

**2010-2012
Resource Summary Report
San Luis Obispo County General Plan**



Board of Supervisors

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I. INTRODUCTION

SCOPE AND PURPOSE

This is the 2010-2012 biennial edition of the Resource Management System's (RMS) Resource Summary Report (RSR) covering the fiscal years July 2010 through June 2012¹. This report is based on information gathered from service providers, county agencies, reports from state or regional agencies, environmental impact reports for major projects, research for the Land Use and Circulation Element Update program, and personal communications with agency staff. Additional resource information is provided by staff of the incorporated cities, community services districts, school districts, other special districts and private water companies.

The RSR's primary purpose is to provide a comprehensive biennial summary of the state of the county's natural and man-made resources. The RSR is meant to inform the public, staff and decision makers about resource and infrastructure issues.

The RSR addresses the following resources: water (system, supply and rates), wastewater treatment, roads and U.S. Highway 101, parks and schools. The RSR also discusses countywide matters such as greenhouse gas emissions, air quality, building permit distribution, vehicle miles traveled and vehicle fuels consumed.

OVERVIEW

About the Resource Management System

The Resource Management System provides information to guide decisions about balancing land development with the resources necessary to sustain such development. It focuses on:

- Collecting data
- Identifying resource problems; and
- Recommending solutions.

¹ The Board of Supervisors revised the RMS in 2011 to provide for a biennial edition of the former Annual Summary Report. This is the first 2-year edition of the now entitled Resource Summary Report (RSR).

When a resource deficiency becomes apparent, several courses of action are possible to protect the public health, safety and welfare:

- The resource capacity may be expanded;
- Conservation measures may be introduced to extend the availability of unused capacity;
- Resource efficiencies may be introduced;
- Development may be restricted or redirected to areas with remaining resource capacity.

In this way, the RMS addresses development in terms of appropriate distribution, location, and timing rather than growth versus no-growth. Recommended actions in the RSR may also address resource use by existing development and improvements in resource and infrastructure needs and efficiencies.

Resource and Infrastructure Needs

Our county's cities, unincorporated communities and rural areas face serious resource and costly infrastructure challenges. These challenges include protecting groundwater levels, securing new water supplies, constructing water distribution facilities, and funding improvements to major circulation facilities such as freeway interchanges. As people continue to be drawn to this area due to the appeal of rural character, quality of life and coastal areas, a focused effort will continue to be needed to address these resource and infrastructure issues.

The community profiles in the following chapters of this report describe the state of our communities and track their important infrastructure and resource needs. The primary resource and infrastructure needs relate to water supply (ground and surface water) and transportation. They include improvements such as pipelines, roads and freeway interchanges.

Some of our communities and rural areas have both long and short-term resource and infrastructure needs. In the case of water supply, additional supplies are potentially available to some areas, but are not being used to the fullest extent (e.g. unallocated State and Lake Nacimiento project water). Providing for resource and infrastructure needs will require both well-considered policy choices and funding of important infrastructure.

How is Information Gathered for this Report?

The information and data gathered for this report is requested and received from the relevant service providers, agencies and planning documents. Information provided for the purposes of this report is on a completely voluntary basis; as such, the report reflects the most accurate information provided to date.

Population

Population forecasts in the RSR are derived from projections prepared by AECOM for the San Luis Obispo Council of Governments (SLOCOG) in July 2011.

Water System, Supply, Usage & Rates

Each July, the Public Works Department asks water suppliers throughout the county to report on water demand and supply for their jurisdiction². Staff contacts service providers who have not submitted the requested information within the requested timeframes.

As RSR reporting system is a voluntary program, service providers are not obligated to respond to requests for information, however many do. As a result, data gaps in the RSR may occur each year if information requested is not provided. The cooperation and participation of the service providers who do respond each year is greatly appreciated.³

Wastewater Treatment

The San Luis Obispo County Planning Department requests information via a standard form from wastewater system operators.

Roads and U.S. 101 Interchanges

The San Luis Obispo County Public Works Department provides updated information on roads and U.S. Highway 101 interchanges. In 2009, the Board of Supervisors directed staff to include the condition of interchanges in the unincorporated communities along the U.S. Highway 101 corridor. The results of these analyses may be found in the applicable community sections of this report. Additional interchanges will be evaluated in subsequent years.

Parks

Planning staff coordinates with San Luis Obispo County Parks staff in preparing this report. Park acreage and needs are derived from the General Plan Parks and Recreation Element, with updates on current developments provided by Parks staff.

Schools

County staff requests each school district to provide enrollment and capacity information for the past two school years: 2010-2011 and 2011-2012.

² In 2012, 33 water providers participated in the reporting program, 28 providers participated in 2011, 26 providers participated in 2010, and 31 providers participated in 2009.

³ Information on current water use, historical water use and water rates are taken from the Water System Reports submitted to the Public Works Department on a fiscal year basis.

Level of Severity

The RMS uses three alert levels called levels of severity (LOS) to identify differing levels of resource deficiencies.

- Level I is the first alert level and occurs when sufficient lead time exists either to expand the capacity of the resource, or to decrease the rate at which the resource is being depleted.
- Level II identifies the crucial point at which some moderation of the rate of resource use must occur to prevent exceeding the resource capacity.
- Level III occurs when the demand for the resource equals or exceeds its supply and is the most critical level of concern. The County should take a series of actions to address resource deficiencies before Level III is reached.⁴

The RMS also lists a variety of steps which can be taken by the Board of Supervisors when it is determined that a resource has reached a particular level of severity.

It is important to distinguish between "recommended" levels of severity and levels of severity that have been certified by the Board of Supervisors. All levels of severity are initially recommendations proposed by staff based on information provided by the various service providers or recommendations from the Water Resource Advisory Committee (WRAC). These recommended levels of severity should be taken as general indicators of declining resource availability.

The "action requirements" are not invoked in response to recommended levels of severity. If the Board of Supervisors determines that a particular resource situation is not being dealt with adequately, or that a failure to act could result in serious consequences, it sets in motion the certification process.

The certification process involves the completion of a Resource Capacity Study (RCS) which investigates the resource issue in more detail than the preliminary analysis which resulted in the "recommended" level of severity. The RCS is the subject of public hearings by the Planning Commission and the Board of Supervisors. If the Board of Supervisors certifies a level of severity, the appropriate "action requirements" are implemented.

The RSR considers the following services and measures of the adequacy of those services:

⁴ The Board of Supervisors directed staff to explore revisions to LOS time frames to better reflect the County's experience with project development, funding and construction time lines. The Board will consider proposed revisions to LOS time frames in 2013.

Service	Measure
Water Supply	Safe Yield/Extractions
Water Systems	Percent of Capacity
Wastewater Systems	Percent of Capacity
Roads	Vehicle/Capacity
Schools	Enrollment/Capacity
Parks	Acreage/Population
Air Quality	State Standards

Levels of Severity Summary

The chart below summarizes the levels of severity recommended for each community resource. **Italic** text indicates Board of Supervisor-certified Levels of Severity. There are no levels of severity established for cities.

Attachment 1: 2011-2012 RMS Summary Report

Planning Area	Community	Water Supply	Water System	Sewer	Roads	Schools	Air Quality
South County	Avila Beach					III	
	Nipomo Mesa	<u>III</u>				II-III	
	Oceano Area				I	II-III	
	San Luis Obispo Area				III	II	
North County	San Miguel	<u>III</u>					II
	Santa Margarita		II			III	II
	Shandon	<u>III</u>				III	II
	Templeton	<u>I</u>					II
	Heritage Ranch						II
North Coast	Cambria	III				III	
	Cayucos CSA10A						
	M.R. Mutual P.R. Beach		<u>II</u>				
	Los Osos	<u>III</u>		III	III		
	San Simeon	III	III			III	
Groundwater Basins	Cuyama Valley	III					
	Los Osos	<u>III</u>					
	Morro-Chorro	III					
	North Coast	III					
	Paso Robles Atascadero Sub-basin	<u>III</u>					
	San Luis Creek	I					
	Nipomo Mesa (NMWCA)	<u>III</u>					

- III indicates the Board of Supervisors has "certified" this level of severity per the RMS procedure.

Level of Severity Criteria

Resources

The RMS defines levels of severity for each resource. The criteria used to determine levels of severity for each resource are as follows:

Resource	Level of Severity I	Level of Severity II	Level of Severity III
Water Supply	When projected water demand over the next nine years equals or exceeds the estimated dependable supply.	When projected water demand over the next seven years equals or exceeds the estimated dependable supply.	When projected water demand equals or exceeds the estimated dependable supply.
Water System	When the water delivery system is projected to be operating at design capacity within seven years.	When the water delivery system is projected to be operating at design capacity within the next five years.	When the water delivery system reaches its design capacity.
Wastewater Treatment	When projected peak flow equals the treatment plant design capacity within six years.	When projected peak flow equals the treatment plant design capacity within five years.	When projected peak flow equals or exceeds the treatment plant design capacity.
Wastewater Collection System	When the projected flow in two years of any portion of the delivery system is 75% of its capacity.	When any portion of a sewage delivery system is operating at 75% of its capacity.	When peak flows reach 100% of capacity.
Roads	When traffic projections indicate that roadway level of service "D" will occur within five years.	When traffic projections indicate that roadway level of service "D" will occur within two years.	When calculation of exiting traffic flows indicate as roadway level of service "D".
Schools	When enrollment projections reach school capacity within seven years.	When enrollment projections reach school capacity within five years.	When enrollment equals or exceeds school capacity.
Air Quality	Refer to the table below.		

Air Quality

Resource	Level of Severity I	Level of Severity II	Level of Severity III
Air Quality	Air monitoring shows periodic but infrequent violations of the state ozone standard, with no area of the county designated by the state as a non-attainment area	Air monitoring shows one or more violations per year of the state ozone standard and the county, or a portion of it, has been designated by the state as a non-attainment for ozone.	Air monitoring at any county monitoring station shows a violation of the federal ozone standard on one or more days per year for three consecutive years.
	Emissions in the planning area approach 75% of the designated threshold level and are projected to reach 100% within the next five years even with implementation of all emissions reduction strategies identified in the Clean Air Plan.	Emissions in the planning area reach 90% of the designated threshold and are projected to reach 100% within the next three years.	Emissions in the planning area equal or exceed a pollutant threshold level determined by the regional ozone modeling.
	At least 50% of the available emissions reductions in the planning area have been utilized through the implementation of the emissions control measures approved through the CAP.	At least 75% of the available emissions reductions in the planning area have been utilized through implementation of emission control measures approved through the CAP.	All ozone control measures approved through the CAP have already been implemented in the planning area.

Parks

The RMS does not establish specific criteria for parks; however, the Board of Supervisors has directed staff to include County-operated parks in the RMS. In 2013, the Board will consider proposed revisions to the RMS that include LOS criteria for parks.

Roads & Highway 101 Interchanges

The ability of streets and roads to carry vehicular traffic depends upon several factors. The number of traffic lanes, surrounding terrain, existence of roadway shoulders, and number of other vehicles all affect the capacity of roads. The 2000 Highway Capacity Manual, published by the Transportation Research Board, sets standards for these and other factors which determine traffic "levels of service" (LOS). Levels of service ranging from level "A" to "F" are defined as follows:

- **LOS "A" Free flow:** Unlimited freedom to maneuver and select desired speed
- **LOS "B" Stable flow:** Slight decline in freedom to maneuver
- **LOS "C" Stable flow:** Speed and maneuverability somewhat restricted
- **LOS "D" Stable flow:** Speed and maneuverability restricted. Small increases in volume cause operational problems
- **LOS "E" Unstable flow:** Speeds are low; freedom to maneuver is extremely difficult. Driver frustration is high during peak traffic periods
- **LOS "F" Forced flow:** Stoppages for long periods. Driver frustration is high at peak traffic periods.

RECOMMENDED ACTIONS FOR 2010-2012

This RSR makes recommendations for actions in unincorporated communities. The RSR does not include recommended actions in the cities, as the County lacks jurisdiction in those areas.

A. Cayucos Water System

1. The work to improve fire flow is in process. Revise LOS III to no LOS.

B. Nipomo Mesa Area

1. There have been several water conservation and related actions instituted in the basin. Water demand has decreased, a technical group continues to study the basin and make recommendations and a supplemental water project alternatives study is ongoing. The following actions should be considered:
 - a. 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.
 - b. Follow the progress of the *Supplemental Water Alternatives Evaluation Committee*. Coordinate any needed County actions

such as an AB 1600 study to quantify the costs and benefits of the identified supplemental water project for groundwater users outside the Nipomo CSD.

- c. Collaborate with the Nipomo CSD and other stakeholders to assist in their efforts to address area wide water issues.
- d. Continue to help fund area wide water conservation through the fee on new construction.

C. Cambria

- 1. Leave the LOS III in place.
- 2. Collaborate with the Cambria Community Services District to address issuance of a limited number of intent-to-serve letters and building permits based on the aggressive water conservation program developed by Maddaus.
- 3. Collaborate with the Cambria Community Services District to revise the County Growth Management Ordinance to reflect the issuance of a small number of building permits for new development as part of a temporary pilot program.
- 4. Collaborate with the Cambria Community Services District to prepare a CEQA determination, with the County acting as a Responsible Agency, that identifies the potentially significant impacts of a temporary, small scale pilot program to issue intent-to-serve letters and building permits for new development.

WATER CONVERSION FACTORS

1CCF = 748 gallons
1 CF = 7.4805 gallons
1 AF = enough water to cover 1 acre of land one foot deep
1 AF = 43,560 cubic feet
1 AF = 325,850 gallons

ABBREVIATIONS

ADT	average daily trips
ADWF	average dry weather flow
AMWC	Atascadero Mutual Water Company
APCD	Air Pollution Control District
ASR	Annual Summary Report
BMP	Basin Management Plan
BOS	Board of Supervisors
BRWO	brackish water reverse osmosis
CCAC	Cayucos Citizen's Advisory Council
CCC	California Coastal Commission
CCSD	Cambria Community Services District
CDP	Coastal Development Permit
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
COSE	Conservation and Open Space Element (COSE)
CSA	County Service Area
CSD	Community Services District
DWR	Department of Water Resources (California)
FY	fiscal year (July to June)
GSWC	Golden State Water Company
HRCSD	Heritage Ranch CSD
ISJ	interlocutory stipulated judgment
LAFCO	Local Agency Formation Commission
LOCSD	Los Osos Community Services District
LOS	levels of severity (refers to ratings within this report based criteria outlined in the RMS)

LOS	level of service (refers to traffic data)
LOVR	Los Osos Valley Road
MRMWC	Morro Rock Mutual Water Company
MWC	Mutual Water Company
NCS	Nipomo Community Services District
NMWCA	Nipomo Mesa Water Conservation Area
NPDES	National Pollutant Discharge Elimination System
NO _x	nitrogen
OHV	off-highway vehicle
PM	particulate matter
PRBWA	Paso Robles Beach Water Association
PZ	Prohibition Zone
RCS	resource capacity study
RLOS	recommended level of severity
RMS	Resource Management System
ROG	reactive organic compounds
RSR	Resource Summary Report
RWMP	Recycled Water Management Plan
SLCUSD	San Luis Coastal Unified School District
SLO	San Luis Obispo
SLOCOG	San Luis Obispo Council of Governments
SOI	Sphere of Influence
SOI-MSR	Sphere of Influence – Municipal Service Review
SSLOCSD	South San Luis Obispo County Sanitary District
SRVA	State Recreational Vehicle Area
SR 46	State Route 46
SSCSD	San Simeon Community Service District
SWRCB	State Water Resources Control Board
TG	Technical Group
URL	Urban Reserve Line
WMP	Water Management Plan
WRAC	Water Resource Advisory Committee
WRF	water reclamation facility
WWTP	wastewater treatment plant

County Service Areas (CSA)

CSA 1	Nipomo
CSA 7/7A	Oak Shores (northern shores of Lake Nacimiento)
CSA 10/10A	Cayucos
CSA 12	Avila Beach/Avila Valley
CSA 16	Shandon
CSA 18	San Luis Obispo Country Club area
CSA 23	Santa Margarita

Units of Measurement

AF	acre-foot; acre-feet
AFY	acre-feet per year
CCF	hundred cubic feet of water
CF	cubic foot (feet) of water
gpcd	gallons per capita per day
gpm	gallons per minute
MG	million gallons of water
mgd	million gallons per day
PM _{2.5}	particulate matter less than 2.5 microns
PM ₁₀	particulate matter less than 10 microns
ppm	parts per million
sec/veh	seconds per vehicle
ug/m ³	micrograms per cubic meter of air

COUNTYWIDE

II. COUNTYWIDE

This chapter identifies data and resources that extend beyond city and community boundaries. Information presented includes countywide population projections, a summary of the distribution of building permits, vehicle miles traveled and vehicle fuels consumed, greenhouse gas emissions, and parks.

The region includes seven incorporated cities: Arroyo Grande, Atascadero, Grover Beach, Morro Bay, Paso Robles, Pismo Beach and San Luis Obispo. The cities account for approximately 55% of the county's total population (2010 Census). In the unincorporated area, a majority of the population is located in urban areas, including Avila Beach, Cambria, Cayucos, Los Osos, Nipomo, Oceano, Santa Margarita, San Miguel, Shandon and Templeton.

POPULATION

The chart below outlines the recent population growth from 2005 through 2012 and the anticipated growth through 2040.

San Luis Obispo County Population Data and Projections									
	2005	2010	2012	2015	2020	2025	2030	2035	2040
Cities	143,096	148,307	149,437	151,132	156,145	160,863	166,755	172,712	178,727
Unincorporated	98,775	104,324	105,575	107,452	113,789	118,982	125,467	132,023	138,644
Countywide	258,159	269,637	272,018	275,590	286,940	296,851	309,228	321,742	334,377

Source: AECOM for SLOCOG, July 2011

Note: Population projections include group quarters (estimated at 17,006 for 2010-2040).

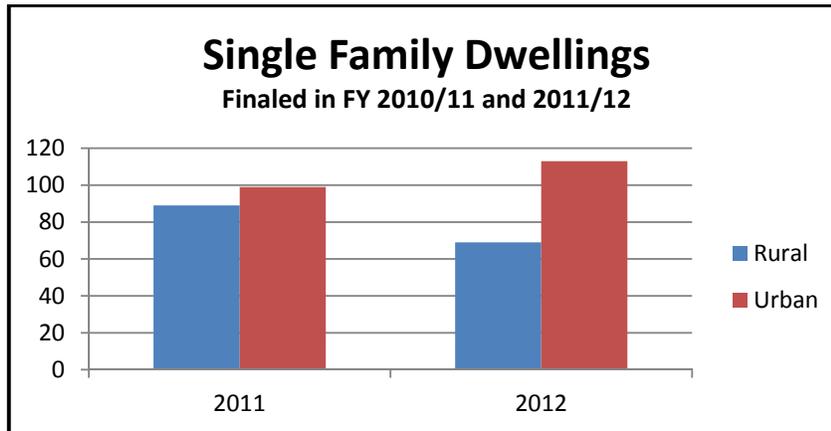
DISTRIBUTION OF BUILDING PERMITS

The distribution of building permits in the unincorporated areas of the county has averaged 62% urban and 38% rural over the last 12 years as shown in the following table. The County General Plan calls for directing development toward existing and strategically planned communities. In addition, a key element of the San Luis Obispo Council of Government's Regional Transportation Plan – Preliminary Sustainable Communities Strategy (RTP-PSCS) is to encourage development in existing urbanized areas with access to existing businesses and services.

COUNTYWIDE

Distribution of Unincorporated Area Finaled Building Permits				
Final Year	Rural	Urban	Total	% of Urban Dwelling Units
2000	277	493	770	64%
2001	230	651	881	74%
2002	366	521	887	59%
2003	327	541	868	62%
2004	437	683	1120	61%
2005	372	661	1033	64%
2006	385	521	906	58%
2007	283	512	795	64%
2008	304	422	726	58%
2009	54	72	126	57%
2010	93	144	237	61%
2011	89	99	188	53%
2012	69	113	182	62%
TOTAL	3,286	5,433	8,719	62%

Source: Planning and Building Department, San Luis Obispo County



Source: Planning and Building Department, San Luis Obispo County

The Department continues to encourage development within existing communities that have adequate resources through existing policies in the Land Use and Conservation and Open Space Elements and through efforts such as:

- **Complete Communities Survey** to identify infrastructure and public facilities that are needed in four communities and develop strategies to finance the construction of these improvements
- **Infill Development Standards** study to recommend changes to development regulations that will remove barriers and create incentives for high-quality and compatible infill development

COUNTYWIDE

- **Update of the Economic Element of the County General Plan**, which contains goals and policies that will guide actions to assure a vital economy and continued high quality of life
- **San Miguel Community Plan** update that is intended to encourage employment, housing and development opportunities and economic vitality in a manner that is compatible with the scale and character of San Miguel
- **Consolidated Capital Improvements Program (CIP)**, which is a coordinated effort among County departments to prepare a comprehensive, five-year CIP that includes strategies for coordinating with community services districts to finance infrastructure in the County's unincorporated urban areas

VEHICLE MILES TRAVELED (VMT) AND VEHICLE FUELS CONSUMED (2005-2030)

Countywide data for vehicle miles traveled and fuel consumption is detailed below.

