

4.12 WATER RESOURCES

This section analyzes the potential water resource impacts associated with the proposed Agricultural Cluster Subdivision Program. The purpose of the analysis is to consider potential impacts to water supplies as a result of the Agricultural Cluster Subdivision Program. This analysis is based primarily on County Water Planning Areas (WPAs), comparing these to anticipated water demand generated by future development resulting from agricultural cluster subdivisions. Areas at a Level of Severity III for water resources that could experience substantial future development include WPA-6 (Nipomo), WPA-3 (Los Osos/Morro Bay) and WPA-1 (North Coast). Since the publication of the Notice of Preparation (NOP) for this Environmental Impact Report (EIR), the Board of Supervisors has also certified a Level of Severity III for the Paso Robles Groundwater Basin (PRGWB)¹.

4.12.1 Setting

a. Master Water Plan and Water Planning Areas (WPAs). The San Luis Obispo County Flood Control and Water Conservation District is the county's primary agency tasked with managing water resources. The County first adopted a Master Water Plan (MWP) in 1972. The present Master Water Plan was adopted in 1998. The flood control and water conservation district is presently in the process of developing a new Master Water Plan to address the changing characteristics of the County's water resources. A draft of the new MWP was circulated in March 2011. As of the time of the publication of this DEIR, the Board of Supervisors has not yet adopted an updated MWP. As a result, this analysis focuses on the "official" 1998 MWP and incorporates supplemental information from the "unofficial" March 2011 draft.

The development of the revised MWP is being monitored by the Water Resources Advisory Committee (WRAC), which is an advisory body commissioned by the Board of Supervisors. The WRAC consists of appointed representatives from each of the County's supervisorial districts, cities, and community services districts which provide water services. Additional appointments are made to represent private water suppliers and agricultural, environmental, development, and institutional interests.

The Master Water Plan segments the County into various Water Planning Areas (WPAs). In contrast to the planning areas defined in the County's General Plan, WPAs have been designated with respect to watersheds and other hydrologic features. As such, WPAs are a more practical tool for geographically assessing water demand, agricultural water needs, sources of supply, and other pertinent hydrologic features. The present WPA boundaries are shown in Figure 4.12-1.

The March 2011 Draft MWP alters the boundaries of the WPAs to more accurately reflect hydrology. These alterations are based on new information about the County's hydrology which has emerged since the 1998 MWP was adopted. One example of a major change is with respect to WPA 9, covering a large portion of the north county. This WPA has been segmented into five separate WPAs (WPAs 11 through 15) in the revised MWP. The proposed WPA boundaries, which have not yet been officially adopted, are shown in Figure 4.12-2.

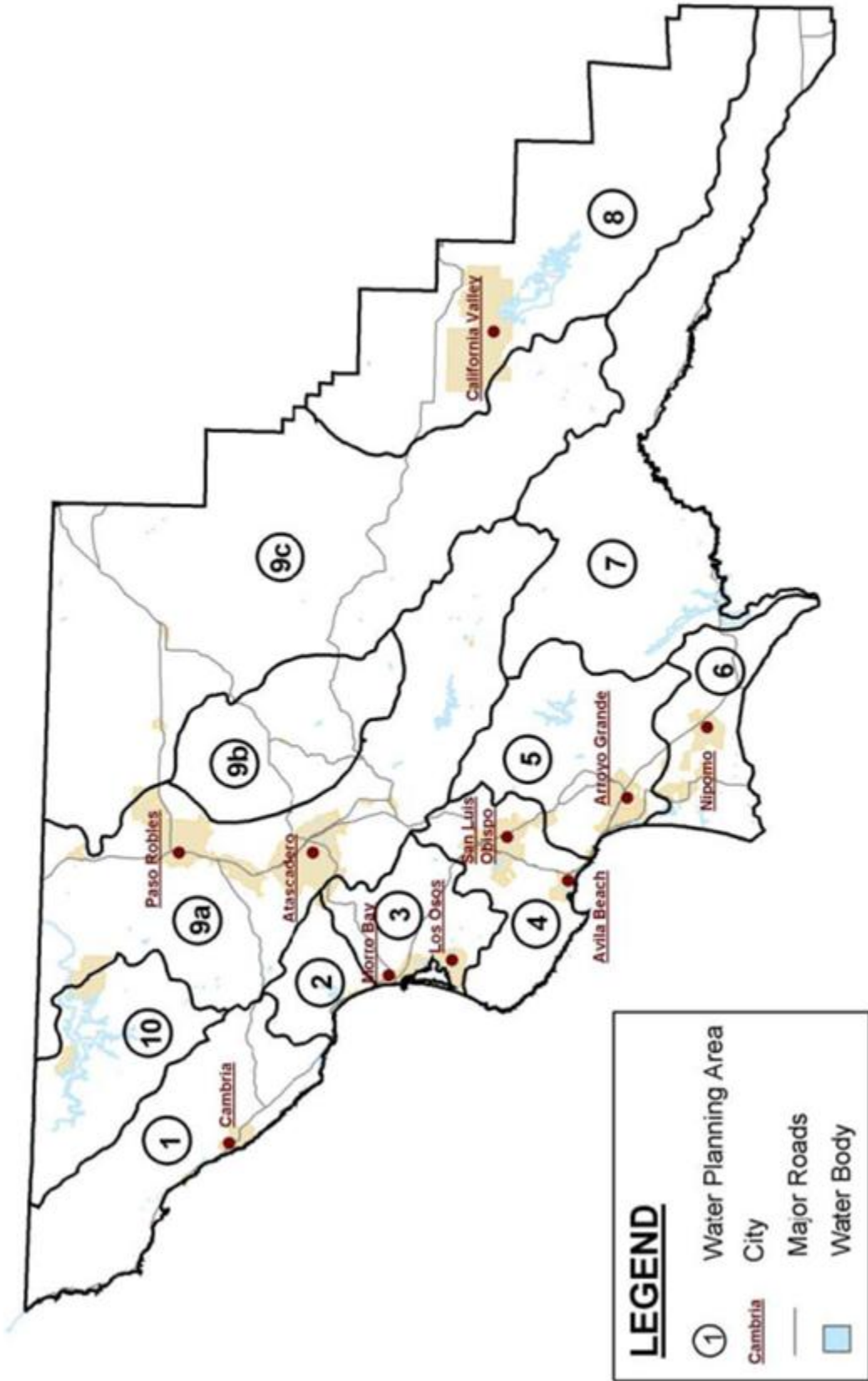
¹ The PRGWB comprises portions of WPAs 9A, 9B, and 9C. The PRGWB is more accurately represented by the proposed WPA 14, with the Atascadero sub-basin (Level of Severity I) being represented by proposed WPA 13 (refer to Figure 4.12-2)



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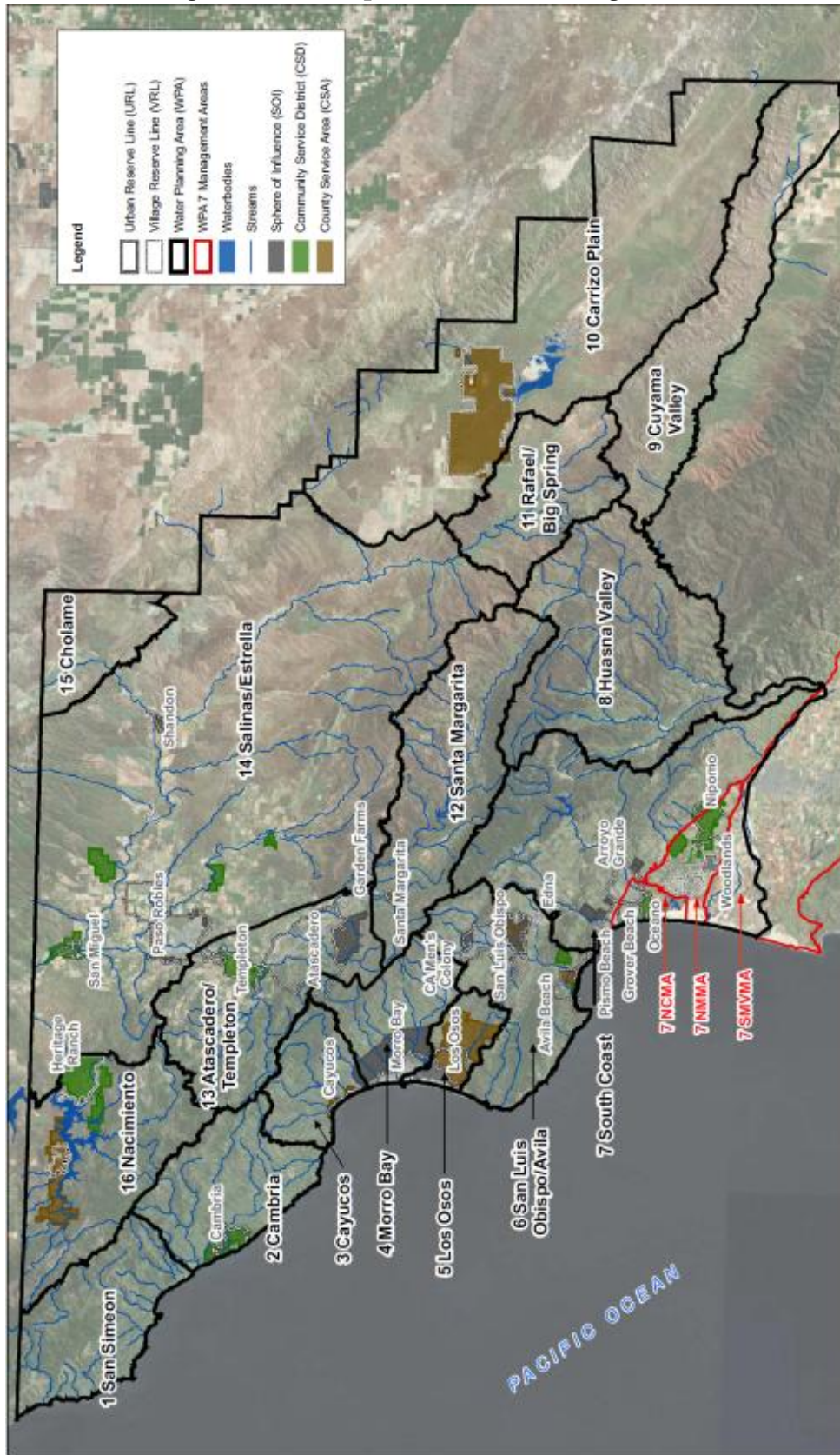
Figure 4.12-1: Current Water Planning Areas



