provides a description and quantification of current and projected potable and non-potable water supplies. A narrative description of each supply source and quantification of the supply availability for each supply source was identified.

Chapter 7 – Water Service Reliability and Drought Risk Assessment: This chapter describes the Districts’ water system reliability through at least a 20-year planning horizon. The description includes normal, single dry year, and five consecutive dry years. The water system reliability differs from the Drought Risk Assessment (DRA) by allowing a different basis for characterizing the five consecutive dry years.

Chapter 8 – Water Shortage Contingency Plan: This chapter provides a structured plan for dealing with water shortages, incorporating prescriptive information and standardized action levels, along with implementation actions in the event of a catastrophic supply interruption.

Chapter 9 – Demand Management Measures: This chapter identifies the District’s efforts to promote conservation and to reduce demand on the water supply; specifically including a narrative describing efforts to implement demand management measures.

Chapter 10 – Plan Adoption, Submittal, and Implementation: This chapter describes and documents the steps taken to make the UWMP publicly available, as well as the steps taken to adopt and submit the UWMP in accordance with the Water Code, and also describes the District’s plan to implement the UWMP.

Appendices: To support and further clarify information included in the main chapters of the UWMP, relevant information has been included in the appendix of this UWMP.

Table 1-1 provides an overview of the applicable changes to the Water Code since the 2015 UWMP, which have been included in this 2020 update.

Table 1-1: Water Code Changes Since 2015 UWMP				
Change Number	Topic	CWC Section	Summary	Guidebook Section
1	System Description	10631(a)	Suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land uses information for projecting water use in five-year increments, up to the year 2045.	3.0
2	Other Social, Economic, and Demographic Factors	10631	Describe the service area of the supplier, including current and projected population, climate, and other social, economic and demographic factors affecting the supplier’s water management planning.	3.4.2
3	Land Uses within Service Area	10631(a)	The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier’s water management planning.	3.5
4	Distribution System Water Loss	10635	Suppliers shall provide a simple lay description of their projected water use for the foreseeable future.	4.2.4
5	Distribution System Water Loss	10631(d)(3) (A) and (C)	Suppliers shall provide quantified distribution system losses for each of the five preceding years and whether or not the state standard was met.	4.2.4
6	Characteristic Five-Year Water Use	10635(b)	The Supplier must produce a projected water use for the years 2021 through 2025 as part of the water use projections, up to the year 2040.	4.2.7
7	Climate Change Effects	10635(b)(1)	Consideration of climate change in future projections in regards to water supply.	6.2. & 10.1
8	Drought Risk Assessment	10635(b)	DRA prepared as a component of the 2020 UWMP	7.3
9	Water Service Reliability – Five Consecutive Dry Years	10635(a); 10631 (b)(1)	Submittal Table 7-4 is used for the Supplier’s water service reliability assessment for five consecutive dry years, for each of the five-year projection increments out to at least 2040	7.2.1 & 7.2.3.3
10	Water Supply Reliability Analysis	10632(a)(1)	Key attributes of its water supply reliability analysis	8.1
11	Six Standard Water Shortage Levels	10632 (a)(3)(A)	Six standard water shortage levels corresponding to progressive ranges of up to 10-, 20-, 30-, 40-, and 50-percent shortages and greater than 50-percent shortage.	8.3
12	Shortage Response Actions	10632 (a)(4)	Locally appropriate “shortage response actions” for each shortage level, with a corresponding estimate of the extent the action will address the gap between supplies and demands.	8.4
13	Annual Water Supply and Demand Assessment Procedures	10632 (a)(2)	Suppliers are required to submit, by July 1 of each year, beginning in the year following adoption of the 2020 UWMP, an annual water shortage assessment report to the California Department of Water Resources (DWR).	8.2

Table 1-1: Water Code Changes Since 2015 UWMP				
14	Communication Protocols	10632 (a)(5)	Communication protocols and procedures to inform customers, the public, and government entities of any current or predicted water shortages and associated response actions.	8.5
15	Monitoring and reporting	10632(a)(9)	Monitoring and reporting procedures to assure appropriate data is collected to monitor customer compliance and to respond to any state reporting requirements.	8.9
16	WSCP Refinement Procedures	10632(a)(10)	A reevaluation and improvement process to assess the functionality of its WSCP and to make appropriate adjustments as may be warranted.	8.10

1.2 UWMP in Relation to Other Efforts

An UWMP is prepared by local Suppliers that have the in-depth and practical knowledge of their water systems. The information contained in each Supplier’s UWMP reflects the operations of its system in the context of the Supplier’s customers, supplies, and service area. This local planning and preparation remains the fundamental focus of the UWMP.

In addition to the local Supplier focus, the UWMP requires coordination with other planning agencies and is most effective when integrated with other planning efforts. Land-use planning agencies, such as cities and counties, prepare General Plans and Specific Plans that affect a Supplier’s analysis provided in its UWMP, and vice versa. Moreover, Water Master Plans, facility plans, Recycled Water Master Plans, Integrated Regional Water Management Plans, Regional Climate Action Plans, Groundwater Sustainability Plans, AB 3030 Groundwater Management Plans, local or regional Hazard Mitigation Plans, and others need to be synthesized with a Supplier’s UWMP to ensure a holistic planning process.

For the District’s UWMP, elements of the following reports and documents were utilized to develop the required sections of the plan (a brief description is provided for the relevant information contained in each document):

- 2015 Urban Water Management Plan: Served as the basis for the 2020 update.
- Nipomo Mesa Management Area (NMMA) 13th Annual Report (Calendar Year 2020) and prepared by the NMMA Technical Group, submitted April 2021: Used for the development of the water shortage contingency plan and identification of existing groundwater pumping.
- San Luis Obispo County 2040 Population, Housing & Employment Forecast for San Luis Obispo Council of Governments dated August 11, 2011 and prepared by AECOM: Used to estimate future population projections throughout 2045 within the service area.
- San Luis Obispo County Multi-Jurisdictional Hazard Mitigation Plan: Contained information to address the seismic risk assessment and mitigation requirement of the UWMP update.

The District’s latest water master plan was developed in December 2007 and was not used to inform this UWMP update since it does not contain current information related to existing water usage, future demand projections, and water supply availability.

1.3 UWMPs and Grant or Loan Eligibility

For a Supplier to be eligible for any water grant or loan administered by DWR, the Supplier must have a current UWMP on file that has been determined by DWR to address the requirements of the Water Code. A current UWMP must also be maintained by the Supplier throughout the term of any grant or loan administered by DWR. An UWMP may also be required in order to be eligible for other state funding, depending on the conditions that are specified in the funding guidelines. Suppliers are encouraged to seek guidance on the specifics of any state funding source from the respective funding agencies.

CHAPTER 2 PLAN PREPARATION

New Requirement for 2020 Update

The preparation and periodic update of a Water Shortage Contingency Plan (WSCP) is now required per the final Guidebook. The WSCP is included in the UWMP, but adopted and amended independently of the UWMP. Coordination with land use agencies, and other relevant regional or local authorities is now required as part of preparing the UWMP and the WSCP.

2.1 Plan Preparation

This chapter includes information about the following sections for the 2020 UWMP:

- Basis for Preparing a Plan
- Regional Planning
- Individual or Regional Planning and Compliance
- Fiscal or Calendar Year and Units of Measure
- Coordination and Outreach

2.2 Basis for Preparing a Plan

2.2.1 Public Water Systems

The District is a public urban water supplier serving an estimated population of 13,771 people. **Table 2-1** provides a summary of the number of connections and total volume of water supplied by the District to its customers for calendar year 2020.

Table 2-1 Retail Only: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2020	Volume of Water Supplied 2020 (MG)
CA4010026	NCS D	4,470	2,048
TOTAL		4,470	2,048

2.2.2 Suppliers Serving Multiple Service Areas/Public Water Systems

The District serves a single public water system and service area.

2.3 Regional Planning

The District is located in the NMMA and acts to assist in coordinate regional water resource planning efforts as mandated by the Court. The Nipomo Mesa Management Area Technical Group (NMMA TG) is the court appointed responsibly for assessing groundwater within the NMMA of the Santa Maria Groundwater Basin.

2.4 Individual or Regional Planning and Compliance

2.4.1 Regional UWMP

The District has developed an UWMP that reports solely on its service area as identified in **Table 2-2**. This plan addresses all requirements of the Water Code including water use targets and baselines for Senate Bill Extraordinary Session 7-7 (SB X7-7) Water Conservation Act of 2009 reporting.

2.4.2 Regional Alliance

The District has developed an UWMP that reports solely on its service area. The individual UWMP addresses all requirements of the CWC. The District has notified and coordinated with appropriate regional agencies and constituents during the development of this UWMP update. Those agencies contacted are identified in **Table 2-5**.

Table 2-2 Plan Identification		
Select Only One	Type of Plan	Name of RUWMP or Regional Alliance if applicable
<input checked="" type="checkbox"/>	Individual UWMP	
<input type="checkbox"/>	<input type="checkbox"/> Water Supplier is also a member of a RUWMP	
<input type="checkbox"/>	<input type="checkbox"/> Water Supplier is also a member of a Regional Alliance	
<input type="checkbox"/>	Regional Urban Water Management Plan (RUWMP)	

2.5 Fiscal or Calendar Year and Units of Measure

2.5.1 Fiscal or Calendar Year

The District has reported water-related information included in this UWMP based on calendar basis and all units are measured in acre-feet (AF) as identified in **Table 2-3**.

Table 2-3: Supplier Identification	
Type of Supplier	
<input type="checkbox"/>	Supplier is a wholesaler
<input checked="" type="checkbox"/>	Supplier is a retailer
Fiscal or Calendar Year	
<input checked="" type="checkbox"/>	UWMP Tables Are in Calendar Years
<input type="checkbox"/>	UWMP Tables Are in Fiscal Years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of Measure Used in UWMP	
Unit	AF

2.5.2 Reporting Complete 2020 Data

The 2020 UWMP includes water use and planning data for the entire calendar year of 2020.

2.5.3 Units of Measure

Water volumes presented in this 2020 UWMP are measured in acre-feet (AF) as identified in **Table 2-3**.

2.6 Coordination and Outreach

2.6.1 Wholesale and Retail Coordination

As shown in **Table 2-4**, the District has provided the City of Santa Maria, a regional wholesale supplier, with projected water demands in five-year increments for the next 20 years.

Table 2-4 Retail: Water Supplier Information Exchange
The retail supplier has informed the following wholesale supplier(s) of projected water use in accordance with CWC 10631.
Wholesale Water Supplier Name
City of Santa Maria

2.6.2 Coordination with Other Agencies and the Community

The District has coordinated with multiple neighboring and stakeholder agencies in the preparation of this UWMP. The coordination efforts were conducted to: 1) inform the agencies of the planning activities of the District; 2) gather data for use in developing this UWMP update; and 3) coordinate planning activities with other related regional plans and initiatives. The coordination activities conducted by the District in preparation of this plan are summarized in **Table 2-5**.

Table 2-5 Agency Coordination							
Agency	Sent a notice of public hearing for draft UWMP	Commented on the draft	Attended public meetings	Contacted for assistance	Sent a copy of the draft plan	Sent a notice of intention to adopt	Notice of Plan Availability
California Department of Water Resources	X						
City of Santa Maria	X						
County of San Luis Obispo Public Works	X						
Golden State Water Company	X						
Woodlands Mutual Water Company	X						

2.6.3 Notice to Cities and Counties

The District has notified the County of San Luis Obispo, City of Santa Maria, Woodlands Mutual Water Company, and Golden State Water Company of the public hearing and this notification has been reported in Chapter 10 **Table 10-1**.

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CHAPTER 3 SYSTEM DESCRIPTION

New Requirements for 2020 Update

Per the Water Code the following new requirements are necessary for this chapter of the UWMP 2020 update.

- Inclusion of service area socioeconomic information as part of the system description
- Coordination with land use agencies and a description of current and projected land uses within the service area

3.1 General Description

The District was formed on January 28, 1965 to provide water and sewer services as allowed under the Community Service District Law of Government Code Section 61000 et. seq. The current service area boundary encompasses approximately 3,907 acres (parcel acreage only and excludes right-of-way) in the Nipomo area of southern San Luis Obispo County, and serves water to an estimated current population of 13,771 people (based 2020 Census data within the DWR population tool). The District service area is primarily residential land uses, with some light commercial and suburban residential. The District is comprised of one water system with three pressure zones; one zone serves the Blacklake Specific Plan area, one zone serves the Maria Vista Pressure Zone, and the third zone serves the rest of the District's service area.

3.2 Service Area Boundary Maps

Figure 3-1 illustrates the location of the District within the State of California and **Figure 3-2** shows the extents of the current service area and Sphere of Influence (SOI) boundary. In addition, **Figure 3-3** shows historical areas of annexation for the service area.

3.3 Service Area Climate

The Mediterranean climate of Nipomo and the surrounding southern San Luis Obispo County area is moderate as a result of the marine influence of the nearby Pacific Ocean. The winter season is usually cool and moist and the summer months are warm and dry, with relatively consistent temperatures averaging 58 degrees. Hills border Nipomo on the north, northeast, and east. The orientation of Nipomo's topography with respect to the Pacific Ocean produces consistent winds from the Pacific in an on-shore direction. During the warmer summer months, heat rises above the surrounding hills, pulling in cooler moist air from the coast. As a result, temperatures stay relatively consistent. Rainfall usually occurs between the months of November and April. **Table 3-0** illustrates monthly and annual average Potential Evapotranspiration (ET_o), precipitation and temperature data for the Nipomo area for calendar year 2020.

Table 3-0: Climate Conditions for Calendar Year 2020			
Month	Monthly Average ETo¹	Monthly Rainfall²	Monthly Average Temperature¹
	Inches	Inches	Fahrenheit
Jan	2.13	0.91	53.3
Feb	2.87	0.00	53.9
Mar	2.96	4.57	53.4
Apr	4.41	1.77	56.3
May	5.70	0.40	59.6
Jun	5.02	0.04	60.0
Jul	5.09	0.00	59.4
Aug	4.56	0.00	61.5
Sep	3.16	0.04	60.7
Oct	2.98	0.00	63.4
Nov	2.37	0.43	56.1
Dec	2.09	1.18	53.7
Average	3.61	0.78	57.6
Total	43.34	9.34	-

NOTES:

1. Data from CIMIS Station #202 Nipomo, January 1, 2020 to December 31, 2020.
2. Data from SLO County Rain Gauge, Nipomo (East), January 1, 2020 to December 31, 2020.

With respect to climate change, the District has not conducted an official climate change vulnerability or risk assessment for the existing water service area. However, climate change considerations for the District’s groundwater supply are incorporated into the Nipomo Mesa Management Area Annual Reports and Chapter 7 of the 13th Annual Report has been included in Appendix A.

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Nipomo Community Services District
2020 Urban Water Management Plan

Figure 3-1:
Nipomo CSD Location Map



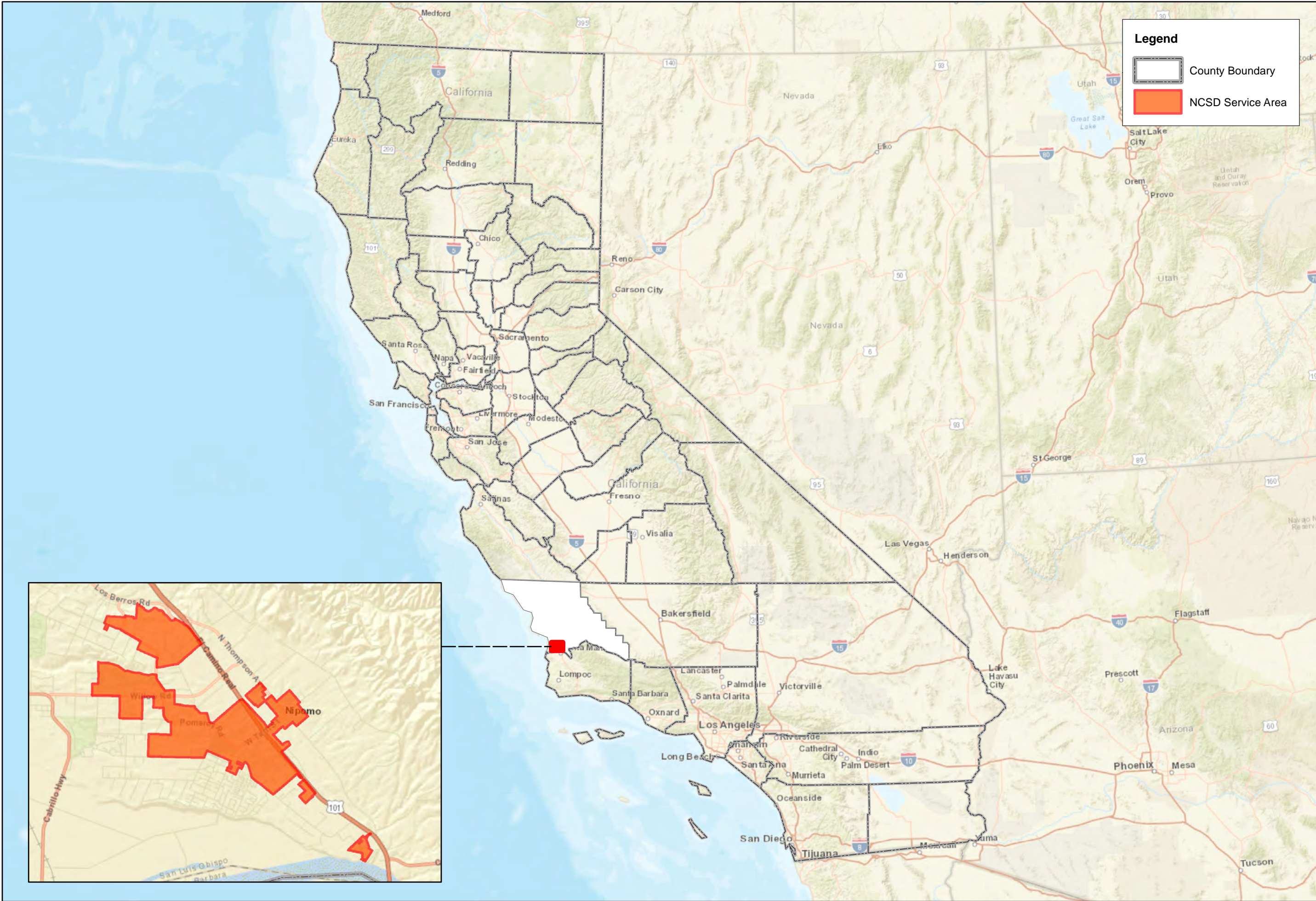
Scale: NTS

Service Layer Credits:
Sources: Esri, HERE,
Garmin, USGS,
Intermap, INCREMENT
P, NRCAn, Esri Japan,
METI, Esri China (Hong