Year	State Highway	Non-State Highway	Total VMT	Gasoline Gallons	Diesel Gallons	Total Gallons	VMT Gallons
2005	1927.92	967.04	2894.96	141.366	24.218	165.584	17.48
2006	1955.34	983.73	2939.07	141.810	25.151	166.961	17.60
2007	1985.13	983.73	2968.86	141.459	26.140	167.599	17.71
2008	1864.17	986.68	2850.85	132.010	25.475	157.485	18.10
2009	1852.61	987.37	2839.98	128.352	25.177	153.529	18.50
2010	1917.92	915.50	2833.42	128.828	25.678	154.505	18.34
2011	1918.54	917.33	2835.87	127.884	25.842	152.726	18.57
2012	1917.97	921.53	2839.50	127.008	25.988	152.997	18.56
2015	1938.17	944.22	2882.39	125.848	26.570	152.419	18.91
2020	2049.56	1013.40	3062.96	122.165	26.739	148.904	20.57
2025	2209.34	1104.09	3313.43	120.838	27.065	147.903	22.40
2030	2393.70	1206.05	3599.75	125.822	28.602	154.424	23.31

Source: Caltrans, CA Motor Vehicle Stock, Travel and Fuel Forecast Modeling System (MVSTAFF), May 23, 2012

Note: MVSTAFF includes actual data from 2005 through 2009, forecasts from 2010 through 2040. MVSTAFF will be updated with actual data for 2010 and 2011 by early 2013. Grayscale is forecasted data. Miles are in millions. Gallons are in millions.

GREENHOUSE GAS EMISSIONS AND ENERGY USE

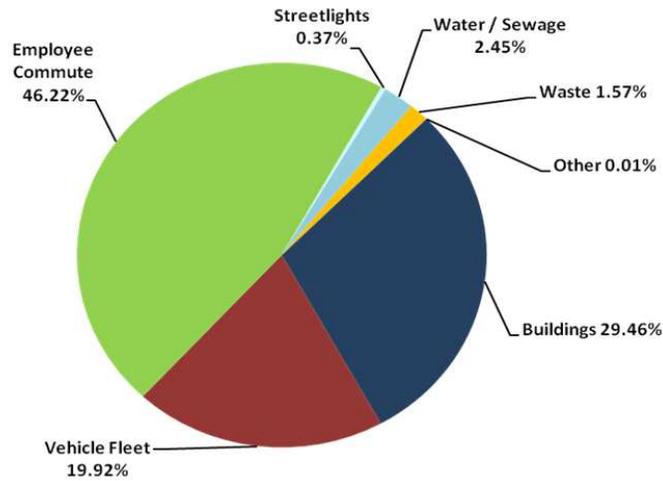
The topic of climate change is gaining a high priority among policy makers and residents alike. In July 2008, the County developed a Community-wide and County Government Operations Baseline Greenhouse Gas Emissions (GHG) Inventory (Inventory). In May 2010, the Inventory was adopted as part of the General Plan's Conservation and Open Space Element. This Inventory identifies

COUNTYWIDE

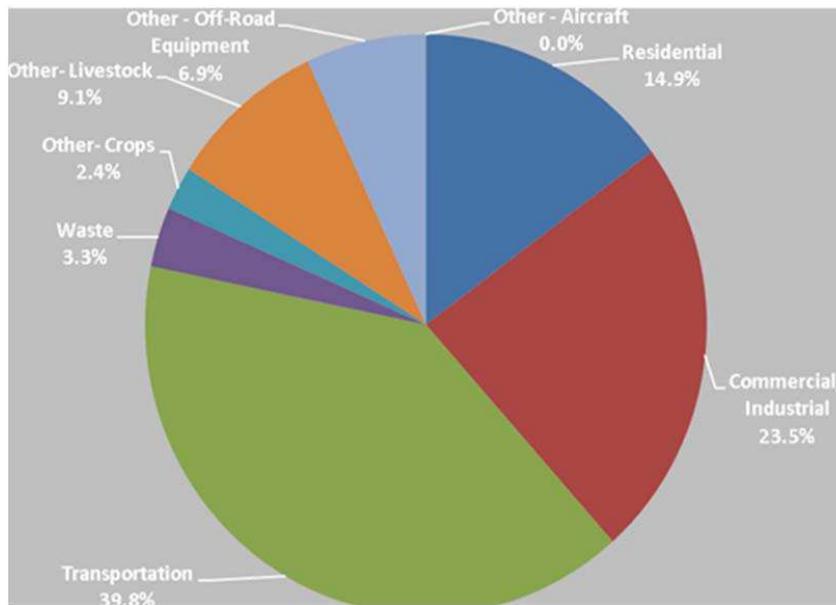
the major sources of greenhouse gas emissions within the county and provides a baseline against which future progress can be measured.

The GHG Inventory includes two components: a County government operations and a community-wide analysis.

County Operations Emissions



Community-wide Emissions



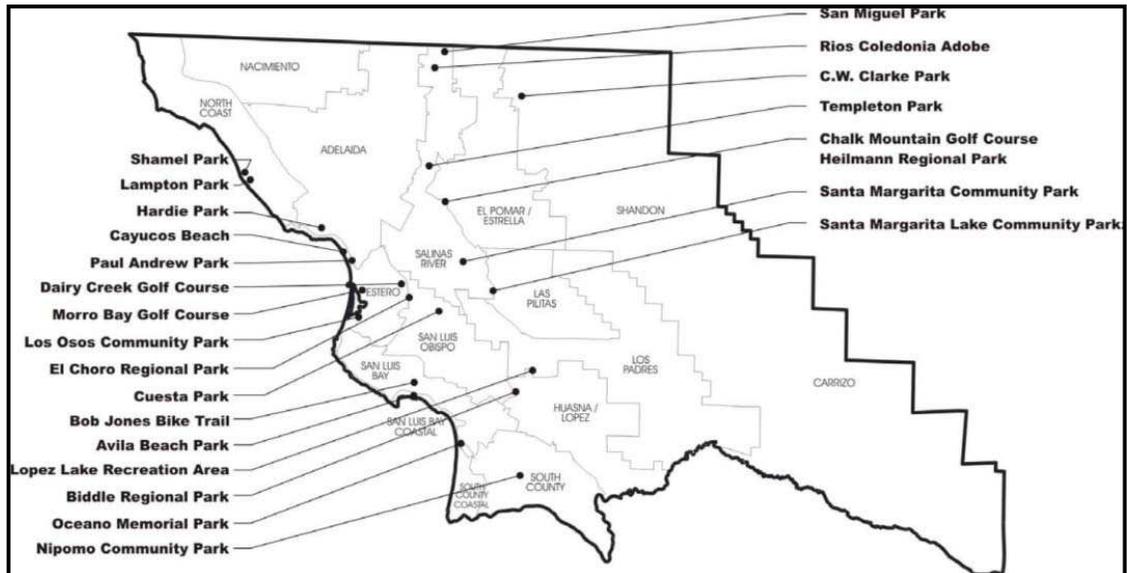
COUNTYWIDE

The adopted Conservation and Open Space Element (COSE) provides direction via goals, policies and implementation strategies to address climate change mitigation and adaption. In addition, the County adopted an EnergyWise Plan in 2012 that describes measures to reduce GHG emissions and increase energy efficiency.

County agencies are currently tracking energy and fuel use. A monitoring program will allow staff to report on energy efficiency and conservation on a yearly basis in the future.

PARKS

San Luis Obispo County operates 22 neighborhood, community and regional parks. The map below identifies the county-operated parks located in San Luis Obispo County.



Source: Parks and Recreation Element, San Luis Obispo County General Plan

In addition to these park resources, there are also county-operated golf courses, trails, natural areas, coastal access and historic facilities that are not addressed in this report. Additional information on these amenities can be found in the General Plan Parks and Recreation Element.

Other local agencies also provide parks within San Luis Obispo County, including and federal agencies, local jurisdictions, school districts and community service districts. These park amenities provided by other agencies are not addressed in this report; however, a list of these park amenities is available in the General Plan Parks and Recreation Element. Private parks are also provided within individual neighborhoods to serve local recreational needs.

COUNTYWIDE

Regional Parks

Regional parks serve the recreational needs of a larger population beyond the local neighborhood or community. Typically, regional parks aim to serve persons within one hour driving time from the park.

Urban regional parks tend to be closer to urban areas and generally greater than 200 acres, although sometimes urban regional parks serve the same purpose as a community park. Rural regional parks tend to emphasize nature-oriented activities and generally greater than 1,000 acres.

County-operated regional parks are outlined in the table below. Parks are discussed in further detail in the 'Regional Resources' sections of Chapters 3 and 4.

San Luis Obispo County-Operated Parks Regional Parks		
Chapter 3: South County	Arroyo Grande Area	Biddle Park
		Lopez Lake Recreation Area
	San Luis Obispo Area	El Chorro Park
Chapter 4: North County	Atascadero Area	Heilmann Park
	Santa Margarita	Santa Margarita Lake Park
	Templeton	Duveneck Park (undeveloped)

Park Demand: Regional Parks

The Parks and Recreation Element identifies the standard for urban regional parks as 5-10 acres per 1,000 population. As such, the current total demand for urban regional parks in the county is ranges between 1,360 – 2,720 acres. By 2020, the acreage needed will increase to 1,435 – 2,869 acres. There is no park demand standard identified for rural regional parks.

SOUTH COUNTY

III. SOUTH COUNTY

The South County includes four cities: Arroyo Grande, Grover Beach, Pismo Beach, and San Luis Obispo, and three unincorporated areas: Avila Beach, the Nipomo area, and Oceano. This chapter discusses resources by community. However, regional resources that cross community boundaries and are shared among communities, such as water supply, parks and freeway interchanges, are discussed separately later in this chapter.



AVILA BEACH

Avila Beach is an unincorporated urban area. It includes four areas: the town, the adjacent Avila Valley, the San Luis Bay Estates development and Port San Luis. There appears to be adequate water and infrastructure for the small amount of future development planned for the area.



Population

Avila Beach is at about 67% of its build out population of about 2,200 per the County General Plan. The San Luis Bay Estates development is largely built out under the current General Plan designations.

Avila Beach/Valley Population Estimates and Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
833	1,149	1,464	1,482	1,508	1,624	1,699	1,830	2,020

Source: AECOM for SLOCOG, July 2011

SOUTH COUNTY

Water Supply

According to the 2012 County Master Water Report, entities within the Avila Beach/Avila Valley area have the following State Water supply allocations¹:

- Avila Beach CSD has a 100 AFY supply of State Water through the Lopez Turnout
- Avila Valley MWC has a 20 AFY supply of State Water through the Lopez Turnout
- San Miguelito MWC has a 550 AFY State Water supply through the Lopez Turnout
- San Luis Coastal Unified School District has a 7 AFY State Water supply through the Lopez Turnout

Various purveyors and property owners in the Avila Beach/Avila Valley area have individual allocations of Lopez Reservoir water supply that total 241 AFY via contracts with Flood Control District Zone 3 or CSA 12.

Water Demand

Avila Beach/Avila Valley Water Demand			
Water Provider	Source	2010-2011	2011-2012
Avila Beach CSD	Lopez Water	79 AFY	82 AFY
San Miguelito MWC	Groundwater	44 AFY	61 AFY
	State Water	146 AFY	125 AFY
Avila Valley MWC	State Water	20 AFY	20 AFY
	Lopez Water	12 AFY	12 AFY
Bassi Ranch MWC	*	*	*
Total Lopez Water		91 AFY	94 AFY
Total Groundwater		44 AFY	61 AFY
Total State Water		166 AFY	145 AFY
TOTAL		301 AFY	300 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: * No data received

¹ Refer to Table 4.5 of the 2012 Master Water Report for the reliability of the State Water supplies per water purveyor under various allocation scenarios.

SOUTH COUNTY

The Avila Beach CSD serves the town of Avila Beach. Its Lopez Reservoir water is delivered via CSA 12 infrastructure.

San Miguelito Mutual Water Company serves San Luis Bay Estates and some development along San Luis Creek. In addition to State Water, the water company has three active wells in the groundwater basin.

The Avila Valley Mutual Water Company serves Avila Valley Estates on the south side of San Luis Bay Drive and has two wells.

Bassi Ranch Mutual Water Company serves the Bassi Ranch cluster development on the north side of San Luis Bay Drive.

Port San Luis is located west of the town of Avila Beach and receives its Lopez Reservoir water via transfer through CSA 12.

Other larger water users include Avila Hot Springs, Sycamore Mineral Springs and agriculture.

Historical Water Demand

The Avila Beach CSD has historically been the only water provider reporting water demand in the area. Recently, other water providers have reported water use. The table below outlines the water use (production) data received.

Provider	Avila Beach Total Water Use AFY (fiscal year)									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Avila Beach CSD	52	49	48	51	*	76	77	76	79	82
San Miguelito MWC	*	*	*	*	*	*	*	175	190	186
Avila Valley MWC	*	*	*	*	*	*	*	30	32	32
TOTAL					*			281	301	300

Source: Water Provider Water System Usage forms (FY-Production)

Notes: * No data provided;

Level of Severity: Water Supply

- None

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Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year (this figure is reported on all Water System Usage forms). Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Avila Beach/Avila Valley Water Rate Data (Average Single-Family Residence)						
Water Supplier	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
Avila Beach CSD	flat	450	**	**	\$39.50	\$39.50
San Miguelito MWC	tiered	1200	58,653 gals	61,592 gals	\$58.98	\$63.79
Avila Valley MWC	tiered	112	371,526 gals	371,526 gals	\$225.00	\$225.00
Bassi Ranch MWC	*	*	*	*	*	*

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

** Incomplete information

Water System

No water system issues have been reported for Avila Beach/Avila Valley.

Wastewater Treatment

Facilities

There are two wastewater providers in the Avila Beach area. The Avila Beach CSD serves the town and Port San Luis, and the San Miguelito Water Company serves the San Luis Bay Estates area. Treated effluent is discharged to San Luis Creek Estuary.

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 and the Avila Hot Springs currently uses on-site treatment and disposal, but should be served by one of the wastewater treatment providers due to on-site septic limitations in the valley.

The Avila Beach CSD's Sphere of Influence (SOI) includes all of Avila Valley east to the freeway and all of Avila Valley Estates that is currently served by San Miguelito Water Company. A single wastewater provider for the entire area, including the town, San Luis Bay Estates, and the unsewered areas such as

SOUTH COUNTY

Avila Valley Estates may be preferable to the separate wastewater treatment providers and individual septic systems.

Operational Issues

None reported.

Capacity

No current capacity information has been reported from the Avila Beach CSD or the San Miguelito Water Company.

Level of Severity: Wastewater

- None

Roads & U.S. Highway 101 Interchange

Avila Beach Roadway Analysis						
Roadway	Location	LOS D Volume	PM Peak Hour Volume			
			2009	2012	2014	2017
Avila Beach Drive	West of San Luis Bay Drive	1,280	692	447	465	494

Source: Public Works Department, San Luis Obispo County

Avila Beach Drive

The Level of Service on Avila Beach Drive is measured on off-peak days due to spikes in traffic volumes during limited summer weekends. Traffic volumes measured in May and September show that Avila Beach Drive operates at Level of Service (LOS) A and does not need widening.

Avila Beach U.S. Highway 101 Interchange Analysis				
Interchange	2010-2011		2020-2021	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
San Luis Bay Drive	5.4	A	7.1	A
Avila Beach Drive	12.7	B	39.8	D

Source: Public Works Department, San Luis Obispo County

Notes: *Shaded area indicates the interchange is below or expected to drop below a LOS C

SOUTH COUNTY

Highway 101 Interchanges

The condition of the Highway 101 interchanges at San Luis Bay Drive and Avila Beach Drive is outlined in the table above. Avila Beach Drive is the only interchange analyzed in 2011 that is anticipated to drop below a Level of Service C within ten years. The County Public Works Department is collecting more intersection data and will be completing an operations analysis of the intersection.

Level of Severity: Roads & U.S. Highway 101 Interchange

- Roads: None
- Highway 101 Interchange: No LOS established yet

Parks

Neighborhood and Community Parks

There is one County-operated park and one currently undeveloped park in Avila Beach, as outlined in the table below.

Avila Beach Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)
Avila Park/Avila Plaza	Community	2.5		
See Canyon Park	Undeveloped	8.7		
TOTAL		11.2		

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in County General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

*Acreage needed will be calculated as part of the RMS revisions

Avila Park is located at San Juan Street and Front Street; Avila Plaza lines the ocean along Front Street. The park and plaza provide children's play equipment, picnic areas, restrooms, access to the beach, a pedestrian plaza along a portion of Front Street, and open play areas.

See Canyon Park is currently undeveloped. The park is planned for future development along See Canyon Creek, south of San Luis Bay Drive, between See Canyon Road and Avila Valley Drive.

SOUTH COUNTY

Based on the current population, there is a park demand for 4.4 acres. Avila Beach currently has a deficiency of 1.9 acres. By 2020, the total acreage needed will increase to 4.9 acres.

Regional Parks

There are no County-operated regional parks located in Avila Beach. Regional parks are discussed in the South County Regional Resources section later in this chapter.

Recommended Action Requirements & LOS Summary

Avila Beach: Recommended Action Requirements

- The use of a single wastewater provider for the entire area should be studied and considered.

Avila Beach: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Avila Beach are summarized below:

Avila Beach	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	None	None	None	None	III	None

SOUTH COUNTY

NIPOMO

Nipomo is an unincorporated urban area located along Highway 101 in the South County.

The Nipomo Mesa Water Conservation Area (NMWCA) is addressed separately in the South County Regional Resources section later in this chapter.



Population

Nipomo is at about 65% of its build out population of about 23,500 per the County General Plan.

Nipomo Population Estimates and Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
12,612	13,940	15,267	15,450	15,725	16,752	17,852	18,875	19,926

Source: AECOM for SLOCOG, July 2011

Water

The community of Nipomo is located within the Nipomo Mesa Water Conservation Area (NMWCA)². The NMWCA boundaries extend beyond those of the Nipomo Urban Reserve Line (URL). Accordingly, areawide Nipomo Mesa water information is located in the South County Regional Resources section later in this chapter.

Wastewater Treatment

Facilities

Within the Nipomo URL, wastewater service is provided by the Nipomo CSD (NCSD). Outside the URL in the Nipomo Mesa Area, the NCSD serves Black Lake Village with its wastewater treatment plant. Other wastewater treatment on the Nipomo Mesa is provided by the Rural Water Company's Cypress Ridge wastewater plant and the Woodlands wastewater treatment plant. Additional

² This area is also referred to as the Nipomo Mesa Management Area (NMMA). The two names are used interchangeably.

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details on these providers outside of the Nipomo URL are provided in the South County Regional Resources section later in this chapter.

The NCS D's Southland Wastewater Treatment Facility is currently being expanded and upgraded to allow tertiary treatment.

The treated effluent at Southland Wastewater Treatment Facility is discharged to the percolation basins and returns the effluent to the groundwater basin. The NCS D considers itself a contributing stakeholder to the Recycled Water Policy, adopted by the State Water Resources Control Board. As such, the NCS D is responsible for participating in a basin-wide salt and nutrient management plan stakeholder group.

Operational Issues

According to NCS D, no operational issues are reported.

Capacity

The Southland Wastewater Treatment Facility currently operates at 67% of its capacity at peak flow as shown in the table below.

Facility	Nipomo Wastewater				
	Average Daily Plant Capacity (mgd)	Avg. Peak Daily Flow (mgd)	Current Operational % of Capacity**	Expansion Plans	New Capacity After Expansion (mgd)
Southland	0.9	0.6	67%	No	n/a

Source: NCS D

Notes: ** peak daily flow divided by average daily plant capacity

The NCS D has no current plans for expansion of the Black Lake Wastewater Treatment Plant (WWTP), but a sewer master plan has been approved for fiscal year 2012-2013, which will identify areas in need of repair or upgrade within the collection system and treatment facility. The disinfected effluent from the Black Lake facility is discharged to a holding pond at the Black Lake Resort Golf Course, where it is used for irrigation.

Operational Issues

No operational issues have been reported. No operational issues are reported for any other facility in the Nipomo Mesa Area.

Capacity

The Black Lake wastewater treatment plant currently operates at 70% of capacity at peak flow as shown in the table below. No data has been reported for any other facility in the Nipomo Mesa area.

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Nipomo Wastewater					
Facility	Average Daily Plant Capacity (mgd)	Avg. Peak Daily Flow (mgd)	Current Operational % of Capacity**	Expansion Plans	New Capacity After Expansion (mgd)
Black Lake	0.20	0.14	70%	No	n/a

Source: NCS D

** peak daily flow divided by average daily plant capacity

Level of Severity: Wastewater

- None

Roads & U.S. Highway 101 Interchange

Nipomo Roadway Analysis						
Roadway	Location	LOS D Volume	PM Peak Hour Volume			
			2009	2012	2014	2017
Tefft Street	West of Mary Avenue	2,815	1,728	1,680	1,748	1,855

Source: Public Works Department, San Luis Obispo County

Tefft Street

Tefft Street traffic volume (peak hour) is not expected to reach a Level of Service D in the foreseeable future.

Level of Severity: Roads

- None

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Highway 101/Tefft Street Interchange

The Tefft Street interchange operates at a LOS E currently and is projected to worsen to LOS F by 2020.

Parks

Neighborhood and Community Parks

There is one County-operated park and one undeveloped park in Nipomo, as outlined in the table below.

Nipomo Area Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (acres)**
Nipomo Community Park	Community	154 (15 active)		
Jack Ready Park	undeveloped	30		
TOTAL		45		

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

** Acreage needed will be calculated as part of the RMS revisions

Nipomo Community Park is located at Pomeroy Road and West Tefft Street. Amenities in the park include sports fields, picnic areas, play equipment, lighted tennis courts, basketball and handball courts, botanical garden, trails, restrooms, and parking. The Nipomo Community Park Master Plan is complete and was adopted by the Board of Supervisors in November 2012.

Jack Ready Park is currently undeveloped and planned for future development along the proposed Nipomo Bluff Trail, south of Eucalyptus Road. The park is designed to be a universally accessible park, regardless of physical limitation. Planned park amenities include a themed play structure, a sand play area, soccer and baseball fields, basketball courts, and a therapeutic riding center.

