County Service Area 23 – Santa Margarita Water Rate Analysis

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County Public Works

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Water Rate Analysis County Service Area (CSA) 23 – Santa Margarita, Water System

Purpose

The purpose of this report is to summarize the revenue requirements for the debt service, capital replacement, and operations and maintenance of the CSA 23 water system and determine the appropriate water rate increase needed to generate those revenue requirements.

Background

The CSA 23 water system was formed in 1946 (originally as County Water Works District #6) and operates for the purpose of furnishing potable water to the residential, commercial and public customers in the community of Santa Margarita. CSA 23 is located in central San Luis Obispo County.

CSA 23 currently serves approximately 509 residential, 24 commercial, and 6 public authority customers. CSA 23 receives its water supply from two wells. One is a deep, fractured rock well and the other is a relatively shallow well that pumps from the alluvial deposits of Santa Margarita Creek. Two other wells exist and are only available to be used in an emergency. Water is treated at the well-head and then pumped through the distribution system up to two water storage tanks located on the west end of town. A grant funded project to connect the CSA 23 water system with that of Atascadero Mutual Water Company for an emergency intertie is expected to be completed in 2016. A map of the CSA 23 water distribution system is included as **Exhibit A** and a map of the water system intertie project is included as **Exhibit B**.

Water rates in Santa Margarita have not increased (other than inflationary adjustments) in 7 years. The last increase was implemented in 2008 in order to partially fund Capital Improvements which included a new water tank and water line improvements. A federal grant provided one-third of the project funding. The need for the current rate increase is discussed below.

Water Consumption

On January 17, 2014, Governor Brown declared a drought state of emergency. Subsequently, on March 11, 2014, the San Luis Obispo County Board of Supervisors adopted a resolution proclaiming a local emergency due to drought conditions in San Luis Obispo County. On July 15, 2014, the State Water Board adopted initial emergency regulations to support water conservation (Resolution No. 2014-0038) as set forth in in California Code of Regulations, Title 23, Sections 863, 864, and 865. In accordance with the adopted regulations, smaller water suppliers must either limit outdoor irrigation of ornamental landscapes or turf with potable water by the persons it serves to no more than two (2) days per week or implement other mandatory conservation measures intended to achieve a comparable reduction in water consumption by the persons it serves relative to the amount consumed in 2013. In order to comply with State emergency regulations, the County enacted Ordinance No. 3265 on August 19, 2014, regulating outdoor water use to Mondays and Thursdays only within applicable County Service Areas, including CSA 23.

On April 1, 2015, after four years of drought and a winter of record low snow fall, Governor Brown issued an Executive Order directing the State Water Board to impose mandatory water conservation measures intended to achieve a statewide 25% reduction in potable urban water usage through February 2016. Emergency water conservation regulations implementing mandatory conservation were adopted on May 5, 2015 and became effective June 1, 2015. Smaller suppliers, including CSA 23, must either reduce water use by 25%, or restrict outdoor watering to no more than 2 days per week. Smaller suppliers must also submit a report on December 15, 2015 to demonstrate compliance.

Figure 1 shows the annual reduction in water use by the community over time. Consumption has decreased by 36% from the high point in fiscal year 2003/2004 and must decrease even further in order to meet the Governor's target reduction level. The result of this reduction in consumption is that the revenue generated by the current rate structure is insufficient to cover the operating expenses of the system. This revenue shortfall has been slowly reducing the reserve balances in CSA 23 which are now critically low at less than $50,000.

With the current drought conditions, it is assumed that future consumption will reduce further with additional conservation measures in order to reach the Governor's 25% reduction target. Thus, the Governor's conservation target of 51,310 CCF for Santa Margarita is assumed for the purpose of developing the new rate structure.

The number of water accounts in CSA 23 has remained consistent as very little infill development has occurred. Only 10 water connections to the CSA 23 system have occurred since 2008 which is less than 2 per year on average. Additional connections are not anticipated and the existing number of accounts is assumed for the purpose of developing the new rate structure.

Revenue Requirements

Table 1 presents an actual revenue and expenditure history for CSA 23. This shows that the system has been running at a deficit in most years since 2008 with the deficit reducing reserves in CSA 23.