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Figure 4.12-2: Proposed Water Planning Areas



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Table 4.12-1: Existing Water Supply and Projected Demand

Water Planning Areas	County Planning Areas	Quantity of Water Resources (af-yr) ¹				Demand ²	Balance [Deficiency]	Level of Severity (LOS) ³
		Surface	Groundwater	Reclaimed	Imported			
WPA #1: North Coast	North Coast Planning Area	4,737	5,664	0	0	U = 2,770 A = 540 R = 790	6,300	SPL = III SYS = III
WPA #2: Cayucos	Estero Area Plan	2,224	1,191	0	0	U = 750 A = 850 R = 680	1,170	SPL = III SYS = II (MRMWC/PRBMWC) SYS = III (CSA 10A)
WPA #3: Los Osos/ Morro Bay	Estero Area Plan	5,262	3,700	275	1,313	U = 6,930 A = 7,490 R = 780	[6,240]	SPL = III SYS = III
WPA #4: SLO/Avila	San Luis Bay – Coastal Area Plan, San Luis Obispo Inland Area Plan,	8,073	5,900	0	100	U = 14,490 A = 6,060 R = 1,100	[7,680]	San Luis Obispo Creek Basin: SPL = I
WPA #5: Five Cities	San Luis Bay – Coastal Area Plan, San Luis Obispo Bay Inland Area Plan, Huasna – Lopez Inland Area plan	10,657	9,320	0	1990	U = 11,990 A = 16,230 R = 3,940	[12,160]	None
WPA #6: Nipomo Mesa	South County Coastal/Inland Area Plans	0	19,900	0	0	U = 3,900 A = 22,540 R = 3,080	[9,620]	Nipomo Mesa Conservation Area: SPL = III
WPA #7: Cuyama	Los Padres Inland Area Plan	0	8,000	0	0	U = 0 A = 20,520 R = 490	[13,010]	Cuyama Valley Basin: SPL = III
WPA #8: California Valley	Shandon-Carrizo Area Plan	0	600	0	0	U = 0 A = 210 R = 1,090	[700]	None
WPA #9a: Salinas	Salinas River Area Plan Las Pilitas Area Plan,	3,693	48,000	0	0	U = 41,120 A = 31,820 R = 7,440	[28,690]	Paso Robles Basin: SPL = III Atascadero Sub-Basin: SPL = I San Miguel SYS = II Santa Margarita SYS = III
WPA #9b: Creston	El-Pomar/Estrella Planning Area	263		0	0	U = 0 A = 5,750 R = 6,230	36,280	Paso Robles Basin: SPL = III
WPA #9c: Shandon	Shandon/Carrizo Inland Planning Areas	138		0	0	U = 0 A = 27,190 R = 1,070	19,880	Paso Robles Basin: SPL = III
WPA #10: Nacimiento	Nacimiento, Adelaida Inland Planning Area	1,200	0	0	0	U = 0 A = 0 R = 3,020	[1,820]	None

¹ Estimated urban water demands are based on General Plan build-out projections, which is beyond the 20 year time frame required by Integrated Regional Water Management guidelines.

² Estimate rounded to nearest 10 ac-ft

³ San Luis Obispo 2009 Annual Resources Summary Report LOS Recommendation for water supply (SPL) and water system (SYS). Ratings are applies to County Planning Areas. LOS I = projected water demand over the next nine years equals or exceeds the estimated dependable supply, LOS II = projected water demand over the next seven years equals or exceeds the estimated dependable supply, LOS III = the existing water demand equals or exceeds the dependable supply

Sources: Master Water Plan (1998); Water Supply in the Nipomo Mesa Area, SLO County, November 2004., Paso Robles Groundwater Basin Resource Capacity Study (January 2011).



Table 4.12-2: Existing Demand by Proposed Water Planning Area²

Existing WPA	Proposed WPA	Planning Area	Category	Existing Demand	Projected Demand		
WPA #1 North Coast	WPA #1 San Simeon	North Coast	Urban	108	213-224		
			Agricultural	70	10-60		
			Rural	20	50		
			Total (U+A+R)	198	273-334		
			Environmental	72,980			
	WPA #2 Cambria	North Coast	Urban	815	987-1,009		
			Agricultural	830	840-1,840		
			Rural	100	190-220		
			Total (U+A+R)	1,745	2,017-3,069		
			Environmental	51,460			
WPA #2 Cayucos	WPA #3 Cayucos	Estero	Urban	432	609-641		
			Agricultural	700	550-1,020		
			Rural	80	130-140		
			Total (U+A+R)	1,212	1,289-1,201		
			Environmental	26,160			
WPA #3 Los Osos / Morro Bay	WPA #4 Morro Bay	Estero	Urban	3,112	3,460-3,532		
			Agricultural	2,060	1,790-2,620		
			Rural	120	200-220		
			Total (U+A+R)	5,292	1,289-1,801		
			Environmental	27,880			
	WPA #5 Los Osos	Estero	Urban	2,043	2,727-2,870		
			Agricultural	3,290	2,750-3,770		
			Rural	20	20		
			Total (U+A+R)	5,353	5,497-6,660		
			Environmental	7,040			
WPA #4 San Luis Obispo / Avila	WPA #6 San Luis Obispo / Avila	San Luis Bay Inland; San Luis Bay Coastal; San Luis Obispo	Urban	7,871	10,787- 11,355		
			Agricultural	3,610	2,810-4,120		
			Rural	450	610-660		
			Total (U+A+R)	11,931	14,207- 16,135		
			Environmental	33,030			
WPA #5 Five Cities	WPA #7 South Coast	San Luis Bay Inland; San Luis Bay Coastal; South County Inland; South County Coastal; Huasna / Lopez	Urban	410	458-482		
			Agricultural	19,920	16,610- 23,830		
			Rural	1,480	1,990-2,160		
			Northern Cities Management Area	11,326	13,142- 13,854		
			Nipomo Mesa Management Area	12,600	17,984		
Santa Maria Valley Management Area			25,540	25,540			
Total (U+A+R)			71,276	83,850			
Environmental			32,960				
WPA #7 Cuyama			WPA #8 Huasna Valley	Huasna/Lopez; Los Padres; Shandon/Carrizo	Urban	0	0
					Agricultural	1,550	2,060-2,820
	Rural	90			360-450		
	Total (U+A+R)	1,640			2,420-3,270		
	Environmental	25,020					
	WPA #9 Cuyama Valley	Shandon/Carrizo	Urban	0	0		
			Agricultural	28,870	25,240- 32,410		

² Source: Fain, Annika (January 11, 2010). *San Luis Obispo County Water Demand Analysis*. Document produced as part of the County Master Water Plan Update. San Francisco, Calif.: ESA



Existing WPA	Proposed WPA	Planning Area	Category	Existing Demand	Projected Demand	
			Rural	10	80-100	
			Total (U+A+R)	28,880	25,320-32,510	
			Environmental	Undetermined		
WPA #8 California Valley	WPA #10 Carrizo Plain	Shandon/Carrizo	Urban	0	0	
			Agricultural	800	680-890	
			Rural	210	9,610-12,740	
			Total (U+A+R)	1,010	10,290-13,630	
			Environmental	Undetermined		
WPA #9a Salinas	WPA #12 Santa Margarita	Salinas River; Las Pilitas; Los Padres	Urban	1,819	5,881-6,190	
			Agricultural	1,770	1,720-2,680	
			Rural	240	450-520	
			Total (U+A+R)	3,829	8,051-9,390	
			Environmental	32,850		
	WPA #13 Atascadero / Templeton	Salinas River; Adelaida	Urban	8,538	9,359-9,852	
			Agricultural	10,620	9,740-14,600	
			Rural	1,480	1,810-1,930	
			Total (U+A+R)	20,638	20,909-26,382	
			Environmental	41,010		
	WPA #9b Creston	WPA #14 Salinas / Estrella	Salinas River; El Pomar/Estrella; Shandon/Carrizo	Urban	8,126	11,634-14,543
				Agricultural	67,610	60,740-86,820
Rural				3,590	5,570-6,230	
Total (U+A+R)				79,326	77,944-107,593	
			Environmental	Undetermined		
WPA #9c Shandon	WPA #11 Rafael / Big Spring	Los Padres	Urban	0	0	
			Agricultural	0	0	
			Rural	0	470-620	
				Total (U+A+R)	0	470-620
				Environmental	Undetermined	
				Urban	0	0
WPA #10 Nacimiento	WPA #16 Nacimiento	Nacimiento; Adelaida	Agricultural	80	60-80	
			Rural	10	150-190	
			Total (U+A+R)	90	210-270	
			Environmental	Undetermined		
						Urban
			Agricultural	3,860	4,740-7,120	
			Rural	280	730-880	
			Total (U+A+R)	4,759	6,457-9,039	
			Environmental	108,390		



Table 4.12-3: Existing Supply by Water Basin³

Current WPA	Proposed WPA	Planning Area	Basin	Users	Yield	Quality	Availability Constraints													
							Poor Basin Recharge During Drought	Seawater Intrusion	Imposed Limitations on Pumping	Low Groundwater Storage Capacity	High Susceptibility to Drought Impacts	Environmental Needs (e.g. riparian/ steelhead)	Elevated Nitrate Levels	Declining Groundwater Levels	Subsidence	Inconsistent Availability - Fractured Rock Reservoirs	At or Approaching Perennial Safe Yield			
WPA #1 North Coast	WPA #1 San Simeon	North Coast	San Carpofaro Valley	Agriculture, rural residential; no community water suppliers	No estimates available	No information available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			Arroyo de la Cruz Valley	Agriculture, rural residential; no community water suppliers	≈ 1,244 AFY	Dissolved solids: 211-381 mg/l	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			Pico Creek Valley	San Simeon CSD and Hearst Ranch	≈ 120 AFY	Seawater intrusion; dissolved solids: 380 mg/l	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	WPA #2 Cambria	North Coast	San Simeon Valley	Cambria CSD and overlying users	≈ 1,040 AFY	Dissolved solids: 46-2,210 mg/l (average: 413 mg/l)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			Santa Rosa Valley	Cambria CSD and overlying users	≈ 2,260 AFY	Dissolved solids: 680 mg/l; chloide concentration: 30-270 mg/l	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Villa Valley	Agriculture, rural residential; no community water suppliers	≈ 1,000 AFY	Dissolved solids: 500 mg/l	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WPA #2 Cayucos	WPA #3 Cayucos	Estero	Cayucos Valley	Bella Vista Mobile Home Park and overlying users	≈ 350 AFY	Dissolved solids: 500 mg/l	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			Old Creek Valley	Cayucos Area Water Organization (CSA 10A, Morro Rock MWC; Paso Robles Beach MWC); Cayucos Cemetery District	≈ 600 AFY	Dissolved solids: 440 mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			Toro Valley	Chevron Estero Marine Terminal and overlying users	≈ 532 AFY	Dissolved solids: 400-700 mg/l; chloride concentrations: 129 mg/l	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

³ Source: Tanaka, Steve (March 29, 2010). *Technical memorandum no. 2: Task C.3 Water Supply Inventory and Assessment – Description of Water Resources*. Document produced as part of the County Master Water Plan Update. San Luis Obispo, Calif.: Wallace Group.



