

Table I-4 -- Recommended Levels of Severity – Water Supply		
Groundwater Basins and Affected Water Purveyors	Recommended LOS	Recommended Actions
		Support San Simeon CSD efforts to develop sustainable supplemental sources of water.
San Simeon Valley Groundwater Basin Santa Rosa Valley Groundwater Basin <u>Water Purveyors</u> Cambria CSD	III <u>None</u> None	<p>LOS-III to remain in place. None, subject to the CCSD adhering to the aggressive water conservation program described in its 2016 Urban Water Management Plan Update (Program B of the 2016 UWMP, see Figure 4-1)</p> <p>Collaborate with the Cambria Community Services District for the issuance of a limited number of intent-to-serve letters and building permits based on the continued use of a demand offset conservation program that offsets new demand from new water connections.</p> <p>Revise the County Growth Management Ordinance in collaboration with the Cambria Community Services District to accommodate the issuance of an allowable number of building permits for new development.</p> <p>Collaborate with the Cambria Community Services District to prepare and obtain a <u>Regular</u> Coastal Development Permit for its recently completed Emergency Water Supply Project <u>Sustainable Water Facility (SWF)</u> along the lower San Simeon Creek</p>
Cayucos Valley Groundwater Basin Old Valley Groundwater Basin <u>Water Purveyors</u> CSA 10A Morro Rock Mutual Water Co. Paso Robles Beach Water Assoc. Garden Farms	None None	<p>Continue to support efforts to improve water conservation, the efficient use of water, and water re-use.</p> <p>Continue to collect development impact fees for the construction of water supply infrastructure.</p> <p>Support efforts to develop a reliable water supply reserve as an alternative to groundwater. Recycled water should be considered as an alternative supply.</p>

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Water Purveyors Serving the Unincorporated County

Water purveyors serving the unincorporated county are summarized on Table II-1 and shown on Figure II-1.

Table II-1 – Water Purveyors Serving the Unincorporated County				
Community	Water Purveyors	Approx. Population Served (2016)	2014-15 Water Deliveries ¹ (AFY)	2015-16 Water Deliveries ¹ (AFY)
Avila Beach Avila Valley	Avila Beach CSD	875	80.4	74.7
	Avila Valley Mutual Water Co.	104	31.6	27.6
	San Miguelito Mutual Water Co.	1,400	159.1	125.5
Cambria	Cambria CSD	6,200	367.5 445.	412.8 476.8
Cayucos	CSA 10A	1,350	96.5	91.0
	Morro Rock Mutual Water Co.	2,125	94.6	91.5
	Paso Robles Beach Water Assoc.	2,577	123.0	121.5
Edna Valley	Golden State Water Co.	1,292	230.9	183.0
Garden Farms	Garden Farms CWD	240	45.7	36.4
Heritage Ranch	Heritage Ranch CSD	3,100	403.2	393.4
Los Osos	Los Osos CSD	7,086	547.2	445.5
	Golden State Water Co.	5,520	515.5	424.0
	S&T Mutual Water Co.	575	34.9	30.3
Nipomo	Nipomo CSD	12,886	2,110.1	1,773.3
	Woodland Mutual Water Co.	1,600	746.6	732.1
	Golden State Water Co.	4,904	832.2	625.1
Oceano	Oceano CSD	7,543	740.1	630.1
Santa Margarita	CSA 23	1,400	120.2	100.3
San Miguel	San Miguel CSD	2,400	243.3	236.3
San Simeon	San Simeon CSD	462	74.8	76.9
Shandon	CSA 16	1,260	93.2	90.2
Templeton	Templeton CSD	6,885	1,223.9	997.8
	Atascadero Mutual Water Co.	31,500	4,926.4	4,001.2

Source: San Luis Obispo County Flood Control and Water Conservation District, 2016

Notes:

1. July 1 through June 30. Reflects water conservation and production associated with ongoing drought conditions.

Recycled Water

Several water purveyors and wastewater agencies in the County recycle municipal wastewater to partly offset potable water production. Recycled water qualities range from secondary quality (as defined by Title 22 California Code of Regulations (CCR) to the highest level of treatment for unrestricted use.

Water recycling projects serving the unincorporated County are listed in II-9. The planned future use of recycled water is included in their forecasted water supply portfolios discussed for each region.