The proposed revenue requirements include a 10% contingency on O&M which totals $22,000. The need for this contingency is twofold. First, it will provide funding for unanticipated expenditures of the system. This could be in the form of one time expenditures (i.e. equipment replacement or emergency water) or increases in ongoing expenditures (i.e. the cost of water treatment and pumping). Secondly, any unused contingency is available to fund pay as you go capital improvements. A $7,500 Capital Equipment Replacement line item is also included to ensure timely replacement of equipment on a regular basis.

The proposed revenue requirements total $393,030. The amount of revenue needed from water sales equals $384,630 and revenue from other charges covers the difference.

Water Rate Structure

Table 2 illustrates the proposed rate change to the Basic Bi-Monthly Charge for Water Service and how the rate was calculated. The current rate structure has a minimum charge, which includes 10 units (748 gallons per unit) of water, and then increasing tiered water rates for higher usage in order to encourage water conservation. However, a recent court decision has limited municipal agencies ability to use tiered water rates. Therefore, the proposed rate structure eliminates the use of tiered water rates for the CSA 23 system.

The proposed rate structure includes a minimum charge (with no water included) and a single volumetric usage charge for each unit of water used. The minimum charge is calculated to cover the annual debt service and fixed operating costs of the system. The volumetric usage charge is calculated to cover the cost of capital replacements and variable operating costs of the system. It is expected that the proposed rate structure will still encourage water conservation as customers will not receive any water with the minimum charge, but will have to pay for each unit used. Customers will only pay for water actually used.

The current average monthly water bill for customers is $44.18. The proposed rate adjustment would raise the monthly average to $59.47. The recommended changes to the Basic Bi-Monthly Charge for Water Service represent an average increase of $30.58 ($15.29 per month) or 35%. The adjustment will generate additional revenues of approximately $98,850 per year. This adjustment is required to cover the cost of ongoing capital replacement, debt service, operations and maintenance expenditures given the reduced water consumption in the community due to the drought and conservation efforts to meet the Governor's target reductions. The existing annual increase based on increases in the Consumer Price Index will be eliminated.

Water bills are computed on a bi-monthly basis (every other month). The charge for water is based on the amount of water used, measured in hundred cubic feet. This is abbreviated as CCF. One CCF equals 748 gallons.

Rate Increase Process

On September 15, 2015 the Board of Supervisors (BOS) found that there were sufficient protests to the first proposed water rate increase initiated in July 2015 and the Ordinance to amend water rates was not adopted. As a result, a second water rate increase process must be initiated in order to pay for operations and maintenance, debt service, and capital replacement costs of the CSA 23 water system. Existing water rates are insufficient to cover these costs.

The rate increase process is outlined in the California Constitution and will take several months to complete. It is estimated that, if successful, the earliest any additional revenue would begin to be realized is May 2016. Therefore, a loan of $60,000 from the County General Fund has been requested to provide necessary cash flow to help cover all the expected obligations of the system this fiscal year. The repayment of the loan is expected to cost $6,680 annually for a period of ten years and is factored into the rate increase proposal.

At the October 1, 2015 meeting of the CSA 23 Advisory Committee, three rate increase structures were presented for consideration. After a report from the water rate subcommittee

and extensive deliberation, the Committee recommended the structure which is presented in this report.

In response to concerns that rates will continue to be collected at higher levels if water usage increases after the drought is over and the additional revenue is not needed to cover system costs, a new section authorizing rate reductions will be included in the Ordinance proposed as following:

Reduction to Service Charges:

If, during the preceding calendar year, total water sold within CSA 23 exceeds the levels in the table below, a corresponding reduction to the maximum Service Charges is authorized for the subsequent calendar year, beginning with the first billing cycle of the subsequent calendar year according to the following table:

Total Water Sold (CCF)	**Authorized Reduction**
60,000 to 64,999 CCF	Up to $0.45 per CCF
65,000 to 69,999 CCF	Up to $0.65 per CCF
70,000 to 74,999 CCF	Up to $0.83 per CCF
Greater than 75,000 CCF	Up to $0.98 per CCF