Regional Parks

Regional parks are addressed in the South County Regional Resources Section later in this chapter.

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Recommended Action Requirements & LOS Summary

Nipomo Area: Recommended Action Requirements

- See South County Regional Resources discussion and LOS below.

Nipomo Area: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Nipomo are summarized below:

Nipomo Area	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	III	None	None	None	II-III	None

SOUTH COUNTY

OCEANO

This unincorporated urban area is located along Highway 1 in the South County adjacent to the Nipomo-Oceano Dunes complex and the Oceano Dunes Off-Highway Vehicle Park.



Population

Oceano is at 77% of its buildout population of about 9,200.

Oceano Population Estimates and Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
7,244	7,176	7,108	7,194	7,322	7,799	8,153	8,670	9,001

Source: AECOM for SLOCOG, July 2011

Water Supply

According to the 2012 County Master Water Report, Oceano has the following water supply allocations:

- 303 AFY from Lopez Lake
- 750 AFY State Water is allocated to Oceano CSD though the Lopez Turnout
- 900 AFY of Oceano’s groundwater supply is part of the “Northern Cities” area of the Santa Maria Groundwater Basin.

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Water Demand

Oceano Water Demand			
Water Provider	Source	2010-2011	2011-2012
Oceano CSD	Groundwater	*	54 AFY
	State Water	*	939 AFY
TOTAL		*	993 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Historical Water Demand

Oceano Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
895	951	*	*	*	940	907	968	*	933

Source: Water Provider Water System Usage forms (FY-Production)

Notes: * Data not received

Level of Severity: Water

- None

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year (this figure is reported on all Water System Usage forms). Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Oceano Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
Oceano CSD	tiered	7,100	119,680	119,680	*	\$36.36

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not received

SOUTH COUNTY

Water System

No water system issues have been reported for Oceano.

Wastewater Treatment

Facilities

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. The treatment plant currently discharges treated effluent to the ocean through an ocean outfall line shared with the City of Pismo Beach. See South County Wastewater Treatment in the South County Regional Resources section later in this chapter.

Operational Issues

See Wastewater in the South County Regional Resources section later in this chapter.

Capacity

No current capacity information has been reported from the South San Luis Obispo County Sanitary District.

Roads

South County Roadway Analysis						
Roadway	Location	LOS D Volume	PM Peak Hour Volume			
			2009	2012	2014	2017
Halcyon Road	South of Arroyo Grande Creek	904	956	852	886	941

Halcyon Road (South of Arroyo Grande Creek)

In 2009, this road segment exceeded the LOS D pm peak hour volume threshold of 904 trips. In 2012, volume decreased to 852 trips, which is below the LOS D threshold. By 2017, volumes are projected to exceed the LOS D threshold. The road segment currently is categorized as a Level of Severity I. LOS III could be reached in 2017 and continue in the future without road work to widen the road.

Level of Severity: Roads

- Halcyon Road: LOS I

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Parks

Neighborhood and Community Parks

There is one County-operated park in Oceano, as outlined in the table below.

Oceano Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)
Oceano Memorial Park	Neighborhood	11.8	21.6	9.8

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

**Acreage needed is calculated at a ratio of 3 acres per 1,000 people

Oceano Memorial Park provides fishing, turf area, play equipment, picnic sites, a campground, a group area, restrooms, and parking.

Level of Severity: Wastewater

- None

Regional Parks

There are no County-operated regional parks located in Oceano. Regional parks are discussed in the South County Regional Resources section later in this chapter.

Recommended Action Requirements & LOS Summary

Oceano: Recommended Action Requirements

- There are no recommended actions for Oceano.

Oceano: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Oceano are summarized below:

SOUTH COUNTY

Oceano	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	None	None	None	None	II-III	None

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SOUTH COUNTY REGIONAL RESOURCES

The following section discusses resources in the South County that extend beyond city or community boundaries, specifically, water, air quality, roads, schools and parks.

SOUTH COUNTY WATER

South County Water Supply

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 reservoir's safe yield of 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 are Oceano; the cities of Grover Beach, Pismo Beach, and Arroyo Grande; and CSA 12, including the Avila Beach area. Their shares of Lopez water are shown in the table below. According to the 2012 County Master Water Report, environmental protection issues may call for increased releases to Lopez Creek, thereby reducing the allocations available to the cities.

Lopez Lake Water Allocations	
Participant	Allocation (AFY)
City of Pismo Beach	896
Oceano CSD	303
City of Grover Beach	800
City of Arroyo Grande	2,290
CSA 12	241
TOTAL	4,530

According to the 2012 County Master Water Report, there are two plans that could change both the amount of water available to contractors and the safe yield.

SOUTH COUNTY

- 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.
- A study is being conducted to consider the feasibility of modifying the dam to augment capacity of the reservoir, 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. 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.

South County Water Demand

The following water providers serve specific areas in the South County other than those covered earlier in this chapter in the discussions of communities. These providers have submitted information for this report as shown in the table below.

South County Water Demand			
Water Provider	Source	2010-2011	2011-2012
GSWC (Edna)	Groundwater	302 AFY	314 AFY
Halcyon/Temple of the People	Groundwater	30 AFY	*
Mesa Dunes Mobile Home Estates	Groundwater	79 AFY	87 AFY
Varian Ranch MWC	Groundwater	51 AFY	56 AFY
Varian Ranch MWC – Ag Well	Groundwater	*	195 AFY
Irish Hills MWC	Groundwater	*	41 AFY
TOTAL		462 AFY	693 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: * Data not provided

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Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year as reported on the Water System Usage forms. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

South County Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
			GSWC (Edna)	Tiered	1,967	145,860 gals
Halcyon/Temple of the People	Flat	*	**	**	\$45.00	*
Mesa Dunes Mobile Home Estates	Flat	800	*	84,631 gals	*	*
Varian Ranch MWC	flat ***	100	370,000 gals	306,387 gals	\$114.50	\$91.00
Irish Hills MWC	tiered	135	*	222,313 gals	*	\$70.82

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012 (Production)

Notes: * Data not provided

** unmetered

*** Varian Ranch MWC charges a penalty above 1,500 gpm daily average

South County Water Management Areas

The South County has two water management areas: Northern Cities Management Area (NCMA) and the Nipomo Mesa Management Area (NMMA). These areas are part of the Santa Maria Groundwater Basin adjudication and are cooperatively managed by the major water users in each area.

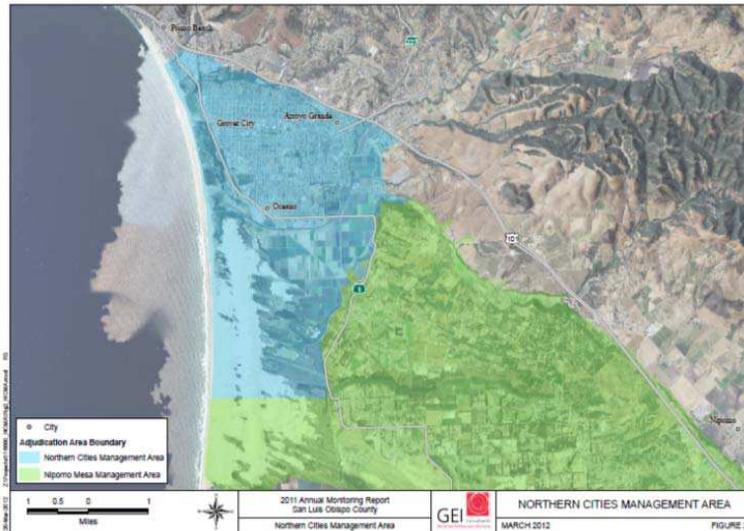
Northern Cities Management Area	Nipomo Mesa Management Area
City of Pismo Beach	Nipomo CSD
City of Grover Beach	Golden State Water Co.
City of Arroyo Grande	Agricultural Users
Oceano	Woodlands Mutual Water Co.
	Conoco-Phillips

SOUTH COUNTY

Northern Cities Management Area

The information in this section of the report is taken from the 2011 Annual Monitoring Report for the NCMA dated May 4, 2012.

The 2005 Settlement Stipulation for the Santa Maria Groundwater Basin Adjudication formed the Northern Cities Management Area (NCMA). The 2011 Annual Monitoring Report (released in May 2012) states that the NCMA consists of: "...the City of Arroyo Grande (Arroyo Grande), City of Grover Beach (Grover Beach), City of Pismo Beach (Pismo Beach) and the Oceano Community Services District (Oceano CSD). These agencies, along with local land owners, the County of San Luis Obispo (County), and the San Luis Obispo County Flood Control & Water Conservation District (FC&WCD) have managed local surface water and groundwater resources since the late 1970s to preserve the long-term integrity of water supplies."



A technical group (TG) has been formed to manage the area. The 2011 Monitoring report was compiled and released by the TG. The 2011 report has a table of Available Urban Water Supplies (2011 data):

Available Urban Water Supplies, AFY							
Urban Area	Lopez Lake	SWP Allocation	Groundwater Allocation	Ag Credit	Temporarily Purchased	Other Supplies	Total
Arroyo Grande	2290	0	1202	121	100	160	3873
Grover Beach	800	0	1198	209	0	0	2207
Pismo Beach	896	1240	700	0	0	0	2836
Oceano	303	750	900	0	-100	0	1853
Total	4289	1990	4000	330	0	160	10,769

The next publication of this RMS report (2013-2015) will merge all the water provider information into the following section, Nipomo Mesa Water Conservation Area.

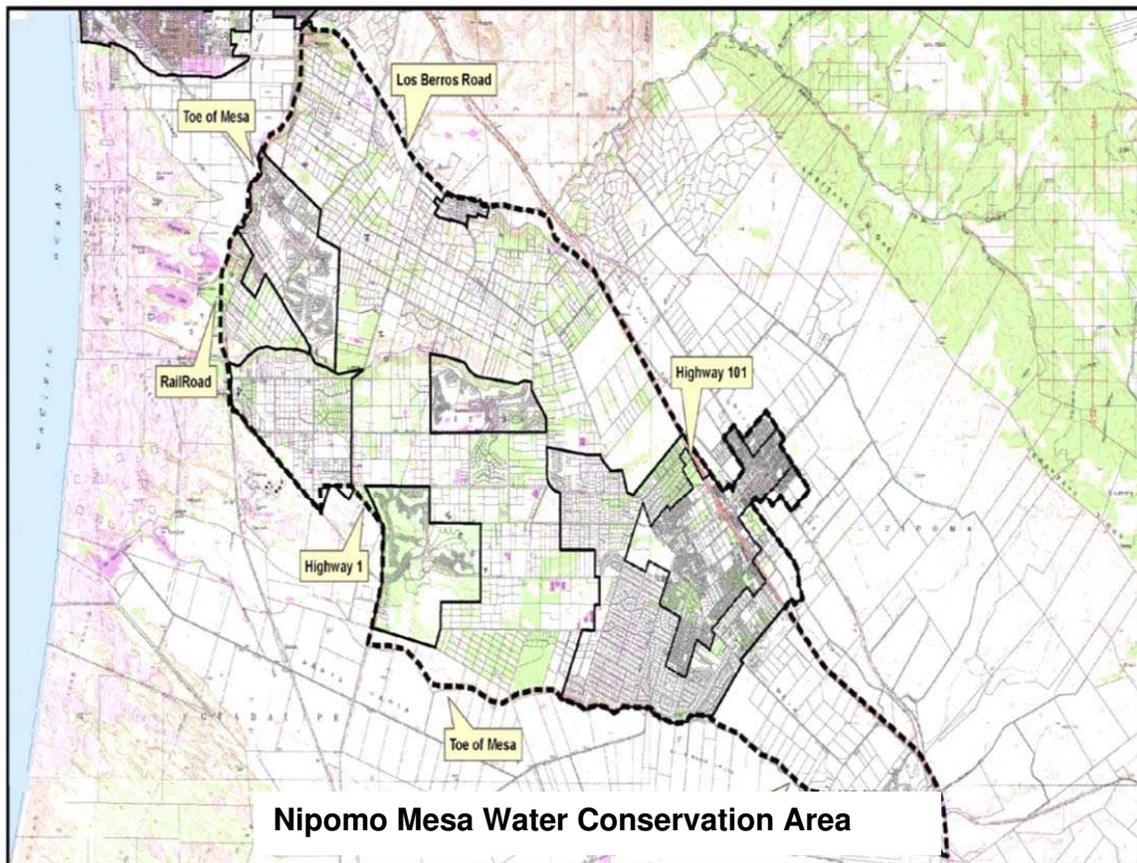
SOUTH COUNTY

Nipomo Mesa Water Conservation Area

The Nipomo Mesa Water Conservation Area (NMWCA) is part of the larger Santa Maria Groundwater Basin (see map below). This area is also referred to as the “Nipomo Mesa Management Area” (NMMA). The Santa Maria Groundwater Basin includes northern Santa Barbara County, the Nipomo Area (including the community of Nipomo and the area known as the Nipomo Mesa as far north as Halcyon Road) and the Northern Cities area (Cities of Grover Beach, Arroyo Grande, Pismo Beach and the community of Oceano).

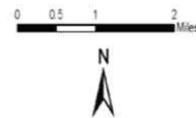
The NMWCA is at a LOS III for water supply. It is part of an area that has had among the highest growth rates in the unincorporated county between 2000 and 2010. The entire Santa Maria Groundwater Basin has been subject to groundwater adjudication that appears to be drawing to a close.

Water Supply and Resource Capacity Study



Legend	
	Nipomo Groundwater Basin
	Urban Service Line
	Urban Reserve Line
	Parcel Line

Nipomo Groundwater Basin



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The entire Nipomo Mesa area is dependent on groundwater as its sole water source. 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 providers in the NMWCA. These providers include the Nipomo CSD, the private, for-profit Golden State Water Company (GSWC) and Rural Water Company and many private not-for-profit mutual water companies (such as Woodlands Mutual Water Company, and Woodland Hills Mutual Water Company). The number of water providers and the lack of a clear regulatory structure is one of the water resource concerns within the NMWCA.

A RCS was prepared in 2004³ in order to determine the severity of the water supply situation and recommend measures to address the problem. The RCS found that the Nipomo Mesa area of the groundwater basin was in a condition of overdraft. The RCS was updated in 2007 by the County Planning and Building Department. Subsequently, the Board of Supervisors certified a LOS III for the NMWCA and approved moving ahead with actions to address the land use issues that affect water supply.

As a result of the 2004 RCS and the 2007 update, the Board of Supervisors put several measures in place to address the water situation, including: 1) a requirement for water-neutral general plan amendments; 2) a fee for development resulting from new land divisions in order to help fund a supplemental water project; 3) landscape and irrigation requirements for outdoor water use; 4) a plumbing retrofit-upon-sale requirement for existing development, and 5) a water conservation fee (per-toilet) for new development to help fund water conservation in the NMWCA.

Groundwater Adjudication and Supplemental Water Project

The NMWCA is part of the larger Santa Maria Groundwater Basin. The basin has undergone “adjudication,” which is a court proceeding involving thousands of property owners who use basin groundwater. The court case was started in July 1997 by the Santa Maria Valley Water Conservation District due to concerns over the City of Santa Maria’s state water banking project.

The groundwater adjudication resulted in a requirement for the NCSD to bring at least 2,500 AFY of supplemental water into the NMWCA to back-fill a pumping depression on the Nipomo Mesa. The supplemental water project chosen by the

³ The 2004 RCS was prepared by the hydrogeology firm of S.S. Papadoplous.

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District was the Santa Maria Pipeline project. That project's proposed funding was recently voted down by property owners in 2012. In addition to the NCSD, GSWC, the Woodlands MWC and the Rural Water Company all would have shared in the cost of the supplemental water project. The NCSD has taken the lead to bring new water resources to the NMWCA and is currently redesigning the project to deliver water in phases. A citizen's Evaluation Committee has also been formed to evaluate available supplemental water sources to meet near-term community needs.

A Technical Group (TG) was formed by the court with jurisdiction for the Nipomo Mesa Management Area (NMMA) as a result of the groundwater adjudication. The court's NMMA corresponds approximately to the County's NMWCA. The TG includes representation from the largest groundwater users such as the water providers, Conoco-Phillips refinery and large agricultural users. The TG publishes an annual report of their activities and findings. The latest report dated May 2012 reaches several conclusions, including: 1) the Nipomo Supplemental Water Project should be implemented as soon as possible; 2) spring groundwater elevations decreased sharply from 2010 levels following three consecutive years of decline; 3) measurements indicate that water demand exceeds the ability of the supply to replace the water pumped from the aquifers; 4) the estimated 2011 calendar year groundwater production is 10,538 acre-feet, and 5) there is no evidence of any water quality issues, including seawater intrusion.

Water Providers

The large number of water providers in the NMWCA creates difficulties for conserving water and obtaining supplemental water. Water providers include the public NCSD and private, for-profit companies such as GSWC and Rural Water Company. In addition, there are many mutual water companies. Each operates under its own set of rules, is regulated by different entities, and has different purposes. Cooperative efforts among the larger providers occur through the technical group established as a result of a groundwater adjudication lawsuit.

The smaller water providers generally do not report water use; however, that is slowly changing as new state laws require smaller systems to report water production to the County Health Department.

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Water Demand

Nipomo Area Water Demand			
Water Provider	Source	2010-2011	2011-2012
Nipomo CSD	Groundwater	2,421 AFY	2,489 AFY
GSWC	Groundwater	1,023 AFY	1,073 AFY
Woodlands MWC	Groundwater	879 AFY	817 AFY
Rural Water Company	Groundwater	728 AFY**	*
TOTAL		5,051 AFY	

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: * No data received

**Rural Water Company information is reported for calendar year 2011 per Nipomo Mesa Management Area 4th Annual Report, April 2012

The 2011 NMMA Annual report's (issued in May 2012) Table 3-6 is entitled "Measured and Estimated Groundwater Production (AFY)":

Measured	
NCSD	2,488 AFY
GSWC	1,043 AFY
Woodlands	864 AFY
Conoco/Phillips	1,100 AFY
RWC	728 AFY
Subtotal	6,223 AFY
Estimated	
Rural Landowners	1,850 AFY
Agriculture	2,465 AFY
Total NMMA Production	10,538 AFY

2011 calendar year

Level of Severity: Water Supply

- NMWCA Water Supply: LOS III based on Resource Capacity Study

Historical Water Demand

The NCSD has taken measures to use water more efficiently. In approving the 2004 Sphere of Influence Update, LAFCO placed conditions on 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 would be relied on heavily to reach this conservation goal are:

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- A multi-tiered conservation rate structure.
- Public education and outreach measures
- Technical assistance (e.g. leak detection, water audits).

According to LAFCO's adopted SOI-MSR Update (July 2010), water conservation efforts since 2004 have reduced water use by 23%.

The following table shows the water use (production) in Nipomo (NCS D and Golden State Water Co.) and in the Woodlands Village. Data from the three water providers has only been complete for the past two years. Prior to that time, the reported data was only for NCS D and GSWC.

Provider	Nipomo Total Water Use AFY (fiscal year)									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
GSWC	1,414	1,488	1,387	1,289	1,288	1,365	1,323	1,191	1,023	1,073
NCS D**	*	2,908	2,794	2,706	2,856	2,755	2,698	2,551	2,421	2,489
Woodlands MWC	*	*	*	*	*	*	*	*	879	817
TOTAL	1,414	4,396	4,181	3,995	4,144	4,120	4,021	3,742	4,323	4,379

Source: Water Providers Water System Usage forms (FY-Production)

Notes: * No data received

**Data for NCS D 2003 – 2010 is from LAFCO and is based on the calendar year, not fiscal year.

Water Rates

The average single-family residential water usage and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year as reported on the Water System Usage forms. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Water Provider	Nipomo Water Rate Data (Average Single-Family Residence)					
	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
NCS D	tiered	12,143	195,540 gals	195,540 gals	\$55.22	\$59.87
GSWC	tiered	4,858	210,188 gals	209,644 gals	\$62.89	\$65.39
Woodlands MWC	flat + tiered	900	154,836 gals	139,060 gals	\$36.13	\$31.90
Rural Water Company	*	*	*	*	*	*

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

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Water System

No water system issues have been reported for the community of Nipomo.

Water Issues and Recommendations

Authority

The County has very limited authority to regulate groundwater pumping. The actions put into place through the original 2004 RCS for the Nipomo Mesa area and the 2007 update focus on the County's land use authority and retrofitting of existing buildings. This should remain the focus of County actions.

General Plan Policies

The County General Plan's Land Use Element and the Conservation and Open Space Element (COSE) contain policies that address water. Generally, the Land Use Element's Framework for Planning includes the range of actions to take for the various RMS levels of severity. LOS II and III call for such actions as:

1. Evaluating the appropriate scale and timing of discretionary projects within the remaining resource capacity to determine whether they should be approved
2. Enacting restrictions on further land development in the area that is affected by the resource problem
3. Adjusting land use categories so that they will accommodate no more than the population which can be served by the remaining available resource, or redirecting growth to communities or areas that have available resource capacity
4. Imposing stringent conservation measures within the service area
5. Adopting growth management or other urgency measures to initiate whatever restrictions are necessary to minimize or halt further resource depletion
6. Establishing a moratorium on land development or other appropriate measures in the area that is affected by the resource problem

The COSE contains policies such as the following that address groundwater issues:

1. Water conservation is acknowledged to be the primary method to serve the County's increasing population.
2. Development of new water supplies should focus on efficient use of our existing resources.
3. The County should help implement interagency projects.
4. Do not approve General Plan amendments or land divisions that increase the density or intensity of non-agricultural uses in rural areas with a certified LOS II or III for water supply.

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5. Avoid a net increase in non-agricultural water use in groundwater basins that are recommended or certified as LOS II or III for water supply, and place limitations on further land divisions in these areas until plans are in place and funded to ensure that the safe yield will not be exceeded.