Current WPA	Proposed WPA	Planning Area	Basin	Users	Yield	Quality	Availability Constraints											
							Poor Basin Recharge During Drought	Seawater Intrusion	Imposed Limitations on Pumping	Low Groundwater Storage Capacity	High Susceptibility to Drought Impacts	Environmental Needs (e.g. riparian/ steelhead)	Elevated Nitrate Levels	Declining Groundwater Levels	Subsidence	Inconsistent Availability - Fractured Rock Reservoirs	At or Approaching Perennial Safe Yield	
WPA #3 Los Osos / Morro Bay	WPA #4 Morro Bay	Estero	Morro Valley	City of Morro Bay; Morro Bay power plant; cement plant; small mobile home park water system; overlying users	≈ 1500 AFY	Dissolved solids: 400-800 mg/l and as high as 1,000 mg/l.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Chorro Valley	City of Morro Bay; County; State Parks; Cal Poly; National Guard; California Men's Colony; overlying users	≈ 2,210 AFY	Dissolved solids: 500-700 mg/l	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	WPA #5 Los Osos	Estero	Los Osos Valley (LOS III)	Golden State Water Company; S&T Mutual Water Company; Los Osos CSD	≈ 3,150 to 3,650 AFY	Dissolved solids: 200 – 400 mg/l, but as high as 950 mg/l in some areas.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WPA #4 San Luis Obispo / Avila	WPA #6 San Luis Obispo / Avila	San Luis Obispo	San Luis Obispo Valley <i>San Luis Valley Subbasin</i>	City of San Luis Obispo; Cal Poly; San Luis Coastal USD; Chevron; ≈ 24 small water systems; overlying users	≈ 2,000 AFY (6,000 AFY total for basin)	Dissolved solids: 320-640 mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		San Luis Bay	<i>Avila Valley Subbasin</i>	Mutual Water Companies: Avila Valley and San Miguelito; overlying users	No estimates available	Dissolved solids: ≈ 700 mg/l	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WPA #5 Five Cities	WPA #7 South Coast	San Luis Obispo; San Luis Bay	<i>Edna Valley Subbasin</i>	Golden State Water Company; San Luis Obispo Country Club; small water systems; overlying users	≈ 4,000 AFY	Dissolved solids: 500-800 mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		San Luis Bay	<i>Pismo Creek Valley Subbasin</i>	Overlying agricultural users	≈ 200 AFY	Dissolved solids: ≈ 620 mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		San Luis Bay; Huasna/ Lopez	<i>Arroyo Grande Valley Subbasin</i>	Small water systems; overlying users	No estimates available	Poor water quality is a constraint in some areas; dissolved solids as high as 1,500 mg/l.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		San Luis Bay	<i>Northern Cities Management Area</i>	Cities of Pismo Beach, Arroyo Grande, and Grover Beach; Oceano CSD; small water systems; Lucia Mar USD; overlying users	≈ 9,500 AFY	Poor water quality is a constraint in some areas; dissolved solids: 500 – 1,250 mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Agricultural Cluster Subdivision Program EIR
Section 4.12 Water Resources

Current WPA	Proposed WPA	Planning Area	Basin	Users	Yield	Quality	Availability Constraints										
							Poor Basin Recharge During Drought	Seawater Intrusion	Imposed Limitations on Pumping	Low Groundwater Storage Capacity	High Susceptibility to Drought Impacts	Environmental Needs (e.g. riparian/ steelhead)	Elevated Nitrate Levels	Declining Groundwater Levels	Subsidence	Inconsistent Availability - Fractured Rock Reservoirs	At or Approaching Perennial Safe Yield
WPA #6 Nipomo Mesa		South County	<i>Nipomo Valley Subbasin</i>	Overlying users. (Nipomo CSD wells tap from deeper fractured rock reservoirs)	No estimates available	Poor water quality is a constraint in some areas; dissolved solids: 750 to 1,300 mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		South County	<i>Nipomo Mesa Management Area (LOS III)</i>	Golden State Water Company; Rural Water Company; Woodlands; Conoco Philips; Nipomo CSD; Lucia Mar USD; small water systems; overlying users	≈ 7,300 AFY	Dissolved solids: ≈ 500 mg/l, but up to 1,000 mg/l in some areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		South County	<i>Santa Maria Valley Management Area</i>	Small public water system; overlying users	≈ 11,000 – 13,000 AFY (SLO County portion)	Dissolved solids: 750 – 1,300 mg/l	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WPA #7 Cuyama	WPA #8 Huasna Valley	Huasna / Lopez	Huasna Valley	Overlying users	No estimates available	No information available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	WPA #9 Cuyama Valley	Shandon / Carrizo	<i>Cuyama Valley (LOS III)</i>	Oil field operators; overlying users	≈ 10,000 AFY (includes SLO and SB Counties)	Poor water quality is a constraint in some areas; dissolved solids: 755 to 1,000 mg/l and as high as 1,750 mg/l; high salinity and nitrate content is also reported	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
WPA #8 California Valley	WPA #10 Carrizo Plain	Shandon / Carrizo	Carrizo Plain	Atascadero USD; overlying users; two proposed solar farms	≈ 600 AFY	Poor water quality is a significant limitation; water quality varies greatly from 161 to 94,750 mg/l; groundwater in some areas is brackish or has high mineral content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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Current WPA	Proposed WPA	Planning Area	Basin	Users	Yield	Quality	Availability Constraints										
							Poor Basin Recharge During Drought	Seawater Intrusion	Imposed Limitations on Pumping	Low Groundwater Storage Capacity	High Susceptibility to Drought Impacts	Environmental Needs (e.g. riparian/ steelhead)	Elevated Nitrate Levels	Declining Groundwater Levels	Subsidence	Inconsistent Availability - Fractured Rock Reservoirs	At or Approaching Perennial Safe Yield
WPA #9a Salinas	WPA #12 Santa Margarita	Salinas River	Santa Margarita Valley	County Service Area 23; overlying users	≈ 400-600 AFY	Dissolved solids: 400-490 mg/l; concerns regarding high E.coli and fecal coliform due to town septic systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Las Pilitas	Rinconada Valley	Overlying users	No estimates available	No information available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Las Pilitas	Pozo Valley	Small water systems; overlying users	≈ 1,000 AFY	Dissolved solids: 287 – 676 mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WPA #9b Creston	WPA #13 Atascadero / Templeton	Salinas River	Paso Robles Basin <i>Atascadero Subbasin</i>	Atascadero Mutual Water Company; Templeton CSD; Garden Farms Water District; overlying users	≈ 16,400 AFY (subbasin only)	Dissolved solids: 317-975 mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WPA #9c Shandon	WPA #14 Salinas / Estrella	Salinas River	Paso Robles Basin	City of Paso Robles; Templeton CSD; San Miguel CSD; County Service Area 16 (Shandon); overlying users	≈ 97,700 AFY (includes Atascadero subbasin)	Potential issues: increasing chlorides near Creston; increasing dissolved solids near San Miguel; increasing nitrates near Paso Robles and San Miguel	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	WPA #11 Rafael / Big Spring	Los Padres	Rafael Valley	Overlying agricultural users	No estimates available	No information available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Los Padres		Big Spring Area	Overlying agricultural users	No estimates available	No information available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WPA #15 Cholame Valley	Shandon / Carrizo	Cholame Valley	Small water systems; overlying users	No estimates available	No specific data; however known concerns include high concentrations of dissolved solids, chlorides, sulfates, and boron	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WPA #10 Nacimiento	WPA #16 Nacimiento	Nacimiento; Adelaida	<i>No Basins</i>														



b. Water Supply. The following discussion of county water supply has been adapted from the San Luis Obispo County Master Water Plan, as augmented by additional information in the March 2011 Draft Master Water Plan, and other specific documents generated to consider capacity of water resources in specific basins⁴. County water supply is divided among three main sectors: groundwater, surface impoundments, and allotments of State water provided through the State Water Project.

The Master Water Plan is presently being updated. Supply figures representing the newly proposed (though not adopted) Water Planning Areas (WPAs) are provided in Table 4.12-3. While these numbers are more up-to-date than those provided in the 1998 Master Water Plan, they do not necessarily translate well to the existing WPA boundaries, which have been altered as part of the update. As such, the water demand estimates identified in the 1998 Master Water Plan for the current WPAs are provided separately in Table 4.12-1. This table should be cross-referenced with the more current data in Table 4.12-3 in order to more thoroughly understand existing water supply characteristics.

Water Planning Areas within the Project Area

The following paragraphs describe the Water Planning Areas within the proposed project area. WPA 7 (Cuyama), WPA 8 (California Valley), and WPA 10 (Nacimientos) are located outside of the project area:

WPA 1 – North Coast (North Coast Planning Area). Groundwater basins in WPA 1 include the San Carpoforo, Arroyo de la Cruz, Pico, San Simeon, Santa Rosa, and Villa basins. Estimates of groundwater availability indicate an annual yield of approximately 5,664 acre-feet (AFY). In addition to groundwater supplies from several coastal basins, WPA 1 benefits from stream flows with an estimated 4,737 AFY in appropriated stream flows. Approximately one-third of the appropriated flows are along the San Carpoforo Creek, half from San Simeon Creek, and the remainder from Santa Rosa Creek. Cambria CSD and the Hearst Corporation hold significant water rights in WPA 1.