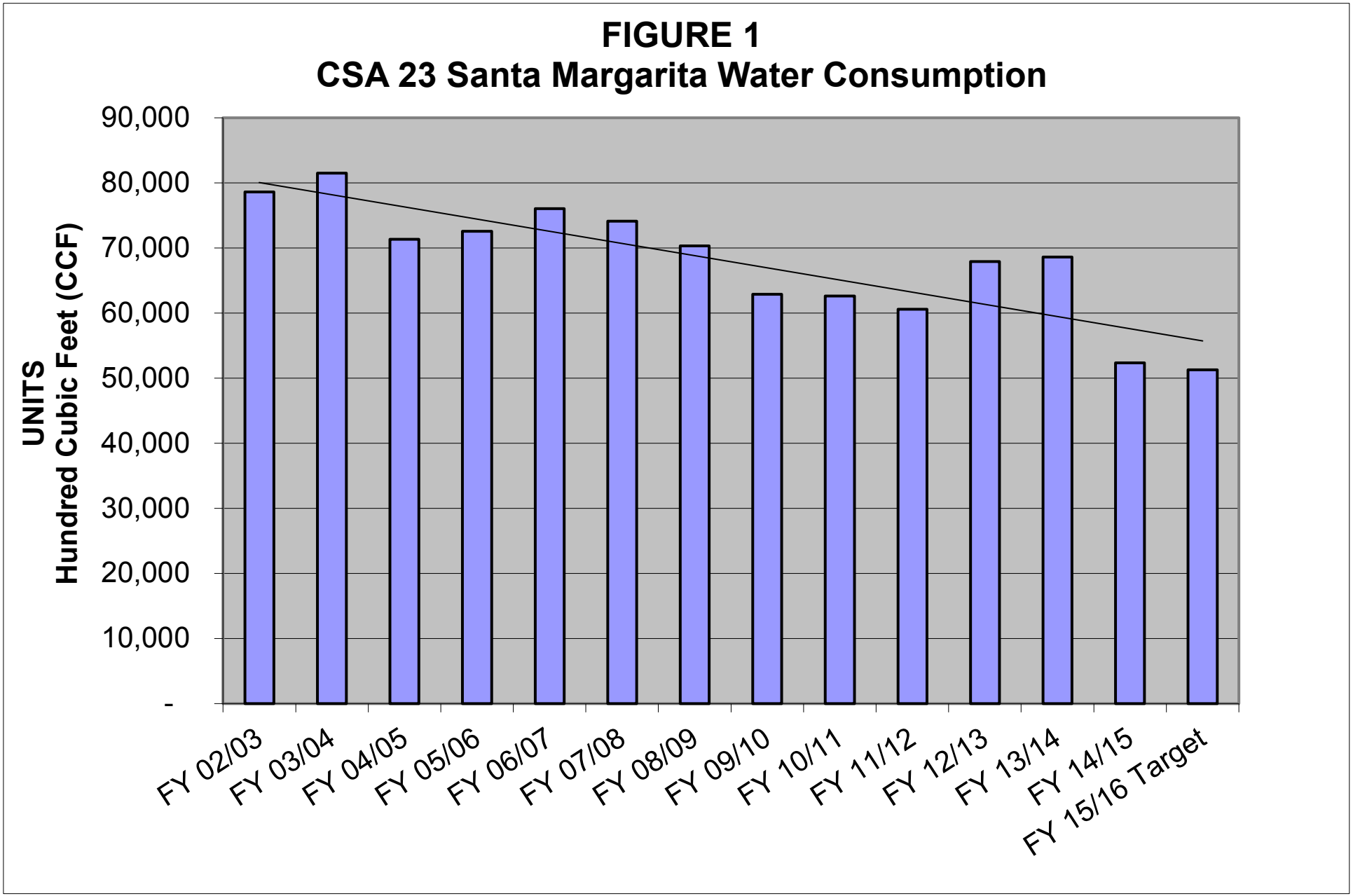


FIGURE 1
CSA 23 Santa Margarita Water Consumption
UNITS
Hundred Cubic Feet (CCF)
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
FY 02/03
FY 03/04
FY 04/05
FY 05/06
FY 06/07
FY 07/08
FY 08/09
FY 09/10
FY 10/11
FY 11/12
FY 12/13
FY 13/14
FY 14/15
FY 15/16 Target