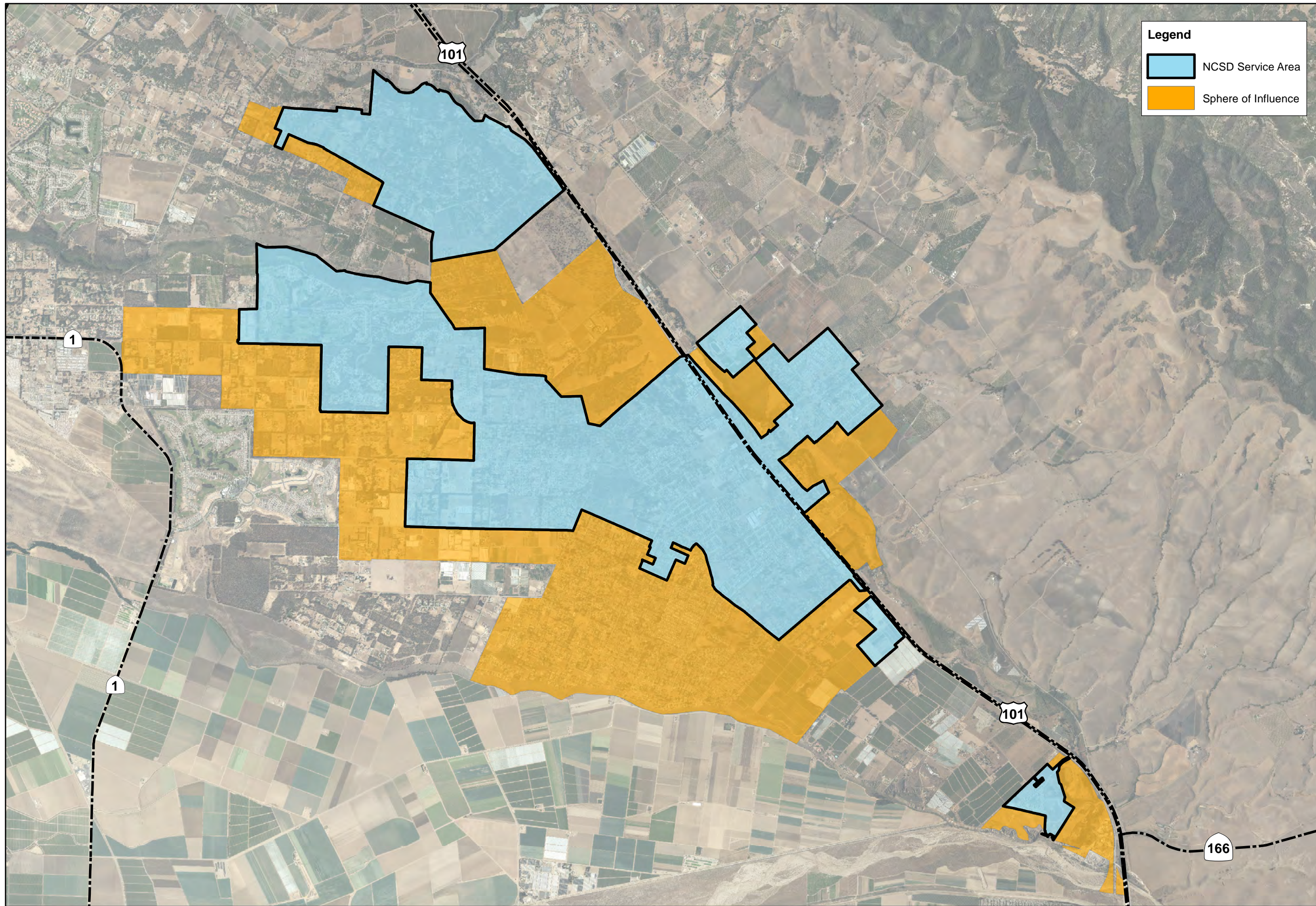


Legend

- County Boundary
- NCS D Service Area



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Legend

- NCSD Service Area
- Sphere of Influence



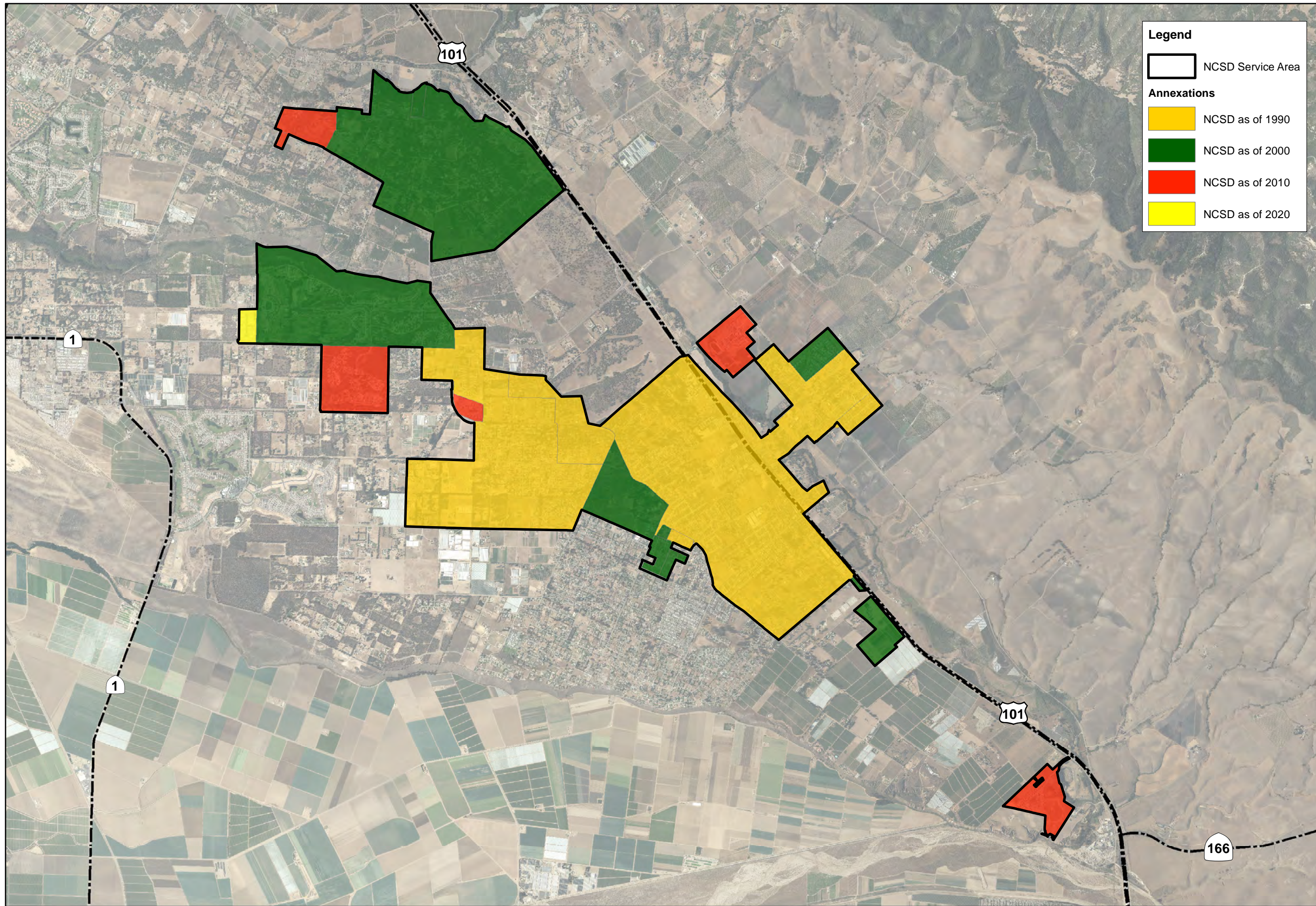
Nipomo Community Services District
2020 Urban Water Management Plan

Figure 3-2:
 Nipomo CSD Service Area Map






1 inch = 3,500 feet



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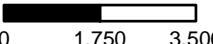
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 NCS D Service Area
Annexations
 NCS D as of 1990
 NCS D as of 2000
 NCS D as of 2010
 NCS D as of 2020



Nipomo Community Services District
2020 Urban Water Management Plan

Figure 3-3:
 NCS D
 Annexation
 Map


 1 inch = 3,500 feet




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3.4 Service Area Population and Demographics

3.4.1 Service Area Population

The 2020 population within the District service area was determined by using the Department of Water Resources (DWR) Population Tool, since the service area is not a City limit or Census designated place. To determine historical population data within the District service area using the DWR Population Tool, service area maps were prepared to reflect the service area boundaries for 1990, 2000, and 2010 Census years. Since the District boundary has changed over the course of the above Census years, three service area map layers (see **Figure 3-3**) were uploaded into the DWR Population Tool. The DWR Population Tool was used to estimate historical population from 1990 through 2020. Output from the DWR Population Tool for current and historical population is included in Appendix B.

The District does not have land use planning authority and relies on the County to identify potential new developments and overall population growth within the service area. With respect to population growth within the service area, several planning documents were reviewed to determine the appropriate growth rate to use for the 2020 update. The following planning documents included proposed population estimates through 2050 for the Nipomo area:

- 2050 Regional Growth Forecast for San Luis Obispo County Population, Housing, and Employment Projections for San Luis Obispo Council of Governments (June 2017)
- Nipomo Urban Reserve 2050 population of 18,598 with an annual average growth rate of 0.30% (2020 to 2050)
- San Luis Obispo County 2040 Population, Housing & Employment Forecast for San Luis Obispo Council of Governments (August 2011)
- Nipomo Urban Reserve 2040 population of 19,007 with an annual average growth rate of 0.83% (2020 to 2040)

The Nipomo Urban Reserve represents the limits of the Nipomo community located in southern San Luis Obispo County and encompasses approximately 3,900 acres. It should be noted that the Nipomo Urban Reserve boundary and the District water service area boundary are not the same. Approximately 2,300 acres of the Nipomo Urban Reserve boundary falls within the current District water service area, with approximately 1,300 acres within the Golden State Water Company service area, and the remaining 300 acres within the District’s SOI.

The District’s 2020 population estimate was based on the DWR population tool (including 2020 Census data) for the current service area only and is the best information currently available for population estimates. At the time this UWMP was prepared the current population within the District’s service area was estimated at 13, 771 people. With respect to future population growth and demands two conditions were reviewed and are briefly described below:

- Growth Scenario 1: Existing District population, infill development within the existing service area (parcels with reserved District capacity, parcels currently served by private wells, and development of vacant parcels) and future population associated with annexations under review
- Growth Scenario 2: Existing District population and infill development within the existing service area (parcels with reserved District capacity, parcels currently served by private wells, and development of vacant parcels)

Table 3-1 provides a summary of existing and future population projections for the District through 2045 assuming Growth Scenario 1 as described above.

Table 3-1: Growth Scenario 1 Population Estimate						
Year	2020	2025	2030	2035	2040	2045
Population Served	13,771	15,407	17,042	17,494	17,946	18,398
NOTES: 2020 population based on 2020 Census Data included in DWR population tool.						

Table 3-1a provides a summary of existing and future population projections for the District through 2045 assuming Growth Scenario 2 as described above.

Table 3-1a: Growth Scenario 2 Population Estimate						
Year	2020	2025	2030	2035	2040	2045
Population Served	13,771	14,223	14,675	15,127	15,579	16,031

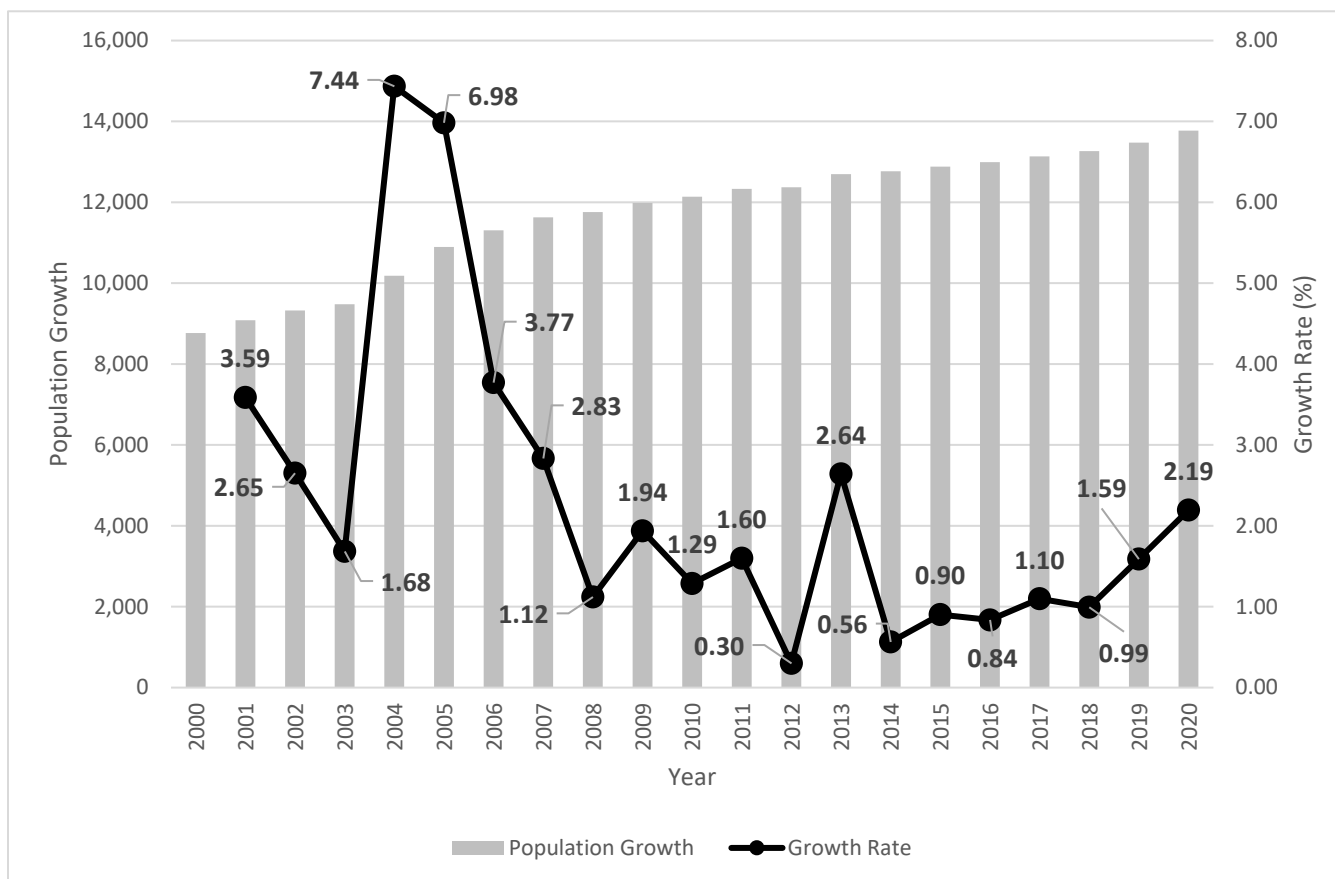
NOTES: 2020 population based on 2020 Census Data included in DWR population tool.

It should be noted that County of San Luis Obispo Growth Management Ordinance (Title 26 of the County Code) limits population growth in the Nipomo Mesa area to 1.8%. For the purpose of the UWMP update, the population estimates associated with Growth Scenario 1 was utilized throughout the report.

In addition, Figure 3-4 provides a summary of historical growth rates within the District service area only over the last twenty years (based on values from the DWR population tool) with the following average growth rates:

- 5-year growth rate of 1.3% (2015-2020)
- 10-year growth rate of 1.27% (2010-2020)
- 20-year growth rate of 2.3% (2000-2020)

Figure 3-4: Service Area 20-year Population and Growth Rate Chart



3.4.2 Other Social, Economic, and Demographic Factors

Total water use increases from year to year due to the growth within the service area. The direct relationship between growth and water consumption should increase at the same rate as population increases. Historically, low water rates and large residential lot sizes allowed for the irrigation of large landscaped areas at relatively low cost to the resident. Future water use patterns will be influenced by the implementation of rate increases, conservation outreach, and State Government Mandates.

The following data was obtained from the US Census Bureau and was the best available information to describe the demographics of the customer base within the District’s service area:

- The population includes 51% male and 49% female with 61% of the population between the ages of 18 and 65
- Approximately 49.1% of the population is White with 45% Hispanic or Latino
- The median household income was identified to be \$82,500 with 9% of the population within the poverty level

In addition to population, there are several additional factors that may affect water management and planning and are important to consider in the context of this UWMP update:

- Current development in Nipomo is mainly residential
- The County Housing Element identifies Nipomo as a community with realistic development capacity for low-income to above moderate income residential uses
- The County has a need for additional housing units and Nipomo is one of the unincorporated communities with the capacity to absorb population increases
- Development in the Nipomo area has slowed recently as a result of economic conditions and water supply constraints
- Severe Water Shortage Conditions exist in the Nipomo Mesa Management Area (NMMA)¹
- Update to Accessory Dwelling Unit (ADU) ordinance would allow more residential lots to add a secondary unit
- Availability of imported water to serve future demands

3.4.2.1 Relevant County of San Luis Obispo Land Use Ordinances

In 2015, the County passed Ordinance No. 3307, amending Title 19 of the County’s Building and Construction Ordinance relating to water conservation. Under Chapter 19.07 – Plumbing Code, section 19.07.042 – Water Conservation Provisions, all new development and, in certain cases, existing structures within the Paso Robles Groundwater Basin and Nipomo Mesa Water Conservation Area (NMWCA) are subject to the following requirements:

(d) Paso Robles Groundwater Basin and Nipomo Mesa Water Conservation Area. In addition to the requirements in Subsections a, b and c above, the requirements of Subsections d.1 through d.4 shall apply to all new development that uses water from the Paso Robles Groundwater Basin (excluding the Atascadero Sub-basin), and the Nipomo Mesa Water Conservation Area as shown on maps in this Subsection.

(1) Offset Required. Prior to issuance of a construction permit for a new structure with plumbing fixtures on property that overlies and/or uses water from the Paso Robles Groundwater Basin (excluding the Atascadero

¹ Nipomo Mesa Management Area 2020 Key Wells Index Status Statement dated June 2020 and prepared by NMMA Technical Group

Sub-basin) or the Nipomo Mesa Water Conservation Area the developer of such new structure shall obtain an Offset Clearance from the Department of Planning and Building verifying that new water use has been offset at a 1:1 ratio. Water savings must come from the same groundwater basin as the proposed new development. Applicants shall meet offset requirements by complying with Sub-section 2 or 3 below.

All development not subject to a general plan amendment or land divisions are subject to sub-section (2) County Approved Water Conservation Program or (3) Alternatives.

In 2006, the County passed Ordinance 3090, an amendment to its Title 22 Land Use Ordinances which established the NMWCA and stipulated requirements for the general plan amendments and land divisions with the NMWCA as summarized below:

Applications for general plan amendments and land divisions in the Nipomo Mesa Water Conservation Area shall include documentation regarding estimated existing and proposed nonagricultural water demand for the land division or development that could occur with the general plan amendment. If this documentation indicates that the proposed nonagricultural water demand exceeds the demand without the requested amendment or land division, the application shall include provisions for supplemental water as follows:

a. General Plan Amendments. Where the estimated nonagricultural water demand resulting from the amendment would exceed the existing nonagricultural demand, the application shall not be approved unless supplemental water to off-set the proposed development's estimated increase in nonagricultural demand has been specifically allocated for the exclusive use of the development resulting from the general plan amendment, and is available for delivery to the Nipomo Mesa Water Conservation Area.

b. Land Divisions. Where the estimated nonagricultural water demand resulting from the land division would exceed the existing nonagricultural demand, a supplemental water development fee shall be paid for each dwelling unit or dwelling unit equivalent, at the time of building permit issuance, in the amount then currently imposed by county ordinance, not to exceed thirteen thousand two hundred dollars. If the development resulting from the land division is subject to payment of supplemental water development fees to an entity other than San Luis Obispo County, the amount of these other fees shall be deducted from the county fee.