The policies of the general plan clearly call for the County to take action in response to the existing groundwater condition in the NMWCA.

District and County Conservation Measures in the NMWCA

There are several land use-related water conservation measures that have been implemented by the County in the past six years in response to the groundwater basin issues. These ongoing measures can be continued, modified, deleted or enhanced.

- **Water Conservation Fee (Building Permits).** All building permit applications are subject to a special fee of \$750 per new toilet. The collected funds are to be used to help fund the NCS D's water conservation program.
- **Supplemental Water Fee (land divisions).** Development resulting from new land divisions is subject to a fee to help fund a future supplemental water project for the Nipomo Mesa. Although most rural parcels would not hook up to the new water project, they would receive some level of benefit, as the new supplemental water replaces pumped groundwater. The project being funded was the Santa Maria Pipeline project, which according to the August 2012 Phasing Study, is now being considered as a phased project.
- **General Plan Amendments:** The Land Use Ordinance requires that General Plan amendment applications that increase non-agricultural water demand cannot be approved unless supplemental water is available and specifically allocated to the development. In addition, a policy in the COSE of the General Plan is to not approve General Plan amendments (or land divisions) that increase the density or intensity of non-agricultural uses in rural areas that have a recommended or certified LOS II or III for water supply until a LOS I or better is reached, unless there is an overriding public need.
- **Outside Water Use Standards.** Outside water use for new development is subject to special landscape irrigation requirements that were included in the Land Use Ordinance in 2008.
- **Toilet Retrofit Program:** A toilet retrofit-upon-sale ordinance in Title 8 of the County Code has been in effect in the NMWCA since 2008. By and large, it has been found that almost all toilets in the NMWCA are already of the low-flow type. Changing the few remaining toilets to low-flow will occur naturally as older-style toilets are replaced.

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Conclusions

According to the latest report by the Technical Group:

- Measurements indicate that water demand exceeds the ability of the supply to replace the water pumped from the aquifers.
- A supplemental water project should be implemented as soon as possible.

The following circumstances have changed in the Nipomo Mesa area since the 2007 update of the original 2004 RCS:

- The County instituted land use and water efficiency measures such as the Title 8 retrofit program.
- The County instituted a fee for new construction to help finance areawide conservation (\$750.00 per toilet).
- New outdoor water use standards for new construction were instituted.
- The Nipomo CSD continues to study the supplemental water options for the area.

In addition, the Nipomo CSD has operated a water conservation program that from 2004 to 2010 reduced water use in the District by approximately 22 percent, as shown in the following table.

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	4,077	0.70	+3%	-10%
2008	2,755	4,092	0.67	-4%	-13%
2009	2,698	4,138	0.65	-3%	-16%
2010	2,551	4,136	0.61	-6%	-22%

Source: LAFCO (from the 2009-2010 ASR)

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Recommended Action Requirements & LOS Summary

NMWCA: Recommended Action Requirements

- There have been several water conservation and related actions instituted in the basin. Water demand has decreased, a technical group continues to study the basin and make recommendations and a supplemental water project alternatives study is ongoing. The following actions should be considered by the Board:
- Consider ending the Title 8 retrofit-upon-sale ordinance in the NMWCA. The program has run for 4 years and approximately 5 % of homes have needed retrofitting.
- Follow the progress of the *Supplemental Water Alternatives Evaluation Committee*. Coordinate any needed County actions such as an AB 1600 study to quantify the costs and benefits of the identified supplemental water project for groundwater users outside the Nipomo CSD.
- Collaborate with the Nipomo CSD and other stakeholders to assist in their efforts to address areawide water issues.
- Continue to help fund areawide water conservation through the fee on new construction.

Level of Severity

The 2004 RCS established a LOS III for the NMWCA. This action was certified by the Board of Supervisors in 2007. Based on the findings of the latest Public Report from the Technical Group, the LOS III remains appropriate, and there is no reason to propose a change.

Level of Severity: Nipomo Mesa Water Conservation Area

- NMWCA: LOS III - Certified 2007

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South County Wastewater Treatment

The South San Luis Obispo County Sanitary District (SSLOCS D) provides wastewater treatment and/or disposal to the Cities of Pismo Beach, Grover Beach, Arroyo Grande and the community of Oceano. The treatment plant is located in Oceano.

Capacity

No current capacity information has been reported from the South San Luis Obispo County Sanitary District. The 2009-2010 Annual Resource Summary Report indicated that the treatment plant was operating at 60% of capacity.

Operational Issues

On October 3, 2012, the California Regional Water Quality Control Board (RWQCB) adopted an Administrative Civil Liability Order and assessed a penalty of \$1,109,812.80 against the SSLOCS D. The Order states, in part, that in December 2010, the wastewater treatment plant's influent pump automatically shut down after floodwaters entered an electrical conduit leading into a pump motor control system. The loss of power caused untreated sewage to surcharge upstream into the wastewater collection system and overflow, discharging untreated sewage from the collection system into the environment.

The District filed an appeal of the Administrative Liability in November 2012.

Level of Severity:

There is no level of severity.

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SOUTH COUNTY AIR QUALITY

Ozone

Ozone is formed in the atmosphere as a byproduct of photochemical reactions between various reactive organic compounds (ROG), oxides of nitrogen (NO_x) and sunlight. The exhaust systems of cars and trucks produce about 50 percent of the county's ROG and NO_x emissions. Other sources include solvent use, petroleum processing, utility and industrial fuel combustion, pesticides and waste burning. The State hourly average ozone standard is 0.09 ppm (parts per million). The State adopted an 8-hour average ozone standard of 0.07 ppm in 2006. Exceedances of the hourly ozone standard for the past ten years are summarized in the following table:

Ozone Standard Exceedances (above CA 1-hour standard)										
Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Grover Beach	0	0	0	N/A						
Nipomo	1	0	0	0	0	0	0	0	0	0 ^{^^^}
San Luis Obispo	0	0	0	0	0	1	0	0	0	0 [^]

Source: San Luis Obispo APCD

Notes: Data is based on calendar year, not fiscal year.

^ = Jan – May ^^ = Jan – August ^^^ = Jan - July

PM₁₀

According to the Air Pollution Control District, the PM₁₀ measurements are a bit complicated due to significant changes in the monitoring network in 2010 and 2011. Prior to the changes, all monitoring stations collected one sample every six days. Since the upgrades, stations have been collecting daily samples.

The table below identifies the actual number of exceedences recorded at each station. As such, data from 2009 and earlier appears to have fewer PM₁₀ exceedences than data for 2010 and beyond. This is due to the recently increased sampling schedule.

Particulate matter less than ten microns (PM₁₀) can be emitted directly from a source, and can also be formed in the atmosphere through chemical transformation of gaseous pollutants. Nitrogen oxides and reactive organic gases can both participate in these reactions to form secondary PM₁₀ products. Re-entrained dust from vehicles driving on paved roads is the single largest source of PM₁₀ in the county. Dust from unpaved roads is the county's second largest source of PM₁₀. PM₁₀ measurements throughout the South County have

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exceeded the State 24-hour average PM₁₀ standard of 50 ug/m³ on numerous occasions in the past several years and the annual standard of 20 ug/m³.

Exceedances of the 24-hour standard for the past ten years are summarized in the table below. Prior to 2010, PM samples were collected once every six days. In 2012, PM samples were collected every day. 2010 and 2011 were transitional years, with different sites on different schedules. Site/year combinations on the everyday sampling schedule for all or part of a year are marked with an *. The number of exceedances reported in the table is actual number of exceedances observed at each site that year. To compare years with daily sampling to those with 1-in-6 sampling, multiply the 1-in-6 value by six to estimate the number of exceedance that would likely have been observed if sampling had been daily.

PM ₁₀ Exceedances (above CA 24-hour standard)										
Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Nipomo	4	2	0	1	2	1	2	2*	3*	6*^^^
San Luis Obispo	1	0	0	1	0	0	0	0	2*	1*^
Mesa to Hwy 1	4	9	1	4	7	5	9	40*	32*	32*^^^
Ralcoa ¹	n/a									
Hillview ²	n/a	n/a	n/a	10	13	17	2	n/a	n/a	n/a
CDF, Arroyo Grande ³	n/a	54*	63*	60*^^^						

Source: San Luis Obispo APCD Notes: Data is based on calendar year, not fiscal year.

^ = Jan – May ^^ = Jan – August ^^ = Jan – July

* Everyday sampling schedule, full or part year

¹ Ralcoa PM₁₀ monitoring term initiated in 2002

² Hillview monitoring station was closed at the end of March, so the data for Hillview does not represent an entire year's worth of exceedances.

³ 2391 Willow Road, Arroyo Grande

Particulate Matter Study

Historical ambient air monitoring on the Nipomo Mesa has documented atypical concentrations of airborne particulate matter compared to other areas of San Luis Obispo County and other coastal areas of California. These historical measurements show that the California health standard for PM₁₀ (airborne particles with a mean aerodynamic diameter of 10 microns or less) is regularly exceeded in many locations on the Nipomo Mesa.

To better understand the extent and sources of these unusually high concentrations of particulate pollution on the Nipomo Mesa, the San Luis Obispo County Air Pollution Control District (SLO APCD) conducted comprehensive air monitoring studies in that region. The Phase 1 South County Particulate Matter Study began in 2004 and measured both PM₁₀ and PM_{2.5} concentrations at six monitoring sites located throughout the Mesa. Samples were collected over a

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one year period. Data from the Phase 1 study showed air quality on the Nipomo Mesa exceeds the state 24-hour PM₁₀ health standard at one or more monitoring locations on over one quarter of the sample days.

The Phase 2 Study involved three independent investigations using a broad array of technologies and measurement techniques to better understand the source(s) and activities responsible for the observed particulate pollution problem on the Nipomo Mesa. Determining the role of off-road vehicle (OHV) activity on the Oceano Dunes State Vehicular Recreation Area (SRVA) was a key focus of the study. The field measurement phase of the study was conducted from January 2008 through March 2009.

The information in Phase 2, combined with the results of Phase I, lead to the following major findings:

- The airborne particulate matter predominantly impacting the region on high episode days does not originate from an offshore source.
- Neither the petroleum coke piles at the ConocoPhillips facility nor agricultural fields or activities in and around the area are a significant source of ambient PM on the Nipomo Mesa.
- The airborne particulate matter impacting the Nipomo Mesa on high episode days predominantly consists of fine sand material transported to the Mesa from upwind areas under high wind conditions.
- The primary source of high PM levels measured on the Nipomo Mesa is the open sand sheets in the dune areas of the coast.
- The open sand sheets subject to OHV activity on the SRVA emit significantly greater amounts of particulates than the undisturbed sand sheets at the study control sites under the same wind conditions.
- Vegetated dune areas do not emit wind-blown particles; the control site dunes have significantly higher vegetation coverage than is present at the SRVA.

Based on the preceding major findings, the conclusion is that OHV activity in the SRVA is a major contributing factor to the high PM concentrations observed on the Nipomo Mesa.

APCD, State Parks and the County have been working cooperatively to evaluate and develop potential solutions to the particulate matter (PM) emissions from the Oceano Dunes State Vehicular Recreation Area (SVRA) that are impacting downwind neighborhoods. For more information, please refer to the APCD's web site, <http://www.slcleanair.org>.

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Recommendation

The Resource Management System Air Quality criteria for determining levels of severity focus on emissions and violations of the state Ozone standard, but not on PM₁₀ levels. The Department of Planning and Building will work with the SLO APCD to determine the appropriate level of severity for PM₁₀.

Level of Severity: South County Air Quality

- No LOS for Ozone
- LOS for PM10 to be determined

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SOUTH COUNTY ROADS AND U.S. HIGHWAY 101 INTERCHANGE

Roads

The following are South County roadways and their Level of Service (for traffic engineering purposes) and their Level of Severity for RMS. Grey boxes indicate LOS D.

South County Roadway Analysis						
Roadway	Location	LOS D Volume	PM Peak Hour Volume			
			2009	2012	2014	2017
Corbett Canyon Road	North of Arroyo Grande City Limits	909	258	231	240	255
Halcyon Road	North of Camino del Rey	898	423	486	506	537
Halcyon Road	South of Arroyo Grande Creek	904	956	852	886	941
Lopez Drive	South of Orcutt Road	886	290	353	367	390
Los Berros Road	South of El Campo Road	978	578	525	546	580
Los Ranchos Road	West of State Route 227	968	583	593	617	655
O'Connor Way	North of Foothill Road	1,084	165	278	289	307
Paso Robles Street	East of State Route 1	970	152	182	189	201
Price Canyon Road	South of State Route 227	995	805	740	770	817

Source: Public Works Department, San Luis Obispo County Notes: Shaded area indicates traffic volume levels exceed LOS D (PM Peak Volume Traffic).

Price Canyon Road

The County currently has a project to widen Price Canyon Road. Two bridges over West Corral de Piedra Creek and the Union Pacific Railroad crossing are under construction and will be completed in 2013. Additional widening is planned in 2015.

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South County Roadway Analysis					
Roadway	LOS D Volume	PM Peak Hour Volume			
		2009	2012	2014	2017
Los Osos Valley Road (West of Foothill Road)	1,475	1,437	1,445	1,503	1,595
Tank Farm Road (West of State Route 227)	1,152	1,668	1,858	1,933	2,051

Source: Public Works Department, San Luis Obispo County

Notes: *Shaded area indicates traffic volume levels that exceed LOS D (PM Peak Volume Traffic)

Los Osos Valley Road (West of Foothill Road)

County Public Works recently completed the five-year update of the Los Osos Circulation Study. Widening of Los Osos Valley Road to four lanes is included in the study; however, no funding is currently available for the project.

Los Osos Valley Road is projected to exceed the LOS D pm peak hour volume threshold by 2014.

Tank Farm Road (West of State Route 227)

The City of San Luis Obispo is planning to widen this portion of Tank Farm Road to four lanes under the Airport Area Specific Plan. The project will increase the capacity of the roadway and the corridor would operate at LOC C or better per existing volumes.

Tank Farm Road currently exceeds the LOS D pm peak hour volume threshold, and volumes are projected to increase in the future.

Level of Severity: Roads

- Los Osos Valley Road (west of Foothill Road) : LOS III
- Tank Farm Road (west of State Route 227): LOS III

U.S. Highway 101 Interchanges

U.S. Highway 101 Interchange Analysis				
Interchange	2011		2021	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Los Berros Road	8.5	A	14.3	B
Highway 166	13.1	B	20	C

Source: Public Works Department, San Luis Obispo County

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U.S. Highway 101 Interchange: Willow Road

The Willow Road interchange has been completed, which provides some relief at the Tefft Street Interchange.

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SOUTH COUNTY SCHOOLS

South County students are served by three school districts as identified below:

- Bellevue-Santa Fe Charter School
- Lucia Mar School District

Central Coast New Tech High School is a new high school in the Lucia Mar School District that opened on August 16, 2012. The school is based on a 'project based learning' model with integrated technology and a collaborative school culture that prepares students with skills to succeed in college and future careers. Enrollment is limited to 150 freshmen in 2012 and will be capped at 125 students each subsequent year.

- San Luis Coastal Unified School District

The Grizzly Youth Academy Challenge Program is located at Camp San Luis Obispo and serves at-risk youth from across the nation with a five-month program allowing students to earn up to 55 credits toward a high school diploma.

South County Schools					
Capacity, Enrollment, Recommended Levels of Severity (RLOS)⁴					
District	School	Capacity	Enrollment	Enrollment Capacity	LOS
Lucia Mar Unified	Elementary	5,191	5,401	104.05%	III
	Middle School	1,810	1,676	92.60%	II
	High School	2,775	3,484	125.55%	III
San Luis Coastal Unified*	Elementary	4,133	3,409	82.48%	
	Middle School	1,550	1,071	69.10%	
	High School	2,670	2,493	93.37%	II

⁴ Enrollment capacity data is from 2009.

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South County Schools: Capacity and Enrollment							
		School Year 2010 - 2011			School Year 2011 - 2012		
District	School	Enrollment	Capacity	Enrollment Capacity	Enrollment	Capacity	Enrollment Capacity
Bellevue-Santa Fe Charter School	K-6	146	146	100%	146	146	100%
Grizzly Youth Academy Challenge Program	High	196	250	78%	211	250	84%
Lucia Mar School District	Elem.	*	*	*	*	*	*
	Middle	*	*	*	*	*	*
	High	*	*	*	*	*	*
San Luis Coastal Unified School District	Elem.	2,497	*	*	2,578	*	*
	Middle	691	*	*	671	*	*
	High	1,423	*	*	1,439	*	*

Source: School Districts

Notes: * Data not received

Level of Severity: South County Schools

- Bellevue-Santa Fe Charter School: LOS III
- Lucia Mar School District: LOS II-III (2009)
- San Luis Coastal Unified School District: LOS II (2009)

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SOUTH COUNTY PARKS

Regional Parks

The Parks and Recreation Element of the General Plan categorizes regional parks as either urban or rural. Urban regional parks often serve a function that is similar to community parks. Regional parks in the rural areas are more rural in nature, emphasizing nature-oriented activities. The South County features three regional parks listed below.

South County Regional Parks					
Park	Location	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)**
Biddle Park	Arroyo Grande	Urban Regional	47		
El Chorro Park	San Luis Obispo	Urban Regional	490		
Lopez Lake Recreation Area	Arroyo Grande	Rural Regional	4,276		
TOTAL			4,813		

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

** Acreage needed will be calculated as part of the RMS revisions

Biddle Park is a 47-acre regional park located on Lopez Drive west of Orcutt Road in Arroyo Grande. The park provides group and individual picnic areas, a gazebo, play equipment, two ball fields, a volleyball court, horseshoe pits, restrooms, parking and a trail. The Biddle Park Master Plan and environmental review are complete. Approval from the Board of Supervisors is anticipated in 2013.

El Chorro Park is a 490-acre regional park is located on Highway 1 across from Cuesta College and adjacent to Dairy Creek Golf Course, an 18-hole golf course also operated by SLO County Parks. El Chorro Park includes two softball fields, group and individual picnicking, play equipment, camping, the SLO Botanical Garden, parking and restrooms.

Lopez Lake Recreation Area is a 4,276-acre regional park located northeast of Arroyo Grande along Lopez Drive, west of Biddle Park. The park features camping, a water slide, boating, water skiing, fishing, swimming, a marina and gas services, trails and nature appreciation.

Based on the standard of 5-10 acres per 1,000 persons, as identified in the Parks and Recreation Element of the General Plan, the countywide park demand for

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urban regional parks is calculated as 1,360 – 2,720 acres. North County provides 182 acres of urban regional parks and South County provides 537 acres for a total of 719 acres countywide. Accordingly, there is a countywide deficiency of 641 – 2,001 acres.

The General Plan does not identify an acreage standard for rural regional parks.

Neighborhood and Community Parks

There is a County-operated park in the City of San Luis Obispo:

South County Neighborhood & Community Parks				
Park	Park Type	Existing Acreage	Acreage Needed	Deficiency (in acres)
Cuesta Park	Neighborhood	5.0	**	**

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

**Acreage needs will be calculated as part of the RMS revisions

Cuesta Park provides group and individual picnicking areas, ball fields, playfields, play equipment, restrooms, and parking.

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SOUTH COUNTY CITIES

ARROYO GRANDE

Arroyo Grande is one of the seven incorporated cities in the county and covers 5.835 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 major infrastructure issues are building an interchange at El Campo Road and Highway 101, and bringing in additional water supplies to supplement water from Lopez Lake and groundwater.

Population

Arroyo Grande is at about 85% of its buildout population of about 20,000.

Arroyo Grande Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
15,641	16,360	17,078	17,256	17,524	18,407	18,933	19,591	20,256

Source: AECOM for SLOCOG, July 2011

Water Supply

According to the 2012 County Master Water Report and the Northern Cities Management Area (NCMA) May 2011 public report, court judgments that are part of the Santa Maria Groundwater Basin adjudication have joined Arroyo Grande and other agencies together to jointly monitor and manage the Northern Cities area of the SMGWB. The City of Arroyo Grande has the following water supply allocations:

- 2,290 AFY from Lopez Lake.
- 100 AFY from the Oceano Community Services District (Oceano CSD) per an interim water supply agreement. Per the agreement, Oceano CSD will deliver up to 100 AFY of groundwater and/or State Water at the Oceano CSD's discretion. This temporary agreement ends in 2014.
- 1,314 AFY of groundwater from the Northern Cities area of the Santa Maria Groundwater Basin (NCMA).

SOUTH COUNTY

Water Demand

Arroyo Grande Water Demand			
Water Provider	Source	2010-2011	2011-2012
City of Arroyo Grande	Lopez Reservoir	2,371 AFY	2,641 AFY
	Groundwater	468 AFY	365 AFY
	Oceano CSD	100 AFY	0 AFY
TOTAL		2,938 AFY	3,006 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

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, including programs for 'cash for grass' rebates, water-efficient washing machine rebates, smart irrigation controllers, and plumbing retrofits. The City also offers information on sustainable landscaping practices to promote water conservation.

Historical Water Demand

Over the past 10 years, water use (production) in the City of Arroyo Grande has ranged from a low of 2,939 AFY in 2010-11 to a high of 3,650 AFY in 2003-04.

Arroyo Grande Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
3,467	3,650	3,381	3,075	3,245	3,475	3,333	3,097	2,939	3,006

Source: Water Provider Water System Usage forms (FY-Production)

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year (this figure is reported on all Water System Usage forms). Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

SOUTH COUNTY

Arroyo Grande Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
City of Arroyo Grande	tiered	16,901	136,136 gals	137,632 gals	\$68.77	\$67.44

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Water System

No water system issues have been reported for Arroyo Grande.

