Water Resources Advisory Committee

Michael Winn **Chairperson** | Sue Luft **Vice Chairperson** | Courtney Howard **Secretary**

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April 5, 2011

Honorable Adam Hill
Chairperson, Board of Supervisors
County of San Luis Obispo
976 Osos Street
San Luis Obispo, CA 93408-2040

Subject: Water Resources Advisory Committee Comments on the Resource Management System 2010 Annual Summary Report

Dear Chairperson Hill:

A subcommittee was formed 2 February 2011 to discuss the draft 2010 Annual Survey Report for the Resource Management System.

Subcommittee members included:

- Sue Luft (Environmental At-Large)
- Bill Garfinkel (District 2)
- Stephnie Wald (Environmental At-Large: Marine Interests)
- Mike Winn, Subcommittee chair (Nipomo Community Services District)
- Ray Allen (Agriculture At-Large) - unable to attend but did offer comments

After a meeting 18 February 2011, consensus was reached on the following comments:

The subcommittee strongly supports the 2010 ASR, including the Level of Severity (LOS) designations, and requests that the WRAC ask that the SLO County Board of Supervisors adopt the document, with the inclusion of the following comments.

General Suggestions:

1. Add a small map of the area/agency being surveyed at the beginning of its section, following its name.

2. Suggest that "acre-feet per year" be used only once in each regional report, using "afy" thereafter – the exception being in titles of charts.

Purpose of the Committee:

To advise the County Board of Supervisors concerning all policy decisions relating to the water resources of the SLO County Flood Control & Water Conservation District. To recommend to the Board specific water resource programs. To recommend methods of financing water resource programs.

Excerpts from WRAC Bylaws dated 3/2/2011

3. Suggest that the section heading "Sewage" be replaced throughout with "Waste Water Treatment".

General Recommendations:

1. Insert a small chart at the beginning of each water supply section, showing water supplier(s), source(s), acre-feet demand in the most recent year reported, Level of Severity (if appropriate), and the date an LOS was certified (if applicable). E.g.,

   Los Osos

Water Supplier	Source	Acre-Feet Used 09-10	LOS	Date Certified
Los Osos CSD	Groundwater Basin	837	III	2007
Golden State Water Company	Groundwater Basin	826	III	2007
S&T Mutual Water Company	Groundwater Basin	80	III	2007

2. Round off "gallons per capita per day" to the nearest whole gallon.

3. Charts used to show calculation of reduction in residential water use should not use "Total Acre Feet per Year", since some classes of users are exempt from this requirement. Instead use "Total Residential Acre-Feet per Year".

4. Use "water supplier" or "water provider" instead of "purveyor".

5. Water rate information should include not only whether they are tiered but should specify where possible how many tiers.

The attached redlined staff report was adopted with emendations 2 March 2011 by the WRAC membership. The motion passed 14-2-0.

Respectfully,

Michael Winn

MICHAEL WINN
Water Resources Advisory Committee Chairperson and Subcommittee Chair

cc: SLO County Board of Supervisors
James Caruso, County Department of Planning and Building

Attachment: WRAC Comments on the Resource Management System 2010 Annual Summary Report

Cambria *

* The section on Cambria was reviewed by the WRAC subcommittee as well as Cambria CSD staff but was inadvertently omitted from the draft voted on by WRAC membership.

Water Supplier	Source	09/10 AF Used	Level of Severity	Date certified
Cambria Community Services District	Santa Rosa & San Simeon Creek Groundwater Basins	820.9	III	

The unincorporated community of Cambria is completely dependent on a limited groundwater supply. Water and sewer service is provided by the Cambria Community Services District (CCSD). Cambria is within the Cambria Union Elementary and Coast Union Joint High School Districts.

The community's water supply has been in a Level of Severity III, the most critical level, for more than 10 years. On August 21, 2008, the CCSD certified a program-level Environmental Impact Report (EIR) for its water master plan. This plan calls for water conservation, use of recycled water for non-potable irrigation, and seawater desalination to augment its potable water supply. The District is currently working with the U.S. Army Corps of Engineers to complete a geotechnical investigation to support development of a project-level Environmental Impact Report/Environmental Impact Statement for its proposed desalination project.

Water Supply

Cambria has a very limited water supply from the San Simeon and Santa Rosa groundwater basins associated with its two well fields. The CCSD has focused on seawater desalination for long-term drought protection and as a water supply for new development and existing users.

Reliance on groundwater in small coastal basins leaves the community vulnerable to drought. The CCSD Master Water Plan looks to seawater desalination, wastewater recycling and water demand management to address this concern.

Water Use

District water users use the least water per connection of any water provider-served area in the County. Water use has ranged from 674 afy in 2009-2010 to 820 afy in 2003-2004.

Cambria Total Water Use AF/Y (fiscal year)								
1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2007-2008	2008-2009	2009-2010
793	811	817~~.3~~	778.6	82~~10.9~~	755~~.1~~	67~~87.5~~	706~~.2~~	674~~.2~~

The 2010 US Census data for Cambria, has shown that the service population went down from 6,232 in 2000 to 6,032 in 2010. The same 2010 census data shows that vacancy rates in Cambria increased from past values of 25% in 1990 and 2000, to 32% in 2010. The increased vacancy may have been a reflection of the poor state of the economy, which resulted in more vacant homes. This increased vacancy rate may have also been a contributing factor towards some of the reduced water production in Cambria. For calendar year 2010, the per capita water use for Cambria was 99.5 gpcd (derived by dividing a total production of 672 af by a 2010 census population of 6,032). This value is below the Department of Water Resources (DWR) Central Coast target of 117 gpcd, when applying the DWR's Target Method 1 (Target methods developed as part of DWR's Guidance in meeting SBx707 water conservation goals). The five-year base period for Cambria (calendar years 2003 through 2007) resulted in 110.7 gpcd. The DWR goal setting methodology for SBx7-7 compliance requires a community's target to be checked against a value that is 95% of its 5-year baseline. This final check results in a target goal for Cambria being set at 105.1 gpcd. Therefore, the table below shows future Cambria demands from 2020 and later at 105.1 gpcd.

The seawater desalination facility that the CCSD is planning with the Army Corps of Engineers could take approximately four years to complete. Current buildout reduction plans for Cambria also call for providing approximately 666 residential wait list customers with a new water service connection over a 22-year period. This would result in approximately 30 new water connections per year once the desalination facility is completed. The 2000 US Census determined the average occupancy of Cambria at 2.21 persons per dwelling unit, which was based on the area's historic 25% vacancy rate. Therefore, for the 30 new connections per year, approximately 66 persons per year would be added until buildout. The table below estimated population for Cambria using the 66 additional persons per year beginning in 2014.

~~Per capita water use is currently 93 gpcd. A 20% reduction in per capita use would result in a year 2020 water use of 74 gpcd. This reduction is calculated as a simple 20% reduction in per capita water use based on current water usage. Other methodologies are available to estimate the 20% reduction figure.~~

Cambria Per Capita Water Use			
Year	Population	Gallons Per Capita Per Day (GPCD)	Total Acre Feet Per Year
~~July 2009-June~~ 2010	6,032~~500~~	100~~92.59~~	672~~4.16~~
2020	6,42~~8681~~	105~~74.07~~	757~~554.35~~
2025	6,759~~99~~	105~~74.07~~	796~~564.14~~

2035	7,088326	10574.07	834607.86

Water Rates

Current Rate: Cambria has a water rate structure with 10 tiers, which increase based on level of consumption.tiered water rate based on consumption.
Avg. Single Family Water Use: 4,488 gallons/Mo.
Avg. Single Family Water Bill: $30.06/Mo.

Sewage

Wastewater treatment service is provided by the Cambria Community Services District. The average dry weather flow, which is monitored May through October, is 60% of permanent plant capacity as of 2009. Treated wastewater effluent is used for a seawater barrier between Cambria's percolation ponds along the lower reach of San Simeon Creek and a potable well field, which is located further upstream. The CCSD also provides non-potable groundwater, which is typically trucked by end users for irrigation and dust control purposes. Long-term planning calls for a recycled water distribution system to serve non-potable irrigation customers, such as recreational areas.
Sewer service is provided by the Cambria Community Services District. The average dry weather flow, which is monitored May through October, is 60% of permanent plant capacity as of 2009. Effluent is used for groundwater recharge and irrigation.

Cayucos

Water Supplier	Source	09/10 AF Used	Level of Severity	Date certified
Paso Robles Beach Water Association	Whale Rock Reservoir	?	II	
CSA 10A	Whale Rock Reservoir	121	III	
Morro Rock Mutual Water Company	Whale Rock Reservoir	?	II	
Cemetary	Whale Rock Reservoir	?	III	

Cayucos is served by three small water purveyors: the Morro Rock Mutual Water Company (MRMWC), the Paso Robles Beach Water Association (PRBWA) and County Service Area 10A (CSA 10A). The three water purveyors share the community's water treatment plant. CSA #10A plans to exchange Whale Rock water for Nacimiento water delivered to the City of San Luis Obispo. The mutual water companies do not plan to add to their supply.

Water Supply

Over the past 10-15 years, total water production in the community has remained fairly constant at roughly 400 – 500 acre-feet per year (Estero Area Plan Update and current estimates). CSA 10A has restricted issuance of building permits since 1993 due to a water shortage emergency. However, the CSA has subscribed to 25 acre feet per year from the Nacimiento Water Project. Nacimineto water is currently available to the community.

The three water purveyors rely on an approximately 600 acre-foot entitlement from Whale Rock reservoir. CSA 10A has subscribed to an additional 25 acre feet of water from the Nacimiento Water Project.

Water Use

Water use in Cayucos has ranged from 406 afy in 2004-2005 to 431 afy in 2007-2008.