3.4.2.2 Nipomo Mesa Management Area

The District extracts groundwater from the Santa Maria River Valley Groundwater Basin and coordinates with the NMMA TG, which is the court-assigned entity responsible for assessing groundwater within the Nipomo Mesa Management Area of the Santa Maria Groundwater Basin.

Severe water shortage conditions within the Santa Maria River Valley Groundwater Basin are defined in the NMMA TG’s Annual Report (Report) as is a response plan to be implemented when this condition exists. The Report is filed with the Court overseeing the Final Judgement no later than 120 days after the end of the calendar year; for calendar year 2020 the Report is filed by April 2021. Once filed, water users subject to the Final Judgement are to take actions in accordance with the Report.

3.4.2.3 Accessory Dwelling Unit (ADU) Ordinance

On May 25, 2017, the County Board of Supervisors approved Phase I of the Accessory Dwelling Unit (ADU) Ordinance. The Phase I amendment eliminated County requirements for road surfacing and owner-occupancy for secondary dwellings. On September 12, 2019, the Planning Commission recommended approval of the amendments to the Board of Supervisors with the following changes:

- Prohibiting ADUs in the Very High Fire Hazard Severity Zone countywide
- Allowing one ADU on Agriculture and Rural Lands parcels in addition to the two primary dwellings allowed

- Adding language that an ADU is considered Residential Accessory Use for the purpose of determining land use limitations in Article 9 (Planning Area Standards) and Article 10 (Community Planning Standards)
- Allowing ADUs in front of the primary residence as long as it still meets the setback requirements
- Reduces required minimum site area to 1,750 square feet (previously 6,000 square feet) for sites served by community water and sewer facilities

3.5 Land Uses within Service Area

The current District service area encompasses 4,479 acres with approximately 4,635 parcels (3,907 land acres). **Table 3-2** shows a summary of the currently developed land uses throughout the existing service area.

Table 3-2: Developed Land Use Summary within Service Area			
Land Use Category	Number of Parcels	Gross Land Acres	Percent of Total
Agriculture	4	97	3%
Commercial Retail	73	66	2%
Commercial Retail / Office Professional	1	3	<1%
Commercial Retail / Residential Multi Family	2	8	<1%
Commercial Service	19	42	1%
Office Professional	22	11	<1%
Office Professional / Residential Multi Family	1	4	<1%
Public Facility	6	22	1%
Recreation	598	454	16%
Rural Lands	1	3	<1%
Residential Multi Family	544	98	3%
Residential Rural	201	817	28%
Residential Suburban	803	765	27%
Residential Single Family	1,982	480	17%
Residential Single Family / Office Professional	3	7	<1%
Total	4,260	2,876	100%

NOTES: Information in this table reflect current District customers only.

Figure 3-5 provides an overview of the overall land use categories within the District’s service area.

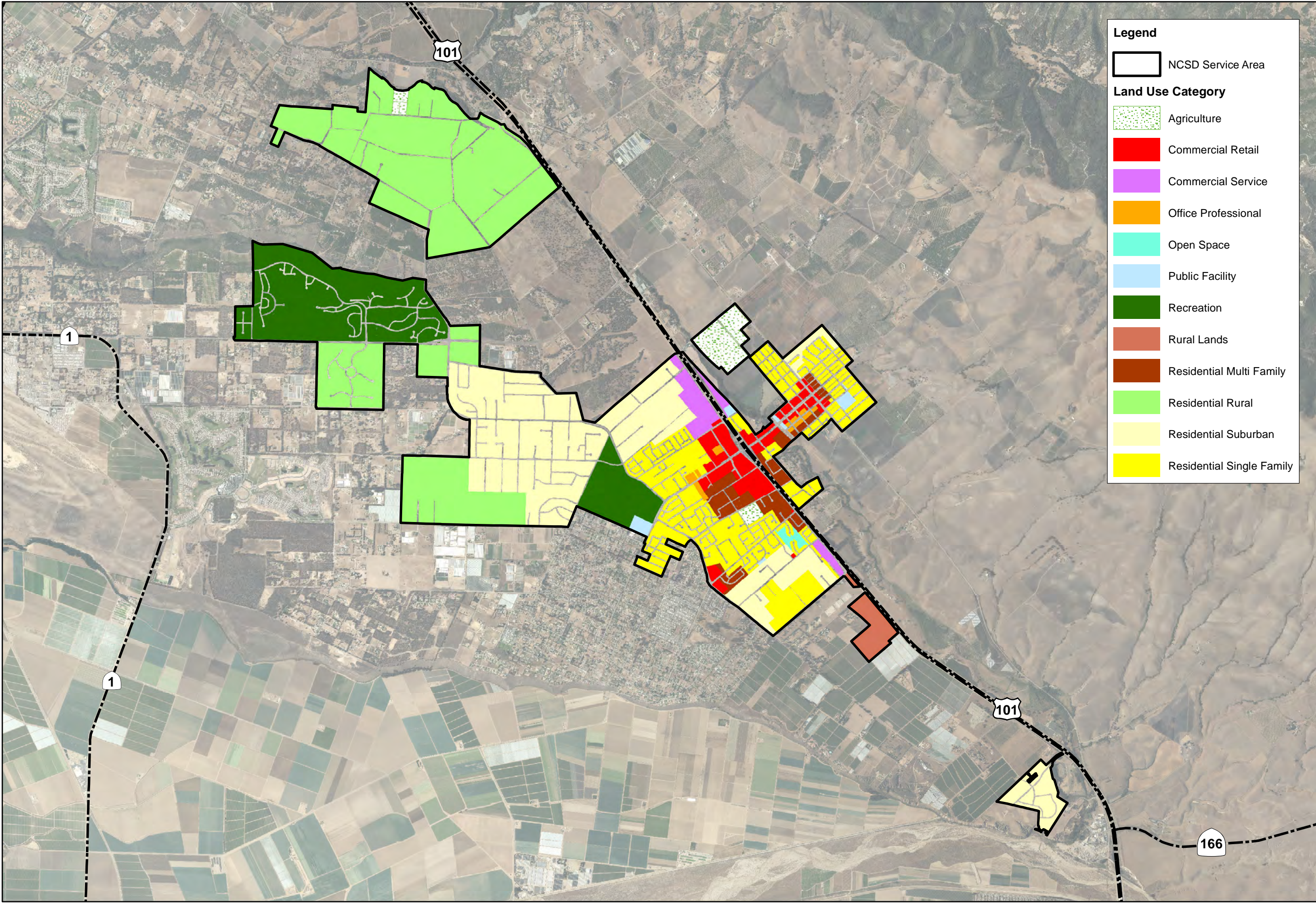


Nipomo Community Services District

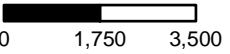
2020 Urban Water Management Plan

Figure 3-5:

Nipomo CSD Land Use Map



1 inch = 3,500 feet



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Table 3-3 shows a summary of the land uses throughout the existing service area that are not currently served by the District, but could receive water service in the future.

Table 3-3: Land Uses Not Currently Served by the District			
Land Use Category	Number of Parcels	Gross Land Acres	Percent of Total
Agriculture	1	6	1%
Commercial Retail	52	40	6%
Commercial Retail / Office Professional	2	10	2%
Commercial Retail / Residential Multi Family	2	12	2%
Commercial Service	5	19	3%
Commercial Service / Commercial Retail	2	9	1%
Office Professional	10	3	0%
Public Facility	1	1	0%
Recreation	4	9	1%
Residential Multi Family	14	9	1%
Residential Rural	69	431	67%
Residential Suburban	37	52	8%
Residential Single Family	60	43	7%
Total	259	646	100%

In addition, there are approximately 117 parcels covering 385 acres that are not developable (drainage basins, parking areas, well site parcel, etc) and will not require water service by the District in the future.

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CHAPTER 4 WATER USE CHARACTERIZATION

New Requirements for 2020 Update

Per Water Code, the following new requirements are necessary for this chapter of the UWMP 2020 update.

- Suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land uses information for projecting water use in five-year increments, up to the year 2045.
- Suppliers shall provide a simple lay description of their projected water use for the foreseeable future.
- Suppliers shall provide quantified distribution system losses for each of the five preceding years and whether or not the state standard was met.
- Both Wholesale and Retail Suppliers shall include a DRA for a drought period that lasts five consecutive water years, starting from the year following the assessment, which would be 2021 for this round of UWMPs (see Chapter 7). The DRA requires a comparison of water supplies with total projected water use. Therefore, the Supplier must produce a projected water use for the years 2021 through 2025 as part of the water use projections, up to the year 2040.
- Both Wholesale and Retail Suppliers will have to conduct an annual water supply and demand assessment on or before July 1 of each year, starting in 2022. The annual assessment will include current year unconstrained demand. Suppliers are encouraged to consider unconstrained demand as the expected water use in the upcoming year, based on recent water use, and before any projected response actions a Supplier may trigger under its Water Shortage Contingency Plan (see Chapter 8).

4.1 Non-Potable Versus Potable Water Use

Recycled water is addressed comprehensively in Section 6.5, however a summary of recycled water demand is included in **Table 4-3**.

4.2 Past, Current, and Projected Water Use by Sector

In this section current and projected water usage is addressed. **Table 4-3** displays water use in five-year increments from 2020 to 2045.

4.2.1 Water Use Sectors Listed in Water Code

The District's service area includes the following water demand sectors listed in the California Water Code applicable to the UWMP update:

- Single Family: Single family detached dwellings
- Multi-Family: Apartments, condominiums, town houses, duplexes and trailer parks
- Commercial: Retail establishments, office buildings, laundries, schools, prisons, hospitals, dormitories, nursing homes, hotels, churches, campgrounds
- Institutional and governmental: Tracked under Commercial customer class
- Landscape: Parks, play fields, cemeteries, median strips, golf courses
- Agricultural
- Distribution system water loss
- Sales to other agencies (projected to start July 2025)

The following sectors are not applicable to the District’s UWMP update:

- Industrial
- Saline water intrusion barriers, groundwater recharge, or conjunctive use

4.2.2 Water Use Sectors in Addition to Those Listed in Water Code

To provide clarity, the following sectors are not currently applicable to the District’s current demands in this UWMP update:

- Exchanges
- Surface Water Augmentation
- Wetlands or Wildlife Habitat

For the District’s imported water source, as described in Section 6.2.1, the District, Golden State Water Company, and Woodlands Mutual Water Company are required by Court Order to purchase water through the Nipomo Supplemental Water Project (NWSP) per the Supplemental Water Management and Groundwater Replenishment Agreement (Replenishment Agreement) to offset groundwater pumping. Supplemental water to Golden State Water Company (GSWC) and Woodlands Mutual Water Company (WMWC) has been included as a water “Sales to Other Agencies” for future demand projections (Table 4-2).

4.2.3 Past Water Use

Table 4-0 provides historical water usage by customer type from 2015 through 2019.

Table 4-0: Retail: Historical Water Usage						
Use Type	Water Use (AF)					% of Total
	2015	2016	2017	2018	2019	
Single Family	1,312	1,234	1,262	1,316	1,215	66
Multi-Family	151	121	116	111	112	6
Commercial	85	88	86	91	90	5
Landscape Irrigation	238	222	251	252	231	13
Other	7	5	1	3	15	0
Agricultural Irrigation	17	19	20	17	7	1
Losses	138	147	203	171	198	9
Total (AF)	1,948	1,837	1,940	1,961	1,868	100

NOTES: Values represent metered use as reported to DWR.

4.2.4 Distribution System Water Loss

Table 4-2 includes projected water losses, reported in five-year increments for the next 20 years. Section 4.2.6 contains Table 4-4 which identifies distribution system water losses for each of the five years preceding the plan update.

4.2.5 Current Water Use

Table 4-1 provides an overview of the existing water demands by use type within the District’s service area for calendar year 2020.

Table 4-1: Retail: Demands for Potable Water - Actual		
Use Type	2020 Actual	
	Level of Treatment When Delivered	Volume (AF)
Single Family	Drinking Water	1,326
Multi-Family	Drinking Water	122
Commercial	Drinking Water	76
Landscape	Drinking Water	271
Other	Drinking Water	4
Agricultural Irrigation	Drinking Water	12
Losses	Drinking Water	237
	TOTAL (AF)	2,048
NOTES:		
1. Demands = Annual water consumption by customer type as shown above.		
2. Values represent use as reported to DWR for 2020.		

4.2.6 Projected Water Use

Based on the 2015 UWMP, the District is required to comply with an urban water use target of 184 gallons per capita per day (gpcd) by 2020. **Table 4-1a** provides a summary of historical gpcd within the service area and years of mandatory conservation with requested conservation level (% reduction).

Table 4-1a: Historical Use Rates (GPCD)						
Year	Service Area Population	Water Production (AFY)	Gross Water Use (gpcd)	Meter Residential Use (AFY)	Residential Water Use (gpcd)	Mandatory Conservation (%)
2010	12,140	2,367	174	1,899	140	-
2011	12,334	2,488	180	1,868	135	-
2012	12,370	2,473	178	1,952	141	-
2013	12,697	2,646	186	1,996	140	-
2014	12,769	2,310	161	1,868	131	28
2015	12,884	1,948	135	1,463	101	28
2016	12,992	1,837	126	1,356	93	28
2017	13,134	1,940	132	1,378	94	23
2018	13,265	1,961	132	1,427	96	-
2019	13,476	1,868	124	1,327	88	-
2020	13,771	2,048	133	1,448	94	-
5-Year Average			129		94	
10-Year Average			149		112	
NOTES:						
1. Water Production = Pumped groundwater from the Santa Maria Groundwater Basin and supplemental imported water from the City of Santa Maria through the Nipomo Supplemental Water Project						
2. Potable Demand based on historical production values provided by the District. The 5-year average includes 2016-2020 and 10-year average includes 2011-2020.						

Annual water demand within the service area was assumed to increase in proportion to the population projected in **Table 3-1**. The demand projections in **Table 4-2** are based on population projections multiplied by the year 2020 gpcd of 133 and aggregated for each use type per the customer type percentages in **Table 4-0**. **Table 4-2** also includes water sales to WMWC and GSWC starting in 2025. The following equation was used to determine demand projections:

$$Demands = Population \times 133 \text{ GPCD} \times \text{Use Type Percentage}$$

Table 4-2: Retail: Demands for Potable Water - Projected					
Use Type	Projected Water Use (AF)				
	2025	2030	2035	2040	2045
Single Family	1,406	1,450	1,495	1,540	1,584
Multi-Family	136	140	144	149	153
Commercial	97	100	104	107	110
Landscape	265	273	282	290	299
Other	7	7	7	7	8
Agricultural Irrigation	18	18	19	20	20
Losses	190	196	202	208	214
District Subtotal (AF)	2,118	2,186	2,253	2,320	2,388
Annexations Under Review	176	352	352	352	352
Subtotal (AF)	2,294	2,538	2,605	2,672	2,740
Sales to Other Agencies	833	833	833	833	833
TOTAL (AF)	3,127	3,371	3,438	3,505	3,573
NOTES: District subtotal demand includes existing District demand and future infill development (parcels with reserved District capacity, parcels currently served by private wells, and development of vacant parcels). It was assumed that infill development would occur from 2025 through 2045 within the existing service area					

Table 4-3 summarizes projected water demands through 2045.

Table 4-3: Retail: Total Water Demands (AF)						
	2020	2025	2030	2035	2040	2045
District Retail Water Demand	2,048	2,118	2,186	2,253	2,320	2,388
Annexations Under Review	0	176	352	352	352	352
District Wholesale Water Demand	0	833	833	833	833	833
Total Water Demand (AF)	2,048	3,127	3,371	3,438	3,505	3,573

Table 4-4 summarizes the distribution system water losses for each of the five years preceding the plan update.

Table 4-4: Retail: 12 Month Water Loss Audit Reporting	
Reporting Period Start Date	Volume of Water Loss (AF)
01/2015	113
01/2016	175
01/2017	239
01/2018	256
01/2019	231
NOTES: Water loss based on AWWA worksheet values.	

4.2.7 Characteristic Five-Year Water Use

Future demands and the characteristic five-year water use represent unconstrained demands as shown in Tables 4-2, 4-3, and 4-4a.

Table 4-4a: Characteristic Five-Year Water Use					
Demand (AFY)	2021	2022	2023	2024	2025
District Retail Water Demand	2062	2076	2090	2104	2118
Annexations Under Review	0	0	0	0	176
District Wholesale Water Demand	0	0	0	0	833

4.2.8 Worksheets and Reporting Tables

All required worksheets and reporting tables have been provided throughout this Chapter.

4.3 Water Use for Lower Income Households

The District’s water use projections through 2045 include water demands for lower income single-family and multi-family households. The total number of lower income households within the District’s service area was estimated based on the County of San Luis Obispo’s General Plan, a review of median household income statistics provided by the U.S. Census Bureau’s American FactFinder, and a review of GIS maps of Disadvantaged Communities (DACs), including block groups, tracts, and places, provided by DWR. The County of San Luis Obispo’s Housing Element for 2014-2019 reported 547 very low and low-income housing units. The water need for low-income housing units is approximately 0.44 AFY, as shown in Table 4-6. Since there is approximately one low-income unit projected to be needed in the District’s service area, it is not possible to separate the demand into multi-family and single-family residential projected water use. The projected water demands for lower income households were included in the District’s total projected water demands, as indicated in Table 4-5.

Table 4-5 Retail Only: Inclusion in Water Use Projections	
Are Future Water Savings Included in Projections?	No
If "Yes" to above, state the section/page where citations of the codes, are found.	-
Are Lower Income Residential Demands Included In Projections?	Yes

Section 10631.1 of the California Water Code requires 2020 UWMPs to include projected water use for lower income single-family and multi-family residential households. Lower Income is defined by Health and Safety Code Section 50079.5 as 80% of County median income or less. The projections are meant to assist water purveyors in complying with the requirements of Government Code Section 65589.7, which requires water purveyors to “grant a priority for the provision of [water and sewer] services to proposed developments that include housing units affordable to lower income households.”

Low-income households in the Nipomo area are estimated from the “County of San Luis Obispo General Plan – Housing Element 2014-2019”. Estimated low-income residential demands are summarized in **Table 4-6**.