TABLE 1

CSA 23 Santa Margarita Water
Actual Revenues and Expenses

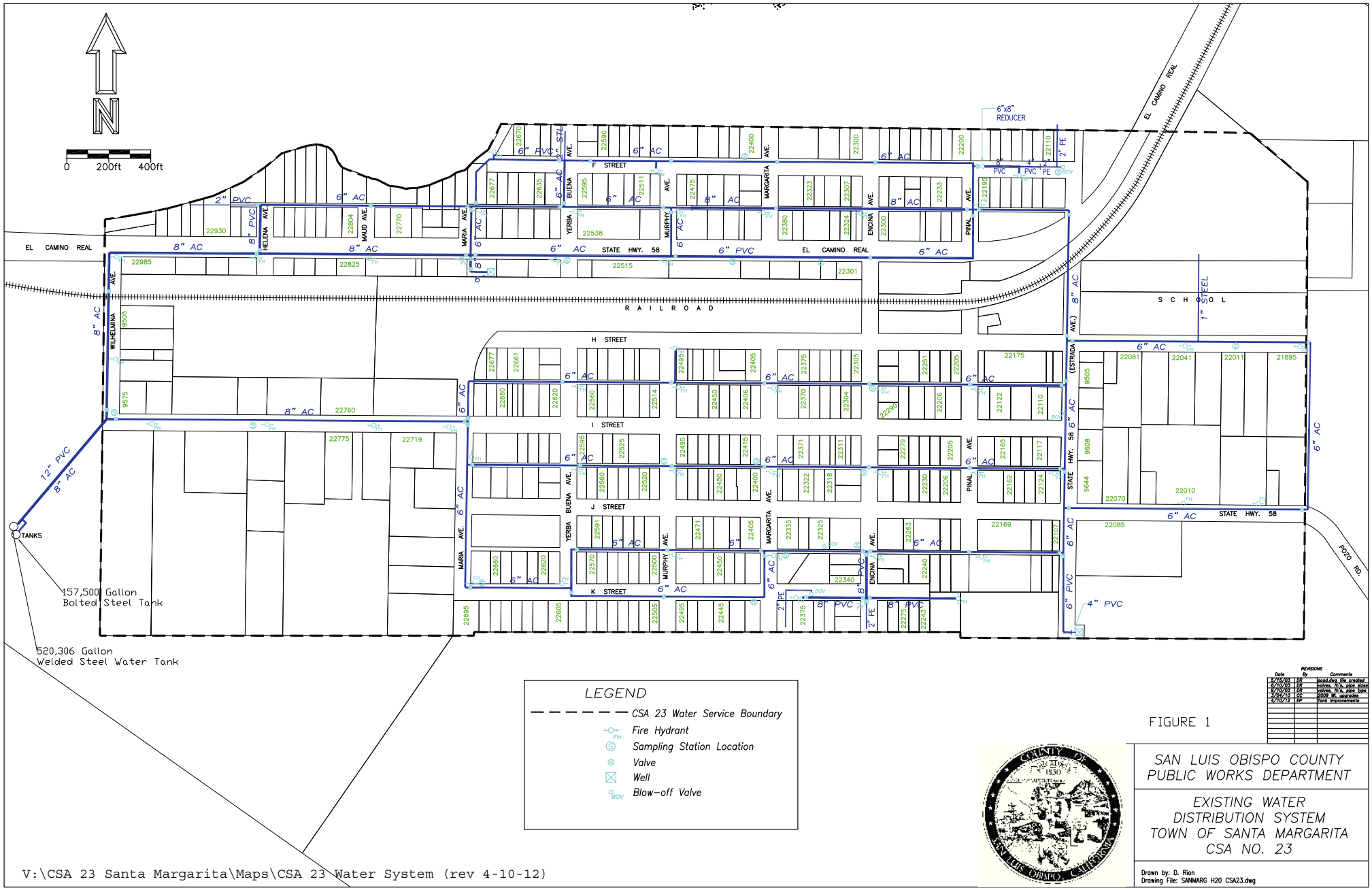
Total Consumption (CCF)	72,550	76,018	74,110	70,320	62,914	62,597	60,580	67,918	68,602	52,366	51,310
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 Projection
Water Sales	193,259	216,898	221,603	297,447	287,464	284,627	303,536	320,507	319,838	285,781	384,630
System Connection Fees	6,000	1,500	3,000	-	-	-	10,500	-	4,500	-	-
Water Availability	1,569	1,154	445	982	915	937	965	978	818	1,280	800
New Service - Water	22,514	4,058	12,385	-	-	-	6,169	-	2,446	1,474	-
Interest	914	766	1,629	585	495	230	226	145	112	874	-
Other Revenues	32	288	1,431	608	307	371	1,074	2,770	8,669	9,479	7,600
Total - Revenues	**224,288**	**224,664**	**240,494**	**299,621**	**289,181**	**286,165**	**322,471**	**324,399**	**336,382**	**298,888**	**393,030**
Other O&M	100,205	92,494	69,859	111,100	119,783	127,403	108,136	113,674	96,908	100,321	105,000
Chemicals	5,572	9,605	11,809	7,516	9,319	11,151	9,147	8,770	13,365	11,433	13,000
Power	11,517	13,442	16,889	22,278	18,316	14,292	14,094	16,424	20,565	19,999	20,000
Equipment Replacement			6,794					5,343		6,103	7,500
Contingency (10%)											22,000
Usage Charge - Expenses	**117,294**	**115,541**	**105,351**	**140,894**	**147,418**	**152,846**	**131,377**	**144,211**	**130,838**	**137,856**	**167,500**
Water Quality Analysis & Support	61,984	57,909	52,766	49,581	38,160	48,640	49,572	44,672	42,135	53,641	52,000
General Accnt, Admin & Billing	24,913	21,120	27,654	23,422	28,803	35,925	30,090	21,047	26,541	30,015	30,000
State Safe Drinking Water Loan Prin/Int	34,407	33,949	33,874	34,597	35,597	35,597	35,597	35,597	35,597	35,597	35,600
Interim Loan Expense			3,123	4,725	488						
General Fund Loan Prin/Int											6,680
USDA Loan Prin/Int					32,535	59,771	85,572	87,169	87,359	87,506	87,500
USDA Loan - Equip Reserve					5,000	5,000	5,000	5,000	5,000	5,000	5,000
USDA Loan - Debt Reserve						13,752	12,504	13,752	3,752	8,752	8,750
Minimum Charge - Expenses	**121,304**	**112,978**	**117,417**	**112,325**	**140,583**	**198,685**	**218,335**	**207,237**	**200,385**	**220,512**	**225,530**
Total - Expenses	**238,598**	**228,519**	**222,768**	**253,219**	**288,001**	**351,531**	**349,712**	**351,448**	**331,223**	**358,367**	**393,030**
Revenues minus Expenses	(14,310)	(3,855)	17,725	46,402	1,180	(65,366)	(27,241)	(27,049)	5,159	(59,480)	0