Water deliveries in acre feet/year by each of the three purveyors and the cemetery since the year 2000 are:

Purveyor	00	01	02	03	04	05	06	07	08	09	Current Allocation
PRBWA	168	159	161	165	169	156	156	163	*	*	222 afy
MRV	106	111	119	114	116	112	114	121	*	*	170 afy
CSA 10A	124	122	127	128	128	125	124	132	*	121	190 afy
Cemetery	14	15	15	16	15	13	15	15	*	*	18 afy
Total	412	407	421	423	428	406	409	431	*	121	600 afy

Per capita water use reductions in the CSA 10A area reflect a 20% reduction in water use from the year 2009-2010.

Cayucos Per Capita Water Use			
Year	**Population**	**Gallons Per Capita Per Day (GPCD)**	**Total Acre Feet Per Year**
July 2009-June 2010	3,183	109~~.25~~	12~~76.92~~
2020	3,310	87~~.40~~	324~~.04~~
2025	3,329	87~~.40~~	32~~65.90~~
2035	3,544	87~~.40~~	34~~76.95~~

Water System

Recently, issues regarding adequacy of fire flow have been discussed by the Fire District and the Cayucos Citizen's Advisory Council (CCAC). The Fire District has approved new development in areas where fire flow is at least 500 gallons per minute with installation of a residential fire sprinkler system. Older development in the area have neither adequate fire flow nor do they have

residential sprinklers as these structures predate the fire flow and sprinkler requirements. The State and County standard minimum is 1,000 gpm.

The CCAC has recommended that no new will-serve letters be issued unless 1,000 gpm of fire flow is available. District staff notes that there are several inadequate 4" water lines and additional fire flow storage is needed in the area.

Water system levels of severity are based on the amount of time until a system reaches design capacity. A Level of Severity III was established for the water system in the CSA 10A area in 2010, as the water system can no longer deliver adequate water for fire protection.

Water Rates

CSA 10A has a [n-]tiered water rate based on consumption. No information was received from the two mutual water companies that serve the town.

Avg. Single Family Water Use: 4,375.8 gallons/Mo.
Avg. Single Family Water Bill: $43.96/Mo.

Sewage

The Cayucos Sanitary District has an agreement with the City of Morro Bay to reserve a portion of the Morro Bay treatment plant capacity for sewage flow from Cayucos. The treatment plant's waiver to use secondary treatment is ending and the plant upgrade is in the design phase. The upgraded treatment plant will result in a higher level of treatment at the plant in the future and possible reuse of the highly treated effluent.

Los Osos

Still in review

Water Supplier	Source	09/10 AF Used	Level of Severity	Date certified
Los Osos Community Services District	Groundwater Basin	837	III	2007
Golden State Water Company	Groundwater Basin	826	III	2007
S&T Mutual Water Company	Groundwater Basin	80	III	2007

The community of Los Osos faces a serious water situation. Continued over-pumping of the lower portion of the Los Osos groundwater basin has led to

seawater intrusion into the basin, which threatens the potable water supply. A Level of Severity III was certified for this basin in 2007 and has led to water conservation requirements by the County. The three water suppliers~~purveyors~~ that serve the community and the County are in groundwater rights litigation (also known as groundwater adjudication). This legal action may result in a plan to address use of the groundwater basin.

The community also faces the need for a wastewater project. The County is moving ahead with the design of a new wastewater project for a portion of the urban area.

Water Supply

Los Osos Valley Groundwater Basin: A Level of Severity III has been certified by the Board for the groundwater basin. Water conservation ordinances have been adopted by the County for new development and upon sale of existing buildings. Water purveyors continue to study and implement changes in pumping patterns to address seawater intrusion. Ongoing groundwater adjudication discussions will result in updated pumping estimates and other basin data. Total basin demand, including private wells and estimated agricultural use, is currently estimated at approximately 2,850~~3,400~~ afy. This exceeds safe yield, with a current deficit of approximately 150 afy. Safe yield in the lower aquifer is currently being exceeded, causing seawater intrusion in the lower aquifer.

The three water suppliers~~purveyors~~ and the County have entered into an Interlocutory Stipulated Judgment (ISJ) as a result of the groundwater adjudication lawsuit filed by the Los Osos CSD. The ISJ requires the four parties to cooperate in assessing the state of the groundwater basin and to develop a Basin Management Plan.

Two water conservation ordinances are in effect. Title 8 requires retrofitting of structures upon sale. Title 19 requires new development to retrofit water fixtures in existing buildings in order to save twice the water that the new development will use. Other water conservation techniques, such as education and outreach, are being used by both the LOCSD and Golden State Water Company.

On May 4, 2010, the agencies involved in the groundwater litigation released an update of the Los Osos Groundwater Basin analysis. The Groundwater Basin update provides a summary of recent basin management efforts, which are still pending, including:

- Basin modeling shows that current water demand is within the basin's safe yield. Water purveyors need to redistribute well pumping between the upper and lower aquifers and from west to east in order to balance basin pumping.
- Seawater intrusion has accelerated following three years of drought.

- A peer review has found that technical groundwater analysis and modeling provides usable results and can be used to implement a Basin Management Plan.
- The Los Osos Wastewater Project will include several actions that benefit the water supply and be complementary to other basin management actions.
- The ISJ is investigating many potential actions to incorporate into the Basin Management Plan.

The update and associated documents are available for review at the Los Osos CSD and County Public Works websites (www.slocounty.ca.gov/pw/LOWWP.htm) or (www.losososcsd.org).

Los Osos is served by three water suppliers~~purveyors~~: the Los Osos Community Services District (LOCSD), Golden State Water Company and S&T Mutual Water Company.

Water Use

Water use in Los Osos has ranged from 2,337 afy in 2001-2002 to 1,743 afy in 2009-2010.~~.~~

Los Osos Water Demand (2000-2010) acre feet/year											
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
LOCSD	1,149	1,099	1,158	1,331	1,045	960	939	943	870	899	837
GSWC	1,076	1,065	1,061	1,035	1,072	1,018	966	990	945	889	826
S&T	111	98	118	96	100	93	88	95	91	83	80
TOTAL	2,336	2,262	2,337	2,262	2,217	2,071	1,993	2,028	1,906	1,873	1,743

Per capita water use reductions reflect a 20% reduction in water use from the year 2009-2010.

Los Osos Per Capita Water Use				
Year	**~~Purveyor~~Supplier**	**Population**	**Gallons Per Capita Per Day (GPCD)**	**Total Acre Feet Per Year**
July 2009-June 2010	LOCSD	7,087	1065~~.52~~	837.67
	Golden State Water Company	7,088	104~~.14~~	8276~~.83~~
	S&T Water	525	1376~~.65~~	80.~~36~~
2020	LOCSD	7,523	84~~.42~~	711~~.36~~
	Golden State Water	7,523	83~~.31~~	702~~.06~~

	Company			
	S&T Water	525	109.32	64.29
2025	LOCSD	7,858	84.42	743.04
	Golden State Water Company	7,858	83.31	733.32
	S&T Water	525	109.32	64.29
2035	LOCSD	8,697	84.42	822.38
	Golden State Water Company	8,697	83.31	8121.62
	S&T Water	525	109.32	64.29

Water Rates

Average Single Family Water Bill (LOCSD): $42/Mo. ([n-]tiered rate)

Average Single Family Water Bill (S&T Mutual Water): $54/Qtr (Flat rate)

Average Single Family Water Bill (Golden State): 2-tiered rates

Sewage

The wastewater project continues in the design stage. The Coastal Commission has approved the Coastal Development Permit for the treatment and collection system. A Level of Severity III has been in place since 1990.

Morro Bay

Morro Bay is one of seven cities and the only incorporated city in the North Coast area. The City covers six square miles. Tourism is the primary industry, and, unlike other cities, the City includes a harbor.

The City provides sewer and water services. It is part of the San Luis Coastal Unified School District. The City has adequate water to continue the existing pattern of development within the City limits. A major wastewater treatment level upgrade is being pursued to bring the treatment plant up to the tertiary treatment level. This level of treatment will facilitate the use of effluent as part of the City's water sources. The wastewater treatment plant also treats wastewater from Cayucos Sanitary District.

Water Supply

The City receives water from a variety of sources: groundwater from the Morro Creek underflow, groundwater from the Chorro Creek underflow, converted saltwater through the City's desalination facility, and State water via the Chorro Valley pipeline. The desalination facility also treats brackish water from the Morro Creek underflow for nitrate removal. The City's desalination plant provides

water during the times that the State Water Project pipeline is undergoing annual maintenance.

Water Use

Water use in Morro Bay has ranged from 1,317 afy in 2009-10 to 1,475 afy in 2003-04.

Morro Bay Total Water Use AF/Y (fiscal year)									
1999-2000	**2000-2001**	**2001-2002**	**2002-2003**	**2003-2004**	**2004-2005**	**2005-2006**	**2007-2008**	**2008-2009**	**2009-2010**
1,372	1,417	1,437	1,423	1,475	1,400	1,384	1,420	1,369	1,317

The City has an allocation from the State Water Project that includes a drought buffer:

City of Morro Bay State Water Allocation (acre feet/year)						
	Water Service Amount	Buffer	Total Reserved	Minimum Allocation	Average Allocation	Maximum Allocation
City of Morro Bay	1,313	2,290	3,603	216	1,313	1,313

Based on the information from the City, per capita water use in 2009-10 was approximately 111 gpcd. Based on Morro Bay's previous reductions and current low usage, the city will comply with the State's requirements of reduction by reducing its per capita water use from its current usage by 5% in 2020.

Morro Bay Per Capita Water Use			
Year	**Population**	**Gallons Per Capita Per Day (GPCD)**	**Total Acre Feet Per Year**
July 2009-June 2010	10,550	111.40	1,316.43
2020	10,650	105.83	1,262.3
2025	10,890		1,290.7
2035	11,500		1,363.06

Water Rates

The City's escalating ~~tiered~~ water rates are relatively high. ~~Morro Bay has the second highest water rates in the county.~~

Avg. Single Family Water Use: 5,236 gallons/Mo.
Avg. Single Family Water Bill: $27.58/Mo.