Table 4-6: Low-income Residential Demand Projections	
Portion of unincorporated County overlaid by NCSO (1)	0.22%
# of very low and low-income housing units needed for 2014-2019 for the unincorporated County (2)	547
NCSO's share of very low and low-income housing units needed 2014-2019 (3)	1.20
Single-family residential water use factor (afy/connection) (4)	0.36
Water Needed for low income housing units, 2014-2019 (afy) (5)	0.44
(1) Calculated by dividing NCSO's service area by the total unincorporated area of San Luis Obispo County. (2) Source: Housing Element 2014-2019 – County of San Luis Obispo General Plan. (3) The portion of NCSO overlaying the unincorporated County applied to the number of very low and low- income housing units needed for the total unincorporated County. (4) Calculated by dividing the single-family residential deliveries by the single-family residential connections for 2015. (5) Since there is approximately one low-income unit projected to be needed in NCSO's service area for 2014-2019, it is not possible to separate the demand into multi-family and single-family residential projected water use.	

4.4 Climate Change Considerations

The District has not conducted an official climate change vulnerability or risk assessment for the existing water service area. However, climate change considerations for the District's groundwater supply are incorporated into the Nipomo Mesa Management Area Annual Reports and Chapter 7 of the 13th Annual Report has been included in Appendix A.

CHAPTER 5 SBX7-7 BASELINES, TARGETS, AND 2020 COMPLIANCE

With the adoption of the Water Conservation Act of 2009, also known as the SB X7-7, the State is required to set a goal of reducing urban water use by 20 percent by the year 2020. Each retail urban water supplier must determine baseline water use during their baseline period and also target water use for the years 2020 and 2025 in order to help the State achieve the 20 percent reduction. The District has updated their baseline water usage and goal of reducing urban water use by 20 percent by the year 2020.

New Requirements for 2020 Update

Per the Water Code there are no new requirements for this chapter of the UWMP 2020 update.

5.1 Guidance for Wholesale Suppliers

5.2 SB X7-7 Forms and Summary Tables

5.2.1 SB X7-7 Verification Form (Baselines and Targets)

The District's SB X7-7 Verification Form submitted for the 2015 UWMP has been included as a reference document in the 2020 UWMP as Appendix C.

5.2.2 SB X7-7 2020 Compliance Form

The District has completed the 2020 SB X7-7 Compliance Form and is included as Appendix D.

5.2.3 Submittal Tables 5-1 and 5-2

Submittal **Table 5-1** and **Table 5-2** from the 2020 SB X7-7 Compliance are included in Section 5.5.

5.2.4 Regional UWMP/Regional Alliance

The District has developed an UWMP that reports solely on its service area. The individual UWMP addresses all requirements of the CWC. The District has notified and coordinated with appropriate regional agencies and constituents during the development of this UWMP update.

5.3 Baseline and Target Calculations for 2020 UWMPs

Suppliers that have submitted a 2015 UWMP with the SB X7-7 Verification Form and have not had a change to their service area will not need to recalculate their baselines and targets in their 2020 UWMPs.

5.3.1 Supplier Submitted 2015 UWMP, No Change to Service Area

The District submitted a 2015 UWMP and has expanded the service area based on new construction of a residential development. The expansion was solely due to new construction, therefore, there was no need to recalculate baselines and targets for this update.

5.3.2 Supplier Did Not Submit 2015 UWMP

This topic does not apply to the District.

5.3.3 Supplier Newly Subject to UWMP Requirements

This topic does not apply to the District.

5.3.4 Distribution Area Expansion

The District’s service area has expanded based on new construction of a residential development. The expansion was solely due to new construction, therefore, there is no need to recalculate baselines and targets for this update.

5.3.5 Distribution Area Contraction

This topic does not apply to the District.

5.3.6 Large Partial Customers Become Whole Customers

This topic does not apply to the District.

5.4 Methods for Calculating Population and Gross Water Use

5.4.1 Service Area Population

Since the District’s service area is not a City limit or Census designated place the DWR population tool and the District’s service area boundaries for Census years 1990, 2000, and 2010 were used to estimate historical population.

5.4.2 Gross Water Use

Historical gross water use for this UWMP used information from the District’s annual DWR Public Water System Statistics reports (DWR 38) from 1999-2008.

5.5 2020 Compliance Daily Per-Capita Water Use (GPCD)

The baseline daily per capita water use for the District for this UWMP update is shown in **Table 5-1**.

Table 5-1 Baselines and Targets Summary					
Baseline Period	Start Year	End Year	Average Baseline GPCD*	2015 Interim Target *	Confirmed 2020 Target*
10-15 year	1999	2008	232	208	184
5 Year	2004	2008	224		
*All values are in Gallons per Capita per Day (GPCD)					

The District has not applied any adjustments to the 2020 gross water use for this UWMP update.

Table 5-2: 2020 Compliance						
Actual 2020 GPCD	Optional Adjustments to 2020 GPCD Enter "0" for adjustments not used <i>From Methodology 8</i>					2020 GPCD <i>(Adjusted if applicable)</i>
	Extraordinary Events	Economic Adjustment	Weather Normalization	TOTAL Adjustments	Adjusted 2020 GPCD	
133	0	0	0	0	133	133
*All values are in Gallons per Capita per Day (GPCD)						

5.5.1 2020 Adjustments for Factors Outside of Supplier's Control

The District has not included any adjustments (including Extraordinary Institutional Water Use, Economic Adjustment (CI), or Weather Normalization) for their 2020 GPCD compliance.

5.5.2 Special Situations

The District does not have any special situations that requires a recalculation of the baselines and 2020 Target in the 2020 UWMP.

5.5.3 If Supplier Does Not Meet 2020 Target

As shown in **Table 5-2**, the District has met the 2020 GPCD compliance target.

5.6 Regional Alliance

The District has developed an UWMP that reports solely on its service area. The individual UWMP addresses all requirements of the CWC. The District has notified and coordinated with appropriate regional agencies and constituents during the development of this UWMP update.

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CHAPTER 6 WATER SUPPLY CHARACTERIZATION

New Requirements for 2020 Update

Per Water Code, the following new requirements are necessary for this chapter of the UWMP 2020 update.

- The new requirements for a water supply analysis are largely in the application of that analysis to the new DRA, WSCP, and consideration of climate change in future projections.
- The conclusions drawn from the water supply characterization integrate into a specific understanding of a Supplier’s new drought risk in the DRA and inform the management and mitigation actions a Supplier must address in the newly required WSCP, along with consideration of climate change and coordination with land use and planning authorities for future projections. For example, an analysis that concludes that a water supply portfolio is reliable under all conditions conceivable may have fewer supply augmentation actions or demand management actions in a WSCP.
- Water supply analysis conclusions translate into a realistic DRA and implementable actions listed in the WSCP in the event of water shortage conditions.

6.1 Water Supply Analysis Overview

The District’s water supply sources include groundwater from the Santa Maria River Valley Groundwater Basin and imported water from the Nipomo Supplemental Water Project. The following sections describe these sources.

6.2 Water Supply Characterization

6.2.1 Purchased or Imported Water

Groundwater was the sole source of the District’s water supply until 2015, when the District began importing water from the City as part of the NSWP. The NSWP included the design and construction of the following infrastructure to deliver supplemental water to the District from the City’s existing water distribution system:

- Approximately 5,000 feet of 24-inch transmission pipeline located within the City
- Flow control and meter station located within the City
- Santa Maria River crossing including 2,600 feet of 24-inch pipeline
- Joshua Road Pump Station with four 800 gpm pumps with onsite generator and 0.5 MG storage tank
- Approximately 1,700 feet of 24-inch transmission pipeline from the Joshua Road Pump Station to the District’s existing distribution system
- Approximately 12,000 feet of 16-inch transmission pipeline located within the District’s service area

The District executed the Wholesale Water Supply Agreement (Wholesale Agreement) with the City on May 7, 2013, which is included as Appendix E. Supplemental Water consists of a “municipal mix” of both surface water from the State Water Project and groundwater from the City of Santa Maria. The Wholesale Agreement dictates a minimum water delivery to the District of 2,500 AFY by fiscal year 2025-26 with a maximum allowable delivery of 6,200 AFY. It should be noted that the existing Santa Maria River crossing, pump station and portion of transmission pipeline were designed to deliver 6,200 AFY. However, pump replacements and additional pipelines would be required to deliver the full 6,200 AFY to the District service area. While the District is obligated to meet the minimum delivery from the Wholesale Agreement, the District will continue operating the groundwater wells to serve existing and future demands. **Table 6-0a** outlines the required Wholesale Agreement water delivery schedule.

AFY	Effective Delivery Date
645	7/1/2015
800	7/1/2016
1,000	7/1/2020
2,500	7/1/2025
6,200	Maximum Capacity

These deliveries also include delivery to Woodlands Mutual Water Company (WMWC), Golden State Water Company (GSWC), and Golden State Water Company Cypress Ridge (GSWCCR). **Table 6-0b** summarizes the required NSWP purchase allocations for the District, GSWC, and Woodlands Mutual Water Company (WMWC) per the Supplemental Water Management and Groundwater Replenishment Agreement (Replenishment Agreement) as of October 16, 2015. The Replenishment Agreement is included as Appendix F.

Water Purveyor	Percent Allocation	NSWP (1000 AFY)	NSWP (2500 AFY)
NCSD	66.68	667	1,667
NCSD (as needed)	-	-	500
GSWC	8.33	83	208
GSWCCR	8.33	83	208
WMWC	16.66	167	417
Total	100.00	1,000	3,000

Through this supply source, the District has a maximum supply capacity of 2,167 AFY (including the remaining 500 AFY of NSWP water to serve new development demands). This excludes the 833 AFY allocation for WMWC and GSWC. Based on the existing infrastructure of the NSWP and contractual obligations, between the District and the City, this water supply source is considered 100% reliable and available during normal, single, and multiple dry year conditions.

6.2.2 Groundwater

The District extracts groundwater from the Santa Maria River Valley Groundwater Basin. The Nipomo Mesa Management Area Technical Group (NMMA TG), which is the court-assigned entity responsible for assessment of groundwater within the Nipomo Mesa Management Area of the Santa Maria Groundwater Basin, declared a Stage IV water severity condition for subbasin purveyors. This condition results in voluntary groundwater reduction goal of 1,267 AFY for the District. The District’s past groundwater production in the Santa Maria Valley Groundwater Basin over the past five years is shown in **Table 6-1** (Section 6.2.2.4). The District owns five wells, 4 of which are active, and one currently being rehabilitated. These five well have a combined pumping capacity of 3,100 gallons per minute (gpm) or 5,000 AFY. However, for planning purposes 2,100 gpm is available assuming the largest well is out of service.

6.2.2.1 Basin Description

Underlying the District is portion of Santa Maria River Valley Groundwater Basin (Basin 3-12 per DWR Bulletin 118). The Santa Maria River Valley Groundwater Basin covers about 288 square miles. It is bordered by the Santa Lucia mountain ranges to the north, the Casmalia-Solomon Hills to the south, the San Rafael Mountains to the east, and the Pacific Ocean to the west. The geologic makeup of the Santa Maria River Valley Groundwater Basin is composed of alluvial deposits covers underlying consolidated rock which usually yields small quantities of water. Most of the water is contained in the alluvial sediments. Recharge of the Santa Maria River Valley Groundwater Basin occurs in four main ways: rainfall percolation, river bed recharge, subsurface inflows, and return flows. As mentioned in the NMMA TG Annual Report, the long-term average precipitation from 1958 to 2020 is 15.65 inches.

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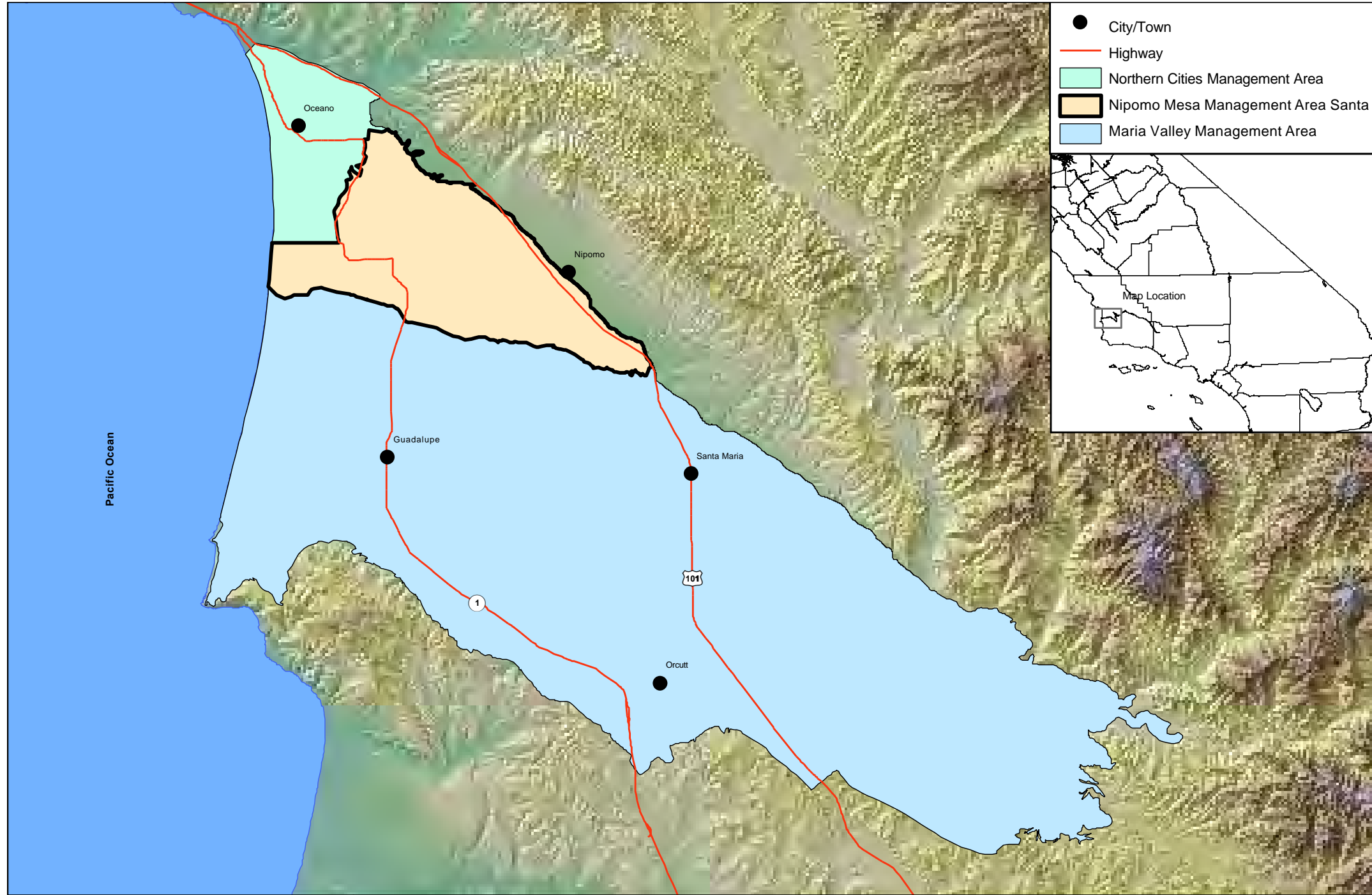


Nipomo Community Services District

2020 Urban Water Management Plan

Figure 6-1:

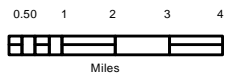
Santa Maria Groundwater Basin and Management Areas



- City/Town
- Highway
- Northern Cities Management Area
- Nipomo Mesa Management Area Santa
- Maria Valley Management Area



NOTES:
 Coordinate System: UTM Zone 10N Horizontal
 Datum: NAD 83



NMMA
 Technical
 Group

DATE: 4/5/12 BY: B. Newton

Notes:
 Figure 1-1. Santa Maria Groundwater Basin and Management Areas from the Nipomo Mesa Management Area 12th Annual Report – Calendar Year 2019 (Submitted April 2020).



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6.2.2.2 Groundwater Management

The Santa Maria River Valley Groundwater Basin has been the subject of ongoing litigation since 1997 and is an adjudicated basin. **Figure 6-1** provides an overview of the adjudicated basin boundary. The District signed a June 30, 2005 Stipulation in the case that was ultimately approved by the Court and incorporated into the final judgment ("Final Judgment") that was filed on January 25, 2008. The Judgment is included in Appendix G. The Court has the jurisdiction to make orders to enforce the rights of the parties outlined in the judgment. The Stipulation has five primary effects:

- 1) For purposes of management only, it divides the Santa Maria River Valley Groundwater Basin into three separate administrative management sub-areas: the Northern Cities Management Area (NCMA), the Nipomo Mesa Management Area (NMMA), and the Santa Maria Valley Management Area (SMVMA).
- 2) It establishes the NMMA TG that includes representatives appointed by the District, Golden State Water Company (GSWC) formally Southern California Water Company, ConocoPhillips, Woodlands Mutual Water Company (WMWC) and an agricultural overlying owner that signed the Stipulation.
- 3) It provides that a minimum of 2,500 AFY of supplemental water from the City of Santa Maria with an additional 500 AFY for growth for NCSO be transmitted to the NMMA by the District with funding participation from Woodlands Mutual Water Company and Golden State Water Company.
- 4) It contains specific provisions with regard to groundwater conditions, development of groundwater monitoring programs, and development of plans and programs to respond to Potentially Severe and Severe Water Shortage Conditions. The NMMA TG developed criteria to track groundwater levels and quality throughout the basin using the Key Wells Index (KWI), which collect data from eight selected wells distributed throughout the management area.
- 5) It contains provisions that each management area prepare an annual report to summarize monitoring results, water balance data and threats to groundwater supplies. The NMMA TG filed its 2020 annual report with the Superior Court in April 2021.

The Nipomo Mesa Management Area (NMMA) is an administrative management sub-area of the Santa Maria River Valley Groundwater Basin. The NMMA is bordered on the north by the Northern Cities Management Area (NCMA) and on the south by the Santa Maria Valley Management Area (SMVMA).

The NMMA covers approximately 33 square miles or 21,100 acres, which accounts for approximately 13 percent of the Santa Maria River Valley Groundwater Basin. The geology underlying the NMMA is comprised of 150 to 250 feet thick sand dune deposits overlying the Paso Robles Formation, the primary groundwater aquifer. There are no significant streams within the NMMA and the sand dune deposits are highly porous and permeable. Recharge to the aquifer only occurs through precipitation, agricultural and urban return flows, and subsurface inflows.

The District has a current voluntary groundwater reduction goal of 1,267 AFY. The availability of this source is governed by the water severity conditions identified by the NMMA based on groundwater levels through the Key Wells Index as described below:

The Nipomo Mesa Management Area Technical Group ("NMMA TG") established groundwater level and groundwater quality criteria to track overall basin conditions within the NMMA. The criteria include the Key Wells Index ("KWI"), which combines groundwater level data from eight selected wells distributed throughout the inland portion of the Management Area. Water level measurements are made in NMMA groundwater wells representing the basin as a whole and are used to compute the KWI during the spring of each year.