TABLE 2

Basic Bi-Monthly Charge for Water Service:	
Allowable Quantity	**Present Rate**
0 CCF to 10 CCF *	$61.41 Minimum Charge
11 CCF to 16 CCF	$2.93 Per CCF
Greater than 16 CCF	$3.76 Per CCF
Allowable Quantity	**New Rate**
0 CCF	$69.74 Minimum Charge
Greater than 0 CCF	$3.10 Per CCF
** (CCF is Hundred Cubic Feet or 748 gallons)*	

CSA 23 WATER RATE CALCULATION				
		Minimum Charge		Usage Charge
Capital / Variable O&M Expense				167,500
(Less other Revenue)				(8,400)
Debt Service / Fixed O&M Expense		225,530		
Total - Revenue Requirement		**$ 225,530**		**$ 159,100**
Customers (or dwellings)		539		
Governor's Target Water Sales		51,310	Units (unit=748 gallons)	
Minimum Bi-Monthly Charge		**$ 69.74**	**per customer ($225,530 / 539 / 6)**	
Usage Charge		**$ 3.10**	**per unit ($159,100 / 51,310 units)**	

Exhibit "A"



REVISIONS		
Date	By	Comments
5/15/03	DR	acad.dwg file created
6/10/03	DR	valves, ft/h, pipe sizes
9/10/03	DR	valves, ft/h, pipe type
3/24/10	CC	2009 ft. upgrades
4/10/12	EP	Tank improvements