WPA 2 – Cayucos (Portions of Estero and Adelaina Planning Areas). Three separate suppliers supply domestic water to the community of Cayucos: Morro Rock Mutual Water Company, Paso Robles Beach Water Company, and County Service Area #10. These suppliers share a common source of supply (Whale Rock Reservoir) and operate a common water treatment plant. In addition, WPA 2 includes the San Geronimo, Cayucos, Old Creek, and Toro Basins. These basins are used principally for local domestic and agricultural purposes. Old Creek Basin is the small alluvial deposit downstream of Whale Rock Dam which is also used by Cayucos water suppliers. Estimates of groundwater availability indicate a yield of approximately 1,191 acre-feet with a surface water supply of 2,224 acre-feet (Master Water Plan; slocountywater.org, 2009). It should be noted that this estimate comes from data published in 1958.

WPA 3 – Los Osos/Morro Bay (Portions of Estero Planning Area). Three groundwater basins (Morro, Chorro, and Los Osos) provide water to municipal, agricultural, recreational, institutional and local domestic users within WPA 3. While these three basins have been

⁴ Specific focus has been given to the Resource Capacity Study for the Paso Robles Groundwater Basin, adopted by the Board of Supervisors on February 1, 2011 and on the document *Water Supply in the Nipomo Mesa Area* (SLO County, November 2004).



grouped together within this planning area, the three basins are very different in terms of their management issues, including seawater intrusion, high nitrate concentrations, and imported water recharge (Master Water Plan, 1998). Estimates of groundwater availability indicate an annual yield of approximately 3,700 AFY (Master Water Plan, 1998). Surface supplies to WPA 3 include water from Whale Rock Reservoir, seawater desalination, State Water supplies, and stream flow. Non-groundwater supply is estimated at approximately 5,262 AFY (Master Water Plan, 1998).

WPA 4 - San Luis Obispo/Avila (San Luis Obispo, San Luis Bay Coastal, and San Luis Bay Inland Planning Areas). The primary groundwater basin that provides water to WPA 4 is the San Luis Obispo Creek groundwater basin. Estimates of groundwater availability indicate an annual sustained yield of approximately 5,900 acre-feet (Master Water Plan, 1998). Surface supplies to WPA 4 include water from Salinas and Whale Rock Reservoirs (principally supplying the City of San Luis Obispo), Lopez Reservoir (to Avila Beach) plus State Water supplies (to Avila CSD, Avila Valley MWC, and others). A seawater desalination plant is operated at the Diablo Canyon Nuclear Power Plant to satisfy high quantity process water needs at the plant. Non-groundwater supply is estimated at approximately 8,073 AFY (Master Water Plan, 1998).

WPA 5 - Five Cities (Portions of San Luis Bay Inland, Huasna/Lopez, and South County Inland Planning Areas). The municipal providers in the Five Cities area (Arroyo Grande, Pismo Beach, Oceano CSD, and Grover Beach) are all on groundwater wells and the Lopez system. The systems share common service area boundaries that do facilitate emergency interconnections; several system interties are in place today. Additionally, Oceano CSD and Pismo Beach both have a State Water allocation.

WPA 5 includes the Pismo Creek-Edna Valley Basin and the Arroyo Grande Plain and Tri-Cities Mesa portion of the Santa Maria Valley Basin. Management issues in these areas include the impact of Lopez Dam modifications, increasing demands on water resources, wastewater reuse, and localized high levels of nitrate concentrations. Sea water intrusion is a potential impact which could result from excessive pumping and inadequate recharge. Combined, these basins provide an estimated 9,320 to 10,320 AFY to the water planning area (Master Water Plan, 1998). Surface supplies to WPA 5 include water from Lopez Reservoir, State Water supplies, and stream flow. Non-groundwater supply is estimated at approximately 10,657 AFY (Master Water Plan, 1998).

WPA 6 - Nipomo Mesa (Portions of South County Coastal and South County Inland Planning Areas). WPA 6 includes the Nipomo Mesa and Oso Flaco portions of the Santa Maria Basin, which are within San Luis Obispo County. The water management issues in these areas include increasing overdraft conditions in the Nipomo Mesa area, well interference from groundwater pumping, water quality issues related to agricultural return flow and domestic wastewater return flow and saltwater intrusion. The portions of the Santa Maria Groundwater Basin within SLO County provide an estimated 19,900 AFY under worst case conditions, which includes areas underlying the Nipomo Mesa, Tri-Cities Mesa, and Santa Maria Valley (*Water Supply in the Nipomo Mesa Area*, SLO County, November 2004). Non-groundwater supplies consist of some reclaimed water being used for irrigation purposes. However, surface water yield for domestic purposes is assumed to be 0 AFY (Master Water Plan, 1998).



WPA 9A – Salinas (Portions of Salinas River, Los Padres, Las Pilitas, El Pomar-Estrella, Adelaida and Nacimiento Area Plans). The three largest communities in WPA 9A (Paso Robles, Atascadero, and Templeton) operate separate water distribution systems. Templeton CSD and Paso Robles have a system intertie at Highway 46 and Theater Drive. The distance between Templeton and Atascadero’s systems is approximately 1.5 miles. Similarly, Santa Margarita’s water system does not adjoin any other community systems, though the Salinas Pipeline (which delivers water to City of San Luis Obispo and Cal Poly) traverses the Santa Margarita service area. San Miguel does not adjoin any other community water system.

Water is supplied to WPA 9A through groundwater extraction from the Paso Robles, Pozo and Cholame basins. Estimates of groundwater availability indicate a yield of approximately 48,000 AFY (Master Water Plan, 2005). Groundwater supplies are augmented by an estimated 3,693 AFY of appropriated stream flows. Releases from Salinas Reservoir benefit groundwater basin recharge and help maintain a “live stream” flow in the Salinas River. While the most recent information (Paso Robles Groundwater Basin Study; Fugro, 2005), indicates that Paso Robles Basin is not in overdraft, there is evidence that localized “pumping depressions” have or could occur within sub areas of the Basin. Most notable is the area roughly along the Hwy. 46 East corridor from the City of Paso Robles boundary to Whitley Gardens. If this condition persists, additional withdrawals in this area could exacerbate this condition.

WPA 9B – Creston (Portions of El-Pomar/Estrealla, Los Padres, Las Pilitas, and Shandon-Carrizo Area Plans). Water service to the Creston area is provided by small, isolated water systems that lack interties. Similar to WPA 9A, water is supplied to WPA 9A through groundwater extraction from the Paso Robles, Pozo and Cholame basins. Agricultural water uses are predominant. Estimates of groundwater availability indicate a yield of approximately 48,000 AFY (Master Water Plan, 1998). Groundwater supplies are augmented by an estimated 263 AFY of appropriated flows along Huerhuero Creek.

WPA 9C – Shandon (Portions of Shandon/Carrizo, El Pomar-Estrella, and Los Padres Area Plans). Water service to the Shandon area is provided by small, isolated water systems that lack interties. Similar to WPA 9A and 9B, water is supplied to WPA 9C through groundwater extraction from the Paso Robles, Pozo and Cholame basins. Agricultural water uses are predominant. Estimates of groundwater availability indicate a yield of approximately 48,000 AFY (Master Water Plan, 1998). Groundwater supplies are augmented by a 100 AFY entitlement in the State Water Project and 38 AFY of appropriated flows along the San Juan Creek and Estrella River systems.

c. Water Delivery Systems. County-operated water delivery systems encompass two key components: infrastructure, which consists of individual service lines and mains, pumps, lift stations, and storage facilities such as tanks and reservoirs; and the energy required to move large amounts of water over the many miles of pipelines that service the County. Water service utilities in unincorporated areas of the County are provided by county service areas (CSAs), community service districts (CSDs), or private water companies.

A county service area (CSA) is a special taxing area which bears a special assessment or service charge for particular types of extended services, including (but not limited to) water service. CSAs are managed by the Board of Supervisors. Under the Board's direction, CSAs may levy taxes, establish zones of benefit, incur bonded indebtedness and enter into contracts. There are



11 CSAs in San Luis Obispo County. Six of these CSAs provide water delivery services. Refer to Table 4.9-1 in Section 4.9, Public Services and Utilities, for a description of these CSAs.

A community service district (CSD) is a local governing body authorized to provide a variety of public services, with the exception of land use planning. A CSD typically has an elected governing body with full financial and operational responsibilities. There are fifteen CSDs in San Luis Obispo County.

Within rural portions of the county (i.e. outside of urban and village areas), development is largely served by private wells. Additionally, several village areas which have not yet developed a community water system are likewise served by wells. These include such areas as Pozo, Creston, and California Valley. Water drawn from wells can include both aquifers and riparian underflow. In some areas, water extraction comes from fractured rock reservoirs and not from larger, more defined aquifers. Appropriation of groundwater for private on-site use is not regulated by the state. The County does, however, issue ministerial permits through the Environmental Health Department for new wells.

The County's annual Resource Management System report has identified potential concerns with the groundwater basin underlying the Nipomo Mesa (refer to Table 4.12-1). Additionally, the County is presently investigating conditions in the Paso Robles Groundwater Basin. Little information is available on many of the other aquifers and basins in the County, although analysis provided by the State Department of Water Resources ("Bulletin 118," updated 2003) shows all basins with known information in San Luis Obispo County to have an acceptable water budget:

- Basins where the groundwater budget is considered "understood" by the Department of Water Resources:
 - Salinas Valley - Paso Robles
 - Los Osos Valley
 - San Luis Obispo Valley
 - Santa Maria River Valley
 - San Simeon Valley
 - Santa Rosa Valley
- Basins with limited information:
 - Carrizo Plain
 - San Carpoforo Valley
 - Arroyo de la Cruz Valley
 - Villa Valley
 - Cayucos Valley
 - Old Valley
 - Toro Valley
 - Morro Valley
 - Chorro Valley
 - Rinconada Valley
 - Pozo Valley
 - Huasna Valley
 - Rafael Valley
 - Big Spring Area



Water distribution infrastructure is divided into a complex network of connected and independent facilities dispersed amongst the County's twelve different Water Planning Areas (WPAs). WPAs represent the geographic organization of the County. Water demand, agricultural water needs, sources of supply, and other information are organized by WPA. Prior to the 1998 Master Water Plan Update, countywide water management plans have been organized by County Planning Area, a designation which does not coincide with watershed or groundwater basin boundaries. The following WPAs are intended foremost to recognize important hydrogeologic units throughout the County (refer to Figure 4.12-1 for WPA locations). The Master Water Plan is presently being updated. As part of this update, changes to the WPAs are proposed (refer to Figure 4.12-2 for newly proposed WPA locations).