Sewage

Facilities:

The City shares a wastewater treatment plant with the Cayucos Sanitary District. The shared treatment plant is located in Morro Bay near the Morro Bay Power Plant. This wastewater treatment plant has one of the few secondary treatment waivers in the State. The waiver allows the wastewater plant to dispose of primary-~~—~~treated sewage through an outfall to the ocean. The secondary treatment waiver is being phased out over the next 4 years, and the plant will be upgraded to provide tertiary treatment. At that level of treatment, the wastewater effluent could be recycled to augment the City's water supply.

Operational Issues:

None.

Capacity Increases:

The City and the Cayucos Sanitary District are continuing to make progress on upgrading the wastewater treatment plant, which is scheduled to be completed by January 2014. The City and District anticipate beginning the design phase in February 2010, with construction scheduled for January 2012.

Level of Severity:

Morro Bay's sewer facilities operate at 66% of capacity. The projected peak flow will not equal the treatment plant capacity in six years. Based on this criterion, no Level of Severity is identified for sewer facilities.

San Simeon

Water Supplier	Source	09/10 AF Used	Level of Severity	Date certified
San Simeon Community Services District	Creek Underflow	?	III~~3~~	1991

San Simeon is a small community on scenic Highway 1 serving both local residents and visitors. San Simeon's water supply is from groundwater and is provided by the San Simeon Community Services District (SSCSD). The community has been at a Level of Severity III for water supply—the most critical level—for several years. No additional water supplies are readily available; no additional development is expected in the foreseeable future. A development moratorium has been in place since 1991.

Water Supply

The community relies on two groundwater wells along Pico Creek. The dependable yield from this water source is estimated at between 120 and 130

acre-feet per year. Pumping from this source totaled 93 acre-feet in the year 2007-2008.

The SSCSD has studied the feasibility of supplemental water supplies including desalination, surface storage, wastewater reclamation and a cooperative agreement with the Cambria CSD. Securing additional water supplies for this isolated coastal community remains problematic.

Water Use

Water use in San Simeon has ranged from 111 afy in 1999-2000 to 86 afy in 2008-2009.

San Simeon Total Water Use AF/Y (fiscal year)								
1999-2000	**2000-2001**	**2001-2002**	**2002-2003**	**2003-2004**	**2004-2005**	**2007-2008**	**2008-2009**	**2009-2010**
111	103	107	104	missing	94	90	86	missing

Water Rates

The community's water rates are 125% of the countywide average cost of water. Details regarding 2010 rates from the SSCSD were not available at the time this report was prepared.

Sewage

Facilities:
The SSCSD operates a treatment plant for the community.

Operational Issues:
None.

Capacity Increases:
There are no plans to make improvements to increase capacity.

Level of Severity:
The sewer treatment plant operates at 69% capacity. There is thus no Level of Severity.

Atascadero

The City of Atascadero is 24.3 square miles in size. The City of Atascadero is served by the Atascadero Mutual Water Company (AMWC), and is located within the Atascadero Unified School District. Freeway interchange improvements and water from the Nacimiento Pipeline Project will address some of the City's infrastructure needs.

Water Supply

The AMWC's water sources are groundwater including underflow of the Salinas River. The Company has contracted for 2,000 acre feet/year (afy) of Lake Nacimiento project water. The AMWC serves water to the City and a portion of the unincorporated territory south of the City.

The AMWC gets its entire water supply from the Atascadero Sub-Basin of the Paso Robles Groundwater Basin and the underflow of the Salinas River. The underflow is part of the Paso Robles Groundwater Basin and is included in the Paso Robles Groundwater Basin Resource Capacity Study (RCS) developed by the County.

The Company has also contracted for a share of the Nacimiento Water Project. Full delivery of the 2,000 acre feet per year is scheduled when the Company's groundwater wells are not sufficient to meet demand.

Water Use

Water use per connection in Atascadero has an overall trend of decreasing since the year 2000.

Atascadero Total Water Use AF/Y (fiscal year)										
1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
6,459	6,355	6,457	6,288	6,978	5,841	6,115	6,850	6,590	6,194	5,511

The AMWC did not include a 20% reduction in per capita water use. The Company states that current effective conservation programs may count toward the 20% goal.

Atascadero Mutual Water Company Per Capita Water Use			
Year	Population*	Gallons Per Capita Per Day (GPCD)	Total Acre Feet Per Year
July 2009-June 2010	30,000	199.00	5,509.27
2020	29,860	199.00	6,656.05
2025	30,810	199.00	6,8687.81
2035	33,200	199.00	7,4010.57

Information received from Atascadero Mutual Water Company.

Water Rates

The City's water rates are relatively low when compared with the rest of the cities and communities in the county. Atascadero's rates are approximately 44% of the countywide average cost of water. Communities that rely on groundwater generally have lower water rates than communities that rely on imported water due to the costs of delivering imported water. Atascadero Mutual Water Company has [n-]tiered rates.

Avg. Single Family Water Use: 23,000 gallons/Mo.
Avg. Single Family Water Bill: $31.74/Mo.

Sewage

Facilities:
According to the City's Sewer System Management Plan, sanitary sewer services are provided to approximately one-half of the residents and to a majority of the businesses within the city limits. Privately owned and maintained on-site septic systems are utilized by the remainder of the city. The south Atascadero unincorporated area that is served by the mutual water company does not have sewer service. The City's Water Reclamation Facility (WRF) is located east of the Chalk Mountain Golf Course. Groundwater reclaimed from below the facility'sfacilities infiltration ponds is used for fairway irrigation.

Operational Issues:
The city had issues meeting discharge requirements for TDS, chloride, and sodium during August, 2008, and is still having these issues.

Capacity:
The City of Atascadero's Wastewater Treatment Plant operates at 47% capacity. No LOS is appropriate.

Paso Robles

The incorporated City of Paso Robles consists of 17.33 square miles of land. Paso Robles is known for itsthe wine industry, which drives both the local tourism and agriculture industries. Paso Robles is a full-service City providing water and sewer with public schools provided by the Paso Robles Unified School District. The City has major circulation improvements to complete at Highway 101 West and East. These improvements must be designed and funded in order for the City to meet its general plan build-out. In addition, the City will take 4,000 acre feet of Nacimiento water each year. Nacimiento water will supplement the groundwater and Salinas River underflow currently used by the City.

Water Supply

The City of Paso Robles has historically relied upon local water supplies from the Salinas River underflow and from the Paso Robles Formation (PRF) for its municipal water supply.

Salinas River underflow refers to shallow subterranean flows in direct connection with the Salinas River. This underflow is subject to appropriative water rights and permitting by the State Water Resources Control Board (SWRCB). An approved SWRCB application allows the City to extract up to eight cfs (3,590 gpm) with a maximum extraction of 4,600 afy (January 1 to December 31).

The deeper Paso Robles Formation (PRF) currently contributes approximately 2,856 afy to City supply. The City plans to maintain this extraction rate in the future.

To assure its water supply into the future, the City will purchase water from the Nacimiento Water Project, which is projected to deliver 4,000 afy of raw water. The City is progressing with its plans for a water treatment plant; the City's timetable for design and construction is dependent on the successful implementation of a new water rate needed to fund the project. The City will have the option of increasing its allotment of Nacimiento water up to 8,000 as needed to meet demand increases.

Another supply alternative being pursued by the City is the use of recycled wastewater. The City owns its own wastewater treatment plant which currently provides secondary treatment. Several alternatives have been studied to upgrade treatment to the tertiary level, and it is assumed that one of these alternatives will eventually be pursued. 5,000 afy of wastewater could ultimately be treated, but approximately 150 afy would only be needed to meet build-out demand if water conservation efforts achieve a 20 percent reduction in per capita use and other supplies are developed and maintained as planned. This margin of safety serves as a backup source in case of limitations on any of the other sources of supply.

The City has implemented a number of permanent mandatory water conservation measures that are in force throughout the water service area. They include mandatory recycling or recirculation of water for car washes, cooling systems~~,~~ and decorative fountains, and several other practices designed to curb water waste.

The City has targeted landscape irrigation as the water use practice with the highest potential for water conservation. Paso Robles currently enforces mandatory landscape watering restrictions that limit irrigation to three days per week. Educational resources are available on the City website, in City offices, and in periodic mailings and with water bills. The City also sponsors a school education program that includes water conservation as a key component. Paso Robles offers rebates for installation of High Efficiency Toilets, rebates for turf conversions to drought-tolerant landscape, and free home and business water surveys. The City is a member of Partners in Water Conservation and the California Urban Water Conservation Coalition.

Water Use

Water use in Paso Robles has ranged from 6,373 ~~acre feet/year~~afy in 2000 to 8,130 ~~acre feet/year~~afy in 2006-07. Use in 2010 was reduced by approximately 20 percent through the implementation of mandatory outdoor water use restrictions limiting use to three days per week.

Paso Robles Total Water Use AF/Y (fiscal year)									
1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2008-2009	2009-2010
6,373	6,598	7,074	7,145	7,929	6,959	7,444	8,130	7,353	6,391

The per capita use of 193 gpcd listed for 2020 and beyond reflects a 20 percent reduction from 241 gpcd, the City's 10-year average per capita water use from 1997-2008. Mandatory water use restrictions were implemented during 2009. The projected buildout demand represents a best-case scenario of attainment of the SB -7 conservation target of a 20 percent reduction in per capita use levels. Future per capita demand may be higher than shown below.

Paso Robles Per Capita Water Use			
Year	Population	Gallons Per Capita Per Day (GPCD)	Total Acre Feet Per Year
July 2009-June 2010	29,950	190~~.44~~ (1)	6,38~~98.90~~
2020	37,570	193 (2)	8,125
2025	44,000	193 (2)	9,515
2035	44,000	193 (2)	9,515

(1) 2009-2010 water use reflects conservation related to temporary outdoor water use restrictions implemented pursuant to Level 2 of Paso Robles' Water Shortage Contingency Plan Ordinance.

Information received from City of Paso Robles.

Water Rates

Paso Robles has [n-]tiered water rates.
Avg. Single Family Water Use In 2008: Not Available
Avg. Single Family Water Bill: $37.32/Mo.