The TG uses the KWI to help identify trends in basin groundwater levels and has compiled KWI data for the period from 1975 to the present. Groundwater levels have changed in the NMMA over time, and in the last seven years are at levels that are lower than at any other time from 1975

One of the NMMA TG's court-required duties is to determine when conditions of "Potentially Severe Water Shortage Conditions" or "Severe Water Shortage Conditions" have been reached. The 2020 KWI value (11.7 feet mean sea level [ft msl]) has decreased from the previous year (15.9 ft msl) but remains within the Severe Water Shortage Conditions (below 16.5 ft msl). This is the sixth consecutive year the KWI value is in Severe Water Shortage Conditions, which signifies a Stage IV NMMA Water Shortage Response.²

The following lists the NMMA Water Shortage Response Stages (Endorsed by NMMA Technical Group April 14, 2014), groundwater supply conditions, and response actions by the District and other purveyors within the NMMA:

- Stage I: Always in place
- Voluntary measures and outreach
- Stage II: Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan
- Goal of voluntary 20% reduction in groundwater production
- Stage III: Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.
- Goal of voluntary 30% reduction in groundwater production
- Stage IV: Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion.
- Goal of voluntary 50% reduction in groundwater production
- Stage V: Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion.
- Goal of voluntary 60% reduction in groundwater production

To achieve the voluntary reduction goals (described above), the District Board adopted Resolution 2014-1335 "Water Shortage Response and Management Plan" (included as Appendix H) during the April 2014 board meeting. Voluntary reduction goals for the District were based on groundwater production for calendar years 2009-2013 with average production of 2,533 AFY.

The NMMA TG has identified the current water shortage conditions within the Santa Maria Valley Groundwater Basin as "Severe Water Shortage Conditions." This signifies a Stage IV NMMA Water Shortage Response in which the District would have a voluntary groundwater reduction goal of 1,267 AFY or 50% of 2,533 AFY. However, the District's voluntary pumping limit from the basin is variable depending on the NMMA TG defined drought levels. **Table 6-0c** summarizes the District's voluntary groundwater reduction goals per NMMA TG defined drought levels.

NMMA Defined Drought Levels	Groundwater Reduction Goal (%)	Available Groundwater (AF)
Stage 1	0	2,533
Stage 2	20	2,027
Stage 3	30	1,733
Stage 4	50	1,267
Stage 5	60	1,013

²Nipomo Mesa Management Area Technical Group - Nipomo Mesa Management Area 2020 Key Wells Index Severe Water Shortage Conditions June 25, 2020.

However, for future groundwater supply availability for this UWMP update, it was assumed that the District would have a maximum groundwater pumping limit of 2,533 AFY from the Santa Maria Valley Groundwater Basin.

6.2.2.3 Overdraft Conditions

The Santa Maria River Valley Groundwater Basin is an adjudicated basin as described in Section 6.1. Therefore, overdrafting conditions do not apply.

6.2.2.4 Past Five Years

Table 6-1 provides an overview of the groundwater sources and the annual quantity pumped to meet the demands of the District customers from 2016 to 2020.

Table 6-1: Retail: Groundwater Volume Pumped						
☐	Supplier does not pump groundwater. The supplier will not complete the table below.					
Groundwater Type	Location or Basin Name	2016	2017	2018	2019	2020
Alluvial Basin	Santa Maria Groundwater Basin	1,078	999	1,003	901	1,007
TOTAL (AF)		1,078	999	1,003	901	1,007

Through this supply source, the District has self-allocated 2,533 AFY with a maximum pumping capacity of 2,100 gpm or 3,387 AFY. With several active wells and current operational practices this water supply source is considered 100% reliable and available during normal, single and multiple dry year conditions.

6.2.3 Surface Water

The District does not have a self-supplied surface water supply source, but does receive a blend of imported surface water and groundwater (“municipal mix”) from the City of Santa Maria as part of the NSWP as described in Section 6.1 and summarized in Tables 6-8 and 6-9.

6.2.4 Stormwater

The District does not currently supplement water supply demands through the capture and reuse of stormwater due to the underlying geology of the Nipomo Mesa.

6.2.5 Wastewater and Recycled Water

6.2.5.1 Recycled Water Coordination

The District currently operates two wastewater treatment facilities within the water service area. The Southland WWTF collects and treats wastewater from the majority of the District and discharges treated effluent back into the Santa Maria River Valley Groundwater Basin via percolation ponds. The Blacklake WRF treats wastewater through secondary treatment. The treated plant’s effluent is discharged to the water hazards at Blacklake Golf Course. Water is extracted from the water hazards as necessary and discharged to a spray field. Blacklake WRF operates under Reclamation Orders from Regional Water Quality Control Board.

6.2.5.2 Wastewater Collection, Treatment, and Disposal

The District operates two wastewater collection systems within the water service area. The Town System collects wastewater on the easterly side of the service area from Orchard Road to Cedarwood Street and on the southerly side of the service area from Juniper Street to Southland Street. The Blacklake System collects wastewater from the Blacklake community north of Willow Road. However, it should be noted that the Blacklake WRF is planned to be decommissioned in 2024 and replaced with a new lift station and force main, which will convey wastewater to the Town System for treatment and disposal. Table 6-2 provides an overview of the quantity of wastewater collected within the District water service area.

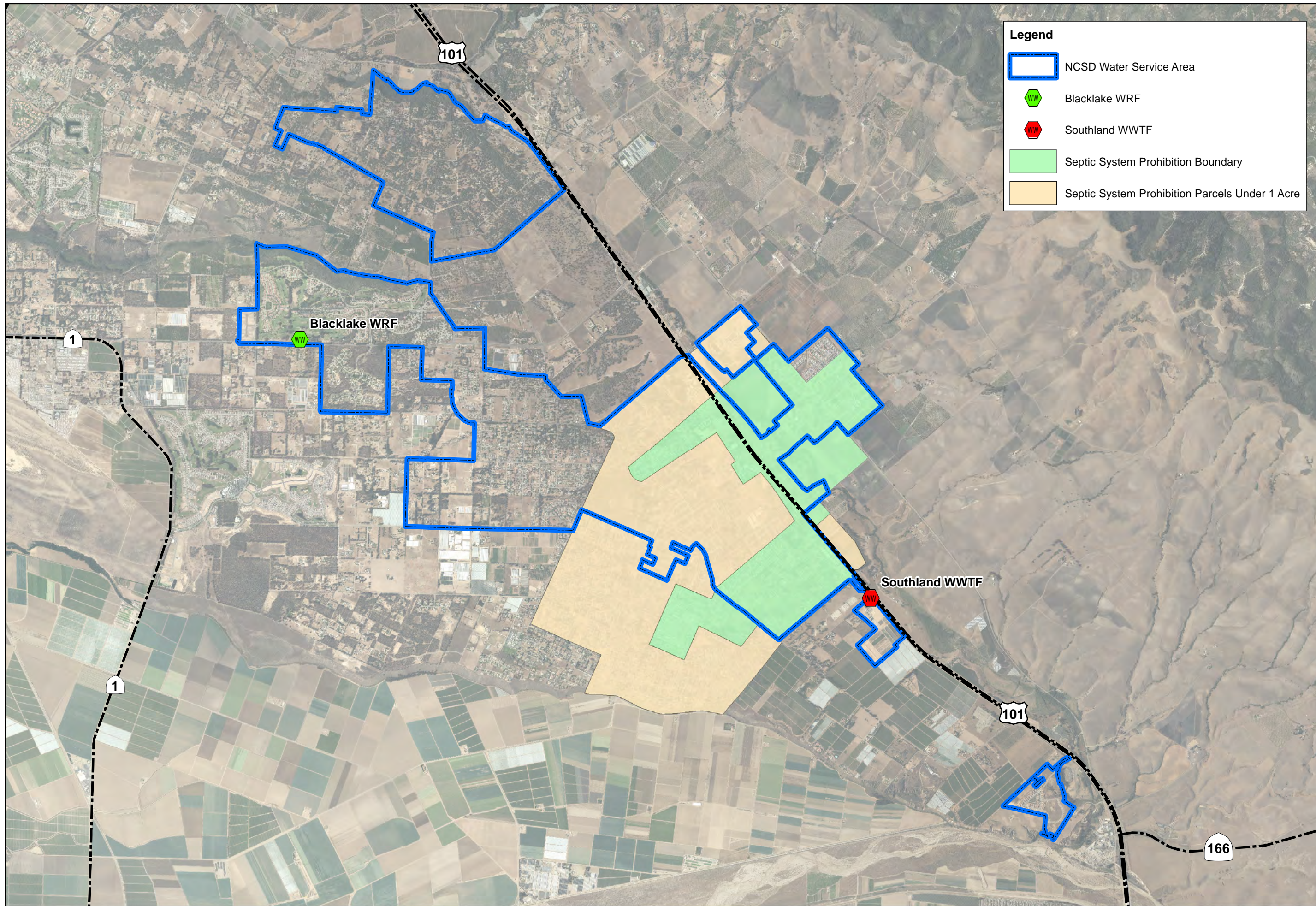
Table 6-2 Retail: Wastewater Collected Within Service Area in 2020						
<input type="checkbox"/> There is no wastewater collection system. The supplier will not complete the table below.						
Wastewater Collection			Recipient of Collected Wastewater			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area in 2020 (AF)	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area?	Is WWTP Operation Contracted to a Third Party?
Nipomo CSD	Metered	554	Nipomo CSD	Southland WWTF	Yes	No
Nipomo CSD	Metered	52	Nipomo CSD	Blacklake WRF	Yes	No
Total Wastewater Collected from Service Area in 2020 (AF):		606				

Table 6-3 provides an overview of the quantity of wastewater treated and discharged within the District’s water service area.

Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2020								
<input type="checkbox"/> No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.								
WWTP Name	Discharge Location Name	Discharge Location Description	Method of Disposal	WWTP Outside the Service Area?	Treatment Level	2020 Volumes (AF)		
						WW Treated	Discharged Treated WW	Recycled Within Service Area
Southland WWTF	Infiltration Ponds onsite	Southland WWTF #R3-2012-0003	Perc. ponds	No	Secondary, Undisinfected	554	554	0
Blacklake WRF	Treated effluent storage ponds onsite	Treated effluent storage ponds onsite	Other	No	Secondary, Disinfected - 23	52	52	0
Total (AF)						606	606	0

It should be noted that a portion of the District water service area is not sewered and utilizes onsite septic systems. Figure 6-2 provides an overview of the existing septic system prohibition boundary and location of the two existing wastewater treatment facilities.

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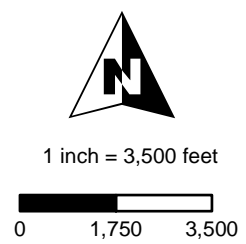
Legend

- NCSD Water Service Area
- Blacklake WRF
- Southland WWTF
- Septic System Prohibition Boundary
- Septic System Prohibition Parcels Under 1 Acre



Nipomo Community Services District
2020 Urban Water Management Plan

Figure 6-2:
 Septic System Prohibition Boundary



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6.2.5.3 Recycled Water System Description

The District owns and operates the Blacklake WRF, as described in Section 6.2.5.2. Treated water use within the District water service area is limited to the treated water discharged to the Blacklake Golf Course spray field. **Table 6-4** provides a summary of current and projected recycled water use within the golf course.

However, as stated in Section 6.2.5.1 the Southland WWTF collects and treats wastewater from the majority of the District and discharges treated effluent back into the Santa Maria River Valley Groundwater Basin via percolation ponds. Per the Final Judgement for the Santa Maria River Valley Groundwater Basin this “return flow” is credited towards the District’s overall consumptive use. Sections 5.6 and 5.7 of the current NMMA annual report³ states the following:

Wastewater discharges include wastewater effluent discharged by the six wastewater treatment facilities located within the NMMA, and ocean discharge of treated wastewater from the P66 industrial facility. In addition, discharges are estimated for septic tanks where centralized sewer service is not provided. The WWTFs include the Southland WWTF, the Blacklake WWTF, the Cypress Ridge WWTF, the Woodlands WWTF, and La Serena and Osage (GSWC). The Southland WWTF discharges treated wastewater into infiltration basins (see Section 3.1.11 Wastewater Discharge and Reuse). A portion of the water percolates and returns to the groundwater system and the remaining portion evaporates. The estimated percolation from Southland WWTF is 482 AF. GSWC delivered 741 AF of groundwater to their Nipomo system customers, where a small number of customers are connected to the Southland WWTF. The amount of groundwater produced that was delivered to customers connected to the Southland WWTF was 112 AF in CY 2020. The remaining GSWC Nipomo system customers discharged an estimated 277 AF of wastewater to septic systems. GSWC’s La Serena and Osage iron and manganese removal treatment facilities treat water from GSWC’s La Serena and Osage wells. Filter backwash water is discharged to percolation ponds, where water infiltrates into the basin. La Serena discharged 9 AF and Osage discharged 1 AF. The total WWTF effluent to infiltration basins in the NMMA was 504 AF (Table 3-9). The treated effluent from Blacklake WWTF (42 AF), Cypress Ridge WWTF (31 AF), and Woodlands WWTF (92 AF) is used to irrigate golf course landscaping. The estimated amount of wastewater discharge from indoor use by rural residences is 183 AF. The wastewater discharged in septic systems percolates downward and may recharge the shallow aquifers, the deep aquifers, or become shallow subsurface flow outside the NMMA.

Return flow is defined as the amount of recharge to the aquifers resulting from applied water that percolates past the root zone to recharge the aquifer(s). This functional definition differs somewhat from that used in the Stipulation to apportion the right to use water that was imported to the basin. However, the physical process of recharge by return flow of applied water is the same regardless of where the water originated.

The TG currently assumes that, all groundwater produced for outdoor use is attributable to sustaining plant life and replenishing soil profile storage, and that only rainfall generates percolation. Rural residences produced 203 AF of groundwater for indoor use in CY 2020. The estimated amount of return flow in CY 2020 from indoor use by rural residences is 183 AF, which is 90 percent of the 203 AF estimated indoor water use of rural residents plus the 250 AF of estimated return flow from indoor water use of GSWC’s Nipomo system. There is no return flow from P66’s groundwater production. The estimated total return flow from applied water, which includes 433 AF from indoor use and 504 AF from infiltration at WWTPs, is 937 AF in CY 2020.

The estimated consumptive use of water in the NMMA, computed by subtracting the total return flow (937 AF) from the groundwater production (14,313 AF), is 13,376 AF in CY 2020.

While groundwater recharge via wastewater treatment percolation basins is not considered a reportable recycled water use by DWR, the Superior Court of the State of California considers return flow to the groundwater basin as a beneficial use of recycled water.

³ Nipomo Mesa Management Area 13th Annual Report Calendar Year 2020 Prepared by NMMA Technical Group Submitted April 2021

6.2.5.4 Potential, Current, and Projected Recycle Water Uses

Table 6-4 provides a summary of the expected recycled water use within the Blacklake service area through 2045.

Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area							
<input type="checkbox"/>	Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below.						
Name of Agency Producing (Treating) the Recycled Water:	Nipomo Community Services District						
Name of Supplier Operating the Recycled Water Distribution System	Nipomo Community Services District						
Supplemental Water Added in 2020	N/A						
Source of 2020 Supplemented Water	N/A						
Beneficial Use Type	Level of Treatment	2020	2025	2030	2035	2040	2045
Golf course irrigation	Secondary, disinfected-23	52	0	0	0	0	0
Total (AF):		52	0	0	0	0	0
NOTES: N/A = not applicable							

Table 6-5 provides a summary of the 2015 UWMP Recycled Water Use Projections compared to the 2020 actual use.

Table 6-5 Retail: 2015 UWMP Recycled Water Use Projection Compared to 2020 Actual		
<input type="checkbox"/>	Recycled water was not used in 2015 nor projected for use in 2020. The supplier will not complete the table below.	
Use Type	2015 Projection for 2020	2020 Actual Use
Golf course spray field	50	52
Total (AF):	50	52

6.2.5.5 Actions to Encourage and Optimize Future Recycled Water Use

It should be noted that the District is currently designing a new sewer lift station (at the Blacklake WRF) and sewer force main that will convey raw wastewater from the Blacklake development to the District’s Town collection system. The existing Blacklake WRF will be decommissioned and land disposal will no longer be utilized. The District does not plan to expand recycled water use within its service area, as noted in Table 6-6.

Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
<input checked="" type="checkbox"/>	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
N/A	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
N/A	N/A	N/A	N/A
Total			N/A
NOTES: N/A = not applicable			

6.2.6 Desalinated Water Opportunities

The District has completed construction of the NSWP to receive water from the City of Santa Maria. The District is not currently pursuing desalinated water, but did review this opportunity as part of the 2007 Water Master Plan.

6.2.7 Water Exchanges and Transfers

The District led the design and construction effort for the NSWP to bring wholesale water from the City of Santa Maria to the Nipomo Mesa as described in Section 6.1. Participating agencies of the NSWP include Golden State Water Company (GSWC) and Woodlands Mutual Water Company (WMWC). GSWC and WMWC have committed to purchase 833 AFY, but are not currently receiving water directly from the NSWP. The District is currently in design of three interconnections to deliver supplemental water to these purveyors. GSWC and WMWC demands/allocations of NSWP are included in the future demand and supply projections shown in **Tables 4-2** and **6-9** respectively.

In addition, the District currently has two emergency intertie connections with GSWC and WMWC through the existing distribution system.

6.2.8 Future Water Projects

As described in Section 6.1, the District has a wholesale water supply agreement with the City of Santa Maria to receive water from the City through the NSWP pipeline and associated facilities. The Wholesale Agreement dictates a minimum water delivery to the District of 2,500 AFY by fiscal year 2025-26 with a maximum allowable delivery of 6,200 AFY. It should be noted that the existing Santa Maria River crossing, pump station and portion of transmission pipeline were designed to deliver 6,200 AFY. However, the license agreement between Santa Barbara County and the District would need to be amended to allow the District full use of the NSWP’s designed capacity (6,200 AFY) in addition to pump replacements and additional system pipelines. **Table 6-7** identifies the additional water supply deliveries and planned implementation years to reach the full 6,200 AFY allocation from the NSWP.

Table 6-7 Retail: Expected Future Water Supply Projects or Programs						
<input type="checkbox"/>	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.					
<input type="checkbox"/>	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.					
Page 6-2	Provide page location of narrative in the UWMP					
Name of Future Projects or Programs	Joint Project with other agencies?		Description (if needed)	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Agency (AFY)
NSWP	Yes	City of Santa Maria		2025	Average Year	1,500
NSWP	Yes	City of Santa Maria		As needed	Average Year	500
NSWP	Yes	City of Santa Maria		As needed	Average Year	3,200

6.2.9 Summary of Existing and Planned Sources of Water

6.2.9.1 Description of Supplies

The District’s existing water supply sources include local groundwater and imported surface water. Based on historical production information provided by the District, management of the Santa Maria Valley Groundwater Basin through

the NMMA, ongoing water resources planning efforts, and existing infrastructure in place for the NSWP it was assumed that the District’s water supplies are considered reliable and 100% available during normal, single and multiple drought conditions.

6.2.9.2 Quantification of Supplies

Table 6-8 provides an overview of the actual source and volume of water for the year 2020 to serve the District customer base.

Table 6-8 Retail: Water Supplies — Actual		
Water Supply	2020	
	Actual Volume	Water Quality
Groundwater	1,007	Drinking Water
Purchased or Imported Water	1,041	Drinking Water
Total (AF)	2,048	

Table 6-9 provides an overview of the projected groundwater and imported water supplies available to serve future demands within the District service area.