WPA 1 - North Coast. Water Planning Area 1 (WPA 1) is situated in the northwest corner of the County and includes the communities of San Simeon and Cambria. The northern boundary of WPA 1 is the San Luis Obispo/Monterey County line. The Santa Lucia Range provides the WPA boundary along the northeast side, while the watershed divide between Villa Creek (WPA 1) and Cayucos Creek (WPA 2) forms the boundary to the south. Other creeks within this WPA include: San Carpoforo, Arroyo Hondo, Arroyo de los Chinos, Arroyo de la Cruz, Burnett, Oak Knoll, Arroyo Laguna, Little Pico, North Fork Pico, South Fork Pico, San Simeon, Steiner, Santa Rosa, and Perry. Water suppliers include Cambria CSD, San Simeon Acres CSD, and the 7X Youth Ranch.

WPA 2 - Cayucos. Water Planning Area 2 (WPA 2) includes coastal watersheds from Cayucos Creek to Toro Creek. The unincorporated community of Cayucos has three water suppliers, which provide services to the local urban area: Morro Rock Mutual Water Company, Paso Robles Beach Water Company, and County Service Area #10 [together, the Cayucos Area Water Organization (CAWO)].

WPA 3 - Los Osos/Morro Bay. Water Planning Area 3 (WPA 3) encompasses Los Osos and those portions of Morro Bay that are within the Chorro Creek watershed. WPA 3 extends along State Route 1 (Cuesta College, Camp San Luis Obispo, Dairy Creek Golf Course, and the California Men's Colony). Three water suppliers serve the Los Osos area: Los Osos CSD, Golden State Water Company and S&T Mutual Water Company. The City of Morro Bay provides water service within its corporate boundaries.

WPA 4 - San Luis Obispo/Avila. Water Planning Area 4 (WPA 4) includes San Luis Obispo Creek watershed as well as the area from Avila Beach to Montana De Oro State Park. WPA 4 extends into Edna Valley up to the Pismo Creek watershed divide. Suppliers include the City of San Luis Obispo, Avila Beach CSD, CSA 21, San Miguelito Water Company, and Avila Valley Estates Water Company.

WPA 5 - Five Cities. Water Planning Area 5 (WPA 5) includes the Five Cities area from Pismo Creek to Arroyo Grande Creek watersheds. WPA 5 also encompasses Lopez Lake watershed. Suppliers include: the City of Arroyo Grande; the City of Grover Beach; the City of Pismo Beach; Oceano CSD; and the Golden State Water Company. Private suppliers include the following:

- *Biddle Regional County Park*
- *Blue Sky Water Assn.*
- *Newsom Spring MWC*
- *Nunes Water Supply*



- *Branch Elementary School*
- *Deer Valley*
- *Fowler Mobile Home Estates*
- *Grande Mobile Home Manor*
- *Ken Mar Gardens*
- *Lopez Recreational Area*
- *Mutual Water Association*
- *Oak Park Manor*
- *Sweet Springs Mobile Park*
- *Talley Farms Labor Housing*
- *Terra De Oro Water Co.*
- *Varian Ranch MWC*
- *Circle II (Tract 1323)*

WPA 6 – Nipomo Mesa. Water Planning Area 6 (WPA 6) includes that portion of San Luis Obispo County that lies within the Santa Maria River watershed. Suppliers include the Nipomo CSD and the Golden State Water Company. Private water suppliers include the following:

- *Arroyo Grande Mushroom Farm*
- *Ball Tagawa Growers*
- *Black Lake Canyon Water Supply*
- *Callender Water Association*
- *Country Hills Estates*
- *Greenheart Farms*
- *Heritage Lane MWC*
- *Hetrick Water Co.*
- *La Mesa Water Co*
- *Mesa Dunes MH Estates*
- *Rancho Nipomo Water Co.*
- *Rural Water Co.*
- *Guadalupe Cooling*
- *Clearwater Nursery*
- *Cuyama Lane Water Co*
- *Dana Elementary School*
- *La Colonia Water Association*
- *Laguna Negra (Tract 610)*
- *Mesa Mutual Water Co*
- *Rim Rock Water Co*
- *Santa Maria Speedway*
- *Speedling, Inc.*
- *True Water Supply*
- *Vista De Las Flores Water Co.*
- *Woodland Park Mutual Water Co.*
- *Woodlands Mutual Water Co.*

WPA 7 – Cuyama. Water Planning Area 7 (WPA 7) encompasses the portion of San Luis Obispo County that lies within the Cuyama River watershed (i.e. Twitchell Reservoir).

WPA 8 – California Valley. Water Planning Area 8 (WPA 8) consists of the Carrizo Plain area of the County. Suppliers include the California Valley CSD, the Cal Fire-Simmler Fire Station, California Valley Water, and the Carrisa Plains Elementary School.

WPA 9A – Salinas. Water Planning Area 9A (WPA 9A) generally consists of the Salinas River watershed along the U.S. Highway 101 corridor from Santa Margarita Lake north to San Miguel. Suppliers include the City of Paso Robles, Templeton CSD, San Miguel CSD, Garden Farms County Water District, CSA 23 (Santa Margarita), and the following private suppliers:

- *Durand Water Co*
- *Adelaide Estates MWC*
- *Almira Water Assn*
- *Town Creek Water Supply*
- *McNamara Water Supply*
- *Via Condiass Water Supply*
- *Atascadero Lake*
- *Los Robles M.H. Estates*
- *Camp Wantala Water Supply*
- *Atascadero Mutual Water Company*
- *McNamara Water Supply*
- *El Paso de Robles School*
- *Ritchie's Water Supply*
- *Moe Water Supply*
- *The Hillhouse Water Supply*
- *Pete Johnston Chevrolet*



- *Mustang Mobile Village*
- *Rancho Colina M.H. Park*
- *Resthaven M.H. Park*
- *Rinconada Trailer Park*
- *Santa Margarita Lake Campground*
- *Hazard Water Supply*
- *Atascadero State Hosp. Water*
- *Bow Valley Aquiland Wtr. Supply*
- *Pleasant Valley Elementary School*
- *Port-a-Port West*
- *Pozo Saloon*
- *San Paso Truck Stop*
- *Santa Lucia School*
- *Shan-Val Hills Vineyard*
- *Wine World Estates*
- *Mustang Springs MWC*

WPA 9B – Creston. Water Planning Area 9B (WPA 9B) encompasses the portion of the Paso Robles groundwater basin that also coincides with the Huerhuero Creek watershed. The northwestern boundary is generally the boundary between urban land uses of Paso Robles and the agricultural uses surrounding Creston. The southern boundary follows the watershed boundary of the Huerhuero Creek. Suppliers include the Black Mountain RV Resort.

WPA 9C – Shandon. Water Planning Area 9C (WPA 9C) encompasses the watershed bounded by the La Panza Range to the southwest and includes the Estrella Creek watershed to the north. Suppliers include County Service Area No. 16 and the following suppliers:

- *Green River MWC*
- *Phillips Elementary School*
- *Shandon Rest Stop*
- *Hearst Corp-Cholame Store*

WPA 10 – Nacimiento. Water Planning Area 10(WPA 10) consists of the portion of the County that drains into Lake Nacimiento. Suppliers include Heritage Ranch CSD and the following private suppliers:

- *Bee Rock Store Water Supply*
- *Cal-Shasta Club, Inc.*
- *Christmas Cove Co.*
- *Laguna Vista Boat Club*
- *Nacimiento Water Company (Oak Shores)*
- *North Shore Club*
- *South Shore Village Club*

Table 4.12-1 summarizes the existing water resource supply and projected demands for a 20-year planning horizon for each water planning area in the region. The information in the table was taken from the County’s Master Water Plan (1998), slocountywater.org (2009), and Water Supply in the Nipomo Mesa Area (November 2004).

The County is presently in the process of updating the Master Water Plan. As part of this update, the Water Planning Areas (WPAs) are proposed to be expanded from 10 to 16. New demand estimates are provided for the 16 proposed WPAs in Table 4.12-2. New supply estimates are provided at a basin-by-basin level in Table 4.12-3. This table also identifies availability constraints and water quality concerns in each basin.



d. Water Demand. The following discussion of County water demand has been adapted from the 1998 San Luis Obispo County Master Water Plan supplemented with data from the March 2011 Draft MWP and data on specific water basins⁵. Existing demand can be separated into three main types of demand: urban, agricultural, and rural. Urban demand estimates consider demand within all communities served by a public water system. Agricultural demand considers water associated with irrigated crop production. Rural demand estimates consider all other non-agricultural water demand in rural areas not served by a public water system (e.g. rural residences served by a well or small community system).

The Master Water Plan is presently being updated. Demand figures representing the newly proposed (though not adopted) Water Planning Areas (WPAs) are provided in Table 4.12-2. While these numbers are more up-to-date than those provided in the 1998 Master Water Plan, they do not necessarily translate well to the existing WPA boundaries. As such, the water demand estimates identified in the 1998 Master Water Plan for the current WPAs are provided in Table 4.12-4 through 4.12-15. These tables should be cross-referenced with the more current data in Table 4.12-2 in order to more thoroughly understand existing water demand characteristics.

WPA 1 - North Coast (North Coast Planning Area). The total existing and future demands for WPA 1 are listed in Table 4.12-4. As discussed in Section 4.12.1(b) above, existing supplies total 10,401 AFY. Based on the existing demand of approximately 1,570 AFY, there appears to be a water surplus of approximately 8,831 AFY. However, limited supply is available in many small basins, and is often inaccessible to the urban demands (Master Water Plan, 1998). Larger demands are dependent upon single basins (e.g. Hearst Ranch, CCSD, and San Simeon Acres). In addition, seasonal peaking in demand coincides with summer shortages in supply (Master Water Plan, 1998).

Table 4.12-4: WPA 1 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	700	1,230	2,770
Agricultural	430	360	540
Rural	440	790	790
Total	1,570	2,380	4,100

Source: Master Water Plan, 1998.

WPA 2 - Cayucos (Portions of Estero and Adelaina Planning Areas). The total existing and future demands for WPA 2 are listed in Table 4.12-5. An increase in irrigation efficiency accounts for the reduction in projected agricultural demand. As discussed in Section 4.12.1(b) above, existing supplies total 3,415 AFY, resulting in a water surplus of approximately 1,685 AFY. A surplus of approximately 1,625 AFY is expected in 2020, while a surplus of approximately 1,165 is expected at build-out (Master Water Plan, 1998).

⁵ Please refer to Footnote 4.