Sewage

Facilities:
Operational issues: Waste discharge limitations for the treated effluent from the wastewater treatment plant, established under the Basin Plan developed for the Regional Water Quality Control Board, are regularly exceeded.

Capacity Increases:
No planned increase in capacity. Current status includes upgrades to improve treatment to meet discharge requirements. The plant effluent discharges to the Salinas River after detention in ponds. Based on the operating level of capacity, the City's treatment plant is not listed with an LOS~~as severe~~.

San Miguel

The community of San Miguel is served by the San Miguel Community Services District. Its water source is groundwater from the Paso Robles Groundwater Basin. Water levels in the majority~~portions~~ of the Basin south of the town are in a state of decline. The CSD chose not to participate in the Nacimiento water project.

Water Supply

The Paso Robles Groundwater Basin supplies the community's water needs. The San Miguel CSD reports approximately 789 afy of water was used in fiscal year 09-10. The CSD expects all of its future supply to be from the Groundwater Basin, as the community is remote from any water project such as the Nacimiento Water Project.

Water Use

The San Miguel CSD has reported water use for the past years:

San Miguel Total Water Use AF/Y (fiscal year)			
2006- 2007	2007- 2008	2008- 2009	2009- 2010
345	317	345	314~~.2~~

Per capita water use reductions reflect a 20% reduction in per capita water use from 2009-2010

San Miguel Per Capita Water Use			
Year	**Population**	**Gallons Per Capita Per Day (GPCD)**	**Total Acre Feet Per Year**
July 2009-June 2010	1,427	19~~76.57~~	314~~.20~~
2020	2,204	157~~.25~~	388~~.23~~
2025	2,391	157~~.25~~	421~~.16~~
2035	2,746	157~~.25~~	48~~43.70~~

Water Rates

Avg. Single Family Water Use: 3,303 gallons/Mo.
Avg. Single Family Water Bill: $55.39/Mo.

Sewage

The San Miguel CSD provides wastewater service to the community of San Miguel. Though the wastewater treatment plant average flow is equal to 60% of capacity, it is at LoS II. The San Lawrence Terrace ~~are~~, located on the east side of the Salinas River, is served by individual septic systems.

Santa Margarita

Santa Margarita is served by groundwater through County Service Area 23 (CSA 23). There have been historical water supply concerns in town, as the shallower of its two wells is subject to seasonal fluctuations in groundwater levels. A Resource Capacity Study (RCS) is planned to better understand the dynamics of the water supply to the community and the surrounding Santa Margarita Ranch. The town is within 8 miles of the employment center of San Luis Obispo. Future plans for infrastructure projects should consider establishing a more dense community with expanded wastewater and water services to support a greater population and density.

Water Supply

The water supply for the community is provided by two wells. The primary source is a high producing well in a shallow formation subject to seasonal fluctuations. The secondary well is in a low producing formation and is used in combination to meet the demands of the community during hot weather periods and for operational flexibility. The two wells are capable of meeting the community's current needs (CSA 23); however, an additional source of water is needed since the back-up well in the low producing formation is incapable of meeting the needs of the town by itself should the main well fail for some reason (a CA Title 22 requirement).

At this time, the community is currently evaluating alternatives for a small additional supply to meet drought reliability. Those options are a connection to State Water or Nacimiento Water for 5 acre feet per year, with an exchange agreement with a water contractor that would allow the water to be banked and withdrawn only when it is needed. The concept of drought reliability is a new element of the County's Master Water Plan update that is currently in progress.

Future efforts should focus on obtaining an additional water source or increase the amount of State Water or Nacimiento water contracted in order to meet Title 22 requirements as well as provide for build out and future ranch development. The goal should be to leave groundwater for the agricultural uses in the area as envisioned by Policy ~~AG~~11 of the Agriculture Element of the General Plan.

Water Use

Water use per connection in Santa Margarita has trended downward since the year 2000.

Santa Margarita Total Water Use AF/Y (fiscal year)										
1999-2000	**2000-2001**	**2001-2002**	**2002-2003**	**2003-2004**	**2004-2005**	**2005-2006**	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**
214	197	206	205	216	189	194	Missing	170	161	144

Per capita water use reductions reflect a 20% reduction in water use from the year 2009-2010.

Santa Margarita Per Capita Water Use			
Year	**Population**	**Gallons Per Capita Per Day (GPCD)**	**Total Acre Feet Per Year**
July 2009-June 2010	1,394	1100~~9.84~~	172~~1.50~~
2020	1,450	8~~87.87~~	143~~2.72~~
2025	1,458	8~~87.87~~	144~~3.51~~
2035	1,552	8~~87.87~~	153~~2.76~~

Water Rates

Avg. Single Family Water Use: 7,929 gallons/Mo.
Avg. Single Family Water Bill: $43.19/Mo.

Sewage

Santa Margarita relies on individual septic systems for wastewater service. Septic failures have occurred in the town. Future development of the Santa Margarita Ranch may ultimately require construction of a community wastewater system. The future system may be used by existing development. Community-wide water and wastewater system improvements would allow the area to development with strategic growth principles.

SHANDON

A specific plan update is being prepared for the small community of Shandon. The plan may result in an ultimate population of 8,000 residents. Water is proposed to ~~would~~ be provided to the expanded population from the town's State water allocation, along with existing groundwater. However, groundwater levels in the Paso Robles Groundwater Basin west of town have been falling. Further use of groundwater is in conflict with the recently adopted Paso Robles Groundwater Basin Resource Capacity Study. Increased development under the future community plan may require substantial work on State Highway 46 to enter and exit the highway from town. The specific plan will address infrastructure phasing and financing requirements.

Water Supply

Present water supply is from the Paso Robles Groundwater Basin. The Basin has seen a decline in water levels along the Highway 48 corridor from 1980 to 2009~~7~~. A groundwater management plan for the Paso Robles Groundwater Basin is currently in preparation. The plan should address the declining water levels in the Basin.

The town is served by groundwater from the Paso Robles Groundwater Basin through CSA 16. The water system has two wells. The town has a 100 acre foot/year allocation of State Water. However, the town has not used that water, and sale of some portion of the allocation has been discussed. Use of the allocation would require the construction of a turnout as well as other infrastructure.

Water Use

Water use in Shandon has ranged from 156 afy in 2005-2006 to 100 afy in 1999-2000.

Shandon Total Water Use AF/Y (fiscal year)										
1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
100	130	143	150	154	147	156	151	125	122	105

* The 2009 figure is based on total water delivery

Per capita reduction

Water Rates

CSA16 has [n-]tiered water rates.
Avg. Single Family Water Use: 1,620.5 gallons/Mo.
Avg. Single Family Water Bill: $44.16/Mo.

Sewage

There is no centralized sewer system in the town. All wastewater disposal is from septic systems. The proposed Specific Plan will call for the construction of a ~~new~~ wastewater treatment plant and sewer system.

Templeton

The ~~local~~ Templeton Community Services District provides water to the community from groundwater, Salinas River underflow and reclaimed water. The CSD has a 240 afy allocation from the Lake Nacimiento water project (under construction). Facilities needed by Templeton CSD to receive and treat this water are under evaluation.

A major road improvement at N. Main Street and Highway 101 is planned. A low growth rate will continue in the urban area. The town is divided by US Highway 101, with the older, denser area of the town located east of the freeway. The west side is a sprawling area of one-acre parcels and low density development. A major freeway interchange project has just been completed at Las Tablas Road and another one is underway at Vineyard Drive.

Water Supply

Templeton is an unincorporated community located between the City of Paso Robles and City of Atascadero. Templeton consists of a mix of residential, commercial, agriculture, and recreational areas. The Templeton area has a number of homes on larger lots, and thus exhibits a relatively large per capita water demand as a result. It should be noted that the population projections are based on only those areas served by, and within, the Templeton CSD service area boundary.

The Templeton CSD depends on water from thirteen wells that extract water from two groundwater sources: the Atascadero sub-basin and the Salinas River underflow. Eleven of the thirteen wells that extract water from the Atascadero Sub basin are extracting from what is known as the Templeton Sub-Unit.

The Templeton CSD currently is permitted to extract 500 afy from the Salinas River Underflow between October 1 and April 1. There are three wells that tap this aquifer, though only two, the Smith Well and the Creekside river wells, are in service. The Templeton CSD may request from the California Department of Public Health an extended permit to continue to pump from the river wells through May 15 if sufficient water is available and flowing during that time.

An additional source of water for the Templeton CSD comes from their re-use program with disposal of treated wastewater effluent from the Meadowbrook WWTP percolation ponds. This program allows the Templeton CSD to percolate treated effluent into the Groundwater Basin/Salinas River underflow and subsequently extract the same amount of water less two percent 28 months later.

Water Use

Total water use in Templeton has ranged from 1,260 afy in 1999-2000 to 1,689 afy in 2003-04.

Templeton Total Water Use AF/Y (fiscal year)										
1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
1,260	1,315	1,474	1,460	1,689	1,438	1,540	**missing**	1,558	1,641	1,425

Per capita water use reduction reflects a 20% reduction in per capita water use from the year 2009-2010.

Templeton Per Capita Water Use			
Year	Population	Gallons Per Capita Per Day (GPCD)	Total Acre Feet Per Year
July 2009-June 2010	6,500	1965.67	1,4254.67
2020	6,459	1576.54	1,1332.55
2025	6,737	1576.54	1,181.29
2035	7,259	1576.54	1,2732.82

20% per capita reduction by 2020 is assumed to be maintained through 2035.

Water Rates

Templeton CSD has [n-]tiered water rates.
Avg. Single Family Water Use: 30,294 gallons/Mo.
Avg. Single Family Water Bill: $39.01/Mo.

Sewage

Facilities:
Wastewater from the town is treated at two locations, the TCSD Meadowbrook wastewater plant and the City of Paso Robles. An additional source of water for the Templeton CSD comes from their re-use program, with disposal of treated wastewater effluent from the Meadowbrook WWTP percolation ponds. This program allows the Templeton CSD to percolate treated effluent into the Salinas River underflow and subsequently extract the same amount of water 28 months later.