Table II-9 – Existing and Projected Recycled Water Use Serving the Unincorporated County						
Agency	Existing Effluent		Inland Discharge	Ocean/Coastal Discharge	Existing Reuse	Planned Future Reuse
	MGD	AFY	AFY	AFY	AFY	AFY
Cambria CSD	0.50	540	5540	540	(1)	--
Cayucos CSD	0.25	275	--	275	--	560
Los Osos WWTP ²	1.20	1,340	1,340	--	--	--
San Simeon CSD	0.07	80	--	80	(3)	--
Heritage Ranch CSD	0.20	230	230	--	--	--
San Miguel CSD	0.10	130	130	--	--	--
Templeton CSD Meadowbrook WWTP ⁴	0.15	170	170 ⁵	--	--	750
Avila Beach CSD	0.05	50	--	50	--	--
Nipomo CSD Blacklake WWTP	0.05	50	--	--	50	80
Nipomo CSD Southland WWTF	0.60	640	640 ⁶	--	--	1,900
San Miguelito MWC	0.15	170	--	170	--	--
South SLO County Sanitation District	2.60	2,910	--	2,910	--	3,920
Woodland MWC	0.05	50	--	--	50	50
Total:	5.97	6,635	2,510	4,025	100	7,230

Source: San Luis Obispo County Regional Recycled Water Strategic Plan, 2014

Notes:

- [Percolated effluent serves as a barrier to slow the seaward migration of subterranean fresh water. The CCSD essentially uses all of its wastewater effluent for: a seawater intrusion barrier; its sustainable water facility \(an indirect potable reuse facility\); or, as landscape irrigation.](#)
- Start of operations planned for 2016.
- Trucking of recycled water for irrigation started in 2014.
- Templeton CSD is considering diverting existing sewer flows that go to the Paso Robles WWTP (approximately 0.22mgd) and conveying the flow for treatment at the TCSD Meadowbrook WWTP.
- Templeton CSD retrieves the percolated water at downstream wells.
- Percolated water is accounted for in the Nipomo Mesa Management Area groundwater balance.

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Recommended Levels of Severity

Methodologies

Water Supply

Groundwater is the principal source of water in the County, and groundwater basins may serve multiple purveyors. Accordingly, the discussion of recommended Levels of Severity has been grouped by regions which generally coincide with the major groundwater basins. Information regarding the current status of each basin was derived from a variety of sources, including:

- The San Luis Obispo County Master Water Report, 2012
- The Draft Basin Plan for the Los Osos Groundwater Basin, August 2013
- The Paso Robles Groundwater Basin Management Plan, 2011
- The Paso Robles Groundwater Basin Computer Model, 2014
- [The 2014 San Luis Obispo County Integrated Regional Water Management Plan](#)
- [More recent input from County Planning and WRAC Member-Agency staff](#)

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To determine recommended LOS for water supply, forecast demand from urban, rural, and agricultural users over 15 years, 15-20 years, and 20 years was derived from the 2012 Master Water Report and the 2014 San Luis Obispo Integrated Regional Water Management Plan and compared with the safe yield of the groundwater basins serving these users (where known). Levels of Severity were assigned based on whether the projected demand would exceed the dependable supply over these time periods.

Water Systems

To determine recommended LOS for water systems, water purveyors were asked to identify water system improvements necessary to accommodate current and projected water demand and the timeframe for the needed improvements. The timeframe for needed improvements were then compared with the LOS timeframes to assign a recommended LOS.

The groundwater basin is considered an unreliable source within the timeframes prescribed by the LOS criteria because:

- ☐ Current estimated demand from urban, rural and agricultural users (166.9 AFY) exceeds the safe yield of the basin (120 AFY).
- ☐ Forecast demand from all sources in 30 or more years is expected to be between 310 and 360 AFY which exceeds the safe yield of the basin (120 AFY).
- ☐ The combination of seawater intrusion along with lowering groundwater levels during the dry season or times of drought.

Water demand projected over 15 years will equal or exceed the estimated dependable supply.
Recommended Level of Severity III.