Table 4.12-5: WPA 2 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	470	580	750
Agricultural	740	530	820
Rural	520	680	680
Total	1,730	1,790	2,250

Source: Master Water Plan, 1998.

WPA 3 - Los Osos/Morro Bay (Portions of Estero Planning Area). The total existing and future demands for WPA 3 are listed in Table 4.12-6. As discussed in Section 4.12.1(b) above, existing supplies total 8,962 AFY, resulting in a water deficit of approximately 2,238 AFY. However, according to the Master Water Plan (1998), the deficit appears to be overstated because the Dairy Creek Reclamation project is not yet included in the supply totals. Nonetheless, a deficit of approximately 2,278 AFY is expected in 2020, while a deficit of approximately 6,238 is expected at build-out (Master Water Plan, 1998). A water fixture retrofit program was recently implemented for the community of Los Osos. This program requires replacement of specified water fixtures prior to transferring real property. Additionally, new development projects in the Los Osos area are also required to offset twice their anticipated water use by retrofitting water fixtures in a specified number of off-site structures. The water savings from implementing the Los Osos water fixture retrofitting programs have not been included in the demand calculations.

Table 4.12-6: WPA 3 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	3,700	5,170	6,930
Agricultural	6,880	5,290	7,490
Rural	620	780	780
Total	11,200	11,240	15,200

Source: Master Water Plan, 1998.

WPA 4 - San Luis Obispo/Avila (San Luis Obispo, San Luis Bay Coastal, and San Luis Bay Inland Planning Areas). The total existing and future demands for WPA 4 are listed in Table 4.12-7. As discussed in Section 4.12.1(b) above, existing supplies total 13,973 AFY, resulting in a water deficit of approximately 237 AFY. A deficit of approximately 4,407 AFY is expected in 2020, while a deficit of approximately 7,677 AFY is expected at build-out (Master Water Plan, 1998). The City of San Luis Obispo will receive some supply from Lake Nacimiento in the future. In addition, they are considering a water reuse program. In the past, the City has experienced severe shortages during drought.



Table 4.12-7: WPA 4 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	8,470	13,260	14,490
Agricultural	4,970	4,020	6,060
Rural	770	1,100	1,100
Total	14,210	18,380	21,650

Source: Master Water Plan, 1998.

WPA 5 - Five Cities (Portions of San Luis Bay Inland, Huasna/Lopez, and South County Inland Planning Areas). The total existing and future demands for WPA 5 are listed in Table 4.12-8. Anticipated changes in cropping acreage in the Five Cities WPA include an increase in vegetable, vineyard, and deciduous crops, coupled with declining irrigated pasture. The combined effect of these anticipated changes contributes to a fairly steady agricultural water demand.

As discussed in Section 4.12.1(b) above, existing supplies total 19,997 AFY, resulting in a water deficit of approximately 4,563 AFY. A deficit of approximately 6,373 AFY is expected in 2020, while a deficit of approximately 12,163 AFY is expected at build-out (Master Water Plan, 1998). According to the Master Water Plan, Edna Valley is experiencing rapid development of vineyards with some additional residential activity. As a result, competition for limited ground water resources will intensify. South County cities have relatively large urban demand and some are projecting considerable growth, especially Pismo Beach and Arroyo. Lopez Lake is currently under study for new yield estimates and the dam is slated for seismic improvements.

Table 4.12-8: WPA 5 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	7,040	10,200	11,990
Agricultural	14,460	12,230	16,230
Rural	3,060	3,940	3,940
Total	24,560	26,370	32,160

Source: Master Water Plan, 1998.

WPA 6 - Nipomo Mesa (Portions of South County Coastal and South County Inland Planning Areas). The total existing and future demands for WPA 6 are listed in Table 4.12-9. Anticipated future changes in cropping acreage in the Nipomo Mesa WPA include an increase in nursery and vegetable crops, coupled with declining citrus crops. The combined effect of these anticipated changes contributes to a fairly steady agricultural water demand (Master Water Plan, 1998). As discussed in Section 4.12.1(b) above, existing supplies total 19,900 AFY, resulting in an existing water deficit of approximately 9,620 AFY (*Water Supply in the Nipomo Mesa Area*, SLO County, November 2004). At projected build-out, the deficit would increase to 16,300 AFY without another source to augment existing supplies. Both the Nipomo Mesa and Oso Flaco portions of the Santa Maria Basin have been found to be in a state of overdraft (Nipomo Mesa Groundwater Resource Capacity Study and 2005 Santa Barbara County Groundwater Report, respectively).



Table 4.12-9: WPA 6 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	3,900	5,030	7,670
Agricultural	22,540	23,860	24,180
Rural	3,080	5,940	4,350
Total	29,520	34,830	36,200

Source: Water Supply in Nipomo Mesa Area, SLO County, 2004.

WPA 7 - Cuyama (Portions of Shandon-Carrizo, Los Padres, and Huasna/Lopez Area Plans). The total existing and future demands for WPA 7 are listed in Table 4.12-10. Anticipated changes in the future cropping acreage in the Cuyama WPA include an increase in vegetable and deciduous crops. Changing crop patterns combined with changes in irrigation efficiency contributes to a fairly steady agricultural water demand (Master Water Plan, 1998). As discussed in Section 4.12.1(b) above, existing supplies total 8,000 AFY, resulting in a water deficit of approximately 11,310 AFY. A deficit of approximately 9,310 AFY is expected in 2020, while a deficit of approximately 12,980 AFY is expected at build-out (Master Water Plan, 1998).

Table 4.12-10: WPA 7 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	0	0	0
Agricultural	18,890	16,820	20,490
Rural	420	490	490
Total	19,310	17,310	20,980

Source: Master Water Plan, 1998.

WPA 8 - California Valley (Portions of Shandon-Carrizo Planning Area). The total existing and future demands for WPA 8 are listed in Table 4.12-11. As discussed in Section 4.12.1(b) above, existing supplies total 600 AFY, resulting in a water deficit of approximately 330 AFY. A deficit of approximately 660 AFY is expected in 2020, while a deficit of approximately 700 AFY is expected at build-out (Master Water Plan, 1998).

Table 4.12-11: WPA 8 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	0	0	0
Agricultural	200	170	210
Rural	730	1,090	1,090
Total	930	1,260	1,300

Source: Master Water Plan, 1998.

WPA 9A - Salinas (Portions of Salinas River, Los Padres, Las Pilitas, El Pomar-Estrella, Adelaida and Nacimiento Area Plans). The total existing and future demands for WPA 9A are listed in Table 4.12-12. As discussed in Section 4.12.1(b) above, existing supplies total 51,693 AFY, resulting in a water surplus of approximately 4,613 AFY. However, a deficit of



approximately 4,317 AFY is expected in 2020 and a deficit of approximately 28,897 AFY is expected at build-out (Master Water Plan, 1998).

Table 4.12-12: WPA 9A Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	14,450	25,830	41,120
Agricultural	27,180	22,740	31,820
Rural	5,450	7,440	7,440
Total	47,080	56,010	80,380

Source: Master Water Plan, 1998.

WPA 9B - Creston (Portions of El-Pomar/Estrealla, Los Padres, Las Pilitas, and Shandon-Carrizo Area Plans). The total existing and future demands for WPA 9B are listed in Table 4.12-13. As discussed in Section 4.12.1(b) above, existing supplies total 48,263 AFY, resulting in a water surplus of approximately 40,163 AFY. A surplus of approximately 38,223 AFY is expected in 2020, while a surplus of approximately 36,283 AFY is expected at build-out (Master Water Plan, 1998).

Table 4.12-13: WPA 9B Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	0	0	0
Agricultural	4,120	3,810	5,750
Rural	3,980	6,230	6,230
Total	8,100	10,040	11,980

Source: Master Water Plan, 1998.

WPA 9C - Shandon (Portions of Shandon/Carrizo, El Pomar-Estrella, and Los Padres Area Plans). The total existing and future demands for WPA 9C are listed in Table 4.12-14. As discussed in Section 4.12.1(b) above, existing supplies total 48,138 AFY, resulting in a water surplus of approximately 27,058 AFY. A surplus of approximately 25,178 AFY is expected in 2020, while a surplus of approximately 19,878 is expected at build-out (Master Water Plan, 1998).

Table 4.12-14: WPA 9C Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	0	0	0
Agricultural	20,360	21,890	27,190
Rural	720	1,070	1,070
Total	21,080	22,960	28,260

Source: Master Water Plan, 1998.



WPA 10 – Nacimiento (Portions of Nacimiento and Adelaida Area Plans). The total existing and future demands for WPA 10 are listed in Table 4.12-15. As discussed in Section 4.12.1(b) above, existing supplies total 1,200 AFY, resulting in a water deficit of approximately 370 AFY. A deficit of approximately 1,820 AFY is expected in 2020 and at build-out (Master Water Plan, 1998).

Table 4.12-15: WPA 10 Demand by Category

Category of Demand	Existing Demand (AFY)	2020 Demand (AFY)	Build-out Demand (AFY)
Urban	0	0	0
Agricultural	0	0	0
Rural	1,570	3,020	3,020
Total	1,570	3,020	3,020

Source: Master Water Plan, 1998.

e. Resource Management System (RMS) and Levels of Severity (LOS). A component of the County’s General Plan, the Resource Management System (RMS) focuses on collecting data in order to avoid or correct resource deficiencies. The RMS considers water supply, sewage disposal, schools, roads, and air quality. Based on the data collected, resource problems are identified and solutions are recommended. Annually, the County produces a summary report on resource constraints. For each resource where a constraint is anticipated, a Level of Severity (LOS) is assigned based on quantitative thresholds. Table 4.12-16, below, summarizes how LOS levels are assigned with respect to water resources:

Table 4.12-16: Levels of Severity

Level of Severity	Meaning
I	Projected water demand over nine years equals or exceeds the estimated dependable supply.
II	Projected water demand over seven years (or other lead time determined by a resource capacity study) equals or exceeds the estimated dependable supply. Seven years is the estimated minimum time required to develop a major supplementary water resource to the point of delivery to users.
III	Water demand equals the available resource; the amount of consumption has reached the dependable supply of the resource. A Level III may also exist if the time required to correct the problem is longer than the time available before the dependable supply is reached.