Capacity Increases:
No planned increases or improvements at this time.

Levels of Severity:
The Meadowbrook treatment plant operates at 29% capacity.

Heritage Ranch

Historically, Heritage Ranch was considered a "vacation" rental area with a large part-time population. The Heritage Ranch CSD findssuggests that this is no longer the case and estimates that only approximately 30% of the water connections can be considered part-time. Most homes in the community are now occupied by full-time residents. Until recently, the homes (subdivisions) at Heritage Ranch were small mobile or modular homes. However, newer subdivisions consist of 1/4-acre to one-acre lots developed with 2,500 to 4,000 square-foot homes, according to the CSD. This is indicative of a significant shift from part-time to permanent residents.

Water Supply

Lake Nacimiento is Heritage Ranch's only source of water. The reservoir is currently at approximately 60% of capacity.

1,100 afy of water from the Lake is reserved for the community. Of that amount, 889 afy is under contract with the County Public Works Department for the Heritage Ranch Community Services District. The additional 211 afy is under contract with a private developer who owns land in Heritage Ranch.

Water Use

Water use in Heritage Ranch has ranged from a low of 479 afy in 2001-02 to a high of 625 afy in 2005-06.

Heritage Ranch Total Water Use AF/Y (fiscal year)									
1999-	2000-	2001-	2002-	2003-	2004-	2005-	2006-	2007-	2009-

2000	2001	2002	2003	2004	2005	2006	2007	2008	2010
484	493	479	507	550	585	625	616	564	553

Per capita water use is currently 150 gpcd. A 20% reduction in per capita use would result in a year 2020 water use of 120 gpcd. This reduction is calculated as a simple 20% reduction in per capita water use based on current water usage. Other methodologies are available to estimate the 20% reduction figure.

Heritage Ranch Per Capita Water Use			
Year	Population	Gallons Per Capita Per Day (GPCD)	Total Acre Feet Per Year
July 2009-June 2010	3,300	150~~49.61~~	553~~.01~~
2020	4,335	120~~19.68~~	581~~.14~~
2025	4,786	120~~19.68~~	642~~1.61~~
2035	5,834	120~~19.68~~	782~~.10~~

Information received from Heritage Ranch CSD.

Water Rates

The Heritage Ranch CSD Board adopted a new five year water and sewer rate structure effective January 1, 2010. The new water rate structure is [n-]tiered based on the size of the water meter and includes both a fixed fee and a consumption fee. The new water rates promote conservation.

Avg. Single Family Water Use: 5,236 gallons/Mo.
Avg. Single Family Water Bill: $32.64/Mo.

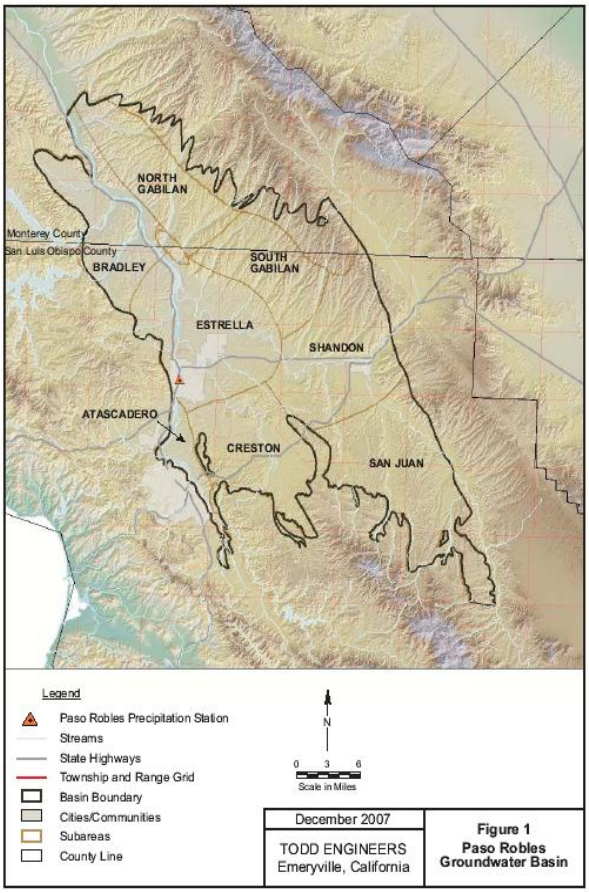
Sewage

The wastewater treatment plant has a design capacity of 0.4 million gallons/day. The plant operates at approximately 50% of capacity and has no LOS.

Water Supplies

Paso Robles Groundwater Basin

In 2000, the County Flood Control and Water Conservation District (SLOCFC&WCD) contracted with a consultant to conduct a study of the Paso Robles Groundwater Basin. The study was completed in February 2005. The study includes creation of a model to simulate groundwater flow and water quality in the basin. The model provides a quantitative tool to refine the estimate of perennial yield and evaluate existing and future hydraulic and water quality trends across the basin, including changing groundwater level elevations, well yields, and natural and artificial recharge.



The study also identifies options for comprehensive or localized management of the basin. Since 2002, several studies and reports have been prepared:

- Fugro 2002 Paso Robles Groundwater Basin Study
- Fugro 2005 Phase II Report
- Todd Engineers 2009 Evaluation of Paso Robles Groundwater Basin Pumping
- Fugro 2010 Paso Robles Groundwater Basin Water Balance Review and Update.

A Resource Capacity Study (RCS) based on these studies and reports was certified by the Board of Supervisors in February 2011. The RCS concluded that the Basin's perennial yield has been, or is close to being, reached. A Level of Severity III was established for the main Basin and an LOS I was established for the Atascadero Sub-Basin.

Extent of the Basin. The Paso Robles Ground–water Basin covers 790 square miles from the Garden Farms area south of Atascadero to as far north as San Ardo in Monterey County, and from the Highway 101 corridor as far east as Shandon. About 80 percent of the Basin—640 square miles—is located in San Luis Obispo County. The Basin studies have found a pumping depression that is located to the east of the City of Paso Robles and north and south of State Highway 46. This area has been identified as the Estrella/Creston Area of

~~Special~~ Concern i~~o~~n the 2011 RCS. Approximately 65% of the water pumped from the basin is used for agriculture.

The Paso Robles Groundwater Basin includes one hydrologically distinct sub-basin, the Atascadero Sub-Basin. This sub-basin is located roughly long the Salinas River from the south end of Paso Robles south toward the community of Garden Farms.

There are five different classes of groundwater "users" included in the supply/demand analysis:

- Agriculture
- Municipal
- Rural
- Small Community Systems
- Small Commercial Systems (e.g. golf courses, wineries, institutional uses)

Water use by user group was estimated by Todd and was based on 2006 data:

Fugro

Groundwater User	1997	2000	2006
Net Agriculture	49,683 afy	56,551 afy	58,680 afy
Urban	13,513	14,629	15,665
Rural	9,400	9,993	10,891
Small Community	---	----	594
Small Commercial	1,465	1,465	2,323
Total	**74,061**	**82,638**	**88,154**

estimated water demand by sector in the 2010 Water Balance Review and Update.

Groundwater User	1997	2000	2006	2009
Net Agriculture	49,683 afy	56,551 afy	58,680 afy	63,077 afy
Urban	13,513	14,629	15,665	16,382
Rural	9,400	9,993	10,891	11,817
Small Community	---	----	594	----
Small Commercial	1,465	1,465	2,323	2,631
Total	**74,061**	**82,638**	**88,153**	**93,907**

The safe yield of the Basin (also referred to as the perennial yield or sustainable yield) was estimated by Fugro (2003) at 97,700 afy. Fugro completed another focused study (Fugro 2010) of the Basin that extends the water balance table from the 2002 report through the years 1998-2009. Fugro estimates that withdrawals from the Basin are at 99% of safe yield in 2009.

As noted above, the Paso Robles Groundwater Basin contains one hydrologically distinct sub-basin – the Atascadero Sub-Basin. Unlike the greater Paso Robles Basin, the Sub-Basin's primary users are municipal pumpers such as the City of Paso Robles and the Atascadero Mutual Water Co. The safe yield of the Sub-Basin was estimated by Fugro at 16,400 afy. Todd 2008 estimated the pumping in the Sub-Basin:

Atascadero Sub basin Pumping, 2006 (Todd 2008)		
Groundwater User	**Amount (afy)**	**% of Total Sub-basin**
Agriculture	1,348	9%
Municipal	11,735	75%
Small Community	213	1.3%
Small Commercial	430	2.7%
Rural	1,819	12%
Total	**15,545**	**100%**

The 2011 Resource Capacity Study determined that the Basin is at, or close to, its perennial yield.

The County, along with numerous stakeholders, have just completed a Groundwater Management Plan. The goal of the Plan is to ensure the long-term reliability of groundwater supplies.

Nacimiento Water Project

In 1959, the Flood Control and Water Conservation District secured the rights to 17,500 afy from Lake Nacimiento, with 1,750 afy reserved for lakeside users and the Heritage Ranch Community Services District (CSD). Now constructed, the Nacimiento Water Project will deliver water to five project participants.

Participants	Allocation (AFY)
City of Paso Robles	4,000
Templeton CSD	250
Atascadero MWC	2,000
City of San Luis Obispo	3,380
CSA 10A (via exchange)	25
TOTAL	**9,655**

Though the participants have contracted for 9,655 afy, the northern portions of the pipeline and appurtenances have been designed for the maximum allowable withdrawal amount of 15,750 afy.

Avila Beach

Avila Beach is one of the 10 unincorporated urban areas in the County and is located on San Luis Bay. It includes four geographic areas: the town, the adjacent Avila Valley, the San Luis Bay Estates development, and Port San Luis. Water is provided by a community services district, several mutual water companies and private, individual wells. Water sources include the State water project and County Service Area 12 (Lopez Lake). There appears to be adequate water and infrastructure for the small amount of future development planned for the area. With the recent completion of the San Luis Bay Drive Bridge expansion, no major road improvements are needed in the future.