San Simeon Valley and Santa Rosa Valley Groundwater Basins

San Simeon Valley Groundwater Basin

Water users in the basin include the Cambria CSD (discussed below under the Santa Rosa Valley Groundwater Basin) and overlying rural and agricultural users. The primary constraints on water availability in the basin include physical limitations and potential water quality issues. ~~The State Water Resources Control Board (State Board) allows the Cambria CSD a maximum extraction of 1,230 AFY in the San Simeon Valley Groundwater Basin and a maximum dry season extraction of 370 AF (Cambria CSD Water Master Plan (WMP), 2008). Although the actual dates will vary each year depending on creek flows and rainfall occurrence, the dry season generally spans from May through October. In general, groundwater levels in the basin are typically highest during the wet season, steadily decline from these levels during the dry season, and recover again to higher levels during the next wet season. The CCSD is in the process of licensing its San Simeon Creek aquifer water rights with the State Water Resources Control Board (SWRCB), which would set its maximum annual San Simeon Creek groundwater aquifer diversion at 798.82 AF. The Sustainable Water Facility (SWF) re-injects the water it produces back into the San Simeon Creek aquifer, which is subsequently extracted by existing CCSD potable wells SS1 or SS2. Therefore, the SWF brackish water extraction would not be subtracted from the 798.82 AF limit that would be licensed by the SWRCB. The CCSD also provides approximately 20 AF per year of agricultural riparian use water from its San Simeon potable wells to a rancher north of San Simeon Creek Road as part of an earlier 2006 settlement agreement. Therefore, the 20 AF provided by the CCSD as riparian agricultural water would also not count towards the licensed diversion limit of 798.82 AF per year. not count towards this total, nor does water supplied to the Clyde Warren property for agriculture use.~~

Santa Rosa Valley Groundwater Basin

Water users in the basin include the Cambria CSD and overlying rural and agricultural users. According to the 2012 Master Water Report, the primary constraints on water availability in the basin include physical limitations and potential water quality issues. ~~The State Board allows the Cambria CSD a maximum extraction of 518 AFY in the Santa Rosa Valley Groundwater Basin and a maximum dry season extraction of 260 AF from May 1 through October 31st as defined in the permit (Cambria CSD WMP, 2008). In general, groundwater levels in the basin are typically highest during the wet season, steadily decline from these levels during the dry season, and recover again to higher levels during the next wet season. The CCSD is in process of licensing its Santa Rosa groundwater aquifer water rights with the State Water Resources Control Board (SWRCB), which~~

~~would set its maximum annual Santa Rosa Creek groundwater aquifer diversion at 217.92 AF. Because of these limitations, the~~The CCSD has used the Santa Rosa basin as a means of augmenting its primary supply from the San Simeon aquifer during the dry season, and as an emergency backup watersupply.

~~Due to the dry season supply limitations of the San Simeon and Santa Rosa Valley Groundwater Basins, an alternative supply is necessary to meet demand during a drought. Two water management strategies are currently being used by the CCSD. In response to the severe drought of 2014, and to improve supply reliability the CCSD completed the following:~~

- ~~The Sustainable Water Facility (a brackish water desalination facility, which includes advanced treatment to meet Title 22 indirect reuse regulations); and~~
- ~~Restored its potable Well SR-1 for non-potable water use.~~
- An aggressive program of water conservation.

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To increase water supply reliability, the Cambria CSD has constructed an emergency water supply facility to produce 250 AFY. The plant will operate during the dry season to augment supply during that period of high demand. The US Army Corps of Engineers is currently (2016) revising a draft Environmental Impact Statement (EIS) to further assess various water supply alternatives, including a means to incorporate emergency project facilities. The CCSD's preferred plan would be to make this facility permanent. Progress on the EIS is on hold while the CCSD develops a project description for this preferred plan. Other water management strategies include further conservation and land use management such as low impact development and rainwater harvesting. In addition, in November, 2015 the Cambria CSD adopted a Groundwater Management Plan which sets forth a range of strategies to manage the District's groundwater resources. As Part of its adopted 2016 Urban Water Management Plan Update, the CCSD commissioned Maddaus Water Management to develop a more aggressive conservation program, which reduced future water demand. This recommended conservation program (Program B) includes measures such as, point of use recycled water (e.g., the Nexus eWater gray water treatment system to allow toilet flushing via a dual plumbed house); and, not allowing the use of potable water on any future home's landscaping.) This resulted in approximately 691,700 acre-feet per year demand at buildout for existing and future connections (a combined total of 4,650 existing and future residences). The Cambria CSD column of Table II-11 has been revised to show the demand modeling results under recommended conservation Program B, which is further described within the CCSD's 2016 adopted Urban Water Management Plan Update.