Table 6-9 Retail: Water Supplies — Projected						
Water Supply	Description	Projected Water Supply				
		2025	2030	2035	2040	2045
		Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume
Groundwater	Santa Maria River Valley Groundwater Basin	2,533	2,533	2,533	2,533	2,533
Purchased or Imported Water	NSWP (District allocation)	2,167	2,167	2,167	2,167	2,167
Purchased or Imported Water	NSWP (WMWC and GSWC allocation)	833	833	833	833	833
Subtotal (AF)		5,533	5,533	5,533	5,533	5,533
Purchased or Imported Water*	NSWP (Future Supply Project)	3,200	3,200	3,200	3,200	3,200
Total (AF)		8,733	8,733	8,733	8,733	8,733

NOTES: *Additional 3,200 AFY NSWP delivery is currently limited by Santa Barbara County license agreement and required water system improvements to accept the full delivery of imported water.

As described in Section 6.2.1, the District will be required to take 2,500 AFY of supplemental water from the City to meet contractual obligations as part of the Wholesale Agreement. There is an additional 500 AFY of supplemental water available through the NSWP that is being utilized by the District to serve future demands on an as needed basis. As stated in Section 6.2.2, the District is assuming a maximum groundwater pumping limit of 2,533 AFY from the Santa Maria Groundwater Basin. However, that pumping limit may be reduced based on the annual water shortage conditions identified by NMMA in order for the District to reach its voluntary groundwater reduction goal. It should be noted the additional 3,200 AF of supplemental water is contingent on the completion of additional system improvements to deliver water to the existing service area and amending the license agreement with Santa Barbara County.

6.2.10 Special Conditions

The District does not have any special conditions that may affect future water supplies and does not anticipate any change.

6.2.10.1 Climate Change Effects

With respect to climate change, the District has not conducted an official climate change vulnerability or risk assessment for the existing water service area. However, climate change considerations for the District’s groundwater supply are incorporated into the Nipomo Mesa Management Area Annual Reports and Chapter 7 of the 13th Annual Report has been included in Appendix A.

6.2.10.2 Regulatory Conditions and Project Development

This District does not foresee any emerging regulatory conditions that would negatively impact water supplies. Planned future projects are discussed in Section 6.2.8 and 6.2.9.

6.2.10.3 Other Locally Applicable Criteria

The District does not foresee any other locally applicable criteria that may affect characterization and availability of identified water supply. However, as mentioned in the NMMA 13th Annual Report, the Santa Maria Groundwater Basin is adjudicated and coordination with the NMMA Technical Group will continue with respect to groundwater management.

6.3 Submittal Tables

All required submittal tables for the District’s water supply characterization are included throughout this chapter.

6.4 Energy Intensity

The District’s water supply facilities include four active groundwater production wells, and the Joshua Road Pump Station. Electrical usage data was provided by the District for each facility in operation. There are three reporting options based on available data which include the following:

- Option 1: Energy Intensity – Water Supply Process Approach by the individual Water Management Processes
- Option 2: Energy Intensity – Total Utility Approach using the sum of all Water Management Processes and total energy for the system
- Option 3: Energy Intensity – Multiple Water Delivery Products by breaking down percentages for retail potable, retail non-potable, agricultural, etc.

Table 6-10 summarizes the District’s supply facilities energy intensity using the total utility approach.

Table 6-10: Recommended Energy Intensity - Total Utility Approach				
Enter Start Date for Period	1/1/2020	Urban Water Supplier Operational Control		
End Date	12/31/2020	Sum of all Water Processes	Non-Consequential Hydropower	
		Total Utility	Hydropower	Net Utility
Volume of Water Entering Process (AF)		2,098		
Energy Consumed (kWh)		1,435,973		
Energy Intensity (kWh/AF)		684		

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CHAPTER 7 WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

New Requirements for 2020 Update

Per the Water Code, the following new requirements are necessary for this chapter of the UWMP 2020 update.

- The new UWMP requirements is manifest in the application of new criteria to the Water Use Analysis in Chapter 4, the Water Supply Analysis in Chapter 6, and the resulting water service reliability assessment in this chapter—including the requirement for a five-consecutive dry years analysis compared to the 2015 UWMPs, which included only a three-year analysis.
- A new Drought Risk Assessment (DRA) is now also required and it must be prepared as a component of the 2020 UWMP. The DRA requires a methodical assessment of water supplies and water uses under an assumed drought period that last five consecutive years. The newly required WSCP is described in Chapter 8.

7.1 Introduction

Assessing water service reliability is the fundamental purpose for an urban water supplier to prepare and update their UWMP. Water service reliability reflects the Supplier's ability to meet the water needs of its customers with water supplies under varying conditions. The District's UWMP considers the reliability of meeting customer water use by analyzing plausible hydrological variability, regulatory variability, climate conditions, and other factors that could affect the District's water supply and its customers' water uses. This chapter synthesizes the details imbedded in the other chapters (including 4, 6, 8, and 9) and it provides a rational basis for future decision-making related to supply management, demand management, and project development. In addition, this chapter includes a new requirement for a Drought Risk Assessment (DRA) that enables the District to evaluate its risk under a severe drought period lasting for the next five consecutive years.

7.2 Water Service Reliability Assessment

As described in Chapter 6, the District's water supply portfolio consists of groundwater from the Santa Maria Valley Groundwater Basin with a maximum pumping limit of 2,533 AFY and imported water from the NSWP with a maximum current delivery of 3,000 AFY.

To identify potential water supply reliability concerns, the District completed a preliminary climate change vulnerability screening analysis (including impacts from extreme heat, water quality, sea level rise, flooding, and wildfire) for its supplies as shown in **Table 7-0**.

Table 7-0: Climate Change Vulnerability Screening		
Preliminary Assessment	Groundwater	Imported Water
	Level of Risk	Level of Risk
I. Water Supply and Demand		
Are the water supply diversions sensitive to climate change?	3	2
Is the water supply source affected by urban or agricultural water demand that might be climate sensitive?	2	2
Is groundwater a major supply source?	5	3
Does the water supply source rely on or could it be affected by snowmelt?	Not applicable	3
Does the water supply source come from or could it be affected by coastal aquifers? Has saltwater intrusion been a problem in the past?	2	Not applicable
Does the water supply source rely on or could it be affected by changes in stored water supplies?	2	2
II. Extreme Heat		
Could extreme heat impact operations of the water supply project or diversions?	Not applicable	Not applicable
Does the supply source rely on equipment or infrastructure that could be impacted by extreme or prolonged heat?	Not applicable	Not applicable
III. Water Quality		
Could water quality issues, such as low dissolved oxygen, algal blooms, disinfectant biproducts affect the water supply source?	Not applicable	Not applicable
Could reduction in assimilative capacity of a receiving water body affect the water supply source?	Not applicable	1
Could the water supply source be affected by water quality shifts during rainfall/runoff events?	2	1
IV. Sea Level Rise		
Is any of the water supply source infrastructure located in area that could be exposed to rising tides?	Not applicable	Not applicable
Could coastal erosion affect the water supply source?	Not applicable	Not applicable
Is the water supply source dependent on coastal structures, such as levees or breakwaters, for protection from flooding?	Not applicable	Not applicable
V. Flooding		
Is the water supply or any of its associated infrastructure located within the 200-year floodplain? Does the water supply source rely on flood protection infrastructure such as levees or dams?	Not applicable	Not applicable
VI. Wildfire		
Is the water supply source located in an area that is expected to experience an increase in wildfire activity or severity? Would a wildfire result in damage to the water supply source infrastructure or interruption of its ability to perform as designed? Could the water supply source be affected by an increase in wildfire activity or severity in an upstream watershed or other adjacent area?	Not applicable	1
NOTES: 1. SMVGWB = Santa Maria River Valley Groundwater Basin 2. NSWP = Nipomo Supplemental Water Project 3. Level of Risk: 1 - low, 3-medium, 5-high		

Based on redundancy within the Joshua Road Pump Station, multiple wells sites throughout the system, and groundwater management practices under the NMMA, the District’s water supply sources are considered 100% reliable and available during normal, single and multiple dry year conditions.

The water service reliability assessment summarizes the District’s expected water service reliability for a normal year, single dry year, and five consecutive dry years projections for 2025, 2030, 2035, and at least through 2040.

7.2.1 Service Reliability - Constraints on Water Sources

The District’s water supply portfolio consists of groundwater from the Santa Maria Valley Groundwater Basin with a maximum current pumping limit of 2,533 AFY. However, as described in Section 6.2.2.2, the NMMA TG determines when conditions of "Potentially Severe Water Shortage Conditions" or "Severe Water Shortage Conditions" have been reached within the Santa Maria Valley Groundwater Basin. Currently the basin is within the Severe Water Shortage Conditions per the NMMA TG. This is the sixth consecutive year of Severe Water Shortage Conditions, which signifies a Stage IV NMMA Water Shortage Response. Per the NMMA drought condition level, the current self-imposed groundwater production limit is 1,267 AFY. Depending on the drought level defined by NMMA, the District’s groundwater pumping limitation could range from 2,533 AFY to 1,013 AFY.

With respect to water quality, the District’s Consumer Confidence Report (2020) in Appendix I describes existing water quality. As shown the District’s water supply meets all United States Environmental Protection Agency (US EPA) and SWRCB water quality standards.

7.2.2 Service Reliability - Year Type Characterization

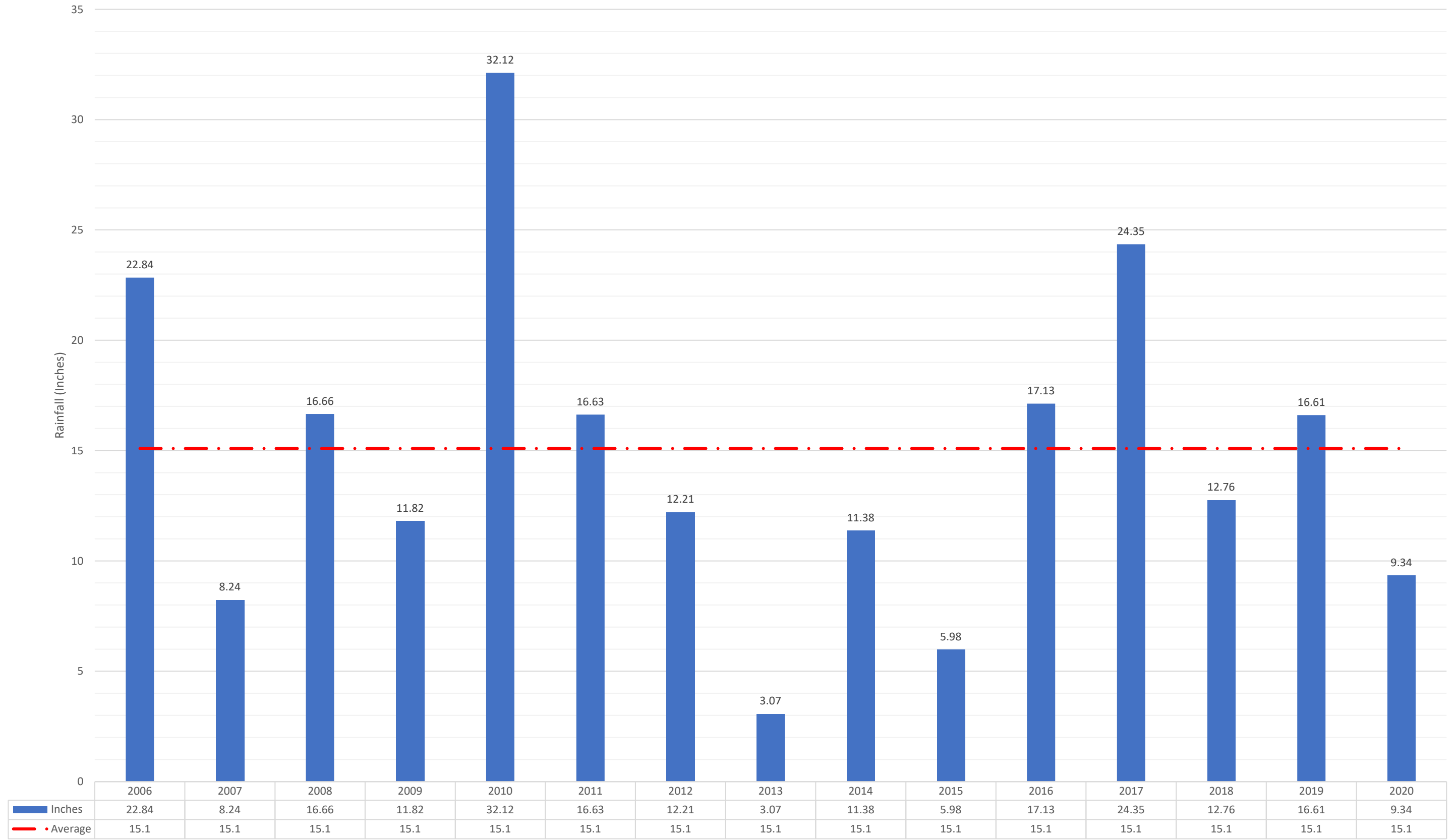
To determine typical average (normal), single dry year, and five consecutive dry years within the service area historical rainfall data was reviewed from the precipitation gauge station Nipomo East #728. The results of the historical rainfall data review are presented in **Figure 7-1. Table 7-1** identifies the basis of water year data as required by the UWMP and identifies the volume of the District’s water supply that was “produced” to serve demands during historical normal, single, and multiple dry year conditions.

Table 7-1 Retail: Basis of Water Year Data			
Year Type	Base Year¹	Available Supplies if Year Type Repeats	
		<input checked="" type="checkbox"/>	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP
		<input type="checkbox"/>	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available (AF)	% of Average Supply
Average Year	2011	2,488	100
Single-Dry Year	2013	2,434	98
Multiple-Dry Years 1st Year	2012	2,340	94
Multiple-Dry Years 2nd Year	2013	2,434	98
Multiple-Dry Years 3rd Year	2014	2,303	93
Multiple-Dry Years 4th Year	2015	1,810	73
Multiple-Dry Years 5th Year	2016	1,690	68

NOTES: Base year represents the typical average year, single dry year, and five consecutive dry years within the service area based on rainfall data from 2006 to 2020.

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Figure 7-1: District Historic Rainfall Data



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Based on variations in groundwater pumping limitations since the Final Judgment of the Santa Maria Valley Groundwater Basin and increased deliveries of imported water from the NSWP, the “Volume Available” in **Table 7-1** are not representative of current and/or future supply availability for the District. The values presented in **Table 7-1** summarizes the actual water supply produced during historical normal, single, and multiple-dry year conditions to serve customer demands. Because of the District’s forward thinking, regional water resource planning efforts, and groundwater management they have developed a robust water supply portfolio for serving existing and future customer demands. In addition, as seen in calendar years 2015 – 2016, the District’s existing water shortage policies and demand management measures (DMMs) were effective in implementing consumer conservation efforts to reduce overall system demand during state-wide drought conditions.

7.2.3 Water Service Reliability

7.2.3.1 Water Service Reliability – Normal Year Supply

Table 7-2 provides a summary of the District’s projected supply and water demands through 2045. The future demand projections are based on future population projections as described in Section 3.4.1. For normal year conditions it was assumed that future supply projections are based on the reasonably available groundwater and imported water volumes as described in Section 6.2.9 and that NMMA would declare a Stage 1 drought level with no voluntary groundwater reduction goals.

Table 7-2 Retail: Normal Year Supply and Demand Comparison					
	2025	2030	2035	2040	2045
Groundwater Supply	2,533	2,533	2,533	2,533	2,533
Imported Water Supply	3,000	3,000	3,000	3,000	3,000
Total	5,533	5,533	5,533	5,533	5,533
District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
Annexations Under Review	176	352	352	352	352
Sales to Other Agencies	833	833	833	833	833
Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	2,406	2,162	2,095	2,028	1,960

Based on the analysis of the District’s projected demands and water supply, there is sufficient resources to serve future demands during normal year conditions.

7.2.3.2 Water Service Reliability – Single Dry Year

For a single dry year it was assumed that NMMA would declare a Stage 2 drought level requiring a voluntary groundwater reduction goal of 20% resulting in 2,027 AFY of groundwater availability. **Table 7-3** provides a summary of the District’s projected supply and demand through 2045 for a single dry year.

Table 7-3 Retail: Single Dry Year Supply and Demand Comparison					
	2025	2030	2035	2040	2045
Groundwater Supply	2,027	2,027	2,027	2,027	2,027
Imported Water Supply	3,000	3,000	3,000	3,000	3,000
Total	5,027	5,027	5,027	5,027	5,027
District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
Annexations Under Review	176	352	352	352	352
Sales to Other Agencies	833	833	833	833	833
Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	1,900	1,656	1,589	1,522	1,454

Based on the analysis of the District’s projected demands and water supply, there is sufficient resources to serve future demands during a single dry year.

7.2.3.3 Water Service Reliability – Five Consecutive Dry Year Supply and Demand Comparison

For five consecutive dry years, it was assumed that NMMA would declare a Stage 2 drought level for the first year and increase the voluntary groundwater reduction goals in subsequent years up to 60% (1,013 AFY from groundwater).

Table 7-4 provides a summary of the District’s projected supply and demand through 2045 for multiple dry years.

Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2025	2030	2035	2040	2045
First year (NMMA Stage 2)	Groundwater Supply	2,027	2,027	2,027	2,027	2,027
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	5,027	5,027	5,027	5,027	5,027
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	1,900	1,656	1,589	1,522	1,454	
Second year (NMMA Stage 3)	Groundwater Supply	1,733	1,733	1,733	1,733	1,733
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,733	4,733	4,733	4,733	4,733
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	1,606	1,362	1,295	1,228	1,160	
Third year (NMMA Stage 4)	Groundwater Supply	1,267	1,267	1,267	1,267	1,267
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,267	4,267	4,267	4,267	4,267
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	1,140	896	829	762	694	
Fourth year (NMMA Stage 5)	Groundwater Supply	1,013	1,013	1,013	1,013	1,013
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,013	4,013	4,013	4,013	4,013
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	886	642	575	508	440	
Fifth year (NMMA Stage 5)	Groundwater Supply	1,013	1,013	1,013	1,013	1,013
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,013	4,013	4,013	4,013	4,013
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
Difference (AF)	886	642	575	508	440	

Based on the analysis of the District’s projected demands and water supply, there is sufficient resources to serve future demands during multiple dry years.

7.2.4 Description of Management Tools and Options

The District coordinates closely with the City of Santa Maria, GSWC, GSWCCR, and WMWC. The District has participated in the following regional water resource planning efforts:

- Nipomo Mesa Management Area (NMMA) within the Santa Maria River Valley Groundwater Basin
- Nipomo Supplemental Water Project (NSWP)
- San Luis Obispo County Integrated Regional Water Management (IRWM) Plan
- San Luis Obispo Regional Water Management Group (RWMG)

7.3 Drought Risk Assessment

7.3.1 Data, Methods, and Basis for Water Shortage Condition

The following information was used to support the District’s DRA to identify water production and consumption to its customers and determine restrictions to supply source:

- Annual AWWA Water Loss Audit Worksheets
- Nipomo Mesa Management Area Annual Reports
- Historical rainfall data from the precipitation gauge station Nipomo East #728

7.3.2 DRA Individual Water Source Reliability

As identified in Section 7.2.2, the District’s supplies have exceeded demands, even in dry years. The NMMA Water Shortage Response Stages have been effective in decreasing demands. On this basis, the District’s supply is presented as 100% reliable for single and multiple dry year periods.