The most recently completed Annual Resource Summary Report has established the following levels of severity for water supply:

- Level of Severity I:
 - Atascadero Sub-basin of the Paso Robles Groundwater Basin
 - San Luis Obispo Creek Basin
- Level of Severity II – none
- Level of Severity III (proposed, but not certified)



- Cambria (community)
 - San Simeon (community)
 - Cuyama Valley Groundwater Basin
 - Morro-Chorro Groundwater Basin
 - North Coast
- Level of Severity III (certified by the Board of Supervisors)
 - Los Osos (community)
 - Nipomo Mesa Water Conservation Area
 - Paso Robles Groundwater Basin

4.12.2 Impact Analysis

a. Methodology and Significant Thresholds. In accordance with Appendix G of the *State CEQA Guidelines*, impacts would be significant if development resulting from the Agricultural Cluster Subdivision Program would:

- *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). Refer to Impact WR-1, below.*
- *Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Refer to Impact WR-2, below.*
- *Fail to have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed. Refer to Impact WR-1.*

Additionally, the County of San Luis Obispo has established local thresholds pertaining to water availability. Impacts would be significant if development resulting from the project would result in any of the following:

- *Change the quality of groundwater (e.g. saltwater intrusion, nitrogen loading, etc.). Refer to Impact WR-3, below.*
- *Change the quantity or movement of available surface or ground water. Refer to Impact WR-1, below.*
- *Adversely affect a community water service provider. Refer to Section 4.13: Effects Finds Not to be Significant.*

Since the Agricultural Cluster Subdivision Program does not involve any immediate physical changes or projects, the above guidance is useful only in general terms. The County Resource Management System (RMS) tracks water supply and delivery systems throughout the County, and provides a more specific set of criteria in its evaluation process. The RMS defines the two highest levels of severity for water supply as follows:

- *Level of Severity II: When projected water demand over the next seven years equals or exceeds the estimated dependable supply.*



- *Level of Severity III: When the existing water demand equals or exceeds the dependable supply.*

For water delivery systems, the levels of severity are similar:

- *Level of Severity II: When the water delivery system is projected to reach design capacity within the next five years.*
- *Level of Severity III: When the water delivery system reaches its design capacity.*

Finally, the County's recently-adopted Conservation and Open Space Element has established several County policies governing water availability. Applicable policies, which all projects and programs must adhere to, include the following:

- **Policy WR 1.7: Agricultural operations.** Groundwater management strategies will give priority to agricultural operations. Protect agricultural water supplies from competition by incompatible development through land use controls.
- **Policy WR 1.9 Discourage new water systems.** Enable expansion of public services by community services districts and County service areas to serve contiguous development when water is available. Strongly discourage the formation of new water and sewer systems serving urban development at the fringe and outside of urban or village reserve lines or services lines. Strongly discourage the formation of new mutual or private water companies in groundwater basins with Resource Management System Levels of Severity I, II, or III, except where needed to resolve health and safety concerns.
- **Policy WR 1.12 Impacts of new development.** Accurately assess and mitigate the impacts of new development on water supply. At a minimum, comply with the provisions of Senate Bills 610 and 221.
- **Policy WR 1.13 Density increases in rural areas.** Do 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 Level of Severity II or III for water supply until a Level of Severity I or better is reached, unless there is an overriding public need.
- **Policy WR 1.14 Avoid net increase in water use.** Avoid a net increase in non-agricultural water use in groundwater basins that are recommended or certified as Level of Severity II or III for water supply. 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.



b. Project Impacts and Mitigation Measures.

Impact WR-1 Residential development resulting from the Agricultural Cluster Subdivision Program will require a long-term sustainable water source, which could create impacts in areas with known resource capacity issues. This is a Class III, *less than significant*, impact when considered in relation to the existing ordinance, because the overall residential density would be reduced. When considered in relation to existing physical environmental conditions, this would be a Class III, *less than significant*, impact. Cumulative impacts would be considered Class II, *significant but mitigable*, impact.

Compared to Development Potential under the Existing Ordinance

The existing agricultural cluster subdivision ordinance requires that the Review Authority make the following finding prior to approving an agricultural cluster subdivision:

The water resources and all necessary services are adequate to serve the proposed development, including residential uses, as well as existing and proposed agricultural operations on the subject site and in the site vicinity.

In order to support this finding, substantial evidence must exist in the record to support the conclusion that there is an adequate water source for not only the residential component of the project, but also for existing and future agricultural operations in the vicinity. While it is not presently required under the ordinance, hydrogeologic reports have been prepared for past agricultural cluster subdivision projects as part of the project-specific environmental analysis.

The proposed Agricultural Cluster Subdivision Program retains the requirement that the Review Authority affirm the adequacy of water resources in order to approve an agricultural cluster subdivision. Additionally, the proposed program would specifically require that a hydrogeologic analysis be submitted as part of the application.

When considered in contrast to existing ordinances and General Plan policies concerning agricultural cluster subdivisions, the proposed Agricultural Cluster Subdivision Program is anticipated to have overall insignificant impacts with respect to water resources. The program would substantially reduce the number of potential residential units by imposing limitations on parcel size, design, and location. These limitations would have the overall effect of decreasing the number of potential residential units located in the rural areas, and would therefore substantially reduce anticipated water demand increases.

Compared to Existing Conditions

Under the proposed Agricultural Cluster Subdivision Program, approximately 418 new residential units could be developed in the Inland portion of the County. Due to distance limitations (e.g. location within 5 miles of an Urban Reserve Line), it is anticipated that these units could be developed within the following water basins:



- Los Osos Valley (WPA #3)
- San Luis Obispo Creek Valley (WPA #4)
 - *San Luis Obispo Valley*
 - *Avila Valley*
- Santa Maria Groundwater Basin (WPA #5 and 6)
 - *Edna Valley*
 - *Arroyo Grande Valley*
 - *Northern Cities Management Area*
 - *Nipomo Valley*
 - *Nipomo Mesa Management Area*
- Santa Margarita Valley (WPA #9a)
- Paso Robles Groundwater Basin (WPA #9a, 9b, and 9c)
 - *Estrella/Creston Area of Concern*
 - *Atascadero Subbasin*

Constraints affecting water availability within these basins are identified in Table 4.12-3. These constraints include, but are not limited to the following, as illustrated below in Table 4.12-17:

Table 4.12-17: Constraints in the Inland Portion of the County

Constraint	Los Osos Valley	San Luis Obispo		Santa Maria					Santa Margarita Valley	Paso Robles	
		San Luis Obispo Valley	Avila Valley	Edna Valley	Arroyo Grande Valley	Northern Cities MA	Nipomo Valley	Nipomo Mesa MA		Estrella / Creston	Atascadero
Certified Level of Severity III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Anticipated Level of Severity III	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seawater Intrusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restrictions on Pumping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Elevated Nitrate Levels	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor Water Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High Susceptibility to Drought Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low Groundwater Storage Capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Needs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subsidence	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fractured Rock Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Declining Groundwater Levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

In the Coastal Zone, the Agricultural Cluster Subdivision Program would not enable the creation of new parcels. Instead, the program would allow for the reconfiguration of existing parcels. Such reconfiguration could nonetheless precipitate residential development by enabling the creation of new parcels which are more attractive for residential development than



larger agricultural parcels. As identified in Table 4.12-3, most of the basins within the Coastal Zone experience substantial availability constraints.

Under the existing Agricultural Cluster Subdivision Ordinance, an agricultural cluster subdivision may only be approved where the Review Authority finds that there are sufficient water resources to support existing agricultural operations, future potential agricultural operations, and the proposed residential development. In order to make this finding, the Review Authority must essentially affirm that there is a sufficient, long-term, sustainable water source. This finding is being retained in the proposed Agricultural Cluster Subdivision Program.

The proposed Agricultural Cluster Subdivision Program, coupled with the County's existing administration of the County General Plan, would only allow the creation of an Agricultural Cluster Subdivision under the following limited circumstances:

- ***The applicant has demonstrated sufficiency of water resources.*** As discussed above, the Agricultural Cluster Subdivision Program will maintain a requirement that the review authority affirm that there are sufficient water resources to serve residential uses, in addition to existing and future agricultural uses. In circumstances where an Environmental Impact Report for a specific agricultural cluster subdivision project identifies a Class I (significant and unavoidable) impact for water resource availability, a finding of overriding considerations would also need to be adopted. In such a case, substantial evidence would need to exist in the record to support both findings simultaneously.
- ***The project site does NOT overlie a groundwater basin with a Level of Severity II or III.*** Policy WR 1.13 in the Conservation and Open Space Element states, "Do 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 Level of Severity II or III, until a Level of Severity I or better is reached, unless there is an overriding public interest." By its very nature, any agricultural cluster subdivision would be regarded as a "land division that increases the density or intensity of non-agricultural uses." As such, it can be reasoned that an agricultural cluster subdivision would only be approved overlying basins that have not been certified with a Level of Severity II or III.
- ***The project is consistent with all applicable County-adopted groundwater management strategies.*** As part of the County's Resource Management System (RMS), the resource capacity of groundwater basins throughout the County are assessed annually. When a basin is found to be approaching overdraft, a Resource Capacity Study is commissioned and a plan for the management of the groundwater basin is prepared, often including specific land use strategies. An example of this is the land use strategies adopted as part of the February 1, 2011 RCS for the Paso Robles Groundwater Basin. Any new discretionary development would be subject to applicable groundwater management strategies adopted by the County.
- ***The project will not cause new residential development to adversely compete with agriculture for water.*** The County has maintained a long standing policy that existing and future agricultural uses have priority over rural groundwater. This policy is



reflected both in the Agriculture Element (Policy AGP 11) and the Conservation and Open Space Element (Policy WR 1.7). To find any particular agricultural cluster subdivision in compliance with the General Plan, the Review Authority must have considered substantial evidence that a conflict with these policies would not exist.

As such, this program is essentially “self-mitigating,” in that projects could only be approved where substantial evidence in the record would support all of the above conclusions.

Within the Inland and Coastal portions of the County, the Agricultural Cluster Subdivision Program would require that all applications be accompanied with a site-specific hydrogeologic analysis. This analysis will largely be the basis for evidence supporting a finding of water resource sufficiency. Hydrogeologic analyses will consider existing and potential agricultural uses in the basin, as well as the proposed residential development. Additionally, the analyses would need to address any potential resource or availability constraints affecting the project, such as those identified above in Table 4.12-17. It is presumed that the requirement for a hydrogeologic analysis and the required finding affirming sufficiency of water resources would preclude agricultural cluster subdivisions in areas with substantial water resource constraints. In this respect, the program is self-mitigating by assuring that sufficient water resource impacts would not occur.