Water Supply

Water service in the Avila Valley area is a mix of the State Water Project, Lopez Water and groundwater. The Avila Beach Community Services District is the only water purveyor that participates in the County's voluntary water reporting program. The other suppliers~~purveyors~~ have not participated in the program until this year.

The Avila area's water suppliers~~purveyors~~ and their sources of wa~~s~~ter are as follows:

Avila Beach Community Services District serves the town area.
State Water: 100 acre-feet/year (afy)
Lopez Water: 68.3 afy
The District also has two wells that are currently inactive. These two wells have provided as much as 20 afy in the past.

San Miguelito Mutual Water Co. primarily serves San Luis Bay Estates and some development along San Luis Creek.
State Water: 550 afy

Bassi Ranch Mutual Water Co. serves the Bassi Ranch cluster development on the north side of San Luis Bay Drive.
No report.

Avila Estates Mutual Water Co. serves Avila Valley Estates on the south side of San Luis Bay Drive.

State Water:	**21 afy**
Lopez water:	**12 afy**
	32 afy

Port San Luis services its water needs separately and is located at the north end of Avila.
Lopez Water: 100 afy

Other development in the Avila Valley relies on individual groundwater wells. Larger users include Avila Hot Springs and Sycamore Mineral Springs, and agriculture.

The only water purveyor in the area that participates in the voluntary program to report water use is the Avila Beach CSD. The other water suppliers~~purveyors~~ have not cooperated with the program.

Water Use

Avila Beach CSD Total Water Use AF/Y (fiscal year)									
1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2007-2008	2008-2009	2009-2010
54	46	47	52	49	48	51	76	77	73

Per capita water use in the Avila Valley ranges from a low of 144 gpcd in Avila Beach to 260 gpcd in Avila Valley. Due to Avila's small population, the water systems are not subject to the 20% reduction in water use per capita by the year 2020. The following table uses a 20% reduction in per capita water use from the year 2009-2010.

Avila Beach Per Capita Water Use				
Year	Supplier~~Purveyor~~	Population	Gallons Per Capita Per Day (GPCD)	Total Acre Feet Per Year
July 2009-June 2010	Avila Beach CSD	450	1443.74	72.45
	San Miguelito Mutual Water Company	1,200	153.38	206.17
	Avila Valley Mutual Water Company	112	260.33	332.66
2020	Avila Beach CSD	484	144	78.07
	San Miguelito Mutual Water Company	1,292	1232.70	1787.53
	Avila Valley Mutual Water Company	121	208.26	28.12
2025	Avila Beach CSD	503	144	81.14
	San Miguelito Mutual Water Company	1,341	1232.70	184.27
	Avila Valley Mutual Water Company	125	208.26	29.19
2035	Avila Beach CSD	546	144	88.08
	San Miguelito Mutual Water Company	1,455	1232.70	200.00
	Avila Valley Mutual Water Company	136	208.26	321.68

Water Rates

Avila Beach CSD

Avila Beach CSD has [n-]tiered water rates.
Avg. Single Family Water Use: 3,740 gallons/Mo.
Avg. Single Family Water Bill: $39.50/Mo.

Avila Valley Mutual Water Co.

Avlla Valley Mutual Water Co. has a flat rate.
Ave. Single Family Water Use: 1.29 afy (420,411 gallons)
Ave. Single Family Water Bill: $270.00/Mo.

Sewage

Facilities:
There are two wastewater providers in the Avila Beach area: the Avila Beach Community Services District (Avila Beach CSD) serves the town and the Port, and the San Miguelito Water Company serves the San Luis Bay Estates area. The eastern portion of the Avila Valley contains rural, hotel and recreational developments that are served by either the wastewater treatment providers or on-site septic systems. Existing development such as Avila Valley Estates (Tract 699) and the Avila Hot Springs should be served by one of the wastewater treatment providers due to on-site ~~wastewater~~ limitations.

~~The~~ Avila Beach CSD's Sphere of Influence includes all of Avila Valley east to the freeway and all of Avila Valley Estates that is currently served by San Miguelito Water Co. A single wastewater provider for the entire area including the town, San Luis Bay Estates, and the unsewered Avila Valley areas such as Avila Valley Estates may be preferable to the separate wastewater treatment providers and individual septic systems.

Operational Issues:
None.

Capacity:
According to the Avila Beach CSD, the wastewater treatment plant currently operates at 27% of capacity. Peak summer flows are at 56% of capacity. The District has recently seen an increase in waste strength that may affect design capacity. The District is studying whether or not the existing plant can handle the higher waste strength at the design flow capacity of 0.2 million gallons per day.

Levels of Severity:
The Avila Beach CSD Wastewater Treatment Plant operates at 27% capacity. This does not meet LOS levels.

Arroyo Grande

Arroyo Grande is one of the seven incorporated cities in the county, and covers 5.45 square miles. It is located between prime agricultural lands and the Pacific Ocean. Arroyo Grande is a full-service city providing both water and sewer service. The City's public schools are served by the Lucia Mar Unified School District.

The City's major infrastructure issues are building an interchange at El Campo Road and US Highway 101, and bringing in additional water supplies to supplement water from Lopez Lake and groundwater.

Water Supply

The City has agreements in place to draw up to 43,804 afy from four water sources: two groundwater basins, Lopez Reservoir and water through Oceano CSD. These sources are described below:

- 1,314 afy is the City's share of groundwater extracted from the Arroyo Grande Plain, which is part of the Santa Maria Groundwater Basin. Extraction rights are shared by agreement with the City of Pismo Beach, the City of Grover Beach, and the Oceano Community Services District. This includes a 112 afy allocation from an Agricultural Land Conversion Credit. As party to the Santa Maria Groundwater Basin litigation, Arroyo Grande may have its extraction rights ~~may be~~ decreased at a future date.

- 100 afy groundwater is extracted from the Pismo Formation, which is outside of the NCMA and not subject to management agreements.

- 2,290 afy from the Zone 3 Lopez Project is provided as a contractual supply to the City of Arroyo Grande. Environmental protection issues may call for increased releases to Lopez Creek, thereby reducing the allotment available for Arroyo Grande and other cities.

- 100 afy from Oceano Community Services District (Oceano CSD). The City of Arroyo Grande and Oceano CSD have entered into an interim water supply agreement, for delivery of up to 100 afy of Oceano CSD water to the City. The City is currently using between 90% and 95% of their current supply allocation, and therefore is in need of temporary provisions to meet water supply needs. Oceano CSD will deliver up to 100 afy of groundwater and/or Lopez Water, at Oceano CSD's discretion. This temporary agreement ends in 2014.

In response to both long-term and short-term water supply concerns, the City has instituted mandatory water conservation measures. Numerous water conservation programs have been instituted (e.g., citywide toilet retrofit program, "cash for grass") and are underway to reduce water use.

Water Use

Water use in the City of Arroyo Grande has ranged from a low of 3,075 acre feet in 2005-06 to 3,650 acre feet in 2003-04.

Arroyo Grande Total Water Use AFY (fiscal year)										
1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
3,334	3,365	3,407	3,467	3,650	3,381	3,075	3,245	3,475	3,333	3,097

Per capita water use is currently 162 gpcd. In compliance with State legislature the City plans to reduce per capita water use by the amount below. The City expects build out to occur in 2025 with yearly water use of 2,933 acre feet per year.

Arroyo Grande Per Capita Water Use			
Year	Population	Per Capita Water Use (Gallons/Day)	Acre-feet Per Year
July 2009-June 2010	17,080	1621~~.86~~	3,097
2020	19,261	149~~.00~~	2,794
2025	20,224	149~~.00~~	2,933
2035	20,224	149~~.00~~	2,933

Information received from City of Arroyo Grande
City of Arroyo Grande expects build out to occur in the year 2025

Water Rates

Arroyo Grande has 4-tiered water rates.
Avg. Single Family Water Use: 11,968 gallons/Mo.
Avg. Single Family Water Bill: $64.72/Mo.

Sewage

Wastewater treatment service is provided to the City by the South San Luis Obispo County Sanitation District. The City maintains the sewer lines and sends sewage to the wastewater treatment plant in Oceano. The community of Oceano and the City of Grover Beach also use this wastewater treatment plant. The treatment plant currently discharges treated effluent to the ocean through an ocean outfall line shared with the City of Pismo Beach.

The South San Luis Obispo County Sanitary District operates at 60% capacity and thus does not meet any LOS levels. However, the wastewater treatment facility was strongly stressed by the storm of December 2010, and its capacity to deal with stormwater peaking needs further evaluation.

San Luis Obispo

San Luis Obispo is the County seat and the most populous of the seven cities in the county. The City's economy, as in most of the county, is bolstered by tourism and agricultural-based industries. The service industry is also a prominent part of its economy.

San Luis Obispo is a full-service city providing water, sewer and many~~all~~ other public services. The City lies within the San Luis Coastal Unified School District. The City has a diversified water supply that includes three surface water sources and reclaimed water from the City's wastewater treatment plant. Major interchange improvements on US Highway 101 are needed at Los Osos Valley Road (LOVR) and Prado Road.

Water Supply

The City of San Luis Obispo has a diverse water supply. The City currently receives water from five sources, Salinas Reservoir (Santa Margarita Lake), Whale Rock Reservoir, Nacimiento Reservoir, local groundwater, and recycled water from the Water Reclamation Facility. The City has depended on imported supplies from Salinas Reservoir, located near the community of Santa Margarita, since 1944 and from Whale Rock Reservoir, located near the community of Cayucos, since 1964. With the onset of the drought in 1986, resulting in decreasing surface water supplies, the City activated its groundwater sources in 1989. The City currently uses a small amount of groundwater (~2% of total) for potable purposes. Water deliveries to the City of San Luis Obispo from Nacimiento Reservoir began in January of 2011.

The Whale Rock Reservoir provides water to the City of San Luis Obispo, California Polytechnic State University, and the California Men's Colony as well as the town of Cayucos. The City staff work closely with staff from the other agencies relative to water planning issues.

