

San Luis Obispo County
Master Water Plan
Total Water Needs - Current and Projected

Summary

This report documents the development of existing water demand levels and future water demand projections for the 12 Water Planning Areas (WPAs) studied for the San Luis Obispo County Master Water Plan (MWP) Update. This document reviews and summarizes supporting materials including water planning documents and City and County growth projections. These documents have been used in analyzing historical consumption rates, in developing demand methodology for future projections, in setting major assumptions and qualifications, and in the preparation of future water needs for the County.

Approach

The methodology for the development of demands includes the collection and analysis of data on a number of parallel tracks. These include the preparation of 1) urban demand; 2) agricultural demand; 3) rural demand; and 4) environmental demand. After reviewing existing plans and data, existing demands for each of the four categories were prepared for each of the 12 WPAs. Data regarding growth and future water use were then analyzed to develop a preferred approach for the development of future water demands. These future demands were then prepared and projected by the four demand categories for each of the 12 WPAs.

Key Assumptions

Projecting the County's ultimate water demand required a number of assumptions, and an extensive review and analysis of data. General assumptions are outlined below. Assumptions specific to one of the individual demand categories are discussed within the appropriate following sections.

- Existing demands represent average annual demand, in acre-feet
- The County's future water demands are shown as a range whenever possible. For urban demands, the 2020 demands and build-out demands define the range. Because different communities may achieve buildout in different years, a specific year has not been equated with the range. For agricultural demands, the range represents the difference between using the high and low end of any of the variables, whenever they exist.
- Agricultural demands are affected by a wide range of conditions, including lack of data, weather conditions, changes in commodities and differences in irrigation practices. It must be recognized that the agricultural demands presented here may be off by a certain percentage because of the unavailability of reliable water use data. Because of constant changes in farming practices, future projections may not reflect the actual future water use or need.

Current Data Gaps

Information on water rights permits and licenses, associated orders on file with the State Water Resources Control Board, and agreements between the California Department of Fish and Game

and other entities, are detailed in the Environmental Demands discussion. Due to the nature of the permit and/or license conditions regarding streamflow, these conditions represent a limit on existing supplies and are not characterized as a quantity of water dedicated to the environment.

Data on unimpaired flows for each of the appropriate rivers are required in order to fully assess and prepare reasonable future environmental demand projections. These data are not available, and therefore, a future quantity of water for environmental needs is also not available, without performing a significant amount of additional analyses.

Total Water Needs

The following table summarizes the total water needs developed for each of the 12 WPAs.

Table A
Existing and Projected Water Needs by Water Planning Area
(acre-feet per year)

WPA	City or Community	Existing Demand	Projected Demand
1	North Coast		
	Urban	700	1,230 - 2,770
	Agricultural	430	360 – 540
	Rural	440	790
	Environmental	--	--
	Subtotal	1,570	2,380 – 4,100
2	Cayucos		
	Urban	470	580 – 750
	Agricultural	740	530 – 820
	Rural	520	680
	Environmental	--	--
	Subtotal	1,730	1,790 – 2,250
3	Los Osos/Morro Bay		
	Urban	3,700	5,170 – 6,930
	Agricultural	6,880	5,290 – 7,490
	Rural	620	780
	Environmental	--	--
	Subtotal	11,200	11,240 – 15,200
4	SLO/Avila		
	Urban	8,470	13,260 – 14,490
	Agricultural	4,970	4,020 – 6,060
	Rural	770	1,100
	Environmental	--	--
	Subtotal	14,210	18,380 – 21,650
5	Five Cities		
	Urban	7,040	10,200 – 11,990
	Agricultural	14,460	12,230 – 16,230
	Rural	3,060	3,940
	Environmental	--	--
	Subtotal	24,560	26,370 – 32,160
6	Nipomo Mesa		
	Urban	2,820	5,030
	Agricultural	28,590	23,860 – 31,770
	Rural	3,800	5,940
	Environmental	--	--
	Subtotal	35,210	34,830 – 42,740

Note: All figures in this table have been rounded to the nearest 10's.

Note: Agricultural demands are affected by a wide range of conditions, including lack of data, weather conditions, changes in commodities and differences in irrigation practices. It must be recognized that the agricultural demands presented here may be off by a certain percentage because of the unavailability of reliable water use data. Because of constant changes in farming practices, future projections may not reflect the actual future water use or need.

WPA	City or Community	Existing Demand	Projected Demand
7	Cuyama		
	Urban	0	0
	Agricultural	18,890	16,820 – 20,490
	Rural	420	490
	Environmental	--	--
	Subtotal	19,310	17,320 – 20,980
8	California Valley		
	Urban	0	0
	Agricultural	200	170 – 210
	Rural	730	1,090
	Environmental	--	--
	Subtotal	930	1,260 – 1,300
9A	Salinas		
	Urban	14,450	25,830 – 41,120
	Agricultural	27,180	22,740 – 31,820
	Rural	5,450	7,440
	Environmental	--	--
	Subtotal	47,080	56,010 – 80,380
9B	Creston		
	Urban	0	0
	Agricultural	4,120	3,810 – 5,750
	Rural	3,980	6,230
	Environmental	--	--
	Subtotal	8,100	10,040 – 11,980
9C	Shandon		
	Urban	0	0
	Agricultural	20,360	21,890 – 27,190
	Rural	720	1,070
	Environmental	--	--
	Subtotal	21,080	22,960 – 28,260
10	Nacimiento		
	Urban	0	0
	Agricultural	0	0
	Rural	1,570	3,020
	Environmental	--	--
	Subtotal	1,570	3,020

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