Table II-11 – Cambria Area: San Simeon Valley and Santa Rosa Valley Groundwater Basins Existing and Forecasted Water Supply and Demand			
Demand	Cambria CSD	Agriculture	Rural
FY 2015/2016 Demand (AFY) ¹	412,847 ⁶	521	100
Forecast Demand in 15 Years (AFY)	909,679 ²	996	184
Forecast Demand in 20 Years (AFY)	909,691 ²	1,115	205
Buildout Demand (30 Or More Years) (AFY)	836,909,691 ²	1,115	205
Supply			
San Simeon Valley Basin (AFY)	640,519 ³ - 799 ³	11	2
Santa Rosa Valley Basin (AFY)	199,170 ⁴ - 218 ⁴	301	55
Villa Valley	0 ⁵	112	21
Other GW Supplies	0 - 195 ⁵	691	127
Other Surface Supplies	600 ⁵	0	0
SWRCB-WPA 1	0	0	0
Recycled Water	100	0	0
Total Supply:	1,509,689 ⁶ - 1017 ⁶	1,115	205
Water Supply Versus Forecast Demand	Water demand for the basins projected over 15 years will likely equal or exceed the estimated dependable supply. ⁶		

Sources: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014; San Luis Obispo County

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Notes:

1. See Table II-1.
2. Cambria CSD Urban Water Management Plan Tables 3-9 and 3-12. The upper range represents estimated demand plus 8% unaccounted water (distribution system and meter losses). The lower range represents demand totals with no system losses. From Maddaus Water Management Decision Support System (DSS) Modeling, (August 2016) for recommended conservation program B of the 2016 Urban Water Management Plan Update (UWMP). Note that Table 4-2 of the CCSD UWMP used only existing plumbing code updates, and therefore shows higher demand values than conservation Program B.
3. State Board allows Cambria CSD 1,230 AFY maximum extraction and 370 AF dry season extraction. California Coastal Commission limits Cambria CSD total diversion from both San Simeon and Santa Rosa Creeks to 1,230 AFY. The table uses a conservative assumption for dry weather extractions. The 519 AF minimum assumes the Sustainable Water Facility is not operating and there is a 15% reduction in supply per Table 7-1a of the 2016 Cambria CSD Urban Water Management Plan. The 799 AF (798.82 rounded) upper range assumes the CCSD licenses its existing diversion permit with the SWRCB at this value.

Summary of Recommended Levels of Severity

Water Supply

Table II-23 -- Summary of Recommended Levels of Severity – Water Supply	
Groundwater Basins and Affected Water Purveyors	Recommended LOS
Pico Creek Valley Groundwater Basin <u>Water Purveyors</u> San Simeon CSD	III
San Simeon Valley Groundwater Basin Santa Rosa Valley Groundwater Basin <u>Water Purveyors</u> Cambria CSD	None None
Cayucos Valley Groundwater Basin Old Valley Groundwater Basin <u>Water Purveyors</u> CSA 10A Morro Rock Mutual Water Co. Paso Robles Water Assoc.	None None
Los Osos Valley Groundwater Basin <u>Water Purveyors</u> Los Osos CSD S&T Mutual Water Co. Golden State Water Co.	III
San Luis Obispo Valley Groundwater Basin – San Luis Sub-basin/Edna Valley Sub-basin <u>Water Purveyors</u> Golden State Water Co.	None
San Luis Obispo Valley Groundwater Basin – Avila Valley Sub-basin <u>Water Purveyors</u> Avila Beach CSD Avila Valley Mutual Water Co. San Miguelito Mutual Water Co. CSA 12	None

Recommended Actions

General Recommendations

- Continue to support efforts to improve water conservation, the efficient use of water, and water re-use.
- Continue to collect development impact fees for the construction of water supply infrastructure.
- Support efforts to complete Basin Management Plans throughout the County.
- Support efforts to develop sustainable supplemental sources of water.

San Simeon Valley and Santa Rosa Valley Groundwater Basins (Cambria)

1. LOS III to ~~remain in place~~ [be changed to None based on data collected by the CCSD.](#)
2. Collaborate with the Cambria Community Services District for the issuance of a limited number of intent-to-serve letters and building permits based on the continued use of a demand offset conservation program that offsets new demand from new water connections.
3. Revise the County Growth Management Ordinance in collaboration with the Cambria Community Services District to accommodate the issuance of an allowable number of building permits for new development.
4. Collaborate with the Cambria Community Services District to prepare and obtain a [Regular Coastal Development Permit](#) for its recently completed [Sustainable Water Facility Emergency Water Supply Project](#) along the lower San Simeon Creek aquifer.

Cayucos Valley and Old Valley Groundwater Basins (Cayucos)

1. Support efforts to develop a reliable water supply reserve as an alternative to groundwater. Recycled water should be considered as an alternative supply.