7.3.3 Total Water Supply and Use Comparison

Sustainable management of the District’s groundwater resources and imported supplies will allow the District to serve existing and future water demands during normal, single-dry, and multiple-dry years. Per NMMA, the Santa Maria Valley Groundwater Basin is in its’ sixth consecutive year of Severe Water Shortage Conditions, which signifies a Stage 4 NMMA Water Shortage Response. To complete the five-year drought risk assessment, it was assumed that the District would have a voluntary groundwater reduction goal of 1,267 AFY (50%), reflecting a Stage IV NMMA Water Shortage Response. Per the wholesale water agreement delivery schedule for the NSWP, it was assumed that the District would have access to a minimum supplemental water delivery of 1,000 AFY from 2021 to 2024 and 2,500 AFY starting in July 2025. However, if needed the District can increase deliveries over 1,000 AFY (for years 2021 to 2024) if required to serve future demands. **Table 7-5** provides the five-year drought risk assessment for the District from 2021 to 2025.

Table 7-5: Five Year Drought Risk Assessment Tables to address Water Code Section 10635(b)	
2021	Total
Gross Water Use	2,062
Supply Total (Groundwater)	1,267
Supply Total (Imported)	1,000
Surplus/Shortfall w/o WSCP Action	205
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0
2022	Total
Gross Water Use	2,076
Supply Total (Groundwater)	1,267
Supply Total (Imported)	1,000
Surplus/Shortfall w/o WSCP Action	191
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0
2023	Total
Gross Water Use	2,090
Supply Total (Groundwater)	1,267
Supply Total (Imported)	1,000
Surplus/Shortfall w/o WSCP Action	177
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0
2024	Total
Gross Water Use	2,104
Supply Total (Groundwater)	1,267
Supply Total (Imported)	1,000
Surplus/Shortfall w/o WSCP Action	163
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0
2025	Total
Gross Water Use (NCSO)	2,118
Gross Water Use (Annexations Under Review)	176
Gross Water Use (WMWC and GSWC)	833
Supply Total (Groundwater)	1,267
Supply Total (Imported)	2,500
Surplus/Shortfall w/o WSCP Action	640
WSCP – supply augmentation benefit	0
WSCP – use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0

CHAPTER 8 WATER SHORTAGE CONTINGENCY PLAN

New Requirements

Per the Water Code, the following new requirements are necessary for this chapter of the UWMP 2020 update.

- Key attributes of its water supply reliability analysis conducted pursuant to Water Code Section 10635. [Water Code Section 10632(a)(1)]
- Six standard water shortage levels corresponding to progressive ranges of up to 10-, 20-, 30-, 40-, and 50-percent shortages and greater than 50-percent shortage. [Water Code Section 10632 (a)(3)(A)]
- Locally appropriate “shortage response actions” for each shortage level, with a corresponding estimate of the extent the action will address the gap between supplies and demands. [Water Code Section 10632 (a)(4)]
- Procedures for conducting an annual water supply and demand assessment with prescribed elements. Under Water Code Section 10632.1, urban water Suppliers are required to submit, by July 1 of each year, beginning in the year following adoption of the 2020 UWMP, an annual water shortage assessment report to the California Department of Water Resources (DWR). [Water Code Section 10632 (a)(2)]
- Communication protocols and procedures to inform customers, the public, and government entities of any current or predicted water shortages and associated response actions. [Water Code Section 10632 (a)(5)]
- Monitoring and reporting procedures to assure appropriate data is collected to monitor customer compliance and to respond to any state reporting requirements. [Water Code Section 10632(a)(9)]
- A reevaluation and improvement process to assess the functionality of its WSCP and to make appropriate adjustments as may be warranted. [Water Code Section 10632(a)(10)]

8.1 Water Supply Reliability Analysis

As described in Chapter 7 of this UWMP, the District’s water supply has been determined to be reliable. More detail about this section can be found in the District’s WSCP in Appendix J.

8.2 Annual Water Supply and Demand Assessment Procedures

In accordance with CWC 10632, the District will conduct an annual water supply and demand assessment, or annual assessment by July 1st of each year. The District will draft and prepare a written report that discusses the results of the annual water supply and demand assessment. Descriptions of the methodology, key data inputs, and a timeline for the annual assessment can be found in the WSCP in Appendix J.

8.2.1 Decision- Making Process

The written decision-making process can be found in the WSCP.

8.2.2 Data and Methodologies

The data and methodologies can be found in the WSCP.

8.3 Six Standard Water Shortage Levels

This WSCP identifies water conservation measures and progressive restrictions on water use to enable the District to implement water management measures in a fair and orderly manner for the benefit of the public in accordance with CWC §10632(a)(3). This WSCP establishes six (6) stages of drought response actions that could be voluntarily implemented by the District in times of shortage, with increasing restrictions on water use in response to decreasing

supplies. This WSCP includes both voluntary and mandatory water use reductions depending on the causes, severity, and anticipated duration of the water supply shortage. Water use reduction stages may be triggered by contamination in one water source, combination of sources, or during times that a shortage is declared by the NMMA, District, State, or Federal government. Because shortages overlap stages, triggers automatically implement the more restrictive stage. Specific criteria for triggering the District’s water use reduction stages are shown in **Table 8-1** below.

Table 8-1: Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Shortage Response Actions
1	Up to 10%	Always in place with voluntary measures and outreach.
2	Up to 20%	Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 20% reduction in groundwater production.
3	Up to 30%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 30% reduction in groundwater production.
4	Up to 40%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan with goal of voluntary 30% reduction in groundwater production.
5	Up to 50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion with goal of voluntary 50% reduction in groundwater production.
6	>50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion with goal of voluntary 60% reduction in groundwater production.

Figure 8-1 provides a comparison that shows the District’s water shortage levels to those mandated by statute.

Figure 8-1: Comparison for the District’s 2015 Shortage Levels and the 2020 WSCP Mandated Shortage Levels

Stages from 2015 UWMP			Crosswalk	2020 WSCP Mandated Shortage Levels			
Stage	Percent Supply Reduction	Water Supply Condition		Stage	Percent Supply Reduction	Water Supply Condition	Mandatory compliance with water savings measures
1	0%	Always in place		1	0% to 10%	Normal	Voluntary, always in place
2	20%	Potentially Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	 	2	10% to 20%	Slightly Restricted	Mandatory compliance
3	30%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan.	 	3	20% to 30%	Moderately Restricted	Mandatory compliance
4	50%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 1 year from the initial declaration; or Severe Water Shortage declaration pursuant to NMMA declaration triggered by both the Key Well Index and the Coastal Area Criterion		4	30% to 40%	Restricted	Mandatory compliance
5	60%	Severe Water Shortage Condition declaration pursuant to NMMA Water Shortage Condition and Response Plan, lasting more than 2 years from the initial declaration, based on both the Key Well Index and Coastal Area Criterion.		5	40% to 50%	Severely Restricted	Mandatory compliance
				6	50% and above	Extremely Restricted	Mandatory compliance

8.4 Shortage Response Actions

8.4.1 Demand Reduction

Table 8-2 summarizes the restrictions and prohibitions on end uses during each stage of water shortage response implemented by the District in accordance with CWC §10632(a)(4)(B). The shortage response actions are aligned to the six water shortage levels with the goal of reducing the gap between supply and demand by the required amount per level.

Table 8-2 Demand Reduction Actions			
Stage	Demand Reduction Actions	Estimated Extent of Reducing the Water Shortage Gap	Penalty, Charge, or Other Enforcement?
1	Other - Education for water conservation methods.	Low	No
1	Other - Public outreach for voluntary reduction in water use by 15%	Low	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	High	Yes
1	Landscape - Limit landscape irrigation to specific times	High	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Medium	Yes
1	Water Features - Restrict water use for decorative water features, such as fountains	High	Yes
1	Landscape- Check all irrigation systems periodically	Low	Yes
2	All Stage 1 reduction actions	Medium	Yes
2	Water Features- Cover swimming pools and spas when not in use	Low	Yes
2	Other - Prohibit use of potable water for washing hard surfaces	Low	Yes
3	All Stage 1 and 2 reduction actions	High	Yes
3	Landscape - Limit landscape irrigation to specific days	High	Yes
3	Other- Prohibit use of hoses without automatic shut-off devices	High	Yes
3	Landscape - Other landscape restriction or prohibition	High	Yes
3	Other – Prohibit use of potable water for construction and dust control	Low	Yes
3	Other - Turn off all automated irrigation systems	High	Yes
3	Water Features – Prohibit water use for decorative water features, such as fountains	High	Yes
4	All Stage 1,2 and 3 reduction actions	Medium	Yes
4	Landscape - Other landscape restriction or prohibition	High	Yes
5	All Stage 1,2,3 and 4 reduction actions	Medium	Yes
5	Landscape- Other landscape restriction or prohibition	High	Yes
6	All Stage 1,2,3,4 and 5 reduction actions	Medium	Yes

A complete description of operational and mandatory restrictions issued by the District can be found in the WSCP.

8.4.2 Supply Augmentation

Table 8-3 summarizes the restrictions and prohibitions on end users during each stage of water shortage responses implemented by the District in accordance with CWC §10632(a)(4)(A).

Table 8-3: Supply Augmentation and Other Actions			
Stage	Supply Augmentation Methods and Other Actions by Water Supplier	Estimated Extent of Reducing the Water Shortage Gap	Penalty, Charge, or Other Enforcement?
All Stages	Expand Public Information Campaign	Medium	No
All Stages	Other - Demand Reduction Program	Medium	No
All Stages	Other - Use Prohibitions	Low	No
1 and 2	Other - Voluntary Water Use Reductions	Medium	No
3	Other - Flow Restriction	Medium	No
4	Other - Prohibit landscape irrigation	High	No
5 and 6	Other - Interrupt Irrigation Services	High	No

8.4.3 Operational Changes

In the event of an extreme water shortage, the District will implement some or all of the following operational changes in accordance with CWC §10632(a)(4)(C) and §10632.5(a):

- The District shall provide prompt notice to customer whenever the District obtains information that indicates a leak may exist within the end-user’s exclusive control. The customer must repair all leaks within twenty-four (24) hours of notification by the District.
- Restrict or prohibit the issuance of new water services.

8.4.4 Additional Mandatory Restrictions

The District’s customers shall comply to the mandatory water shortage response actions listed in **Table 8-2** associated with a level 3 or higher water shortage event in accordance with §10632(a)(4)(D).

8.4.5 Emergency Response Plan

A catastrophic event may result in a complete loss of District water supplies for a temporary period lasting from a day to a week or more. Examples of catastrophic events include earthquakes, widespread power outage, contamination, long-term drought, or loss of imported supplies. Through information included in billing inserts, and information on its website, the District encourages its customers to be prepared for emergencies and potential interruption of water supply system. The District has an Emergency Response Plan which provides guidance for emergency situations. In the event of a catastrophic emergency the District will immediately declare and enact level six (6) water shortage level and response actions, shown in **Table 8-3** until service is restored to pre-emergency conditions. More detail about this section can be found in the District’s WSCP in Appendix J.

8.4.6 Seismic Risk Assessment and Mitigation Plan

The District completed their American’s Water Infrastructure Act (AWIA) Risk and Assessment (RRA) in June 2021, which assessed seismic risk. In addition, the County of San Luis Obispo, in partnership with the District, developed a Multi-Jurisdictional Hazard Mitigation Plan (Hazard Plan), which evaluated seismic risk within District’s service area. A summary of these seismic risk assessments can be found in the WSCP.

8.4.7 Shortage Response Action Effectiveness

The District will monitor and evaluate the effectiveness of the shortage response actions. In the event that the shortage response actions are not effective, the District will have the power to amend the WSCP. A more detailed description of the District's plan to monitor effectiveness can be found in the WSCP.

8.5 Communication Protocols

The District will inform customers, the public, and the necessary local, regional, and state government entities in regard to any current or predicted water shortages based on the results of the Annual Water Supply and Demand Assessment or in the event of an emergency. The District will also notify all necessary entities of any shortage response actions mandated in response to the Annual Assessment. A detailed communication plan can be found in the WSCP.

8.6 Compliance and Enforcement

The District's enforcement policies can be found in the WSCP.

8.7 Legal Authorities

The District has the power to declare a water shortage. See the WSCP for the District's declaration of a water shortage.

8.8 Financial Consequences of WSCP

The District is currently able to meet expenses with a combination of rates and reserves. The District has sufficient reserves and rate stabilization funds to meet its current near-term obligations; however, rates may need to be adjusted in the future, in accordance with Proposition 218, to mitigate future revenue reduction as a result of the WSCP.

8.9 Monitoring and Reporting

Monitoring and reporting procedures can be found in the WSCP.

8.10 WSCP Refinement Procedures

Refinement procedures can be found in the WSCP.

8.11 Special Water Feature Distinction

A description of special water features can be found in the WSCP.

8.12 Plan Adoption, Submittal and Availability

The procedures that were used to adopt the WSCP are detailed in the WSCP.

CHAPTER 9 DEMAND MANAGEMENT MEASURES

New Requirements for 2020 Update

There are no new plan preparation requirements from the 2020 UWMP guidance.

9.1 Demand Management Measures for Wholesale Suppliers

The District is not a wholesale agency and is not required by DWR to complete Section 9.1.

9.2 Existing Demand Management Measures for Retail Suppliers

The UWMP Act requires a discussion of Demand Management Measures (DMMs), including a description of each of the DMMs currently being implemented/scheduled for implementation, the schedule of implementation for all DMMs, and the methods, if any, the District will use to evaluate the effectiveness of DMMs.

9.2.1 Water Waste Prevention Ordinances

Ordinance 2015-122, adopted on August 12, 2015, updated the District’s Water Shortage Response and Management Plan. A copy of the NCSD Code of Ordinances is available on the District’s website:

- <https://ncsd.ca.gov/resources/documents/district-codes/>

New development is required to comply with County imposed building and planning water efficiency standards.

9.2.2 Metering

The District is 100% metered and water usage is tracked by usage type and service size, which includes single family residential, multi-family residential, commercial/institutional, landscape irrigation, and other.

9.2.3 Conservation Pricing

Table 9-2 summarizes the District’s bimonthly fixed charges.

Table 9-2: NCSD Water Rate Structure	
Meter Size	Fixed Charge
5/8 thru 1-inch	\$53.70
1-1/2-inch	\$75.76
2-inch	\$106.42
3-inch	\$223.04
4-inch	\$312.99
6-inch	\$631.28
8-inch	\$995.04

9.2.4 Public Education and Outreach

The District implements many public outreach programs. Public outreach efforts are updated on the District’s conservation website (<http://ncsd.ca.gov/cm/Resources/Conservation.html>). The District provides multiple workshops, giveaway items, brochures, newsletters, and bill inserts to customers. Below is a list of the public outreach efforts implemented by the District:

- High efficiency washer rebate program

- Advertising
- Events and item giveaways
- Post cards, brochures mailed out to NCSO customers
- Door-hangers for water waste and other water-use issues
- Conservation website
- Water audit program
- Annual newsletter
- Toilet-retrofit-at-time-of-sale, administered by San Luis Obispo County Planning and Development (SLO-PD) (Title 8 Amendment) for Nipomo Mesa Water Conservation Area (NMWCA) (includes all of NCSO)

Some public outreach events that NCSO participates in include the Harvest Festival and Creek Day.

9.2.5 Programs to Assess and Manage Distribution System Real Loss

District staff visit and inspect all production and storage facilities weekly. All of the District's tanks, reservoirs, and pumps have alarms to indicate over-topping or loss of pressure. These alarms provide notification to District staff of any potential problems so adjustments can be made to limit system losses. The District has begun to install an automated distribution pipeline leak detection system that monitors the District' pipelines for leaks. The leak detection system consists of Permalog leak noise loggers that are deployed throughout the water distribution system. Data from the loggers is transmit through a licensed frequency wireless network to software that is monitored by Operations personnel.

The District produces and submits annual reports to DWR quantifying the amount of metered water deliveries and the total water in the system. These reports are one way to measure the effectiveness of the District's water loss control measures based on the comparison of production and deliveries. The District completes the standard water audit and balance using the AWWA Water Loss software to determine their current volume of apparent and real water loss and the cost impact of these losses on District operations, and plans to re-conduct the analysis at annual intervals.

The District provides leak detection information and assistance to its customers through providing educational tools and giveaways, such as dye tablets, to detect leaks. The District's database that tracks water use alerts utility billing staff when current water use at a given meter varies significantly from the historic use, which indicates a leak is likely. The District has also begun implementing Advanced Metering Infrastructure (AMI) with 15 minute interval reads. When a leak is detected, the District contacts the customer with the information needed to find leaks. Statistics of the number of customers assisted with leak detection and repair is tracked by utility billing staff.

9.2.6 Water Conservation Program Coordination and Staffing Support

Water conservation activities are performed by utility billing staff, public outreach staff, operations staff, and engineering staff. BMP report preparation is coordinated by engineering staff.

9.2.7 Other Demand Management Measures

Other demand management measures that NCSO has implemented include the following:

Water Survey Programs for Single- Family Residential and Multi-Family Residential Customers:

The District provides leak detection information and assistance to its customers through providing educational tools and giveaways, such as dye tablets, to detect leaks. The District's database that tracks water use alerts utility billing staff when current water use at a given meter varies significantly from the historic use, which indicates a leak is likely. When a leak is detected, the District contacts the customer with the information needed to find leaks. Statistics of the number of customers assisted with leak detection and repair is tracked by utility billing staff.

The County's Ordinance 3370 amends Title 19 of the County Code to require any applicant for a construction permit or remodel permit constituting a permit fee greater than \$20,000 to install plumbing fixtures with certain criteria designed for water conservation. New construction permits will only be given when an applicant has retrofitted the plumbing fixtures of five existing structures in the Nipomo Mesa Water Conservation Area. The District distributes and tracks aerators, hose nozzles, hose timers, moisture meters, and toilet tabs. The District plans to continue implementing this BMP through educational tools, giveaways and by supporting County Ordinance 3370.

Landscape Water Survey

The District provides giveaways, workshops, and educational tools to assist customers with their own landscape water surveys, thereby making customer landscapes more efficient. The District plans to continue implementing, giveaways, workshops, and educational tools.

High-Efficiency Clothes Washing Machine Financial Incentives Programs

The District provides a high efficiency washer rebate program through which it provides a rebate of \$75 on new high efficiency washers.

Water Sense Specification (Wss) Toilets

The County Code requires a toilet-retrofit-at-time-of-sale, administered by San Luis Obispo County Planning and Development (SLO-PD) (Title 8 Amendment) for Nipomo Mesa Water Conservation Area (NMWCA) (includes all of NCSO).

9.3 Reporting Information

9.3.1 Implementation Over the Past Five years

NCSO has implemented the required DMMs per CWC 10631 to achieve its water use targets pursuant to Section 10608.20 and described in section 5.

9.3.2 Implementation to Achieve Water Use Targets

NCSO has implemented the required DMM per CWC 10631 to achieve its water use targets pursuant to Section 10608.20. Baseline and target 2020 GPCD are described in section 5 of the UWMP. No additional DMMs are proposed to be implemented by NCSO.