The safe yield from the Salinas and Whale Rock reservoirs was adopted by the City in 2010 as 6,940 afy, ~~in 2010~~ which takes into account losses in the yield from the two reservoirs ~~due date in the yield from the two reservoirs~~ due to siltation. The 2010 update to the City's Water Management Element of the General Plan also identified an additional 500 afy of loss due to siltation for the next fifty years. The City will continue to utilize the limited amount of local groundwater, but due to limitations on its use (contamination, drought conditions, etc.), the City will not consider this supply in estimating available water resources to meet long-term community needs.

Water Use

Water use in the City of San Luis Obispo has ranged from a low of 6,217 afy in 2001-02 to 6,988 afy in 2006-07 (which includes potable water delivered to Cal Poly from their Whale Rock Reservoir entitlement).

City of SLO Total Water Use AF/Y (fiscal year)										
1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
6,835	6,610	6,217	6,429	6,851	6,448	6,984	6,988	6,420	6,322	6,459

The expected reductions in per capita demand in the following table were developed by the City of San Luis Obispo.

San Luis Obispo Per Capita Water Use			
Year	Population	Gallons Per Capita Per Day (GPCD)	Total Acre Feet Per Year
July 2009-June 2010	44,948	1143.8	5,730.07
2020	49,650	117	6,5076.97
2025	52,180	117	6,8398.55
2035	54,850	117	7,188.47

Information received from City of San Luis Obispo.

Water Rates

Avg. Single Family Water Use: 6,732 gallons/Mo.
Avg. Single Family Water Bill: $52.13/Mo.

Sewage

Facilities:
The City's wastewater treatment plant produces tertiary-treated effluent. A water re-use project delivers this high quality water throughout the southern part of the City for landscaping purposes. As a result, a total of 1,000 acre-feet of reusable water will be available every year. The treatment plant also discharges clean water to San Luis Obispo Creek for habitat maintenance purposes.

Operation Issues:
None.

Capacity Increases:
The City's Master Plan is almost complete. The Master Plan includes increasing the treatment's capacity to 5.5 MGD (million gallons per day).

Levels of Severity: The City's current plant capacity is 5.2 MGD. The plant is operating at 92.3% of its capacity.

Nipomo Mesa Area

The Nipomo Mesa Area consists of Nipomo, which is both on and east of the Mesa and is one of the 10 unincorporated urban communitries in the county; and the Nipomo Mesa Area includes ~~and~~ that portion of the unincorporated ~~rural Nipomo~~ Mesa ~~area~~ called "rural Arroyo Grande" but does not include the Nipomo Valley, which is east of Highway 101. Together, the area has seen the highest growth rate of any unincorporated area of the county for the past decade. The Nipomo Mesa Water Conservation Area (NMWCA) is part of the Santa Maria Groundwater Basin and has been a key area considered in the Santa Maria Groundwater Basin adjudication lawsuit. The area will need additional supplies (referred to as “supplemental water”) to bring the local pumping depressions in the groundwater basin back into balance. The Mesa area and Nipomo east of US Highway 101 currently is in a Level of Severity III for water supply.

The large number of water supplierspurveyors in the Nipomo Mesa area creates difficulties in areas of water conservation and supplemental water. Water purveyors include the public Nipomo Community Services District and, private for-profit companies such as Golden State Water Company, and Rural Water Company. In addition there are many mutualprivate water companies. Each operates under its own set of rules, is regulated by different entities, and has different purposes. Cooperative efforts among the larger purveyors occur through a technical group established as a result of the groundwater adjudication lawsuit.

Roads are a second infrastructure need in the area. A major Highway 101 interchange is being planned at the extension of Willow Road. Financing of the Willow Road extension and interchange has been progressing for several years. In addition to the interchange, Willow Road will be extended from Pomeroy Road to Foothill Road. The construction of the first phase has begun. A future interchange may be considered at Southland Drive.

Wastewater service is provided by the Nipomo Community Services District within the Nipomo Urban ReserveServices Line. Other wastewater treatment providers include Nipomo CSD's plant in Blacklake Village, Rural Water Company’s Cypress Ridge wastewater plant, and the Woodlands.

Water Supply

The Nipomo Community Services District provides water and wastewater service to approximately 25% of the Mesa area’s population. The remainder of the area is served by other water providers, individual wells and individual septic systems. The entire Nipomo Mesa area is dependent on groundwater. No surface water is brought to the Mesa from any of the five surface water projects that supply the county with potable water. This dependency on groundwater is problematic for this growing area.

Groundwater is used by all of the water purveyors and suppliers in the NMWCA. Thesе purveyors include the Nipomo Community Services District (NCSD), the private, for-profit Golden State Water Company, and Rural Water Company; and the many private not-for-profit mutual water companies draw from the same aquifer. The number of water suppliers~~purveyors~~ and the lack of a clear regulatory structure is one of the water resource concerns within the NMWCA.

Total water use represents purveyor production from Golden State, Rural Water Co., and NCSD. Actual total water use was estimated by the NCSD to have exceeded 10,500 af in 2007.

The Nipomo area is in a certified Level of Severity III (LOS III) for water supply. The LOS III was first established in 2005 after preparation of a Resource Capacity Study (RCS). The RCS states: "Since current and projected pumping beneath the Nipomo Mesa exceeds inflow (natural recharge plus subsurface inflow), the Nipomo Mesa portion of the Santa Maria Groundwater Basin is currently in overdraft and projections of future demand indicate increasing overdraft." The focus of the RCS and subsequent work is the Nipomo Mesa Water Conservation Area (NMWCA—please refer to the map at the end of this section on the Nipomo Mesa Area).

The Board of Supervisors reconsidered the recommended LOS III and decided to certify the LOS III in 2007. The Board directed the preparation of water conservation ordinances for the NMWCA. In addition, the Nipomo Community Services District has taken the lead to bring new water resources to the NMWCA. The District will construct a pipeline from Santa Maria to Nipomo. The pipeline will deliver approximately 2,500 acre feet of water per year to be shared by:

• Woodlands	415 afy	• Rural Water Co.	208 afy
• Golden State Water Co.	208 afy	• Nipomo CSD	1,664 afy

Water Use

The District has also taken a lead role in water efficiency and conservation measures. In approving the 2004 Sphere of Influence Update, LAFCO placed conditions on annexations to the NCSD's water service. One of the conditions was the institution of a water conservation program that would reduce per connection water use by 15%. The "core" activities that are being~~would be~~ relied on heavily to reach this conservation goal are:

- A ~~multi~~4-tiered conservation rate structure, which has been adopted but not yet implemented
- Public education and outreach measures
- Technical assistance (e.g. leak detection, water audits)

According to data provided by the District to LAFCO, water conservation efforts since 2004 have reduced water use:

Year	AF Pumped	Connections	AFY/Connection	AF/Connection Reduction (2004)	% Reduction since 2004
2004	2,908	3,751	0.78		
2005	2,794	3,879	0.72	-7%	-7%
2006	2,706	3,995	0.68	-6%	-12%
2007	2,856	40,77	0.70	+3%	-10%
2008	2,755	4,092	0.67	-4%	-13%
2009	2,698	4,138	0.65	-3%	-16%

Nipomo Per Capita Water Use				
Year	**Purveyor**	**Population**	**Gallons Per Capita Per Day (GPCD)**	**Total Acre Feet Per Year**
July 2009-June 2010	Nipomo CSD	10,815	2110.51	2,550.14
	GSW Nipomo	4,157[1]	2565.77	1,1910.99
2020	Nipomo CSD	12,350[2]	168.40	2,33029.66
	GSW Nipomo	4,747[3]	2054.62	1,088.02
2025	Nipomo CSD	13,227[2]	168.40	2,495.05
	GSW Nipomo	5,084[3]	2054.62	1,165.27
2035	Nipomo CSD	15,105[2]	168.40	2,849.38
	GSW Nipomo	5,806[3]	2054.62	1,3310.75

[1] Population obtained through multiplying # of connections in 2008 (MWP) by Population per Residential Connection (Nipomo Memo). Then adjusted for increase in population using 1.42% projected growth per year (projected growth rate is good for the next two decades) (MWP).
[2] Projected population obtained through multiplying the growth rate of 1.42% by the number of years from the previous projected year and then adding the additional population to the existing one.
[3] Projected population obtained through using the ratio of populations between Nipomo CSD and GSW Nipomo for July 2009-June 2010 and extrapolating that ratio to future years.

Water SuppliersPurveyors

These smaller water supplierspurveyors in the Nipomo Mesa Water Conservation Area do not report water use. See recommendations in the Introduction to expand reporting requirements.

Larger SuppliersPurveyors	
Nipomo Community Services District	Rural Water Company
Golden State Water Company	Woodlands Water Company
Smaller SuppliersPurveyors	
Blacklake Canyon Water Supply	Callender Water Association
County Hills Estates	Cuyama Lane Water Company
Heritage Lane Mutual Water Co.	Hetrick Water Company
Ken Mar Gardens	La Colonia Water Association
Laguna Negra Mutual Water Co.	La Mesa Water Company
Mesa Mutual Water Company	True Water Supply
Woodland Park Mutual Water Co.	
~~Arroyo Grande Mushroom Farm~~	~~Blacklake Canyon Water Supply~~
~~Callender Water Association~~	~~County Hills Estates~~
~~Greenheart Farms~~	~~Heritage Lane Mutual Water Co.~~
~~Hetrick Water Company~~	~~Ken Mar Gardens~~
~~La Mesa Water Company~~	~~Rancho Nipomo Water Company~~
~~Guadalupe Cooling~~	~~Clearwater Nursery~~
~~Cuyama Lane Water Company~~	~~Dana Elementary School~~
~~La Colonia Water Association~~	~~Laguna Negra Mutual Water Co.~~
~~Mesa Mutual Water Company~~	~~Rim Rock Water Company~~
~~Santa Maria Speedway~~	~~Speedling, Inc~~
~~True Water Supply~~	

Water Rates

Nipomo Golden State:
Golden State has a 2-tier rate structure and has petitioned the PUC for three tiers.
Avg. Single Family Water Use: 21,879 gallons/Mo.
Avg. Single Family Water Bill: $41.54/Mo.

