



November 25, 2014

TO: LOCSO Board of Directors
FROM: Rob Miller, District Engineer
SUBJECT: **Agenda Item 12A – 12/04/2014 Board Meeting**
Consideration of Approval of a Draft Water Rate Study

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DESCRIPTION

The purpose of this agenda item is to consider the approval of a draft Water Rate Study prepared by Bartle Wells Associates.

STAFF RECOMMENDATION

Staff recommends that the Board adopt the following motion:

Motion: I move that the Board approve the draft Water Rate Study, set a public hearing for February 5, 2015, and direct staff to prepare the Proposition 218 notice at least 45 days prior to the public hearing.

BACKGROUND AND DISCUSSION

In October 2014, the Board approved a contract with Bartle Wells Associates for the preparation of a Water Rate Study in order to accomplish the following objectives:

- Provide for the prudent planning of capital infrastructure, including water supply projects and implementation of the Basin Plan, as outlined in the Capital Improvement Program approved by the Board in August, 2014
- Account for current and future operations, maintenance, and replacement expenses
- Fund reserve accounts in accordance with adopted policies, and revisit reserve policies where prudent
- Prepare for future reductions in revenue due to decreased water sales from conservation efforts and the delivery of recycled water
- Recommend emergency rates necessary to support District operations during various drought stages as defined in the Water Shortage Contingency Plan (Plan) adopted by the Board in August, 2014, or recommend changes to the Plan if necessary.
- Consider alternative rate structures that would encourage increased conservation.
- Comply with the requirements of Proposition 218

The attached draft Water Rate Study summarizes the technical work assembled to meet these goals. The recommended financial plan and corresponding rates were considered in a joint meeting of the Financial Advisory Committee and Utilities Advisory Committee on November 19, 2014. The committees were in

general agreement with the approach taken in the draft plan, and asked for additional clarification and technical support for the proposed emergency rates. Bartle Wells has provided clarified information in the attached draft, and will be prepared to answer additional questions during the Board meeting. It should be noted that the proposed rates represent the maximum recommended values. If supplemental funding is obtained for water supply projects in the Basin Plan through a Community Facilities District, the maximum approved water rate increases will not need to be applied in future years.

With respect to the implementation of the recommended rates, the following schedule is recommended:

- December 19, 2014: Staff to mail the required Proposition 218 notice to district customers at least 45 days in advance of the hearing.
- February 5, 2015: Conduct the required public hearing consistent with Proposition 218.
- April 1, 2015: If Stage 3 of the Water Shortage Contingency Plan is declared, implement corresponding emergency rates.
- July 1, 2015: Implement planned rate increase.

FINANCIAL IMPACT

The proposed Water Rate Study is a critical step in the planning process for the District's finances. Increased revenues will be necessary to fund approved capital improvements, and rates will be increased to provide stable income during periods of reduced water sales.

Attachments

Los Osos Community Services District



Water Financial Plan & Rate Study

Revised Draft 11-24-14



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS



Los Osos Community Services District

Water Financial Plan & Rate Study

Findings & Recommendations

Background

- The Los Osos Community Services District (LOCSO or District) is a community-owned and governed public agency.
- LOCSO provides water service to approximately 2,770 primarily residential accounts serving a population of roughly 7,100.
- Water facilities include 5 active wells, approximately 27 miles of water distribution pipelines, 3 storage tanks and over 550 valves.
- Groundwater is the District's sole source of water supply.
- The regional groundwater basin has been in overdraft since the late 1970s. This has resulted in seawater intrusion into the District's coastal aquifers which poses a threat to the District's water supply.
- The upper aquifer (closest to the surface) has been impacted by wastewater septic system discharge over many years, which has resulted in elevated levels of nitrate and groundwater degradation in the upper aquifer and increased the District's reliance on water supplies from the lower aquifers, which are threatened by seawater intrusion.
- In response to the regional threat of seawater intrusion into the lower aquifer and water quality degradation of the upper aquifer, the regional water purveyors jointly developed the *Basin Plan for the Los Osos Groundwater Basin* dated August 1, 2013. The Basin Plan includes projects and initiatives designed to a) reduce water demand, and b) improve the long-term sustainability of the region's water supply.
- In 2014, the District's consulting engineer, the Wallace Group, developed a Capital Improvement Program (CIP) identifying \$23.5 million of capital needs. The CIP was designed to fund the District's share of Basin Plan requirements, address existing water system deficiencies, improve operation efficiencies, improve system reliability, and replace/rehabilitate aging and substandard infrastructure. High-priority, near-term needs total \$4.9 million.
- The CIP also identifies desired funding sources for near-term and long-term improvements. Considering the water fund does not have adequate fund reserves available to address high-priority needs, the CIP anticipates the issuance of debt to help fund the \$4.9 million of high-priority projects.