Los Osos Groundwater Basin

1. LOS III to remain in place.
2. Continue to support efforts to implement the Basin Management Plan.
3. Implement the water management strategies of the Los Osos Community Plan following adoption.

San Luis Obispo Valley Groundwater Basin

1. Support efforts to determine the safe yield of the Avila Valley Sub-basin.

Santa Maria Valley Groundwater Basin

1. Consider ending the Title 8 retrofit-upon-sale ordinance in the NMWCA. The program has run for four years and approximately 5% of homes have needed retrofitting.

Water Rates and Rate Structure

Table A-1 -- 2015-2016 Water Rates and Rate Structure

Community	Water Purveyors	Approximate Population Served		2015-2016 Single Family Residence (SFR)		
		Total District Population Served	Single Family Residences (SFR) Metered (hook-ups)	Average Annual Water Use	Water Rate Structure ¹	Average Residence Water Bill ²
Avila Beach Avila Valley	Avila CSD	875	249	0.09 AFY	Flat Rate	\$110.35/mo.
	Avila Valley Mutual Water Co	104	28	0.98 AFY	Tiered	\$525.03 for 2 mo. billing cycle
	San Miguelito Mutual Water Co.	1,400	616	0.12 AFY	Tiered	\$64.76/mo.
Cambria	Cambria CSD	6,520	3,644	0.078 AFY	Tiered	\$45.22 for 2 mo. billing
Cayucos	CSA 10A	1,350	752	0.13 AFY	Tiered	\$65.50/mo.
	Morro Rock Mutual Water Co.	2,125	472	0.12 AFY	\$48.00 per month, plus \$7.17 per 1,000 gallons used	\$58.63/mo.
	Paso Robles Beach Water Assoc.	2,577	663	0.12 AFY	\$35.00 per month plus \$9.30 per 1,000 gallons used	\$135.28 for 2 mo. billing cycle
Edna Valley	Golden State Water Co. – Edna Valley	1,292	549	0.25 AFY	Tiered	\$206.16 for 2 mo. billing cycle
Garden Farms	Garden Farms CWD	240	115	0.31 AFY	Tiered	\$68 for 2 mo. billing cycle
Heritage Ranch	Heritage Ranch CSD	3,100	1,840	0.19 AFY	Three tiers	\$34.41/mo. for 7 HCF
Los Osos	Los Osos CSD	7,086	2,459	0.13 AFY	Four tiers	\$77.36 for 2 mo. billing cycle
	Golden State Water Co. – Los Osos	5,520	2,508	0.13 AFY	Tiered	\$122.91 for 2 mo. billing cycle
	S&T Mutual Water Co.	575	178	0.16 AFY	Tiered	\$68 per 2 mo. billing cycle
Nipomo	Nipomo CSD	12,886	3,603	0.42 AFY	Tiered	\$155.92 per 2 mo. billing cycle
	Woodland Mutual Water Co.	1,600	748	0.39 AFY	Flat + tiered	\$75.02 per 2 mo. billing cycle
	Golden State Water Co. – Nipomo	4,904	1,412	0.40 AFY	Tiered	\$60.22/mo.
Oceano	Oceano CSD	7,543	2,040	0.25 AFY	Five tiers	\$180.00 for 2 mo. billing cycle
Santa Margarita	CSA 23 – Santa Margarita	1,400	485	0.29 AFY	Tiered	\$59.47/mo.
San Miguel	San Miguel CSD	2,400	733	0.27 AFY	Tiered	\$69.34/mo.
San Simeon	San Simeon CSD	462	172	0.07 AFY	Flat	\$65.54/mo.
Shandon	CSA 16 -- Shandon	1,260	325	0.26 AFY	Tiered	\$91 per 2 mo.

						billing cycle
Templeton	Templeton CSD	6,885	2,425	0.41 AFY	Tiered	\$63.00 per mo.
	Atascadero Mutual Water Co.	30,332	9,242	0.32 AFY	Tiered	40.14/mo.

Source: Water System Usage forms: July 2014 – June 2015; July 2015 – June 2016

1. Flat, tiered, etc.
2. Dollar amount per billing cycle.
3. Data not provided for FY 2015/2016

Source: Water System Usage forms: July 2014 – June 2015; July 2015 – June 2016

4. Flat, tiered, etc.
5. Dollar amount per billing cycle.
6. Cost shown does not include the CCSD's waste-water billing component, which would add approximately \$74.09 per a 2-month billing period.