

### Appendix C: Watershed Summary

#### Central Coastal Watershed (part in Monterey County)

LCP Area Plan	Subwatershed	Subarea	Acres	Creeks	LCP Zoning/Land Characteristics	Main Threats
North Coast	Cambria (partly in Monterey County)	San Carpoforo (part in Monterey County)	29321	San Carpoforo	Predom. cattle grazing with some other agricultural uses. Some large lot rural and urban reserve lands. Some visitor serving and recreation at San Simeon. Major developed area is Cambria. Other commercial areas include San Simeon Acres, Harmony, Hearst Castle, Old San Simeon Village. Terrain is mix of land, rolling hills, steeper slopes in northern and eastern areas, narrow coastal valleys. Major streams support anadromous fish.	Iron, manganese in groundwater from natural sources in Santa Rosa basin. <sup>1</sup> Possible overdraft on Santa Rosa River and Pico Basin. <sup>8</sup> Increasing agricultural use could cause subsidence in Santa Rosa basin. Siltation of Carpoforo Creek suspected from agriculture and grazing. <sup>2</sup> Carbonera Creek affected by sedimentation, bacteria, nutrients. <sup>2</sup> Impairment to spawning and fish population decline. Sources include urban runoff, construction and land development, septage disposal. <sup>2</sup>
		Arroyo de la Cruz	27775	Arroyo de la Cruz		
		San Simeon	51491	San Simeon		
		Santa Rosa	30400	Santa Rosa Creek		
North Coast; Estero	Cambria	Villa	16664	Villa Creek	Predom. agriculture; some large lot rural and urban reserve lands.	

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Estero	Cambria, con't.	Cayucos	11543	Cayucos Creek; Little Cayucos Creek	Mix of agriculture, large lot rural and urban reserve lands, and recreation/open space. Whale Rock Reservoir located in Old subarea. Some public facility lands in Chorro subarea. Morro Bay is a predominant feature of the region. The hilly and mountainous areas support cattle grazing; valleys support croplands.	Nitrates may be from agriculture and septic, sodium, chloride, iron, manganese, organic solvents, and TDS in groundwater. <sup>1,4</sup> Seawater intrusion/overdrafts in Chorro, Morro, Cayucos, and Los Osos Creek basins. <sup>1</sup> In Chorro Valley and Los Osos Valley, threat of drinking water impairment due to bacteria, nitrates, nutrients, seawater intrusion.* Possible sources include agriculture, flow alterations, groundwater withdrawals, municipal point source discharges, septage disposal, nonpoint source runoff. <sup>2</sup> Throughout region, concerns over water quality degradation include surface runoff from oil operations, agricultural and range lands, urban land uses, mines, and natural sedimentation. <sup>4</sup> South of Los Osos Valley Road surface runoff and erosion from steep slopes is particular concern, affecting drainage problems in the South Bay. <sup>6</sup>
		Old	15428	Old Creek	Developed areas are concentrated in Cayucos and Los Osos/Bayview. Several State parks provide open space areas, predominately dunes and wetlands. The region includes narrow valleys and steep slopes in the northern portion, volcanic peaks, and broader valleys in the southern portion of the area.	
		Torro	9841	Torro Creek		

\*Data cited from 1982, 1984, 1995, 1997 for Los Osos Valley; 1976, 1995 for Chorro Valley; and from 1976 ongoing for Morro Bay.

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Estero	Point Buchon	Morro	18242	Morro Creek; Little Morro Creek	See above.	Continued from above. Morro Bay: Impaired under EPA's 303(d) list. Affected by bacterial contamination, loss of endangered species, flow alterations, nutrients, siltation and sedimentation, pathogens, organics, turbidity. <sup>2,3,5</sup> Sources include urban development and runoff, septic, animal waste, rangeland operations, boats, effluent discharge, fertilizers, agriculture, nonpoint source pollution, surface mining, groundwater withdrawals, hydromodification, natural processes. <sup>2,3,5</sup> <i>San Bernardo Creek</i> contaminated with coliform from cattle. <sup>1</sup> <i>Cayucos Creek</i> affected by sedimentation. <sup>2</sup> <i>Chorro Creek</i> polluted with heavy metals, likely from upland mines, and bacterial contamination (also running into Morro Bay). <sup>5</sup> <i>Morro Creek</i> suspected degradation from chromium, metals, siltation, and trace elements. Suspected sources are agriculture, grazing, and resource extraction. <sup>2</sup> <i>Los Osos Creek</i> is identified as impaired under EPA's 303(d) list. Sedimentation in Pismo Marsh, particularly due to erosion in Arroyo Grande fringe area. <sup>6</sup>
		Chorro	33693	Chorro Creek; San Bernardo Creek		
		Los Osos	14776	Los Osos Creek		
		Point San Luis	29572	Coon Creek		
		San Luis Obispo Creek	53135	San Luis Obispo Creek		
		Pismo	25803	Pismo Creek		