FIGURE 1

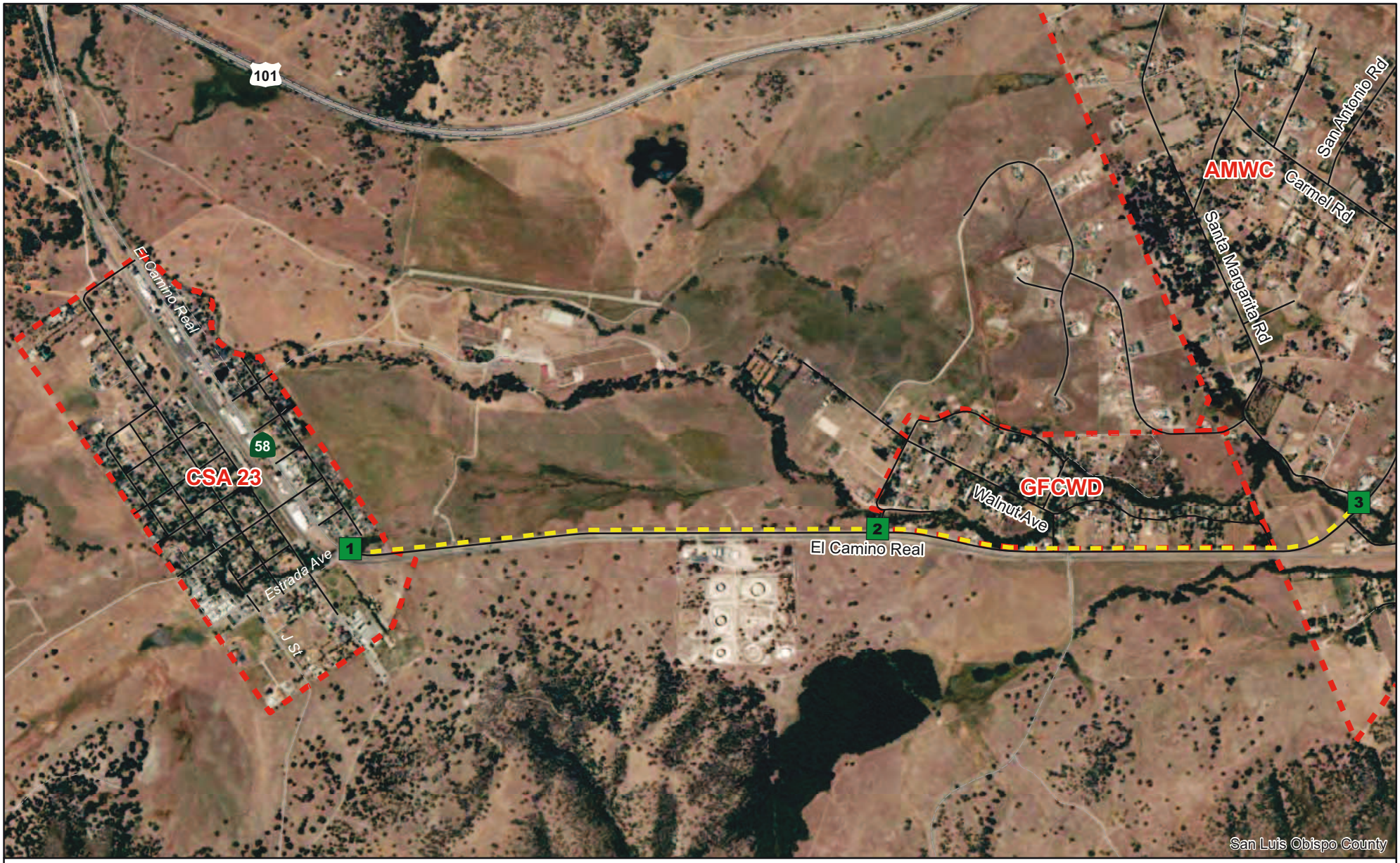
SAN LUIS OBISPO COUNTY
PUBLIC WORKS DEPARTMENT

EXISTING WATER
DISTRIBUTION SYSTEM
TOWN OF SANTA MARGARITA
CSA NO. 23

Drawn by: D. Rion
Drawing File: SANMARG H20 CSA23.dwg

V:\CSA 23 Santa Margarita\Maps\CSA 23 Water System (rev 4-10-12)

Exhibit "B"



Intertie Project Between CSA 23 (Santa Margarita), Atascadero Mutual Water Company, and Garden Farms Community Water District

CSA 23/AMWC/GFCWD Interlie (Proposed)

Service Areas

1 Tie-in with CSA 23

2 Tie-in with GFCWD

3 Tie-in with AMWC

0 0.125 0.25 0.5
Miles