Wastewater Treatment

Facilities

Wastewater treatment service is provided to Arroyo Grande, Oceano and Grover Beach by the South San Luis Obispo County Sanitation District. The City of Arroyo Grande maintains sewer lines within the City and sends sewage to the wastewater treatment plant in Oceano. See South County Wastewater Treatment in the preceding section on South County Regional Resources.

Capacity

No current capacity information has been reported from the South San Luis Obispo County Sanitary District.

SOUTH COUNTY

GROVER BEACH

Grover Beach is one of the seven incorporated cities in the county and covers 2.25 square miles. 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 in the Lucia Mar School District.



Population

Grover Beach is at about 81% of its buildout population of about 16,000.

Grover Beach Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
12,941	12,954	12,967	13,037	13,142	13,432	13,684	13,999	14,317

Source: AECOM for SLOCOG, July 2011

Water Supply

According to the 2012 County Master Water Report, the City of Grover Beach has the following water supply allocations:

- 800 AFY from Lopez Lake.
- 1,407 AFY of the City's groundwater supply is part of the "Northern Cities" area of the Santa Maria Groundwater Basin.

Water Demand

Grover Beach Water Demand			
Water Provider	Source	2010-2011	2011-2012
City of Grover Beach	Lopez	809 AFY	*
	Groundwater	972 AFY	*
TOTAL		1,781 AFY	*

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012 (Production)

Notes: * Data not provided

SOUTH COUNTY

Historical Water Demand

Over the past 10 years, water use (production) in Grover Beach has ranged from a low of 1,781 AFY in 2010-11 to a high of 2,199 AFY in 2003-04.

Grover Beach Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
2,027	2,199	*	*	*	2,057	1,971	1,851	1,781	*

Source: Water Provider Water System Usage forms (FY-Production)

Notes: * Data not received

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year (this figure is reported on all Water System Usage forms). Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Grover Beach Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
City of Grover Beach	tiered	13,067	94,248 gals	*	\$32.50	32.93

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012

Notes: * Data not provided

Water System

No water system issues have been reported for Grover Beach.

Wastewater Treatment

Facilities

Wastewater treatment is provided by the South San Luis Obispo County Sanitary District (SSLOCSD). The service is shared with the cities of Grover Beach and Arroyo Grande. The treatment plant currently discharges treated effluent to the ocean through an ocean outfall line shared with the City of Pismo Beach. See South County Wastewater Treatment in the preceding section on South County Regional Resources.

Capacity

SOUTH COUNTY

No current capacity information has been reported from the South San Luis Obispo County Sanitary District.

SOUTH COUNTY

PISMO BEACH

Pismo Beach is one of the seven incorporated cities in the county, covering 3.6 square miles of land area. It provides water and sewer services. Public schools are provided by the Lucia Mar School District.



Population

Pismo Beach is at about 59% of its buildout population of about 13,000. Future population growth may be affected by potential annexations in the southeast portion of the City.

Pismo Beach accommodates many visitors in its hotels and restaurants. These visitors are not reflected in the City's population figures, but they do affect water use, wastewater flows and traffic.

Pismo Beach Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
8,524	8,083	7,642	7,688	7,757	7,954	8,216	8,545	8,876

Source: AECOM for SLOCOG, July 2011

Water Supply

According to the 2012 County Master Water Report, the City of Pismo Beach has the following water supply:

- 896 AFY from Lopez Lake.
- 1,240 AFY State Water is allocated to the City (which it receives through the Lopez Turnout), with another 1,240 AFY as a drought buffer. This results in a supply of 1,240 AFY.
- 700 AFY of groundwater supply is part of the "Northern Cities" area of the Santa Maria Groundwater Basin.

SOUTH COUNTY

Water Demand

Pismo Beach Water Demand			
Water Provider	Source	2010-2011	2011-2012
City of Pismo Beach	Lopez Lake	*	1,061 AFY
	State Water	*	733 AFY
	Groundwater	*	43 AFY
TOTAL		*	1,837 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: * No data received

Historical Water Demand

Over the past 10 years, water use (production) in Pismo Beach has ranged from a low of 1,837 AFY in 2011-12 to a high of 2,247 AFY in 2003-04.

Pismo Beach Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
2,153	2,247	2,135	2,112	*	2,018	2,125	1,963	*	1,837

Source: Water Providers Water System Usage forms (FY-Production)

Notes: * Data not provided

The City of Pismo Beach offers water audits to assist residents and business owners with water conservation efforts.

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year (this figure is reported on all Water System Usage forms). Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Pismo Beach Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
City of Pismo Beach	tiered	8,603	*	*	*	\$75.00

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

SOUTH COUNTY

Water System

No water system issues have been reported for Pismo Beach.

Wastewater Treatment

Facilities

The City operates its own wastewater collection and treatment system. A five-mile long pipeline sends treated wastewater to the South San Luis Obispo County Sanitary District (SSLOCSD) treatment plant in Oceano. Effluent from both plants is then sent through an ocean outfall pipeline.

Operational Issues

None reported.

Capacity

No current capacity information has been reported.

SOUTH COUNTY

SAN LUIS OBISPO

The City of San Luis Obispo is the County seat and the most populous of the seven cities in the county. The City is 10.5 square miles in area.

San Luis Obispo is a full-service city providing water, sewer and 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 Highway 101 are needed at Los Osos Valley Road (LOVR) and Prado Road.

Population

The City is at about 77% of its buildout population of about 57,200.

San Luis Obispo Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
42,312	43,125	43,937	44,229	44,668	45,969	46,704	47,622	48,550

Source: AECOM for SLOCOG, July 2011

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 Whale Rock Reservoir, located near the community of Cayucos, since 1964. Water deliveries to the City of San Luis Obispo from Nacimiento Reservoir began in January of 2011.

SOUTH COUNTY

Water Source	Supply
Salinas Reservoir	
Whale Rock Reservoir	6,940 AFY
Nacimiento Lake	3,380 AFY
Groundwater	100 AFY
Recycled Water	130 AFY
Siltation	-500 AFY
TOTAL	9,950 AFY

Source: 2012 Master Water Report

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.

San Luis Obispo Water Demand			
Water Provider	Source	2010-2011	2011-2012
City of San Luis Obispo	Salinas Reservoir (Santa Margarita Lake)	2,640	2,149
	Whale Rock Reservoir	2,023	1,277
	Nacimiento Reservoir	981	2,321
	Groundwater	117	91
	Recycled Water	148	162
TOTAL		5,909	6,000

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012 (Production)

Historical Water Demand

Over the past 10 years, water use (production) in the City of San Luis Obispo has ranged from a low of 5,833 AFY in 2009-10 to a high of 6,439 in 2006-07.

San Luis Obispo Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
5,911	6,273	5,923	5,972	6,439	6,418	6,295	5,833	5,909	6,000

Source: Water Provider Water System Usage forms (FY-Production)

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year (this figure is reported on all Water System Usage forms).

SOUTH COUNTY

Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

San Luis Obispo Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
City of San Luis Obispo	tiered	45,308	71,808 gals	62,832 gals	\$50.16	\$42.99

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Water System

No water system issues have been reported for San Luis Obispo.

Wastewater Treatment

There are two wastewater treatment plants in San Luis Obispo and vicinity. The City of San Luis Obispo Wastewater Treatment Plant serves the City and CSA 18's Country Club Wastewater Treatment Plant serves development in the Country Club area of the Los Ranchos/Edna Village south of the City. Details for each facility are provided below.

Facilities

City of San Luis Obispo Wastewater Treatment Plant

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 about 160 AF of reusable water is available every year. The treatment plant also discharges clean water to San Luis Obispo Creek for habitat maintenance purposes.

CSA 18 Wastewater Treatment Plant

CSA 18 serves the Country Club area of the Los Ranchos/Edna Village. In March 2007, the County Public Works Department completed upgrades to the Wastewater Treatment Plant to increase circulation and digestion in the Aeration Pond. County staff is currently evaluating the effectiveness of these upgrades to determine if additional upgrades are necessary.

Recycled water from the CSA 18 Wastewater Treatment Plant is provided to the San Luis Obispo Golf and Country Club for golf course irrigation. Treated water is discharged into a blending pond, which is owned and operated by the SLO Golf and Country Club, for use in the golf course irrigation system.

Operational Issues

No operational issues are reported for the City of SLO or the CSA 18 Wastewater Treatment Plants.

SOUTH COUNTY

Capacity

City of San Luis Obispo Wastewater Treatment Plant

The City's current average daily plant capacity is 5.1 mgd. In 2010, the plant was operating at 92.3% of its capacity at peak flow. It is currently operating at 88% of capacity at peak flow (calculated as the average dry weather flow divided by average daily plant capacity). It is normal for wastewater treatment plants to see a great range in their flow throughout the day. The City's wastewater treatment plant experiences a pronounced range in flow throughout the day due to the large daily influx of commuters and students. According to the City, the facility is equipped to handle this peak flow.

CSA 18 Wastewater Treatment Plant

The CSA's wastewater treatment plant has a capacity of 120,000 gallons per day. The plant currently operates at 83% capacity at peak flow.

San Luis Obispo Wastewater Treatment					
Facility	Average Daily Plant Capacity (mgd)	Peak Daily Flow (mgd)	Operational % of Capacity	Expansion Plans	New Capacity After Expansion (mgd)
City of SLO	5.1	9.0	88%*	Yes	5.6
CSA 18	0.12	0.1	83%	No	n/a

Source: City of San Luis Obispo and CSA 18

Notes: **Operational % of capacity = average dry weather flow divided by average daily plant capacity; City of SLO facility: average dry weather flow is 4.5 mgd

Level of Severity: Wastewater (CSA 18)

- None

NORTH COUNTY

IV. NORTH COUNTY

The North County includes the Cities of Atascadero and Paso Robles and the unincorporated communities of San Miguel, Heritage Ranch, Santa Margarita, Shandon, and Templeton. This chapter discusses resources by community. However, regional resources that cross community boundaries and are shared among communities, such as water supply, parks and freeway interchanges, are discussed separately later in this chapter.



SAN MIGUEL

San Miguel is the northernmost of the county's unincorporated urban areas along Highway 101. Resource issues include a level of severity III for water supply. The Planning and Building Department is working with the community to update the community plan.



Population

San Miguel is at about 34% of its build out population of about 6,800 per the County General Plan. Based on the projections shown in the following table, build out population is not expected to be reached for several decades.

San Miguel Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
1,420	1,879	2,337	2,383	2,451	2,640	2,792	3,045	3,338

Source: AECOM for SLOCOG, July 2011

NORTH COUNTY

Water Supply

San Miguel's water source is groundwater from the Paso Robles Groundwater Basin, supplied by the San Miguel Community Services District. The Paso Robles Groundwater Basin is at a LOS III. Water levels in a majority of the basin are in a state of decline.

The San Miguel CSD did not participate in the Nacimiento water project. The CSD expects that all of its future water supply will be from the groundwater basin, as the community is remote from any water project such as the Nacimiento Water Project.

Water Demand

San Miguel Water Demand			
Water Provider	Source	2010-2011	2011-2012
San Miguel CSD	Groundwater	281 AFY	296 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Level of Severity: Water Supply

- San Miguel is at a LOS III for water supply .
- LOS III established by the Paso Robles GWB RCS ; 2-1-11

Historical Water Demand

Over the past 10 years, water use (production) in San Miguel has ranged from a low of 281 AFY in 2010-11 to a high of 345 AFY in both 2006-07 and 2008-09.

San Miguel Total Water Use AFY (fiscal year)									
2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
*	*	*	*	345	317	345	314	281	296

Source: Water Provider Water System Usage forms (FY – Production)

Notes: * No data received
** Incomplete data

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

NORTH COUNTY

San Miguel Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
San Miguel CSD	tiered	2,300	93,075 gals	*	\$35.15	\$34.53

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012 *Missing data

Water System

The CSD is reviewing alternatives for treatment of water produced at its San Lawrence Terrace site.

Wastewater Treatment

Facilities

The San Miguel CSD provides wastewater service to the community of San Miguel with the Machado Wastewater Facility. Plans have been started for a possible expansion; however, they are on hold due to the lack of construction in San Miguel. San Lawrence Terrace, located on the east side of the Salinas River, is served by individual septic systems.

Operational Issues

None reported.

Capacity

San Miguel Wastewater				
Average Daily Plant Capacity (mgd)	Avg. Dry Weather Flow (mgd)	Current Operational % of Capacity	Expansion Plans	New Capacity After Expansion (mgd)
0.2	0.1	50%	Yes	Unknown

Source: San Miguel CSD

Level of Severity: Wastewater

- None

NORTH COUNTY

Roads & U.S. Highway 101 Interchange

San Miguel Roadway Analysis						
Roadway	Location	LOS D Volume	PM Peak Hour Volume			
			2009	2012	2014	2017
Mission Street	North of US Highway 101	974	382	368	383	406

Source: Public Works Department, San Luis Obispo County

San Miguel Interchange Analysis				
Highway 101 Interchange	2011		2021	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
10 th Street	4.1	A	5.8	A

Source: Public Works Department, San Luis Obispo County

Level of Severity: Roads

- None

Parks

Neighborhood and Community Parks

There is one County-operated park in San Miguel, as shown in the table below.

San Miguel Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)
San Miguel Park	Community	4.3	7.1	2.8

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department**Acreage needed is calculated at a ratio of 3 acres per 1,000 people

San Miguel Park is located on K Street between 12th and 13th Streets. Amenities include a swimming pool, a wading pool, a ball field, a community center, play equipment, picnic sites, restrooms and parking. An application for a road abandonment of K Street has been submitted for an expansion of the park. Funding sources for this expansion are being considered.

NORTH COUNTY

Based on the current population, there is a need for 7.1 acres. San Miguel currently has a deficiency of 2.8 acres. By 2020, the acreage needed will increase to 7.9 acres.

Regional Parks

There are no County-operated regional parks located in San Miguel. Regional parks are discussed in the North County Regional Resources section later in this chapter.

Recommended Action Requirements & LOS Summary

San Miguel: Recommended Action Requirements

- As part of the San Miguel Community Plan update, consider water efficiency and conservation to address basin-wide water supply.

San Miguel: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in San Miguel are summarized below:

San Miguel	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	III	None	None	None	None	II

NORTH COUNTY

SANTA MARGARITA

Santa Margarita is an unincorporated urban area divided by the Union Pacific Railroad and surrounded by the Santa Margarita Ranch.

There have been historical water supply concerns in the town, as the shallower of its two wells is subject to seasonal fluctuations in groundwater levels. In addition, septic systems have failed in a portion of the town due mainly to high groundwater conditions during wet seasons.



Population

Santa Margarita is at about 86% of its buildout population of about 1,470 per the County General Plan.

Santa Margarita Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
1,279	1,269	1,259	1,268	1,281	1,325	1,395	1,410	1,451

Source: AECOM for SLOCOG, July 2011

Water Supply

Santa Margarita's water supply is provided by County Service Area 23 (CSA 23) through 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 with the primary well in order to meet demand during hot weather periods and for operational flexibility. The two wells are capable of meeting the community's current needs.

A Resource Capacity Study (RCS) is planned in the future to better understand the dynamics of the water supply for the community and the surrounding Santa Margarita Ranch.

NORTH COUNTY

Water Demand

Santa Margarita Water Demand			
Water Provider	Source	2010-2011	2011-2012
CSA 23	Groundwater	167 AFY	174 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: * No data received

Level of Severity: Water Supply

- None

Historical Water Demand

Over the past 10 years, water use (production) in Santa Margarita has ranged from a low of 161 AFY in 2008-09 to a high of 216 AFY in 2003-04.

Santa Margarita Total Water Use AFY (fiscal year)									
2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
205	216	189	194	*	170	161	172	167	174

Source: Water Provider Water System Usage forms (FY – Production)

Notes: * No data received

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Santa Margarita Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
CSA 23	tiered	*	*	*	*	\$44.61

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

NORTH COUNTY

Water System

A Proposition 218 vote was completed in May 2012 to form an assessment district in order to fund a physical connection to the California State Water Pipeline for drought reliability. The result of the balloting was a majority protest against the formation of the district.

Future water reliability concerns during droughts in Santa Margarita will focus on monitoring water levels in the existing wells and implementing voluntary and, when needed, mandatory water conservation programs during droughts. Santa Margarita has successfully reduced water consumption by 22% over the past 10 years and is well positioned to further those conservation efforts during normal rainfall years, as well as during droughts.

The community's water system does not meet the Department of Public Health's Title 22 requirement for backup water supplies. In the event that the most productive well is rendered unusable for any reason, the remaining well would not be capable of supplying the community with water during peak demand periods. The District is working on this system issue.

Level of Severity: Water System

- LOS II

Wastewater Treatment

Santa Margarita relies on individual septic systems for wastewater service. Septic failures have occurred in areas of the town subject to high groundwater levels. Future development of the Santa Margarita Ranch may ultimately require construction of a community wastewater system, which might be used by existing development.

Level of Severity: Wastewater

- None

Roads

No local roads are part of the RMS reporting program. Future development of the Santa Margarita Ranch may require improvements on Highways 58 and 101.

NORTH COUNTY

Parks

Neighborhood and Community Parks

There is one County-operated park in Santa Margarita, as shown in the table below.

Santa Margarita Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)
Santa Margarita Community Park	Neighborhood	2.00	3.8	1.8

Source: Parks Department, San Luis Obispo County

Notes: *Existing acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

**Acreage needed is calculated at a ratio of 3 acres per 1,000 people

Santa Margarita Community Park is located on Estrada Avenue adjacent to Santa Margarita Elementary School. The park provides group and individual picnicking, play equipment, an open play area, restrooms, and parking.

Based on the current population, there is a demand for 3.8 acres. Santa Margarita currently has a deficiency of 1.8 acres. By 2020, the acreage needed will increase to 4.0 acres.

Regional Parks

Santa Margarita Lake Regional Park is located southeast of the community. Regional parks are discussed in the North County Regional Resources section later in this chapter and in the South County Regional Resources section in Chapter III.

NORTH COUNTY

Recommended Action Requirements & LOS Summary

Santa Margarita: Recommended Action Requirements

- Maintain the LOS II for the water system.
- Conduct a Resource Capacity Study (RCS) to help identify future water supply needs and water source options.
- Monitor the progress of the development of the Santa Margarita Ranch. Phase-in water and road improvements that are needed for the proposed level of development on the ranch.

Santa Margarita: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Santa Margarita are summarized below:

Santa Margarita	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	None	II	None	None	None	II

NORTH COUNTY

SHANDON

The unincorporated urban area of Shandon is located about 18 miles east of Paso Robles in the northeasterly portion of San Luis Obispo County. Shandon is located just south of State Route 46 (SR 46). The community lies at the confluence of Cholame Creek and San Juan Creek where they form the Estrella River.

An update to the Shandon Community Plan was approved by the Board of Supervisors in April 2012. A primary resource concern for future development is a long-term water supply. Infrastructure needs include a community sewer system, intersection improvements at Highway 46 and West Centre Street and drainage improvements.



Population

Shandon is at about 25% of its buildout population of about 5,260 per the County General Plan. Based on the projections shown in the following table, buildout population is not expected to be reached for several decades.

Shandon Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
979	1,137	1,295	1,316	1,347	1,562	2,002	2,630	3,306

Source: AECOM for SLOCOG, July 2011

Water Supply

According to the 2012 County Master Water Report, Shandon has a 100 AFY allocation of State Water that has not yet been used. A turnout from the State Water project pipeline is needed to use this allocation, and construction of the turnout will commence in 2013.

The town is served by groundwater from the Paso Robles Groundwater Basin through CSA 16. The water system has two wells that pump from the Paso Robles Groundwater Basin. The Paso Robles Groundwater Basin is at a LOS III. The basin has seen a decline in water levels from 1981 to 2012. A Groundwater Management Plan for the Paso Robles Groundwater Basin has been prepared to help address the declining water levels in the basin.

NORTH COUNTY

Water Demand

Shandon Water Demand			
Water Provider	Source	2010-2011	2011-2012
CSA 16	Groundwater	*	131 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012 (Production)

Notes: * No data received

Level of Severity: Water Supply

- LOS III for water supply
- LOS III established by Paso Robles GWB RCS; 2-1-11

Historical Water Demand

Over the past 10 years, water use (production) in Shandon has ranged from a low of 105 AFY in 2009-10 to a high of 156 AFY in 2005-06.

Shandon Total Water Use AFY (fiscal year)									
2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
150	154	147	156	151	125	122	105	*	131

Source: Water Provider Water System Usage forms (FY - Production)

Notes: * No data received

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Shandon Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
CSA 16	tiered	*	*	*	*	\$41.40

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012

Notes: * Data not provided

Water System

No water system issues have been reported for Shandon.

NORTH COUNTY

Wastewater Treatment

There is no centralized sewer system in the town. The community is served by individual septic tank and leach field systems for wastewater disposal, with the majority on small lots.

The recently approved Shandon Community Plan requires a community wastewater system to be constructed with new development. Existing development, where the land uses are not intensified, may remain on individual septic systems, but will need to be connected to the wastewater system if certain criteria are met.

Level of Severity: Wastewater

- None

Roads

No local roads are part of the RMS reporting system.

Parks

Neighborhood and Community Parks

There is one County-operated park in Shandon, as outlined in the table below.

Shandon Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)
C.W. Clarke Memorial Park	Community	11.5	3.9	(7.6)

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

**Acreage needed is calculated at a ratio of 3 acres per 1,000 people

C.W. Clarke Memorial Park is located on Centre Street north of Shandon High School and Shandon Elementary School. Park amenities include a swimming pool, a wading pool, playfields, playground equipment, ball fields, an open play area, restrooms and parking.

Based on the current population, there is a demand for 3.9 acres. Shandon has an excess of 7.6 acres. By 2020, the acreage needed will increase to 4.7 acres, still less than the existing acreage provided.

NORTH COUNTY

Regional Parks

There are no County-operated regional parks located in Shandon. Regional parks are discussed in the North County Regional Resources section later in this chapter.