The hydrogeologic analysis and required findings notwithstanding, even in circumstances where an agricultural cluster subdivision has the potential to cause significant impacts to water resources, the project will be individually evaluated and considered by a separate project-specific Environmental Impact Report.

Cumulative Impacts

CEQA requires that all projects be reviewed for the potential to create significant environmental impacts. In addition to direct project-specific impacts, CEQA also requires each project to consider indirect or secondary effects and cumulative effects that are reasonably foreseeable. Significant cumulative effects are impacts that, when considered together, would rise to a level of significance. These same impacts when evaluated individually may or may not surpass the threshold of significance.

All agricultural cluster subdivisions will be subject to individual CEQA review. Projects will be mitigated to a level of insignificance for all impacts, including cumulative impacts to water resources. Projects which cannot mitigate cumulative impacts to a less-than-significant level would require preparation of an Environmental Impact Report.

Individual agricultural cluster subdivisions may only be permitted under the following circumstances (described in further detail above):

- The applicant has demonstrated sufficiency of water resources.
- The project site does not overly a groundwater basin with a Level of Severity II or III.
- The project is consistent with all applicable County-adopted groundwater management strategies.
- The project will not cause new residential development to adversely compete with agriculture for water.



Because of the self-mitigatory nature of the Agricultural Cluster Subdivision Program, it is not anticipated that cumulatively significant impacts regarding water availability would arise, however it remains a distinct possibility.

The Paso Robles Groundwater Basin (PRGWB) illustrates such a possibility. A clear majority – 65 percent – of the water usage in this basin is attributed to agricultural uses⁶; however water extraction associated with these agricultural uses remains unregulated by the County. Therefore, even if all non-agricultural development within the PRGWB were to be fully mitigated for direct, secondary, and cumulative impacts, growth in water extraction from expansion or intensification of agricultural uses would remain unaddressed. As a consequence, cumulatively significant impacts could still have the potential to occur, despite the existing policy framework and the requirements of CEQA.

The potential for cumulative impacts is considered to be mitigable, both programmatically, and on a project-by-project basis. The incorporation of the mitigation measures specified below would ensure that cumulative impacts remain below a level of significance. Therefore cumulative impacts are considered to be Class II, *significant but mitigable*.

Mitigation Measures. The Agricultural Cluster Subdivision Program will largely be self-mitigating, as all individual proposals will be required to supply a hydrogeologic analysis and such analysis will be used as a basis in determining whether or not the Review Authority has substantial evidence to make a finding affirming the adequacy of water resources and consistency with the General Plan. To address potential cumulative impacts, the following measures are required:

- WR-1(a) Consideration of cumulative impacts as part of the project-specific environmental review process.** The Initial Study prepared for any and all proposed agricultural cluster subdivisions shall consider and address any potential cumulative impacts on water resources that could result from the proposal. Such consideration shall also take into account existing and future water extraction from uses not presently regulated by the County (e.g. agricultural water demand). Appropriate, feasible mitigation measures to offset the project's contribution towards an impact shall be provided. Such measures may include, but are not necessarily limited to the following measures, which would be presumably implemented for all uses (e.g. not just agricultural cluster subdivisions) basin-wide where cumulative impacts are anticipated, in order to effectively mitigate those cumulative effects:
- **Groundwater Management Plan Requirements.** Compliance with measures in an established groundwater management plan that are intended to address cumulative basin-wide impacts.

⁶ Refer to the Resource Capacity Study adopted by the Board of Supervisors on February 1, 2011.



- **Compliance with any applicable requirements from Title 8 of the County Code.** In areas where groundwater resources are limited, the County may establish water fixture retrofit programs. Such programs are presently in place in the Nipomo Mesa Management Area and in the Los Osos area. Applicants seeking to develop may be required to offset net increases in non-agricultural water by retrofitting a specified number of fixtures based on an established ratio.
- **Compliance with landscaping ordinances.** In certain areas, the County may require low-water-use landscaping. When implemented basin-wide, this can substantially reduce residential water demand.
- **Best Management Practices.** To address cumulative impacts, a project may be required to have all residential development comply with the California Urban Water Conservation Council (CUWCC)'s Best Management Practices for residential development and landscaping. The practices require water-efficient landscaping, low-flow fixtures, and water-efficient appliances.
- **Purchasing water offsets.** If such a program should be developed to address cumulative effects in a groundwater basin, an applicant may be required to purchase surface water allocations (e.g. State Water Project, Nacimiento Lake, Lopez Lake) to be dedicated to uses within urbanized areas in order to allow a commensurate reduction in municipal pumping from that basin.

WR-1(b)

Offset non-agricultural water use. Where resulting residential development would conflict with agricultural water demands, agricultural cluster subdivision projects shall be required to offset net increases in non-agricultural water demand. Mitigation measures that will offset the net increases shall be discussed and fully evaluated in a project-specific Initial Study. Measures offsetting non-agricultural water demand may include, but are not limited to, the following:

- Contributing proportionally towards an existing water mitigation program covering the underlying groundwater basin.
- Purchasing off-site water allocations (e.g. surface water allocations from Nacimiento Lake or the State Water Project) to be directed towards the agricultural use and subsidized by the residential development.
- Other feasible and suitable means identified by the Environmental Coordinator which would effectively negate any new conflicts in water demand brought about by residential development.



WR-1(c) Evaluation of the feasibility of water offset mitigation measures. The hydrogeologic analysis supplied with each agricultural cluster subdivision project shall consider and evaluate proposed mitigation measures to offset non-agricultural water use. Such evaluation shall consider both enforceability and nexus. Measures must be fully enforceable and able to be monitored without undue burden on County staffing or funding sources. Preference shall be given to mitigation by design over mitigation by policy. With respect to nexus, water offsets must have a direct relationship to impacts caused by net increases in non-agricultural water demand. As such, offsets would need to occur in the same basin or sub-basin where the identified availability constraints and impacts are being experienced.

Residual Impacts. With the incorporation of the above mitigation measures, it is not foreseeable that the Agricultural Cluster Subdivision Program could result in a cumulatively significant impact to water resources. Where cumulative impacts are anticipated to be significant, appropriate mitigation measures, such as those listed above, will be applied on a project-specific basis in order to reduce those effects to a level of insignificance. In the occurrence that a project would result in Class I cumulative impacts to water availability, because the mitigation applied is insufficient and no further feasible measures are available, the Review Authority would most likely be unable to adopt the necessary finding affirming sufficiency of water resources.

Impact WR-2 Consistent with Conservation and Open Space Element Policy WR 1.9, the Agricultural Cluster Subdivision Program will preclude the establishment of small community water systems to serve residential cluster parcels. As a result, new residential development will need to obtain water service from on-site wells. Because on-site wells lack certain features of community systems (e.g. multiple well sources, large communal storage capacity, back-up systems, etc.), this requirement may reduce the reliability of water service to the residential parcels. This is a Class III, less than significant, impact when considered both in relation to existing policy and environmental conditions.

Compared to Development Potential under the Existing Ordinance

The existing ordinances and policies governing agricultural cluster subdivisions allow residential parcels to be served by on-site wells, shared wells, small water systems, or a community water provider. The proposed Agricultural Cluster Subdivision Program would instead require that each residential parcel obtain water from an on-site well; shared wells, small water systems, and community water providers would not be able to service residential parcels. To accommodate on-site water supply requirements, residential parcels would need to be sized at 2.5 acres or larger. The requirement that rural development, such as agricultural cluster subdivisions, be precluded from establishing new community water systems is derived from Conservation and Open Space Element Policy WR 1.9.



The requirement for on-site water supply is not anticipated to affect agricultural cluster subdivisions within the Coastal Zone. Public Works policies outlined in the Coastal Plan Policies document, a component of the County's Local Coastal Program, already preclude urban level services from being provided on agricultural lands.

Existing ordinance standards already address the sufficiency of water service to individual residences. County Environmental Health must provide a preliminary subdivision approval letter to each proposed subdivision prior to acceptance. The preliminary approval letter is issued after County Environmental Health is satisfied that there will be a compliant water source for the anticipated residential development. The California Fire Code and the County's Building and Construction Ordinance (Title 19 of the County Code) establish water storage and fire suppression requirements. In order to move forward in the process, a project must demonstrate that an on-site water service and storage capabilities can be sufficient to serve each parcel. Absent this, the County would be precluded from authorizing residential development.

As existing ordinance standards are already designed to ensure that a reliable water system will service each parcel, this impact is anticipated to be Class III, *less than significant*.

Compared to Existing Conditions

As discussed above, residential development associated with an agricultural cluster subdivision may only occur where water quality, water storage, and fire suppression requirements have been met. Impacts relating to the reliability of on-site wells in association with agricultural cluster subdivisions are therefore anticipated to be *less than significant*.

Mitigation Measures. No mitigation measures are necessary.

Residual Impacts. The impact will be less than significant.

Impact WR-3 Residential water quality may be affected by adjacent agricultural uses. This is a Class III, *less than significant*, impact when considered both in relation to existing policy and environmental conditions.

The Agricultural Cluster Subdivision Program will allow residential development to occur on agricultural lands. Agricultural use of land is cited as a contributing factor towards water quality issues in some areas. For example, fertilizers used as part of agricultural operations can leach into the groundwater resulting in increased nitrate levels. In some circumstances, the nitrates, minerals, and dissolved solids could exceed drinking water standards.

Existing ordinance standards already address water quality concerns. In order to receive final map approval, applicants must supply comprehensive water quality testing data to County Environmental Health. In circumstances where water quality thresholds are exceeded, the project will be required to provide sufficient water treatment facilities to bring the water quality up to drinking water standards. A final map may not be approved until County Environmental Health has been satisfied that the well on each parcel will meet state-established water quality standards.



As existing ordinance standards are already designed to ensure that each residential parcel will be supplied with potable water meeting water quality standards, this impact is anticipated to be *less than significant*.

Mitigation Measures. No mitigation measures are necessary.

Residual Impacts. The impact will be less than significant.

d. Cumulative Impacts. The proposed Agricultural Cluster Subdivision Program would allow the creation of approximately 418 new residential parcels on agricultural lands in the Inland portion of the County. Within the Coastal Zone, new parcels may not be created under the program, but may be reconfigured to better accommodate residential development. When considered cumulatively with the residential build-out of agricultural lands, this program is anticipated to result in cumulatively significant, but mitigable, impacts to water resources. These impacts are more thoroughly discussed above as part of Impact WR-1.



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