Nipomo CSD:
Nipomo CSD has adopted but not yet implemented a 4-tier rate structure.
Avg. Single Family Water Use: 16,260 gallons/Mo.
Avg. Single Family Water Bill: $55.22/Mo.

Sewage

The primary sewage treatment provider in the Nipomo Mesa area is the Nipomo Community Services District. According to the District, the Southland wastewater treatment plant operates at approximately 63% of capacity. The District has

improved their monitoring of flow volumes, providing a more accurate calculation of percent capacity than in the past. Last year the District ~~had~~ over-stated their flow, producing~~showing~~ a LOS II. Further data analysis showed this to be an anomaly, and no LOS is required.

Operational issues include occasional BOD (Biochemical Oxygen Demand) limit violations during settling pond maintenance. BOD is a basic measure of how well a plant is operating. A plant upgrade Master Plan is in preparation, with upgrade construction expected to begin in 2011.

There are three other wastewater treatment plants operating in the Nipomo Mesa area. The Woodlands development has a tertiary level plant that produces water used for golf course and median landscape irrigation. Another tertiary level plant is located at Cypress Ridge. This plant has seen 19 violations of their waste discharge permit in 2008. Nipomo CSD also has a second wastewater treatment plant in Blacklake Village, the treated effluent of which is used to irrigate the three fairways on the golf course. The rest of the Nipomo Mesa area relies on septic systems for domestic waste disposal.

Pismo Beach

Pismo Beach is one of the seven incorporated cities in the county. It covers a land~~total~~ area of ~~13.4 square miles, only~~ 3.6 square miles ~~of which is land~~. Pismo Beach is a part of the "Five Cities" in the South County. Its location on the coast makes it attractive to tourism,~~results~~ and the number of visitor-serving uses such as hotels and restaurants adds to its permanent year-round population.

Pismo Beach is a full-service city providing water and sewer service. Public schools are provided by the Lucia Mar School District. The City seeks to annex lands adjacent to its southeastern border. Additional water resources are necessary for the annexations to proceed.

Water Supply

The City has a diverse water supply from Lopez Lake, State water and groundwater. Additional water supplies will be needed for the proposed annexations in the southeast portion of the City.

Total water supply = 2,269 acre feet per year (afy)

Water Use

Water use in Pismo Beach has ranged from 2,247 afy in 2003-04 to a low of 1,963 afy in 2009-2010.

Pismo Beach Total Water Use AF/Y (fiscal year)

1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2007-2008	2008-2009	2009-2010
2,148	2,121	2,150	2,153	2,247	2,135	2,112	2,018	2,125	1,963

The following table uses a 20% reduction in per capita water use from the year 2009-2010.

Pismo Per Capita Water Use			
Year	Population	Gallons Per Capita Per Day (GPCD)	Total Acre Feet Per Year
July 2009-June 2010	8,603	2043.73	1,963.25
2020	8,900	1632.98	1,6254.82
2025	9,170	1632.98	1,674.11
2035	9,840	1632.98	1,796.43

Water Rates

Avg. Single Family Water Use: 7,146 gallons/Mo.
Avg. Single Family Water Bill: $75.00/Mo.

Sewage

Facilities:
The City operates its own wastewater collection and treatment system. A 5-mile-long pipeline brings treated wastewater to the South San Luis Obispo County Sanitary District treatment plant in Oceano. Treated effluent from both plants is then sent through an ocean outfall pipeline.

Operational Issues:
None.

Increases in Capacity:
None.

Levels of Severity:
The City of Pismo Beach Wastewater Treatment System operates at 23% capacity. This is a low capacity level and is not at LOS.

Oceano

This unincorporated community is served by the Oceano Community Services District. The community's water sources include Lopez Lake, State Water and groundwater. Wastewater service is provided by South San Luis Obispo County Sanitary District and shared with other South County cities. Oceano serves as

the main entrance to the Nipomo-Oceano Dunes complex and the Oceano State Vehicular Recreational Area (Oceano SVRA).

Water Supply

The community's water supply includes State Water, Lopez Lake and groundwater. The groundwater is part of the "Northern Cities" area of the adjudicated Santa Maria Groundwater Basin. Test wells showed elevated chlorides in 2009, but after spring rains chlorides in all but one sentinel well have declined to insignificant. ~~Neighboring cities are starting to plan for additional water supplies.~~

The community sources of water include a 303 afy allotment from Lopez Lake and a 750 afy allocation from the State Water project. The community also uses groundwater. The Oceano CSD has discussed permanent sale of some of their State water to Pismo Beach and/or Arroyo Grande.

Water Use

Oceano Total Water Use AFY (fiscal year)				
2006-2007	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011 Projection**
missing	939.5	907.1	missing	967.6

Water use totaled 907.1 acre-feet in 2008-2009.

- Lopez Lake = 279.4 afy
- State Water = 297.2 afy
- Groundwater = 330.5 afy

Still compiling previous years' data

Water Rates

Current Rates: Oceano has a [n-]tiered rate based on consumption.
Avg. Single Family Water Use: 8,864 gallons/Mo.
Avg. Single Family Water Bill: $54.34/Mo.

Sewage

Wastewater treatment is provided by the South San Luis Obispo County Sanitary District. The service is shared with the Cities of Grover Beach and Arroyo Grande.

Operational Issues:
None.

Levels of Severity:
The South San Luis Obispo County Sanitary District operates at 60% capacity. This capacity level does not operate at LOS.

Grover Beach

Grover Beach is one of the seven incorporated cities in the county, consisting of 2.25 square miles. It is also a part of the "Five Cities" located in the South County. The City provides water service to its residents and is served by the South San Luis Obispo County Sanitary District's wastewater treatment plant. The community's schools are provided by the Lucia Mar School District.

Water Supply

Grover Beach's water sources are similar to those of the City of Arroyo Grande. Approximately 1,200 afy of the City's water is groundwater from the "Northern Cities Management Area" (NCMA)~~Arroyo Grande sub-basin~~ of the Santa Maria groundwater basin. The other 800 afy is the City's allotment of Lopez Lake water.

According to the City's Urban Water Management Plan (2005), an additional 800 afy of water is needed for the City to reach its buildout~~ultimate~~ population.
The City uses its entire 800 acre-foot allocation from Lopez Lake. The City also has an "agreement" with other water users in the NCMA~~sub-basin~~, allowing it to use a maximum of 1,428 afy of groundwater.

The 2005 Urban Water Management Plan looks to a future desalination facility for its long-term supplemental water source. In the short term, water transfers from other local water purveyors are planned.

Water Use

The following table uses a 20% reduction in per capita water use from the year 2009-2010.

Grover Beach Per Capita Water Use			
Year	**Population**	**Gallons Per Capita Per Day (GPCD)**	**Total Acre Feet Per Year**
July 2009-June 2010	13,067	126~~.44~~	1,851~~0.66~~
2020	13,390	101~~.15~~	1,517~~.12~~
2025	13,650	101~~.15~~	1,547~~6.58~~
2035	14,290	101~~.15~~	1,619~~.10~~

Water Rates

No information available.

Sewage

Wastewater treatment service is provided to the City by the South San Luis Obispo County Sanitary District. The City maintains the sewer lines and sends sewage to the wastewater treatment plant in Oceano. The community of Oceano and the City of Arroyo Grande also use this wastewater treatment plant.

Operational Issues:
None.

Increases in Capacity:
Rehabilitation and a retrofit of the No. 2 Digester completed in 2009; Energy Services Project, planning underway as of February, 2010; Grease to Cogeneration Station, scheduled to be completed 2010; Replacement and relocation of the centrifuge, scheduled to be completed 2011/2012; Primary Treatment Redundancy, scheduled for 2011/2012.

Levels of Severity:
The South San Luis Obispo County Sanitary District operates at 60% capacity. This capacity level does not operate at LOS.

Lopez Lake

The San Luis Obispo County Flood Control and Water Conservation District completed the Lopez Dam in 1968 to provide a reliable water supply for agricultural and municipal needs as well as flood protection for coastal communities. Lopez reservoir has a capacity of 49,388 af. The lake covers 950 acres and has 22 miles of oak covered shoreline. Allocations for Lopez water are based on a percentage of the safe yield of the reservoir, 8,730 afy. Of that amount, 4,530 afy are for pipeline deliveries and 4,200 afy are reserved for downstream releases. The dam, terminal reservoir, treatment and conveyance facilities are a part of Flood Control Zone 3.

The agencies that contract for Lopez water in Zone 3 include the communities of Oceano, Grover Beach, Pismo Beach, Arroyo Grande, and County Service Area (CSA) 12 (including the Avila Beach area). Their allocations are shown in the table below.

Participant	Allocation (AFY)
City of Pismo Beach	896
Ocean CSD	303
City of Grover Beach	800
City of Arroyo Grande	2,290

CSA 12	241
TOTAL	4,530

According to the County Water Master Plan (WMP), there are two developments that could change both the amount of water available to contractors and the safe yield. The Arroyo Grande Habitat Conservation Plan, which is currently being developed, will likely require additional downstream releases. An interim downstream release schedule has reduced the amount of water available to municipalities. Changes in operation of the dam are being considered for reducing spills and optimizing future deliveries.

Whale Rock Reservoir

Whale Rock Reservoir is located on Old Creek Road approximately one-half mile east of the community of Cayucos. The project was planned, designed, and constructed under the supervision of the State Department of Water Resources. Construction took place between October 1958 and April 1961. The Reservoir is jointly owned by the City of San Luis Obispo, the California Men's Colony, and Cal Poly. These three agencies, with the addition of a representative from the Department of Water Resources, form the Whale Rock Commission, which is responsible for operational policy and administration of the Reservoir and related facilities. Day-to-day operation is provided by the City of San Luis Obispo.

Participant	Allocation (AFY)
City of San Luis Obispo	22,383
Cal Poly	13,707
CMC	4,570
TOTAL	**40,660**