Recommended Action Requirements & LOS Summary

Shandon: Recommended Action Requirements

- There are no recommended actions for Shandon.

Shandon: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Shandon are summarized below:

Shandon	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	III	None	None	None	III	II

NORTH COUNTY

TEMPLETON

The unincorporated urban area of Templeton is located between the City of Paso Robles and the City of Atascadero. There are many homes on larger lots and a relatively large per capita community water demand.

Major freeway interchange projects have been completed at Las Tablas Road and at Vineyard Drive.

Population

Templeton is at about 76% of its buildout population of about 9,170 per the County General Plan.



Templeton Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
4,607	5,792	6,976	7,059	7,184	7,739	8,094	8,720	9,128

Source: AECOM for SLOCOG, July 2011

Water Supply

According to the 2012 County Master Water Report, Templeton has a 250 AFY supply from the Nacimiento Pipeline Project. Templeton's primary water source is groundwater from the Atascadero Sub-basin of the Paso Robles Groundwater Basin. The Atascadero Sub-basin aquifer contains two primary water bearing geologic units: the Paso Robles Formation, and the Salinas River alluvium (underflow). The District has several water rights for diversions of water from the Salinas River underflow. Water Rights Permit 8964 authorizes a maximum of 500 acre-feet from October 1 through March 30. Permit 20785 authorizes the diversion of 1.5 cfs from April 1 through May 15, if there is a "live stream" flowing in the Salinas River. The quantity of water that can be diverted under both Permits combined cannot exceed 500 acre-feet per year.

The Templeton Community Services District (TCSD) also holds Water Rights License 4829, often referred to as the Greer License. This license permits water diversion from the Salinas River underflow from April 1 through October 15 for a maximum of 102 acre-feet. The District also has several riparian right agency

NORTH COUNTY

agreements by which it provides water to customers through its system and pumps the same amount of water from the underflow.

The District has a re-use program involving disposal of treated wastewater effluent from the Meadowbrook treatment plant into percolation ponds. The treated effluent percolates into the Salinas River underflow for subsequent retrieval by downstream municipal wells.¹

Water Demand

Templeton Water Demand			
Water Provider	Source	2010-2011	2011-2012
Templeton CSD	Groundwater	660 AFY	563 AFY
	Subsurface Flow	688 AFY	856 AFY
	Riparian 2011 / Other	72 AFY	61 AFY
TOTAL		1,420 AFY	1,480 AFY

Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Level of Severity: Water Supply

- LOS I for water supply established by the Paso Robles Groundwater Basin RCS; 2-1-11

Historical Water Demand

Over the past 10 years, water use (production) in Templeton has ranged from a low of 1420 AFY in 2010-11 to a high of 1,689 AFY in 2003-04.

Templeton Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
1,460	1,689	1,438	1,540	*	1,558	1,641	1,425	1,420	1,480

Source: Water Provider Water System Usage forms (FY – Production)

Notes: * No data received

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

¹ Water supply information has been provided by the Templeton CSD.

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Templeton Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
			Templeton CSD	tiered	6,650	154,216 gals

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012

Water System

No water system issues have been reported for Templeton.

Wastewater Treatment

Facilities

Wastewater from the town is treated at two locations, the Templeton CSD's Meadowbrook Wastewater Treatment Plant (WWTP) and the City of Paso Robles WWTP. The District is in the process of returning all wastewater flows generated within the District to the Meadowbrook WWTP for treatment and disposal. The Meadowbrook WWTP discharges the treated effluent to ponds which percolate into the underflow of the Salinas River for subsequent retrieval by downstream municipal wells.

Operational issues

None reported.

Capacity

The Meadowbrook WWTP operates at 25% capacity at peak flow. The facility will be redirecting Eastside sewer area flows to the Meadowbrook WWTP beginning December 2014; this will result in an additional flow of 220,000 gpd.

Facility	Templeton Wastewater				
	Average Daily Plant Capacity (mgd)	Avg. Dry Weather Flow (mgd)	Operational % of Capacity	Expansion Plans	New Capacity After Expansion (mgd)
Meadowbrook	0.6	0.15	25%	No	n/a
City of Paso Robles	*	*	*	*	*

Notes: *No data received

Level of Severity: Wastewater

- None

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Roads & U.S. Highway 101

Templeton Roadway Analysis						
Roadway	Location	LOS D Volume	PM Peak Hour Volume			
			2009	2012	2014	2017
Las Tablas Road	West of Duncan Road	1,446	1,378	1,268	1,319	1,400
Ramada Drive	South of State Route 46	978	514	606	630	669
Vineyard Drive	West of State Route 46	905	236	209	217	231
Vineyard Drive	West of U.S. Highway 101	1,160	1,020	1,017	1,058	1,123

Source: Public Works Department, San Luis Obispo County

Notes: *Shaded area indicates traffic volume levels exceed LOS D (PM Peak Volume Traffic).

Las Tablas Road (West of Duncan Road)

The Templeton Circulation Study includes a project to widen Las Tablas Road to five lanes for one-quarter mile west of US Highway 101.

Vineyard Drive

Construction on the Vineyard Drive interchange was completed in 2009. The project widened the bridge and Vineyard Drive between Bennett Way and Main Street to three lanes (two travel lanes and one center turn lane) with bike lanes.

Templeton U.S. Highway 101 Interchange Analysis				
Interchange	2010-2011		2020-2021	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Main Street	16	B	27.6	C
Las Tablas Road	24.1	C	23.6	C
Vineyard Drive	19.8	B	25	C

Source: Public Works Department, San Luis Obispo County

Main Street

In 2010, the Public Works Department evaluated the North Main Street interchange with Highway 101. No LOS is established for the Main Street interchange.

Level of Severity: Roads

- There is no Level of Severity for Ramada Drive, Vineyard Drive, Las Tablas or the Highway 101 interchanges.

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Parks

Neighborhood and Community Parks

There is one County-operated park in Templeton, as listed in the table below.

Templeton Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)
Templeton Park	Community	3.5	21.2	17.7

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

**Acreage needed is calculated at a ratio of 3 acres per 1,000 people

Templeton Park is located on Old County Road between 5th and 6th Street. The park offers picnic areas, a swimming pool, a gazebo, play equipment, restrooms and parking. Based on the current population, there is a demand for 17.7 acres. Templeton currently has a deficiency of 17.7 acres. By 2020, the acreage needed will increase to 23.2 acres.

Regional Parks

There are no County-operated regional parks located in Templeton. Regional parks are discussed in the North County Regional Resources section later in this chapter.

Recommended Action Requirements & LOS Summary

Templeton: Recommended Action Requirements

- There are no recommended actions for Templeton

Templeton: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Templeton are summarized below:

Templeton	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	I	None	None	None	None	II

NORTH COUNTY

HERITAGE RANCH AND OAK SHORES

Historically, the unincorporated village of Heritage Ranch was considered a “vacation” rental area with a large part-time population. The Heritage Ranch CSD finds 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.



Population

Heritage Ranch is at about 56% of its build out population of about 4,270 per the County General Plan. Based on the projections shown in the following table, build out population is not expected to be reached for several decades.

Heritage Ranch Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
2,166	2,276	2,386	2,424	2,482	2,634	2,723	2,863	2,995

Source: AECOM for SLOCOG, July 2011

Water Supply

Lake Nacimiento is Heritage Ranch’s only water source. 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 CSD (HRCSD). The remaining 211 AFY is under contract with a private developer who owns land in Heritage Ranch.

Water Demand

Heritage Ranch Water Demand			
Water Provider	Source	2010-2011	2011-2012
Heritage Ranch CSD	Lake Nacimiento	551 AFY	545 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: * No data received

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Level of Severity: Water Supply

- None

Historical Water Demand

Over the past 10 years, water use (production) in Heritage Ranch has ranged from a low of 507 AFY in 2002-03 to a high of 625 AFY in 2005-06.

Heritage Ranch Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
507	550	585	625	616	564	*	553	551	545

Source: Water Provider Water System Usage forms (FY – Production)

Notes: * No data received

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Heritage Ranch Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
Heritage Ranch CSD	tiered	3,450	62,832 gallons	62,832 gallons	\$32.64	\$33.91

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

Water System

No water system issues have been reported for Heritage Ranch.

Heritage Ranch Wastewater Treatment

Facilities

The Heritage Ranch CSD Wastewater Treatment Plant (WWTP) consists of an aerated lagoon, a polishing pond, sodium hypochlorite injection, an effluent holding pond, two sand filters, and de-chlorination. In 2012, the HRCSD initiated a sludge project to remove excessive sludge solids from the two ponds, improving water quality and operational efficiency.

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There are currently no expansion plans and no water re-use/recycling activities. A new NPDES permit allows limited use of effluent for re-use.

Operational Issues

Current complexities and discharges limitations of the NPDES permit process have made compliance for HRCSD WWTP extremely difficult in recent years. Long-term discharge to surface water by the HRCSD WWTP will be problematic.

Capacity

The wastewater treatment plant has a design capacity of 0.4 mgd. The plant operates at a peak average daily flow of 0.18 mg (and 0.27 mg peak daily dry weather flow). The plant is operating at 45% of capacity at peak flow and at 68% capacity for dry weather flows.

Heritage Ranch Wastewater				
Average Daily Plant Capacity (mgd)	Avg. Dry Weather Flow (mgd)	Operational % of Capacity	Expansion Plans	New Capacity After Expansion (mgd)
0.4	0.18	45%	No	n/a

Source: Heritage Ranch CSD

Level of Severity: Wastewater

- None

Oak Shores Wastewater Treatment

Oak Shores is a community on the north shore of Lake Nacimiento. A CSA operates the wastewater treatment plant.

Oak Shores: Facilities

CSA 7/7A services the Oak Shores Village development on the northern shores of Lake Nacimiento. Plans to upgrade to match future development needs are currently on hold. The new capacity following expansion is not known at this time. No water re-use or recycling activities are reported.

Oak Shores: Operational Issues

None reported.

Oak Shores: Capacity

The CSA 7/7A Wastewater Treatment Plant has an annual daily average plant capacity of 0.037 mgd. and an average flow of 0.032 mgd. The majority of the time, the plant operates well below the monthly daily average of 100,000 gpd.

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During peak boating and vacation season (summer and holidays), the influent flow can spike above 100,000 gallons on a given day as more people use their vacation homes. However, the monthly daily average is always below the plant capacity. During the remainder of the year, flows are more consistent with year-round resident use.

CSA 7/7A Wastewater				
Average Daily Plant Capacity (mgd)	Avg. Dry Weather Flow (mgd)	Operational % of Capacity*	Expansion Plans	New Capacity After Expansion (mgd)
0.10	0.05	50%	No	n/a

Source: CSA 7/7A

Level of Severity: Wastewater

- None

Roads

No local roads are part of the RMS reporting program

Parks

Neighborhood and Community Parks

There are no County-operated neighborhood or community parks in Heritage Ranch. Based on the current population, there is a demand for 7.3 acres in neighborhood and community parks. By 2020, the acreage needed will increase to 7.9 acres.

Regional Parks

There are no County-operated regional parks located in Heritage Ranch. Regional parks are discussed in the North County Regional Resources section later in this chapter.

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Recommended Action Requirements & LOS Summary

Heritage Ranch: Recommended Action Requirements

- There are no recommended actions for Heritage Ranch

Heritage Ranch: Level of Severity Summary Table

The recommended levels of severity for the resources in Heritage Ranch are summarized below:

Heritage Ranch	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	None	None	None	None	None	II

NORTH COUNTY

NORTH COUNTY REGIONAL RESOURCES

The following section addresses resources in the North County that extend beyond city or community boundaries: water supply, air quality, roads, schools and parks.

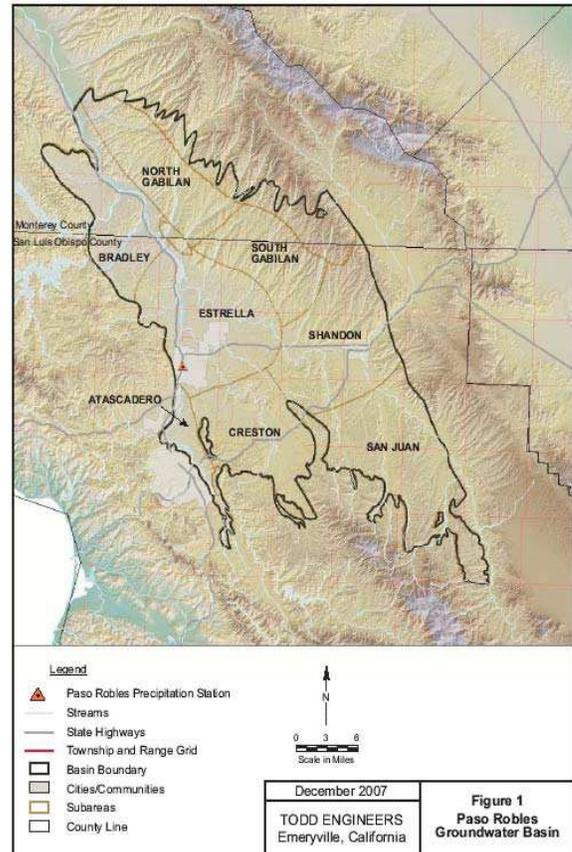
NORTH COUNTY WATER SUPPLY

Paso Robles Groundwater Basin

In 2000, the County Flood Control and Water Conservation District contracted with a consultant to conduct a study of the Paso Robles Groundwater Basin. The study was completed in February 2005. The study includes 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 LOS III was established for the main basin and an LOS I was established for the Atascadero Sub-basin.

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Extent of the Basin

The Paso Robles Groundwater 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. Approximately 65% of the water pumped from the basin is used for agriculture. The latest hydrographs of groundwater levels in 2012 show a continued groundwater level decline throughout the basin.

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

Water Use and Perennial Yield

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)

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

Paso Robles Groundwater Basin Water Demand (AFY)				
Groundwater User	1997	2000	2006	2009
Net Agriculture	49,683 AFY	56,551 AFY	58,680 AFY	63,077 AFY (67%)
Urban	13,513	14,629	15,665	16,382 (17%)
Rural	9,400	9,993	10,891	11,817 (12%)
Small Community	---	----	594	----
Small Commercial	1,465	1,465	2,323	2,631 (3%)
Total	74,061	82,638	88,153	93,907

Source: Fugro 2010 Paso Robles Groundwater Basin Water Balance Review and Update.

The safe yield of the basin (also referred to as the perennial yield or sustainable yield) was estimated by Fugro (2002) at 97,700 AFY. Fugro completed another focused study (Fugro 2010) of the basin that extends the water balance table

NORTH COUNTY

from the 2002 report through the years 1998-2009. Fugro estimated that withdrawals from the basin were 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 MWC. The safe yield of the sub-basin was estimated by Fugro at 16,400 AFY. Todd (2008) estimated the pumping in the sub-basin as follows:

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 RCS determined that the main groundwater basin is at, or close to its perennial yield. The RCS certified a LOS III for the main basin and a LOS I for the sub-basin. Land use, conservation and monitoring actions have been adopted by the County as part of the RCS.

A water conservation ordinance for the rural area of the main basin was approved by the Board of Supervisors in September 2012. The ordinance prohibits the creation of new parcels until groundwater levels stabilize or recover, requires that discretionary land use projects offset new groundwater demand at a 2:1 ratio and requires that general plan amendments be water-neutral.

The County and the cities along with numerous stakeholders have developed a Groundwater Management Plan. The goal of the plan is to ensure the long-term reliability of groundwater supplies. The plan is being implemented by the water providers, the County and a volunteer steering committee of basin stakeholders.

The County has recently funded an update to the groundwater model originally developed in 2005. The updated model should improve understanding of safe yield, interactions between the basin and sub-basin, and how various solutions may affect groundwater levels.

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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 CSD. Now constructed, the Nacimiento Water Project will deliver water to five project participants as shown in the table below.

Nacimiento Water Project Water Allocation	
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.

Level of Severity: North County Water Supply

- Main Paso Robles Groundwater Basin: LOS III
- Atascadero Sub-Basin: LOS I

NORTH COUNTY

NORTH COUNTY AIR QUALITY

Ozone

Ozone is formed in the atmosphere as a byproduct of photochemical reactions between various reactive organic compounds (ROG), oxides of nitrogen (NO_x) and sunlight. The exhaust systems of cars and trucks produce about 50 percent of the county's ROG and NO_x emissions. Other sources include solvent use, petroleum processing, utility and industrial fuel combustion, pesticides and waste burning. The State ozone hourly average standard has been established as 0.09 ppm. Exceedances of the ozone standard since 2000 are summarized in the following table:

Ozone Standard Exceedances (above CA 1-hour standard)										
Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Atascadero	0	0	1	0	0	0	0	0	0	0 ^{^^}
Paso Robles	1	0	1	0	0	0	0	0	0	0 [^]
Carrizo Plains	n/a	n/a	0	4	0	4	0	0	0	1 ^{^^}
Red Hills	3	0	0	0	0	4	0	2	0	0 ^{^^}

Source: San Luis Obispo APCD

Notes: Data is based on calendar year, not fiscal year. [^] = Jan – May ^{^^} = Jan – August
^{^^^} = Jan - July

PM₁₀

Particulate matter less than ten microns (PM₁₀) can be emitted directly from a source, and can also be formed in the atmosphere through chemical transformation of gaseous pollutants. Nitrogen oxides and reactive organic gases can both participate in these reactions to form secondary PM₁₀ products. Re-entrained dust from vehicles driving on paved roads is the single largest source of PM₁₀ in the county. Dust from unpaved roads is the county's second largest source of PM₁₀. PM₁₀ measurements throughout the county have exceeded State standards on numerous occasions in the past several years.

Exceedances of the 24-hour standard for the past 10 years are summarized in the table below. Prior to 2010, PM samples were collected once every 6 days. In 2012, PM samples were collected every day. 2010 and 2011 were transitional years, with different sites on different schedules. Site/year combinations on the everyday sampling schedule for all or part of a year are marked with an *. The number of exceedances reported in the table is actual number of exceedances observed at each site that year. To compare years with daily sampling to those with 1-in-6 sampling, multiply the 1-in-6 value by 6 to estimate the number of exceedances that would likely have been observed if sampling had been daily.

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PM ₁₀ Measurements (above CA 24-hour standard)										
Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Atascadero	1	0	0	0	0	0	0	0*	2*	2*^^
Paso Robles	1	0	0	1	0	1	0	0	2*	1*^

Source: San Luis Obispo APCD

Notes: Data is based on calendar year, not fiscal year. ^ = Jan – May ^^ = Jan – August

* Everyday sampling schedule, full or part year

Level of Severity: North County Air Quality

- LOS II

NORTH COUNTY ROADS

North County Roadway Analysis						
Roadway	Location	LOS D Volume	2009	PM Peak Hour Volume		
				2012	2014	2017
Nacimiento Lake Drive	East of Chimney Rock Road	902	493	464	483	512

Level of Severity: North County Roads

- None

NORTH COUNTY SCHOOLS

North County students are served by five school districts:

- Atascadero Unified School District
- Paso Robles Joint Unified School District
- Pleasant Valley Joint Union School District
- San Miguel Joint Union School District
- Shandon Joint Unified School District
- Templeton Unified School District

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North County Schools: Capacity and Enrollment							
School Year 2010 - 2011				School Year 2011 - 2012			
District	School	Enrollment	Capacity	Enrollment Capacity	Enrollment	Capacity	Enrollment Capacity
Atascadero Unified School District	Elem.	2025	1708	119%	2062	1708	121%
	Middle	866	1396	62%	800	1396	57%
	High	1587	1888	84%	1617	1888	86%
Paso Robles Joint Unified School District	Elem.	2862	4978	56%	2946	4978	59%
	Middle	1404	2470	57%	1405	2470	57%
	High	2155	4218	51%	2143	4218	51%
Pleasant Valley Joint Union School District	Elem.	548	673	81%	598	673	89%
Shandon Joint Unified School District	Elem.	18	27	68%	21	27	79%
	Middle	196	140	140%	206	140	147%
	High	76	124	61%	69	124	56%
Templeton Unified School District	Elem.	831	1664	50%	884	1664	53%
	Middle	502	640	78%	484	640	76%
	High	726	1056	69%	748	1056	71%

Source: School Districts

Level of Severity: North County Schools

- Atascadero Unified School District: LOS III
- Paso Robles Joint Unified School District: None
- Pleasant Valley Joint Union School District: None
- Shandon Joint Unified School District: III
- Templeton Unified School District: None

NORTH COUNTY REGIONAL PARKS

The Parks and Recreation Element of the General Plan categorizes regional parks as either urban or rural. Urban regional parks often serve a function that is similar to community parks. Regional parks in the rural areas are more rural in nature, emphasizing nature-oriented activities. The North County features three regional parks listed below.

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North County Regional Parks					
Park	Location	Park Type	Existing Acreage*	Acreage Needed	Deficiency (in acres)
Heilmann Park	Atascadero	Urban Regional	102	**	**
Santa Margarita Lake Park	Santa Margarita	Rural Regional	7,122		
Duveneck Park (undeveloped)	Templeton	Urban Regional	80		
TOTAL			7,304		

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

** Acreage needed will be calculated as part of the RMS revisions

Heilmann Park is a 102-acre regional park located on El Bordo Avenue south of Chalk Mountain Golf Course, an 18-hole golf course operated by SLO County Parks in Atascadero. The park provides the Cortez Staging Area, tennis courts, play equipment, group and individual picnicking, trails, restrooms and parking.

Santa Margarita Lake Park is a 7,122-acre regional park located off West Pozo Road southeast of Santa Margarita. Amenities include boating, camping, play equipment, picnicking, fishing and trails.

Duveneck Park is an undeveloped 80-acre regional park located on Vaquero Drive in Templeton. The park was received as a donation to the County. Future improvements may include passive recreation.