9.4 Water Use Objectives (Future Requirements)

The Water Code requires suppliers to develop new water use objectives by 2023 that align with the supplier's conservation management actions. The District describes its water use objectives during water shortages in its WSCP and will further develop objectives by 2023.

CHAPTER 10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

New Requirements

- Since 2015, the public processes for completing the UWMP have not been revised. However, the Water Shortage Contingency Plan is a new component of the 2020 UWMP that can be amended separately from the UWMP (see Chapter 8)

10.1 Inclusion of all 2015 Data

This 2020 UWMP update includes water use and planning data for the entire 2020 calendar year.

10.2 Notice of Public Hearing

10.2.1 Notice to Cities and Counties

10.2.1.1 60 Day Notification

The District notified the agencies listed in **Table 10-1** at least sixty (60) days prior to the public hearing of the preparation of the 2020 Plan and invited them to participate in the development of the Plan. A copy of the notification letters sent to these agencies is provided in Appendix K.

10.2.1.2 Notice of Public Hearing

The Notice of the public hearing, held at the November 10, 2021 Board meeting at the District office, was sent to the City of Santa Maria and County of San Luis Obispo on September 10, 2021. A copy of the letters from the District to the City and County are included in Appendix K of this UWMP.

10.2.1.3 Submittal Tables

Table 10-1 summarizes the agencies which were provided notifications by the District.

City Name	60 Day Notice	Notice of Public Hearing
City of Santa Maria	☑	☑
County of San Luis Obispo County	☑	☑

10.2.2 Notice to the Public

The public hearing was noticed in the local newspaper as prescribed in Government Code 6066. This notice included time and place of hearing, as well as the location where the UWMP and WSCP is available for public inspection. A copy of the newspaper notice is included in Appendix L.

10.3 Public Hearing and Adoption

10.3.1 Public Hearing

Prior to adopting the 2020 UWMP and WSCP, the District held a public hearing on November 10, 2021 which included input from the community regarding the District’s draft 2020 UWMP and WSCP. As part of the public hearing, the District provided information on determination of its water use targets and action plan in case of severe water shortage conditions.

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10.3.2 Adoption

The 2020 UWMP was adopted on December 8, 2021 during a regularly scheduled board meeting. A copy of the resulting adoption Resolution 2021-1608 and meeting minutes is included in Appendix M of this UWMP.

10.4 Plan Submittal

10.4.1 Submitting a UWMP and Water Shortage Contingency Plan to DWR

Within 30 days of adoption of the 2020 UWMP by the District Board, the District will submit the adopted 2020 UWMP to DWR, as required by CWC 10621 and 10644. The 2020 UWMP will be submitted through DWR’s “Water Use Efficiency (WUE) Data Online Submittal Tool” website.

DWR previously provided a checklist to determine if an Urban Water Management Plan has addressed the requirements of the California Water Code. The District has completed the DWR checklist by indicating where the required CWC elements can be found within the District’s 2020 UWMP (See Appendix N).

10.4.2 Electronic Data Submittal

Within 30 days of adoption of the 2020 Plan, the District will also submit all data tables associated with the 2020 Plan through DWR’s “Water Use Efficiency (WUE) Data Online Submittal Tool” website.

10.4.3 Submitting a UWMP to the California State Library

Within 30 days of adoption of the 2020 UWMP by the District Board, a copy (CD or hardcopy) of the 2020 Plan will be submitted to the State of California Library. A copy of the letter to the State Library will be maintained in the District’s file. The 2020 Plan will be mailed to the following address if sent by regular mail:

California State Library
 Government Publications Section
 P.O. Box 942837
 Sacramento, CA 94237-0001
 Attention: Coordinator, Urban Water Management Plans

The 2020 Plan will be delivered to the following address if sent by courier or overnight carrier:

California State Library
 Government Publications Section
 914 Capitol Mall
 Sacramento, CA 95814

10.4.4 Submitting a UWMP to Cities and Counties

Within 30 days of adoption of the plan by the District Board, a copy of the 2020 UWMP will be submitted to the County of San Luis Obispo Registrar / Records office and District’s office. A copy of the letter to the County of San Luis Obispo and the City of Santa Maria will be maintained in the District’s file.

10.5 Public Availability

Within 30 days of adoption of the 2020 UWMP by the District Board, the adopted plan will be available on the District’s website at www.ncsd.ca.gov and at the District’s office at 148 South Wilson Street, Nipomo between the hours of 8 AM and 4:30 PM Monday through Friday.

10.6 Notification to Public Utilities Commission

The section is not applicable to the District.

10.7 Amending an Adopted UWMP or Water Shortage Contingency Plan

10.7.1 Amending a UWMP

If the District amends the adopted 2020 UWMP, the amended UWMP will undergo adoption by the District's governing board. Within 30 days of adoption, the amended UWMP will then be submitted to DWR, the State of California Library, the County of San Luis Obispo / Records office, and the District's office.

10.7.2 Amending a Water Shortage Contingency Plan

If the District amends the adopted 2020 WSCP, the amended WSCP will undergo adoption by the District's governing board. Within 30 days of adoption, the amended WSCP will then be submitted to DWR, the State of California Library, the County of San Luis Obispo / Records office, and the District office.

**2024 Dana Reserve Specific Plan
Transportation Impact Study Addendum
(February 19, 2024)**



MEMORANDUM

Date: February 19, 2024
To: Nick Tompkins and Claire Simoulis, NKT Nipomo Properties, LLC
From: Michelle Matson and Joe Fernandez, CCTC
Subject: **2024 Dana Reserve Specific Plan – Transportation Impact Study Addendum**

This memorandum evaluates the transportation impacts of the 2024 Dana Reserve Specific Plan (DRSP) land use alternative as recommended by the County of San Luis Obispo Planning Commission. This memorandum also evaluates the transportation impacts of the 2024 DRSP with Senior Housing (Age-Restricted).

CCTC prepared a Transportation Impact Study (TIS) dated July 14th, 2021, for the project as well as an addendum dated October 20th, 2021, which evaluated the impacts of 15 percent additional commercial service trips than were analyzed in the TIS as a sensitivity test.

SUMMARY

The 2024 DRSP as recommended by the County of San Luis Obispo Planning Commission trip generation does not change the TIS findings under Existing or Cumulative Conditions and all previous findings would apply. Similarly, the 2024 DRSP would be less impactful to vehicle miles traveled (VMT) than the previously analyzed alternative. Results are detailed in the following sections.

TRIP GENERATION ESTIMATES

July 2021 TIS

The Institute of Transportation Engineers (ITE) *Trip Generation Manual* 10th Edition was used to estimate project trip generation consistent with the TIS. **Table 1** summarizes the trip generation from the July 2021 TIS.

Table 1: Project Trip Generation (July 2021 TIS)

Weekday and Sunday Vehicle Trip Generation															
Land Use	Size	Unit	Weekday			AM Peak Hour			PM Peak Hour			Sunday		Sunday MID ⁶	
			Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total		
Single Family Residential ¹	833	DU	7,310	149	447	596	490	287	777	7,324	355	314	669		
Multi Family Residential ²	610	DU	4,571	61	205	266	186	109	295	3,831	205	204	409		
Commercial Services ³	113,000	SF	6,533	129	79	208	286	309	595	2,384	154	161	315		
Education ⁴	30,000	SF	608	48	14	62	28	28	56	36	3	3	6		
Hotel ⁵	110	Rooms	920	31	21	52	34	32	66	655	29	33	62		
Gross Trips			19,942	418	766	1,184	1,024	765	1,789	14,230	746	715	1,461		
Internal Trips ⁷			1,240	14	14	28	124	124	248	1,020	102	102	204		
Pass-by Trips ⁸			810	0	0	0	81	81	162	280	28	28	56		
Net New Trips			17,892	404	752	1,156	819	560	1,379	12,930	616	585	1,201		

DU=Dwelling Unit; SF= Square Feet

1) ITE Land Use Code #210, Single-Family Detached Housing. Fitted curve equations used for weekday and Sunday.

2) ITE Land Use Code #220, Multifamily Housing (Low-Rise). Fitted curve equation used for weekday; Average rate used for Sunday.

3) ITE Land Use Code #820, Shopping Center. Fitted curve equation used for weekday; Average rate used for Sunday.

4) ITE Land Use Code #540, Junior/Community College. Average rates used for weekday and Sunday.

5) ITE Land Use Code #310, Hotel. Average rate used for weekday and Sunday.

6) Sunday, Peak Hour of Generator rates and equations used for midday.

7) Internal trips calculated using *TripGen 10* software. Sunday mid-day internal capture assumed same as weekday PM. PM and mid-day internal trips multiplied by factor of 5 to determine daily internal trips.

8) Pass-by rates from ITE *Trip Generation Handbook*, 3rd Edition. PM peak hour and Sunday Mid-day volumes both multiplied by a factor of 5 to determine weekday and Sunday daily pass-by trips, respectively. Saturday Mid-day pass-by rates used for Sunday Mid-day.

Source: ITE *Trip Generation Manual*, 10th Edition; CCTC, 2021.

2024 DRSP (As Recommended by the County of SLO Planning Commission)

The 2024 DRSP as recommended by the County of SLO Planning Commission modifies the residential land use to reflect the current design including: 831 residential single-family dwelling units and 691 residential multi-family dwelling units. Of the 691 multi-family dwelling units, 156 units are affordable (deed restricted) and 152 units are accessory dwelling units (ADUs). **Table 2** summarizes the 2024 DRSP trip generation.

Table 2: Project Trip Generation (2024 DRSP)

Trip Generation (2024 DRSP)														
Land Use	Size	Unit	Weekday			AM Peak Hour			PM Peak Hour			Sunday		
			Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total	
Single Family Residential ¹	831	DU	7,294	149	446	595	489	287	776	7,306	354	314	668	
Multi Family Residential ²	383	DU	2,855	39	132	171	123	72	195	2,405	129	128	257	
Affordable Housing ³	308	DU	1,481	45	109	154	84	58	142	1,248	94	93	187	
Commercial Services ⁴	113,000	SF	6,533	129	79	208	286	309	595	2,384	154	161	315	
Education ⁵	30,000	SF	608	48	14	62	28	28	56	36	3	3	6	
Hotel ⁶	110	Rooms	920	31	21	52	34	32	66	655	29	33	62	
Gross Trips (2024 DRSP)			19,691	441	801	1,242	1,044	786	1,830	14,034	763	732	1,495	
Internal Trips ⁸			1,270	15	15	30	127	127	254	1,040	104	104	208	
Pass-by Trips ⁹			800	0	0	0	80	80	160	270	27	27	54	
Net New Trips (2024 DRSP)			17,621	426	786	1,212	837	579	1,416	12,724	632	601	1,233	
7/2021 TIS Trips - 2024 DRSP Trips			271	-	-	-56	-	-	-37	206	-	-	-32	
Percentage Change from 7/2021 TIS			-2%	-	-	5%	-	-	3%	-2%	-	-	3%	
10/2021 +15% Commercial - 2024 DRSP			1,041	-	-	-27	-	-	10	484	-	-	-1	
Percentage change from 10/2021 Memo			-6%	-	-	2%	-	-	-1%	-4%	-	-	0%	

DU=Dwelling Unit; SF= Square Feet

1) ITE 10th Ed. Land Use Code #210, Single-Family Detached Housing. Fitted curve equations used for weekday and Sunday.

2) ITE 10th Ed. Land Use Code #220, Multifamily Housing (Low-Rise). Fitted curve equations used for weekday; Average rate used for Sunday.

3) ITE 11th Ed. Land Use Code #223, Affordable Housing. Average rates used for weekday. Sunday rate developed using Land Use #220.

4) ITE 10th Ed. Land Use Code #820, Shopping Center. Fitted curve equation used for weekday; Average rate used for Sunday.

5) ITE 10th Ed. Land Use Code #540, Junior/Community College. Average rates used for weekday and Sunday.

6) ITE 10th Ed. Land Use Code #310, Hotel. Average rate used for weekday and Sunday.

7) Sunday, Peak Hour of Generator rates and equations used for midday.

8) Internal trips calculated using *TripGen 10* software. Sunday mid-day internal capture assumed same as weekday PM. PM and mid-day internal trips multiplied by factor of 5 to determine daily internal trips.

9) Pass-by rates from ITE *Trip Generation Handbook*, 3rd Edition. PM peak hour and Sunday Mid-day volumes both multiplied by a factor of 5 to determine weekday and Sunday daily pass-by trips, respectively. Saturday Mid-day pass-by rates used for Sunday Mid-day.

Source: ITE *Trip Generation Manual*; CCTC, 2024.

The 2024 DRSP alternative would generate 17,621 net new daily trips, 1,212 net new AM peak hour trips, 1,416 net new PM peak hour trips, 12,724 net new Sunday daily trips, and 1,233 net new Sunday midday peak hour trips. The 2024 DRSP alternative produces fewer daily and more peak hour trips compared to the land use alternative evaluated in the July 2021 TIS and the project’s Environmental Impact Report (EIR). Without the 152 ADUs, the 2024 DRSP alternative would generate fewer trips than evaluated in the EIR under all peak hours.

The 2024 DRSP produces fewer daily and weekday PM peak hour trips and slightly more weekday AM and Sunday midday PM peak hour trips compared to the alternative with 15 percent additional commercial trips evaluated in October 2021. The October 2021 analysis did not find any additional impacts compared to the TIS and the 2024 DRSP trip generation would not change the TIS findings under Existing or Cumulative Conditions.

DRSP with Senior Housing (Age-Restricted Units)

Table 3 summarizes an alternative 2024 DRSP trip generation with 417 senior housing (age-restricted) units.

Table 3: Project Trip Generation (2024 DRSP with Senior Housing)

Trip Generation (2024 DRSP with Senior Housing Units)														
Land Use	Size	Unit	Weekday			AM Peak Hour			PM Peak Hour			Sunday	Sunday MID ⁸	
			Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total	
Single Family Residential ¹	414	DU	3,842	75	224	299	250	147	397	3,607	179	159	338	
Multi Family Residential ²	383	DU	2,855	39	132	171	123	72	195	2,405	129	128	257	
Affordable Housing ³	308	DU	1,481	45	109	154	84	58	142	1,248	94	93	187	
Senior Housing ⁴	417	DU	1,977	40	81	121	89	57	146	967	45	43	88	
Commercial Services ⁵	113,000	SF	6,533	129	79	208	286	309	595	2,384	154	161	315	
Education ⁶	30,000	SF	608	48	14	62	28	28	56	36	3	3	6	
Hotel ⁷	110	Rooms	920	31	21	52	34	32	66	655	29	33	62	
Gross Trips (Preferred Alternative)			18,216	407	660	1,067	894	703	1,597	11,302	633	620	1,253	
Internal Trips ⁹			1,280	13	13	26	128	128	256	1,000	100	100	200	
Pass-by Trips ¹⁰			800	0	0	0	80	80	160	280	28	28	56	
Net New Trips (Preferred Alternative)			16,136	394	647	1,041	686	495	1,181	10,022	505	492	997	
7/2021 TIS Trips - 2024 DRSP Trips			1,756	-	-	115	-	-	198	2,908	-	-	204	
Percentage Change from 7/2021 TIS			-10%	-	-	-10%	-	-	-14%	-22%	-	-	-17%	

DU=Dwelling Unit; SF= Square Feet

1) ITE 10th Ed. Land Use Code #210, Single-Family Detached Housing. Fitted curve equations used for weekday and Sunday.

2) ITE 10th Ed. Land Use Code #220, Multifamily Housing (Low-Rise). Fitted curve equations used for weekday; Average rate used for Sunday.

3) ITE 11th Ed. Land Use Code #223, Affordable Housing. Average rates used for weekday. Sunday rate developed using Land Use #220.

4) ITE 10th Ed. Land Use Code #251, Senior Adult Housing - Detached. Fitted curve equation used for weekday; Average rate used for Sunday.

5) ITE 10th Ed. Land Use Code #820, Shopping Center. Fitted curve equation used for weekday; Average rate used for Sunday.

6) ITE 10th Ed. Land Use Code #540, Junior/Community College. Average rates used for weekday and Sunday.

7) ITE 10th Ed. Land Use Code #310, Hotel. Average rate used for weekday and Sunday.

8) Sunday, Peak Hour of Generator rates and equations used for midday.

9) Internal trips calculated using TripGen 10 software. Sunday mid-day internal capture assumed same as weekday PM. PM and mid-day internal trips multiplied by factor of 5 to determine daily internal trips.

10) Pass-by rates from ITE Trip Generation Handbook, 3rd Edition. PM peak hour and Sunday Mid-day volumes both multiplied by a factor of 5 to determine weekday and Sunday daily pass-by trips, respectively. Saturday Mid-day pass-by rates used for Sunday Mid-day.

Source: ITE Trip Generation Manual; CCTC, 2024.

The 2024 DRSP alternative with senior housing units would generate 16,136 net new daily trips, 1,041 net new AM peak hour trips, 1,181 net new PM peak hour trips, 10,022 net new Sunday daily trips, and 997 net new Sunday midday peak hour trips. The 2024 DRSP alternative with senior housing units would produce fewer trips under all scenarios compared to the land use alternative evaluated in the July 2021 TIS and the project’s Environmental Impact Report (EIR).

The 2024 DRSP trip generation does not change the TIS findings under Existing or Cumulative Conditions and all previous recommendations would apply. All project trips will make their fair share contribution through the County’s impact fee program for cumulative roadway improvements at the time of building permits.

VEHICLE MILES TRAVELED (VMT)

The 2021 TIS evaluated VMT by applying the County's quick-response tool for the project's various land use components. While this tool does not differentiate between residential housing types the preceding trip generation tables can be used to compare the trip intensity of the different uses. VMT is correlated with trip generation, so a reduction in trips per housing unit indicates a reduction in residential VMT per capita.

Commercial Land Uses

The 2024 DRSP includes different residential land use quantities and types from the 2021 TIS analysis but does not change the commercial quantities. As a result, the 2021 TIS VMT findings for the non-residential project components would not change with the 2024 DRSP.

Residential Land Uses

The County's residential land use VMT threshold is based on residential VMT per capita. Residential VMT includes all home-based automobile trips (home based work, shop, K-12, college, and other trips). The 2024 DRSP includes more total multi-family units than the 2021 TIS, but the increase is made up by ADUs and deed-restricted affordable housing. Both of these housing types produce fewer trips per unit than single-family homes, resulting in lower VMT per capita.

The 2024 DRSP with Senior Housing (Age-Restricted) converts a portion of the single-family units to age-restricted senior housing units. Senior housing also produces fewer trips per unit than non age-restricted units, resulting in lower VMT per capita.

Both of the 2024 DRSP land use alternatives would produce lower residential VMT per capita than the project description evaluated in the 2021 TIS.

CONCLUSION

The 2024 DRSP as recommended by the County of SLO Planning Commission and 2024 DRSP with Senior Housing would not change the findings or recommendations in the 2021 TIS. Both of the 2024 DRSP land use alternatives would be less impactful to VMT than the project description evaluated in the 2021 TIS.

Please let us know if you have any questions.