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Estero; San Luis Bay	Point Buchon, con't.	Point San Luis	29572	Coon Creek	Mix of agriculture, recreation, large lot rural, urban reserve lands, and public facility.	Nitrate, iron, manganese identified in groundwater in Estero region. <sup>4</sup> Impacts to San Luis Bay from petroleum leaks and boat moorings. <sup>7</sup> <i>San Luis Creek</i> identified as impaired under EPA's 303(d) designation. Affected by sedimentation, impacts to habitat and rare/endangered species, low flows and water diversion, threat of spawning impairment and fish population decline, metals, nutrients, pathogens, and coliform. <sup>2,3</sup> Ground water overdraft in San Luis Obispo Creek basin <sup>6</sup> . Pollutant sources include municipal point sources, agriculture, and nonpoint source pollution from land development and urban runoff. Metals may be due to natural sources. <sup>2,3</sup>
San Luis Bay		San Luis Obispo Creek	53135	San Luis Obispo Creek	Predominately agriculture in northern portion of area. Mix of agriculture, urban reserve and village reserve lands, large lot rural, small lot rural. Some public facility lands in Pismo subarea. Communities of Avila Beach, Pismo Beach, and Oceano comprise development nodes. Terrain includes some steep slopes around the towns of Avila and Pismo.	
		Pismo	25803	Pismo Creek		
San Luis Bay; South Bay	Arroyo Grande	Oceano	97187	Arroyo Grande Creek	Mix of ag, open space/recreation, large-lot rural, small lot rural, and urban reserve/village reserve lands. Includes Lopez Reservoir.	TDS, nitrate, sodium, chloride in groundwater. <sup>1</sup> Pesticides in Arroyo Grande Creek. <sup>1</sup> Seawater intrusion/overdrafts in Arroyo Grande and Nipomo Mesa basins. <sup>1,6</sup>

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South County	Arroyo Grande, con't.	Nipomo Mesa	13737		Mix of agriculture, open space/ recreation, small lot rural, urban reserve and village reserve lands. Some large lot rural lands. Concentration of residential uses outside the coastal zone boundary, including Palo Mesa, Callendar-Garret, and Nipomo.	Nitrates in groundwater from irrigation return and septic. Irrigation, runoff of fertilizer and pesticides, siltation due to intensive agricultural practices. Oil processing impacts on water quality.

#### Santa Maria Watershed (extends into Santa Barbara County)

South County; extends into Santa Barbara County	Guadalupe		152244	Santa Maria River	Within the coastal zone, the land is predominately open space/recreation and agricultural uses. Much of the land is dune habitat. An industrial plant is located in the Guadalupe Dunes, on the southern edge of the County's coastal zone.	TDS, chloride, sulfate, nitrate in groundwater from irrigation return and sewage plant discharge. Siltation suspected in Santa Maria River, possibly from agriculture. Sedimentation, heavy metals, herbicide fertilizer, pesticides, and nutrients to Oso Flaco Lake, from agriculture and potentially from recreational uses. Pesticides in Santa Maria Estuary. <sup>7</sup> Oil processing concerns.
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Sources: <sup>1</sup>San Luis Obispo County Master Water Plan Update. Department of Water Resources. March 1986.

<sup>2</sup>Information Center for the Environment; University of California, Davis. ([www.ice.ucdavis.edu](http://www.ice.ucdavis.edu); California Rivers Assessment Project).

<sup>3</sup>EPA's 303(d) list and EPA's Surf Your Watershed ([www.epa.gov/surf3](http://www.epa.gov/surf3)).

<sup>4</sup>Draft Environmental Impact Report for the Estero Area Plan Update. Crawford, Multari, Clark, and Mohr. December 1999.

<sup>5</sup>Turning the Tide for Morro Bay; Draft Comprehensive Conservation and Management Plan. Morro Bay National Estuary Program, Bay Foundation of Morro Bay, and the Central Coast Regional Water Quality Control Board. August 1999.

<sup>6</sup>San Luis Obispo County LCP, area plans.

<sup>7</sup>Downing J, Fairey R, Roberts C, Landrau E, Clark R, Hunt JW, Anderson BS, Phillips BM, Wilson C, La Caro F, Kapahi G, Worcester K, Stephenson M, Puckett HM. 1998. *Chemical and biological measures of sediment quality in the Central Coast Region*. California State Water Resources Control Board. Sacramento, CA.

<sup>8</sup>San Luis Obispo County. Annual Resource Summary Report. 1999.

*Periodic Review of the San Luis Obispo County LCP  
Preliminary Report  
February 2, 2001  
(As revised to incorporate errata/clarifications of the July 12, 2001 action)*

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