Regional park acreage needs will be calculated with a package of revisions to the RMS that are now being prepared.

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NORTH COUNTY CITIES

ATASCADERO

The City of Atascadero is 25.64 square miles in size. Freeway interchange improvements and water from the Nacimiento Pipeline Project will address some of the City's infrastructure needs.

Population

Atascadero is at about 75% of its buildout population of about 36,000 per the City General Plan.

Atascadero Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
24,945	25,966	26,986	27,138	27,366	28,003	28,940	30,109	31,292

Source: AECOM for SLOCOG, July 2011

Water Supply

The City of Atascadero is served by the Atascadero Mutual Water Company (AMWC), which serves water to the City and a portion of the unincorporated territory south of the City. The AMWC's water source is groundwater, including underflow of the Salinas River. The underflow is part of the Paso Robles Groundwater Basin, the status of which is described in the Paso Robles Groundwater Basin Resource Capacity Study (RCS) developed by the County (see the preceding North County Regional Resources section).

According to the 2012 County Master Water Report, the Atascadero Mutual Water Company (AMWC) has a 2,000 AFY supply of Nacimiento Water.

Water Demand

Atascadero Water Demand			
Water Provider	Source	2010-2011	2011-2012
AMWC	Groundwater	1,388 AFY	1,387 AFY
	Subsurface Flow	5,576 AFY	4,252 AFY
TOTAL		6,963 AFY	5,639 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012 (Production)

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Historical Water Demand

Over the past 10 years, water use (production) in Atascadero has ranged from a low of 5,509 AFY in 2009-10 to a high of 6,978 AFY in 2003-04.

Atascadero Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
6,288	6,978	5,841	6,115	6,850	6,590	6,194	5,509	6,963	5,639

Source: Water Provider Water System Usage forms (FY-Production)

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Atascadero Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
			Atascadero MWC	tiered	31,000	136,935 gals

Source: Water System Usage forms: July 2010 - June 2011; July 2011 - June 2012 (Production)

Water System

No water system issues have been reported for Atascadero.

Wastewater Treatment

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 unincorporated south Atascadero area that is served by AMWC does not have sewer service.

Plans for the Atascadero Water Reclamation Facility (WRF) are in the final design stages for installation of headworks, including bar screens and screw compactor. This will aid in the efficiency and maintenance of the wastewater treatment process. The plant capacity will remain the same.

The City's WRF is located east of the Chalk Mountain Golf Course. Groundwater reclaimed from below the facility's infiltration ponds is used for fairway irrigation.

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Operational Issues

None reported.

Capacity

The City of Atascadero's WRF has a daily capacity of 2.40 mgd, and is currently operating at 58% of capacity. The table below outlines Atascadero's wastewater data.

Atascadero Wastewater				
Average Daily Plant Capacity (mgd)	Avg. Dry Weather Flow (mgd)	Current Operational % of Capacity*	Expansion Plans	New Capacity After Expansion (mgd)
2.4	1.4	58.3%	no	n/a

Source: City of Atascadero

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PASO ROBLES

The City of Paso Robles covers 17.3 square miles. Paso Robles is a full-service city providing water and sewer services. Major circulation improvements are planned at the interchanges of Highway 101 with Highway 46 West and East. The City has contracted to use Lake Nacimiento water that will supplement the groundwater and Salinas River underflow that is currently pumped by the City.

Population

Paso Robles is at about 67% of its buildout population of about 44,000 per the City General Plan. Based on the projections shown in the following table, buildout population is not expected to be reached for several decades.

Paso Robles Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
23,370	26,497	29,624	29,983	30,522	32,137	33,905	36,112	38,343

Source: AECOM for SLOCOG, July 2011

Water Supply

According to the 2012 County Master Water Report, the City of Paso Robles has a 4,000 AFY supply of Nacimiento Water.

The City of Paso Robles has historically relied upon local water supplies from the Salinas River underflow and from the Paso Robles Formation of the Paso Robles Groundwater Basin 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 appropriate water rights and permitting by the State Water Resources Control Board (SWRCB). An approved SWRCB permit allows the City to extract up to 3,590 gallons per minute, with a maximum extraction of 4,600 AFY (January 1 to December 31).

To assure its water supply into the future, the City has a contracted entitlement to the Nacimiento Water Project, for 4,000 AFY of raw water. The City is planning to purchase an additional 1,400 AFY of Nacimiento water in the future. The City is progressing with its plans for a water treatment plant capable of treating 2.4 mgd. The first phase of the plant is currently in design. Construction is scheduled to begin by fiscal year 2015-16.

Another water 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 expected that one of these

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alternatives will eventually be pursued. 5,000 AFY of wastewater could ultimately be treated at buildout of the City, but only about 150 AFY would be needed to meet buildout demand, assuming that 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 ensures a back-up source of water in the event of limitations on any of the other water sources. The recycled water system is estimated to be developed in 2025.

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.

Paso Robles Water Demand			
Water Provider	Supply	2010-2011	2011-2012
City of Paso Robles	Groundwater	6,320	6,609

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Historical Water Demand

Over the past 10 years, water use (production) in Paso Robles has ranged from a low of 6,320 AFY in 2010-11 to a high of 8,130 AFY in 2006-07. Beginning in 2009, the implementation of mandatory outdoor water use restrictions limited outdoor water use to three days per week, which has contributed to the reduction of water use shown below.

Paso Robles Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
7,145	7,929	6,959	7,444	8,130	*	7,353	6,391	6,320	6,609

Source: Water Provider Water System Usage forms (FY-Production)

Notes: * No data received

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Water Rates

The average annual single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

The approved rate increase for 2013 – 2016 will result in the average single-family water bill increasing to \$63.35/month in 2016, based on 359 gallons per residence per day.

Paso Robles Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
City of Paso Robles	Uniform	30,200	126,412 gals	130,900 gals	\$36.55	\$36.50

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

Water System

No water system issues have been reported for Paso Robles.

Wastewater Treatment

Facilities

The current treatment plant process consists of physical treatment, primary treatment, trickling filters, secondary clarifiers, chlorination for disinfection and polishing ponds. Treated effluent is discharged to the Salinas River.

Operational issues

Treated effluent from the wastewater treatment plant has exceeded waste discharge limitations established under the Basin Plan developed for the Regional Water Quality Control Board.

Capacity

No current capacity information has been reported for Paso Robles.

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IV. NORTH COAST

The North Coast area includes the City of Morro Bay and four unincorporated communities: Cambria, Cayucos, Los Osos, and San Simeon. This chapter discusses resources by community. However, regional resources that cross community boundaries and are shared among communities, such as water supply, parks and freeway interchanges, are discussed separately later in this chapter.



CAMBRIA

Cambria is an unincorporated urban area located about 20 miles north of Morro Bay. It features two villages and natural areas, including native pine forests, creeks, and a scenic coastline.

The key resource issue in Cambria is the community's water supply, which has been at a level of severity III, the most critical level, for more than 10 years.



Population

Cambria is at about 48% of its buildout population of about 12,600 per the County General Plan. Based on the projections shown in the following table, buildout population is not expected to be reached for several decades.

Cambria Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
6,230	6,125	6,020	6,051	6,096	6,175	6,251	6,328	6,408

Source: AECOM for SLOCOG, July 2011

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Water Supply

Cambria is completely dependent on a limited groundwater supply from the San Simeon and Santa Rosa Groundwater Basins associated with its two well fields. Water is supplied by the Cambria CSD (CCSD).

Sole reliance on groundwater in small coastal basins could leave the community vulnerable to drought and saltwater intrusion into the area's aquifers. To maximize its utilization of local supplies while furthering future long-term reliability, the CCSD's water planning calls for water conservation, use of recycled water for non-potable irrigation, a long-term water supply project, and water demand management.

The CCSD's water conservation efforts included adoption of its 2010 Urban Water Management Plan with a year 2020 target goal of 105 gallons per capita per day, which calculated to a 5 percent reduction. The CCSD is also finalizing a subsequent conservation study with Maddaus Water Management to further expand upon its currently adopted conservation program. From this latest study, it is estimated that approximately 75 acre-feet per year (AFY) of conservation could be realized by year 2020 from adopting additional conservation measures, which would equate to a total of approximately 10 percent in water savings. The CCSD Board will be taking formal action to adopt recommendations from the MWM report as part of its February 28, 2013 meeting.

For its long-term water supply, the CCSD is working with the Army Corps of Engineers, which is in the process of completing an Environmental Impact Report/Environmental Impact Statement (EIR/EIS). Alternatives being analyzed include desalination of brackish water¹, use of the Whale Rock Reservoir for seasonal storage, and new surface water storage on ranch land located north of San Simeon Creek Road. Completion of a public review draft of the project's EIR/EIS is estimated to occur during the spring of 2013.

¹ Alternatives being analyzed include desalinating seawater that has migrated inland via a subterranean saltwater wedge, which has mixed with freshwater (i.e., brackish water).

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Cambria Water Supply		
Source	Supply (AFY)	Limitation
San Simeon Valley Groundwater Basin	1230 AFY	Dry season pumping is limited to no more than 370 acre-feet from the period when flow ceases at Palmer Flats until October 31 st .
Santa Rosa Valley Groundwater Basin	518 AFY	Dry season pumping is limited to no more than 260 acre-feet from May 1 through October 31 st .
		CDP 428-10 limits total annual diversion from both aquifers to no more than 1230 AFY . An annual water budget created by the USGS ¹ and subsequently updated within the CCSD's 2010 UWMP estimated the basins would be in balance with approximately 610 AFY municipal (CCSD) pumping from the San Simeon aquifer and 200 AFY municipal (CCSD) pumping from the Santa Rosa aquifer ² .

Notes:

- 1) 1998 USGS Report 98-4061, p.46
- 2) Cambria CSD 2010 Urban Water Management Plan Update, Final Report dated February 23, 2012, pp.4-2 through 4-3 and Table 4-2.

Cambria Water Demand			
Water Provider	Source	2010-2011	2011-2012
Cambria CSD	Groundwater	679 AFY	707 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Historical Water Demand

Over the past 10 years, water use (production) in Cambria has ranged from a low of 674 AFY in FY 2009-2010 to a high of 821 AFY in FY 2003-04, as shown in the following table. With the exception of fiscal year 2003-2004, the District has not exceeded the estimated 810 AFY value, which would keep the San Simeon and Santa Rosa basins in balance. During the past five years, the demand has averaged approximately 86% of the 810 AFY.

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Cambria Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
779	821	725	730	785	710	707	674	679	707

Source: Water Provider Water System Usage forms (FY – Production)

Based on the CCSD's reduced water production and its recent completion of updates to its water conservation program, the CCSD Board has requested that the Level of Severity for water supply be amended from LOS III to LOS I. In addition, the CCSD would like to approve a small number of intent-to-serve letters for new water service connections. This might be accomplished as part of a temporary "pilot program." In order for this to occur, the CCSD would still need to comply with the Local Coastal Program's Cambria communitywide planning area standard 4.B. in the North Coast Area Plan. This standard requires offsetting the demand from any new connections with water conservation. In addition, the CCSD moratorium would need to be addressed and the County's Growth Management Ordinance would need to be amended. However, no change to the RMS level of severity would be needed at this time.

Level of Severity: Water Supply

- Currently LOS III due to limited supply.
- Recommendation: See recommendations at the end of the Cambria section.

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Cambria Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
Cambria CSD	tiered	6,032	*	*	\$60.12	\$60.12

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

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Water Distribution and Storage System

No water system issues affecting levels of severity have been reported for Cambria.

Wastewater Treatment

Facilities

Wastewater service is provided by the CCSD. The average dry weather flow, which is monitored from May through October, is 60% of permanent plant capacity as of 2012. Long-term planning calls for a recycled water distribution system to serve non-potable irrigation customers such as recreational areas.

Operational Issues

None reported.

Capacity

The CCSD wastewater treatment plant was designed and upgraded during 1991 with a 1.0 million gallon per day (mgd) average dry weather flow capacity.

Cambria Wastewater				
Average Daily Plant Capacity (mgd)	Avg. Dry Weather Flow (mgd)	Current Operational % of Capacity	Expansion Plans	New Capacity After Expansion (mgd)
1.0	0.6	60%	No	

Level of Severity: Wastewater

- None

Parks

Neighborhood and Community Parks

Cambria Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)**
Lampton Park	Community	2.2		
Shamel Park	Community	6.0		
Total		8.2 acres		

** To be determined in RMS revisions

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Regional Parks

There are no County-operated regional parks located in Cambria. Regional parks are discussed in the North Coast Regional Resources section later in this chapter.

Recommended Action Requirements & LOS Summary

Cambria: Recommended Action Requirements

- Leave the LOS III in place.
 - Collaborate with the Cambria Community Services District to address issuance of a limited number of intent-to-serve letters and building permits based on the aggressive water conservation program developed by Maddaus.
 - Collaborate with the Cambria Community Services District to revise the County Growth Management Ordinance to reflect the issuance of a small number of building permits for new development as part of a temporary pilot program.
 - Collaborate with the Cambria Community Services District to prepare a CEQA determination, with the County acting as a Responsible Agency, that identifies the potentially significant impacts of a temporary, small scale pilot program to issue intent-to-serve letters and building permits for new development.
- Ongoing recommended actions:**
- Encourage continued implementation of water conservation measures in Cambria and San Simeon Acres.
 - Review new proposed landscaping plans for inclusion of water-efficient design elements.
 - Encourage voluntary lot mergers and other actions to support the Cambria Community Service District (CCSD) buildout reduction program.
 - Encourage continued efforts to acquire alternative water supplies.
 - Facilitate and expedite, whenever possible, future permitting of CCSD water projects.

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Cambria: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Shandon are summarized below:

Cambria	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	III	None	None	None	III	None

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CAYUCOS

Cayucos is an unincorporated urban area located north of Morro Bay. Major tourist attractions such as the Cayucos area beaches draw many visitors each year.

Population

Cayucos is at about 82% of its buildout population of about 3,100 per the County General Plan.



Cayucos Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
2,926	2,730	2,541	2,548	2,553	2,597	2,680	2,946	3,222

Source: AECOM for SLOCOG, July 2011

Water Supply

Cayucos is served by three small water providers: the Morro Rock Mutual Water Company (MRMWC), the Paso Robles Beach Water Association (PRBWA) and CSA 10A. The three water providers rely on an approximately 600 AF entitlement from Whale Rock Reservoir. CSA 10A receives an additional 25 AF of water from the Nacimiento Water Project through an exchange of Whale Rock water for Nacimiento water delivered to the City of San Luis Obispo, but the other water companies do not plan to add to their water supply. If future needs in CSA 10A require additional water, CSA 10A can request that the County Board of Supervisors increase its Nacimiento allocation up to a maximum of 80 AFY.

Cayucos obtains nearly all of the community's water from Whale Rock Reservoir, located in the hills east of the community. The water supply is sent directly from Whale Rock Reservoir to the CSA 10A Water Treatment Facility and then distributed into receiving tanks at MRMWC, PRBWA and CSA 10A. Additional discussion of Whale Rock Reservoir is provided in the Regional Resources section later in this chapter.

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Cayucos Water Supply			
Source	PRBMWC	MRMWC	CSA 10A
Whale Rock Reservoir	222 AFY	170 AFY	190 AFY
Lake Nacimiento			25-90 AFY
Water Diversions		3 AFY	
Total	222 AFY	173 AFY	280 AFY

Source: 2012 Master Water Report

Water Demand

Cayucos Water Demand			
Water Provider	Source	2011-2011	2011-2012
MRMWC	Whale Rock Reservoir	107 AFY	110 AFY
PRBWA	Whale Rock Reservoir	146 AFY	148 AFY
CSA 10A	Whale Rock Reservoir	129 AFY	109 AFY
	Groundwater	9 AFY	0 AFY
Cemetery		13 AFY	14 AFY
TOTAL		404 AFY	381 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: *Water is distributed from the CSA10A supply, received from Whale Rock Reservoir.

Level of Severity: Water Supply

- None

Historical Water Demand

Over the past 10 years, water use (production) in Cayucos has ranged from a low of from 381 AFY in 2011-12 to a high of 431 AFY in 2007-08, as shown in the following table.

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Cayucos Total Water Use AFY (fiscal year)										
Year	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
PRBWA	161	165	169	156	156	163	158	148	146	148
MRMWC	119	114	116	112	114	121	115	109	107	110
CSA 10A	127	128	128	125	124	132	134	134	138	109
Cemetery	15	16	15	13	15	15	13	12	13	14
Total	422	423	428	406	409	431	420	403	404	381

Source: Water Provider Water System Usage forms (FY – Production)

Notes: Data not provided, or incomplete data

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Cayucos Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
Morro Rock MWC	flat + usage charge	639	48,000 gals	48,000 gals	*	*
Paso Robles Beach Water MWC	flat + usage charge	780	48,000 gals	48,000 gals	*	*
CSA 10A	tiered	1,868	*	*	*	\$51.62

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

Water System

Background

Past issues regarding adequacy of fire flow have limited new development in Cayucos to areas where fire flow is at least 500 gallons per minute (gpm) with the installation of a residential fire sprinkler system. Water system LOS ratings are based on the amount of time until a system reaches design capacity. In 2010, a LOS III was established for the water system in CSA 10A, as the water system could no longer deliver adequate water for fire protection in portions of the area.

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Status

Preliminary engineering, environmental permitting, financing, and project design are currently underway for construction projects to upgrade the 4" lines and to construct a new water storage reservoir for CSA 10A. Accordingly, the LOS should reflect that there is no level of severity. There is an existing certified LOS II for the PRBMWC and the MRMWC.

Level of Severity: Water System

- Revise LOS III for CSA10A to no LOS due to system improvements.

Wastewater Treatment

Facilities

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 California Coastal Commission held hearings on the treatment plant upgrade. Both the Cayucos Sanitary District and the City of Morro Bay have asked the Commission to withdraw the project. See the Morro Bay section later in this report for additional information.

Level of Severity: Wastewater

- None

Roads

Cayucos Roadway Analysis					
Roadway	Location	LOS D Volume	PM Peak Hour Volume		
			2009	2012	2014
South Ocean Ave.	North of 13 th Street	965	*	471	490

*No data

Parks

Neighborhood and Community Parks

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Cambria Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)**
Hardie Park	Community	4.0	7.5	1.3
Norma Rose Park (undeveloped)	Community	1.5		
Paul Andrew Park	Community	1.0		
Total		6.2 acres		

Source: Parks Department, San Luis Obispo County

Notes: *Existing Acreage as identified in General Plan Parks and Recreation Element, or as updated by San Luis Obispo County Parks Department

**Acreage needs are calculated at a ratio of 3 acres per 1,000 people

Recommended Action Requirements & LOS Summary

Cayucos: Recommended Action Requirements

- Revise LOS III to no LOS for the CSA 10A water system.

Cayucos: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Cayucos are summarized below:

Cayucos	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	None	None	None	None	None	None

NORTH COAST

Los Osos

Los Osos is an unincorporated urban area located near Morro Bay. The community of Los Osos is experiencing a difficult water supply situation, as groundwater pumping of the lower portion of the Los Osos groundwater basin has led to seawater intrusion into the basin. This poses a threat to the community's potable water supply.



Los Osos is also in need of a community sewer system. Construction is underway for a new wastewater project for a portion of the urban area.

Population

Los Osos is at about 65% of its build out population of about 21,300 per the County General Plan. Based on the projections shown in the following table, build out population is not expected to be reached for several decades.

Los Osos Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
14,277	14,100	13,908	13,930	13,988	14,071	14,157	14,240	14,325

Source: AECOM for SLOCOG, July 2011

Water Supply

The water supply for the community of Los Osos comes from the Los Osos Groundwater Basin. According to the 2012 County Master Water Report, the basin safe yield and current use by sector are as follows:

Los Osos Groundwater Basin Water Supply		
Basin Safe Yield	Water Providers	Other users (agriculture, domestic)
3200 AFY	2100 AFY	1100 AFY

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Water Demand

There are three water providers in the community of Los Osos:

- Los Osos Community Services District (LOCSD)
- Golden State Water Company (GSWC)
- S&T Mutual Water Company (S&T)

Los Osos Water Demand			
Water Provider	Source	2010-2011	2011-2012
GSWC	Groundwater	748	735
Los Osos CSD	Groundwater	756	783
S & T MWC	Groundwater	70	67
TOTAL		1,574	1,585

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: * No data received

Los Osos Valley Groundwater Basin and Conservation Efforts

In 2007, the Board of Supervisors certified a LOS III for water supply for the Los Osos Valley Groundwater Basin. Subsequently, the County established water conservation ordinances applicable to new development and upon sale of existing buildings. Two water conservation ordinances are in effect. Title 8 of the County Code requires retrofitting of structures with water saving plumbing fixtures upon sale. Title 19 of the County Code 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 measures will be sponsored by the County as part of the community wastewater project or by the water providers as part of the Basin Management Plan (BMP).

Los Osos' three water providers and the County have entered into an Interlocutory Stipulated Judgment (ISJ) as a result of a groundwater adjudication lawsuit filed by the Los Osos CSD in February 2004. The ISJ requires the four parties to cooperate in assessing the state of the groundwater basin and to develop a Basin Management Plan (BMP). To date, the BMP has not been released. The draft BMP is expected to include a number of conservation measures, including outdoor measures and programs targeting properties outside of the prohibition zone. The BMP is also expected to provide a detailed analysis of current indoor and total per capita use, as well as a quantification of commercial and institutional demand.

The ISJ Working Group continues 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. Safe yield in the lower aquifer is currently being exceeded, causing seawater intrusion in the lower aquifer.

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Prepared as a requirement of Special Condition No. 5 of the Coastal Development Permit for the Los Osos Wastewater Project, the *Recycled Water Management Plan* (RWMP) was approved by the California Coastal Commission in May 2012. The RWMP includes a Recycled Water Reuse Program, Water Conservation Program, Monitoring Program and Reporting and Adaptive Management Program. The details of the RWMP, including plans for water reuse, conservation and monitoring, were developed in coordination with the ISJ Working Group and designed to be complimentary with the pending BMP.

A Water Conservation Implementation Plan was approved by the Board of Supervisors on October 23, 2012. This Water Conservation Implementation Plan outlines the actions to achieve the measures of the Water Conservation Program, which is part of the RWMP, described above. The conservation measures include a community retrofit that will ensure that high efficiency fixtures will be used for all indoor demand within the wastewater service area prior to connection to the wastewater project.

Project updates and associated documents are available for review at the Los Osos CSD website (www.lososocsd.org) and County Public Works website (www.slocounty.ca.gov/pw/LOWWP.htm).

As the BMP and RWMP are implemented, the existing Titles 8 and 19 requirements should be reviewed and modified as appropriate. It is expected that retrofitting opportunities for Title 19 compliance will diminish over time as the Water Conservation Implementation Plan proceeds. This will also have an effect on the Title 8 retrofit, as all of the wastewater service area, where most of the retrofit opportunities exist, will have compliant toilets.

Level of Severity: Water Supply

- LOS III due to sewer intrusion .

Historical Water Demand

Over the past 10 years, water use (production) in Los Osos has ranged from a low of 1,574 AFY in 2010-11 to a high of 2,262 AFY in 2002-03. Water use in Los Osos has trended downward for all three providers since the year 2002. Total water use by customers in all three areas has dropped approximately 40% since 2002, as shown in the following table.

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Los Osos Total Water Use AFY (fiscal year)										
Year	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
GSWC	1,038	1,086	988	994	1005	990	831	826	748	735
LOCS D	1,331	1,045	960	939	943	870	899	837	756	783
S&T	96	100	93	88	95	91	83	80	70	67
Total	2,465	2,231	2,041	2,012	2,043	1,951	1,813	1,743	1,574	1,585

Source: Water Providers Water System Usage forms (FY – Production)

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

Los Osos Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
GSWC	tiered	8,821	72,705 gals	68,592 gals	\$68.12	\$80.48
LOCS D	tiered	7,657	74,052 gals	80,784 gals	\$39.38	\$43.47
S & T	flat	550	*	*	\$27.00	\$27.00

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

Water System

No water system issues have been reported for Los Osos.

Wastewater Treatment

Los Osos currently utilizes individual septic tanks for wastewater collection. The County began construction of the Los Osos Wastewater Collection System Project on August 13, 2012, with an anticipated completion date of February 2015. The project will provide wastewater collection, conveyance, treatment and recycled water reuse for Los Osos. The project is a key effort toward reducing groundwater pollution and helping to solve the water supply problem in Los Osos.

The project includes nine primary pump stations, 12 pocket pump stations, pump station wet wells, 220,000 feet of gravity sewer and force main, 588 manholes, fiber optic conduit, 35,000 feet of recycled water distribution mains and 4,710

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lateral connections. Individual lateral connections to the sewer main will be required in 2015, after completion of the wastewater project facilities.

Level of Severity: Wastewater

- LOS III

Roads

Los Osos Roadway Analysis					
Roadway	Location	LOS D Volume	PM Peak Hour Volume		
			2009	2011	2014
South Bay Boulevard	South State Park Road	967	1,310	1,363	1,446

South Bay Blvd (South of State Park Road)

The Los Osos Circulation Study includes widening of South Bay Blvd. from Los Osos Valley Road to the Urban Reserve Line. The project would increase the capacity of the roadway and improve operation to LOS C or better per existing volumes. Funds from Los Osos Road Improvement Fees are necessary for the widening; however, the improvement fees are stagnant pending community growth.

Level of Severity: Roads

- LOS III

Parks

Neighborhood and Community Parks

Los Osos Neighborhood & Community Parks				
Park	Park Type	Existing Acreage*	Acreage Needed**	Deficiency (in acres)
Los Osos Community Park	Community	6.2	*	*

* To be determined by RMS revisions

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Recommended Action Requirements & LOS Summary

Los Osos: Recommended Action Requirements

- Continue water conservation programs ,including the completion and implementation of the Basin Management Plan.
- Continue to implement water conservation programs adopted in 2008 and report the program status to the Board of Supervisors in calendar year 2014.

Los Osos: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in Los Osos are summarized below:

Los Osos	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	III	None	III	III	None	None

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SAN SIMEON

San Simeon is an unincorporated village area on Highway 1 serving both local residents and visitors. Water supply is San Simeon's key resource issue, as 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. A development moratorium has been in place since 1991.



Population

San Simeon is at about 38% of its population of about 1,200 per the County General Plan. Based on the projections in the table below, buildout population will not be reached for several decades.

San Simeon Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
639	550	450	451	452	458	461	466	468

Source: AECOM for SLOCOG, July 2011

Water Supply

San Simeon's water supply is from groundwater and is provided by the San Simeon Community Service District (SSCSD). The community relies on two groundwater wells along Pico Creek. The dependable yield from this water source has been estimated at 120 to 130 AFY.

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.

Level of Severity: Water Supply

- LOS III

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Historical Water Demand

Over the past 10 years, water use (production) in San Simeon has ranged from a low of 80 AFY in 2011-12 to a high of 104 AFY in 2002-03, as shown in the following table.

San Simeon Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
104	*	94	*	*	90	86	*	*	80

Source: Water Provider Water System Usage forms (FY – Production)

Notes: * No data received

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

San Simeon Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
San Simeon CSD	*	452	*	*	*	\$24.69

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

Water System

The water system has been at a LOS III since 2002 due to ongoing issues with the community's wells in Pico Creek.

Level of Severity: Water System

- LOS III

Wastewater Treatment

Facilities

The SSCSD operates a treatment plant for the community.

Operational Issues

None reported.

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Capacity

No current capacity information was provided for San Simeon.

Level of Severity: Wastewater

- No data

Roads & U.S. Highway 101

No roads or interchanges in the San Simeon area are included in this section.

Parks

There are no County-operated parks located in the area.

Recommended Action Requirements & LOS Summary

San Simeon: Recommended Action Requirements

- Retain LOS III for water supply.
- Continue the development moratorium.
- Continue conservation activities

San Simeon: Level of Severity Summary Table

The RMS defines levels of severity for each resource. The criteria used to determine the level of severity for each resource are outlined in Chapter I. The recommended levels of severity for the resources in San Simeon are summarized below:

San Simeon	Water Supply	Water System	Sewer	Roads	Schools	Air
Levels Of Severity	III	III	None	None	III	None

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NORTH COAST REGIONAL RESOURCES

The following section addresses resources in the North Coast that extend beyond city or community boundaries. Air quality, roads, schools and parks are discussed below.

NORTH COAST AIR QUALITY

Ozone

Ozone is formed in the atmosphere as a byproduct of photochemical reactions between various reactive organic compounds (ROG), oxides of nitrogen (NO_x) and sunlight. The exhaust systems of cars and trucks produce about 50 percent of the county's ROG and NO_x emissions. Other sources include solvent use, petroleum processing, utility and industrial fuel combustion, pesticides and waste burning. The State ozone hourly average standard has been established as 0.09 ppm. Exceedances of the ozone standard since 2003 are summarized in the following table:

North Coast Ozone Standard Exceedances (above CA 1-hour standard)										
Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Morro Bay	0	0	0	0	0	0	0	0	0	0^^

Source: San Luis Obispo APCD

Notes: Data is based on calendar year, not fiscal year. ^ = Jan – May ^^ = Jan – August ^^ ^= Jan - July

PM₁₀

Particulate matter less than ten microns (PM₁₀) can be emitted directly from a source, and can also be formed in the atmosphere through chemical transformation of gaseous pollutants. Nitrogen oxides and reactive organic gases can both participate in these reactions to form secondary PM₁₀ products. Re-entrained dust from vehicles driving on paved roads is the single largest source of PM₁₀ in the county. Dust from unpaved roads is the county's second largest source of PM₁₀. PM₁₀ measurements throughout the county have exceeded State standards on numerous occasions in the past several years.

Exceedances of the 24-hour standard for the past 10 years are summarized in the table below. Prior to 2010, PM samples were collected once every six days. In 2012, PM samples were collected every day. 2010 and 2011 were transitional years, with different sites on different schedules. Site/year combinations on the everyday sampling schedule for all or part of a year are marked with an *. The number of exceedances reported in the table is actual number of exceedances observed at each site that year. To compare years with daily sampling to those

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with 1-in-6 sampling, multiply the 1-in-6 value by 6 to estimate the number of exceedances that would likely have been observed if sampling had been daily.

PM10 Measurements (above CA 24-hour standard)										
Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Morro Bay	1	0	0	1	0	2	1	1	n/a	n/a

Source: San Luis Obispo APCD

Notes: Data is based on calendar year, not fiscal year. ^ = Jan – May ^^ = Jan – August

* Everyday sampling schedule, full or part year

Level of Severity: North Coast Air Quality

- None

NORTH COAST ROADS

See Los Osos and Cayucos for North Coast roads analysis.

NORTH COAST SCHOOLS

North Coast students are served by three school districts:

- Coast Unified School District
- Cayucos Elementary School District
- San Luis Coastal Unified School District

Coast Unified & Cayucos Elementary				
Capacity, Enrollment, Recommended Levels of Severity, 2010				
School	Capacity	Enrollment	Enrollment Capacity	LOS
Cambria Elementary	360	307	85.30%	None
Santa Lucia Middle School (Cambria)	103	161	156.30%	III
Coast Union High School (Cambria)	506	265	52.40%	None
Cayucos Elementary	240	187	77.90%	None

Source: School Districts

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Level of Severity: North Coast Schools

- LOS III at Santa Lucia Middle School in Cambria

NORTH COAST

NORTH COAST CITIES

MORRO BAY

Morro Bay is one of seven cities and the only incorporated city in the North Coast area. Unlike other cities, Morro Bay includes a harbor.

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.



Population

The City of Morro Bay is at about 83% of its buildout population of about 12,200 per the City's General Plan. Based on the projections shown in the following table, buildout population would be reached sometime after 2035.

Morro Bay Population Projections								
2000	2005	2010	2012	2015	2020	2025	2030	2035
10,152	10,338	10,073	10,100	10,152	10,244	10,482	10,778	11,078

Source: AECOM for SLOCOG, July 2011

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. According to the 2012 Master Water Report, the City's water supply is as follows:

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Morro Bay Water Supply (AFY)	
State Water Project*	1313
Morro Basin	581
Chorro Basin	566
Desal	645
TOTAL	3105

- * The City contracts with the San Luis Obispo County Flood Control and Water Conservation District for 1313 AFY of State Water. The City also has a Drought Buffer Water Agreement with the District for 2290 AFY that will allow the City to receive its full 1313 AFY when the SWP can deliver at least 36.5% of contracted allocations.

Water Demand

Morro Bay Water Demand			
Water Provider	Source	2010-2011	2011-2012
City of Morro Bay	Subsurface Flow - potable	87 AFY	15 AFY
	BWRO Subsurface**	*	76 AFY
	State Water	1,136 AFY	1,149 AFY
TOTAL		1,223 AFY	1,240 AFY

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012 (Production)

Notes: * No data received

** BRWO: Brackish Water Reverse Osmosis

Historical Water Use

Over the past 10 years, water use (production) in Morro Bay has ranged from a low of 1,223 in 2010-11 to a high of 1,475 in 2003-04 as shown in the following table.

Morro Bay Total Water Use AFY (fiscal year)									
2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012
1,423	1,475	1,400	1,384	*	1,420	1,369	1,317	1,223	1,240

Source: Water Provider Water System Usage forms (Production)

Notes: * No data received

Water Rates

The average single-family residential water use and rates are shown in the table below. For consistency in reporting, water use calculations are reflected as gallons per year. Dollar figures for water bills reflect monthly amounts and are not necessarily representative of billing cycles.

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Morro Bay Water Rate Data (Average Single-Family Residence)						
Water Provider	Rate Structure	Population Served	Water Use (Avg. Annual)		Water Bill (\$/month)	
			2011	2012	2011	2012
City of Morro Bay	tiered	10,234	44,521 gals	46,316 gals	\$66.96	\$66.96

Source: Water System Usage forms: July 2010 - June 2011; July 2011 – June 2012

Notes: * Data not provided

Water System

No water system issues have been reported for Morro Bay.

Wastewater Treatment

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 through 2014.

The City and the Cayucos Sanitary District are in the process of upgrading the wastewater treatment plant to be in compliance with state and federal regulations and provide tertiary treatment. At that level of treatment, the wastewater effluent could be recycled to augment the City's water supply. Facility planning and CEQA have been completed. Construction was originally anticipated for 2012; however, the Coastal Development Permit (CDP) issued by the City of Morro Bay was appealed to the California Coastal Commission (CCC) in January 2011. Both the Cayucos Sanitary District and the City of Morro Bay have asked the Commission to withdraw the project.

Operational Issues

None Reported.

Capacity

Morro Bay's sewer facilities operate at 56% of capacity. The proposed plant upgrade will provide tertiary filtration capacity of 1.5 million gallons per day (average dry weather flow—ADWF). The new plant will have less rated capacity based on extensive population projections developed for this project. All documents related to the upgrade, including the Facility Plan, are available on the City of Morro Bay website.

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Morro Bay Wastewater				
Average Daily Plant Capacity (mgd)	Avg Dry Weather Flow (mgd)	Operational % of Capacity	Expansion Plans	New Capacity After Expansion (mgd)
2.06	1.154	56%	Yes	1.5

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VI. GLOSSARY

Acre-feet (AF): A volume of water that will cover one acre of land one foot deep. It is equal to approximately 325,900 gallons.

Air basin: A land area with generally similar meteorological and geographic conditions throughout. To the extent possible, air basin boundaries are defined by the California Air Resources Board along political boundary lines and include both the source and receptor areas.

Buildout: Development of land to its full potential or theoretical capacity as permitted under current or proposed planning or zoning designations.

Community services district (CSD): A geographic subarea of a city or county used for the planning and delivery of parks, recreation, and other human services based on an assessment of the service needs of the population in that subarea. A CSD is a taxation district with independent administration.

Complete Communities Survey: A study that identifies what infrastructure and public facilities will be needed in the future in San Miguel, Templeton, Oceano, and Nipomo; how much they will cost; and how to fund them. Examples of infrastructure and public facilities are water, sewer and drainage systems; roads; sidewalks; trails; parks; and public buildings. This study will help the County and the community services districts plan for improvements to the communities.

County services area (CSA): A CSA is authorized to provide a wide variety of services, including extended police protection, fire protection, park and recreation facilities, libraries, low power television and translation facilities and services. CSAs also may provide other basic services such as water and garbage collection if they are not already performed on a countywide basis.

Fiscal year (FY): In San Luis Obispo County, fiscal year refers to the time period July 1 through June 30.

Greenhouse gas emissions: Gases which cause heat to be trapped in the atmosphere, warming the earth. Greenhouse gases are necessary to keep the earth warm, but increasing concentrations of these gases are implicated in global climate change. Greenhouse gases include all of the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The majority of greenhouse gases come from natural sources, although human activity is also a major contributor.

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Groundwater basin: An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

LOS (RMS): Level of severity. The RMS uses three levels of alert (called levels of severity I, II and III) to identify potential and progressively more immediate resource deficiencies. The alerts are intended to occur while sufficient time is available for avoiding or correcting a shortage before a crisis develops. LOS for resources are reported to the Board of Supervisors every two or more years.

LOS (traffic): Level of service. A measure of traffic conditions at intersections and on roadways ranging from LOS A (representing free flowing conditions with little or no delay) to LOS F (representing congested conditions with long delays and lengthy vehicle queues).

Mutual water company: According to the California Public Utilities Code, a mutual water company is “any private corporation or association organized for the purposes of delivering water to its stockholders and members at cost, including use of works for conserving, treating and reclaiming water.”

Nipomo Mesa Management Area (NMMA): The NMMA lies between the Northern Cities Management Area to the north and the Santa Maria Valley Management Area to the south. The goal of the management area is to promote monitoring and management practices so that present and future water demands are satisfied without causing long-term damage to the underlying groundwater resource.

Nipomo Mesa Water Conservation Area (NMWCA): See NMMA.

Non-attainment: The condition of not achieving a desired or required level of performance. The term is frequently used in reference to air quality.

Northern Cities Management Area (NCMA): The Northern Cities Management Area (NCMA) represents the northernmost portion of the Santa Maria Groundwater Basin. Adjoining the NCMA to the southeast is the Nipomo Mesa Management Area (NMMA), while the Santa Maria Valley Management Area encompasses the remainder of the groundwater basin.

Parks (the following definitions are from the Parks and Recreation Element of the County General Plan)

Regional: San Luis Obispo provides two types of Regional Parks: Urban and Rural. Urban Regional Parks tend to be located near an urban area. Because of their location closer to population center, these parks may include some

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neighborhood and community park components as well as recreation generally associated with a Rural Regional Park (such as camping, trails and nature appreciation). Urban Regional Parks within San Luis Obispo County are generally larger than 25 acres. Examples of Urban Regional Parks in San Luis Obispo County include El Chorro and Biddle Parks. Rural Regional Parks tends to be located in a more remote area, i.e., away from urban development and population centers. These parks provide nature oriented recreation as well as items such as swimming, fishing, and boating. Generally a large proportion of a Rural Regional Park is set aside for conservation and resource management (natural areas). These parks are typically over 1,000 acres and tend to serve the county's population as well as a tourist population. Within San Luis Obispo County, examples of Rural Regional Parks are Santa Margarita Lake Regional Park and Lopez Lake Recreation Area.

Community: Community parks are roughly between 20 and 25 acres and provide recreation facilities that serve not only the local community but also, in some cases, visitors from outside the city or county. For example, a community park, which includes numerous sports fields, will draw people from outside the community for tournament play. Typical facilities might include a skate park, sports fields (football, baseball, soccer, and softball), a swimming pool, a sufficient number of tennis courts for tournament play, group picnic areas, and/or a community center. Although community parks tend to be more active in nature and/or provide a greater mix of active recreation, they may also contain some passive uses such as trails, scenic overlooks, benches and nature appreciation.

Neighborhood: Neighborhood parks typically serve nearby populations consisting of one or more neighborhoods. According to National Recreation and Parks Association standards, a neighborhood park may range in size from roughly five to ten acres. In general, neighborhood parks are within walking distance from the people they are primarily intended to serve, i.e. one mile or less. Neighborhood parks usually include passive recreation as well as some active recreation. Typical facilities might include children's play equipment, a court game (such as basketball, tennis or handball), a turf area and individual picnic areas.

Particulate matter (PM10) and fine particulate matter (PM2.5): Fine mineral, metal, smoke, soot, and dust particles suspended in the air. While particulate matter also has many natural sources, human derived sources such as vehicle exhaust, road dust, mineral quarries, grading, demolition, agricultural tilling, and burning are major contributors to exceedances of air quality standards in our county. In addition to reducing visibility, particulate matter can lodge in the lungs and cause serious, long-term respiratory illness and other health problems. The smaller the size of the particle, the deeper it can penetrate into the lungs, and the more difficult it is to expel.

GLOSSARY

Recycled water, reclaimed water, treated sewage effluent water, or greywater: Treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation; not intended for human consumption.

Regional Transportation Plan (RTP): The 2010 Regional Transportation Plan-Preliminary Sustainable Communities Strategy (2010 RTP-PSCS) is a comprehensive plan guiding transportation policy for the region and makes recommendations concerning improvements to the existing transportation network of highways, transit, air and water, rail and bicycling. The RTP is required by the California Transportation Commission (CTC) to be updated every five years by SLOCOG.

Resource Management System (RMS): The RMS is identified in the County General Plan as a tool to determine where services and resources are adequate to support new development. The RMS establishes “levels of severity” (see LOS) to identify projected or realized shortfalls of resources.

Resource capacity study (RCS): Special studies of resource usage when ordered by the Board of Supervisors upon its determination that a new level of severity has been reached through the advisory process described in Chapter 3 of the Framework for Planning.

SLO Council of Governments (SLOCOG): The San Luis Obispo Council of Governments (SLOCOG) is an association of local governments in the San Luis Obispo County Region. Its members include all 7 cities (Arroyo Grande, Atascadero, Grover Beach, Morro Bay, Paso Robles, Pismo Beach, and San Luis Obispo), as well as unincorporated areas of San Luis Obispo County. The central purpose of SLOCOG is to examine common regional problems and suggest solutions. SLOCOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the region’s long-range transportation plan, SLOCOG plans regional public transit and other alternative methods of transportation.

Tiered rate structure: Water rates that increase per unit charges in tiers so that using large amounts of water costs more per unit than using less water. Tiered water rates decrease the use of water.

Unincorporated communities: Urban areas that are not governed by a local government board and instead are governed by the county government. Examples in San Luis Obispo County include Templeton, Nipomo, Cambria, Cayucos, Los Osos, Avila Beach and San Miguel.

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Vehicle-miles traveled (VMT): A key measure of overall street and highway use. Reducing VMT is often a major objective in efforts to reduce vehicular congestion and achieve regional air quality goals.

Water, demand: For purposes of the Resource Management System (RMS), water demand is the total amount of water measured in a fiscal year that is produced by a water system (production). Water demand is taken from the Water System Usage forms, Section 2, Total Amount of Water Into the System (Production), completed by water providers and submitted to the County Public Works Department.

Water, supply: The amount of water defined by the water provider, the 2012 County Master Water Report and/or Technical Group Monitoring Reports as being available to the provider for distribution to its customers.

Water Resource Advisory Committee (WRAC): The WRAC is a 34-member advisory body to the Board of Supervisors. The purpose of the WRAC is: 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 and to recommend methods of financing water resources programs.