Process

- In 2014, Bartle Wells Associates (BWA) was retained to develop a long-term financial plan and rate study for the District’s water enterprise. A key objective of the rate study is to ensure adequate funding for future operating and capital needs while maintaining financial stability.
- BWA worked with District staff and the District’s engineering consultant, the Wallace Group, to gain an understanding of the water utility and its financial challenges, obtain data and information, resolve outstanding questions, and gain input and direction.
- During the study, BWA met with LOCSD’s Finance Advisory Committee (FAC), Utilities Advisory Committee (UAC), and Board of Directors to present findings and preliminary recommendations, discuss alternatives, and gain input for developing and refining recommendations.
 - **09/10/14 – Special Joint Meeting of the FAC and UAC**
BWA presented preliminary findings and observations, discussed key issues, and received initial input from UAC and FAC members and the public.
 - **10/02/14 – LOCSD Board Meeting**
BWA presented preliminary findings and observations, discussed key issues, and received initial input from the LOCSD Board of Directors and comments from the public.
 - **11/19/14 – Special Joint Meeting of the FAC and UAC**
BWA presented draft findings and recommendations, discussed key issues and assumptions, and received input from UAC and FAC members as well as from members of the community who attended the meeting. Based on input received, BWA developed revised recommendations for presentation to the Board of Directors.
 - **12/04/14 – LOCSD Board Meeting**
BWA will present revised recommendations and be available to answer questions and receive additional input from the Board.

Financial Plan & Rate Study Objectives

Key objectives for the water financial plan and rate study include:

Financial Plan Objectives

- Develop 10-year financial projections to determine future annual revenue requirements
- Incorporate the latest available financial information and projections of future operating and capital funding needs
- Evaluate financing alternatives for the District’s water system capital improvement program
- Recommend minimum fund reserve targets for financial planning purposes
- Evaluate future finances and future rate increases

Water Rate Study Objectives:

- Evaluate the District's current water rate structure as well as potential alternatives or modifications designed to improve rate equity and achieve District objectives
- Analyze customer and water consumption data
- Recommend water rates designed to:
 - a. Recover the District's costs of providing water service and support long-term financial stability
 - b. Provide adequate funding for capital needs including the Basin Plan and other high-priority projects
 - c. Position the District to be able to begin addressing longer-term infrastructure needs and future replacements
 - d. Comply with the legal requirements of Proposition 218
- Develop emergency water shortage rates to support financial stability during periods of required reductions in water consumption
- To the degree possible, aim for steady, gradual annual rate increases to help minimize the annual impact on customers
- Aim to build consensus and public acceptance for final recommendations

Water Utility Finances

- The District's water utility is a self-supporting enterprise
 - Revenues must be adequate to fund the cost of providing service including long-term operating and capital needs
 - Water rates are the main source of revenue and should be set at levels adequate to support the District's financial needs and support long-term financial stability
- In recent years, the District has provided good financial stewardship by raising water rates in each of the past 5 years to help keep revenues in line with the cost of providing service
 - The District modified its rate structure in 2010. Key changes included:
 - a) ended the practice of providing 9 units of water at no cost each bi-monthly billing period
 - b) Added a 4th water consumption rate tier and revised tier rates and breakpoints
 - The District completed its own financial and rate analysis in 2012. Based on this analysis, the District adopted two years of 12% rate increases effective in 2012/13 and 2013/14 and most recently adopted a 1.83% inflationary rate increase effective July 1, 2014.
- The water utility has one outstanding debt obligation, a 30-year, \$5 million I-Bank Loan issued with a 3.05% interest rate (plus a 0.30% annual admin fee). Annual debt service totals a little over \$275,000 for approximately another 20 years, through 2034/35.

- The District maintains a minimum prudent level of water fund reserves with approximately \$1.2 million in fund balances available for operating and capital needs as of June 30, 2014. The District also maintains a restricted debt service reserve fund for its one outstanding I-Bank debt obligation in the amount of \$281,000.
- The District's water service area is entirely located within a Prohibition Zone established by the Regional Water Quality Control Board that has resulted in a moratorium on new development since 1988.
- The water utility is currently in reasonably adequate financial health, but faces a number of financial challenges that will require significant rate increases.

Financial Challenges

Key financial challenges facing the District include:

➤ **Long-Term Water Supply & the Basin Plan**

- To help address threats to the regional groundwater basin, the Basin Plan identifies projects and initiatives designed to a) reduce water demand, and b) improve the long-term sustainability of the region's water supply. Financial impacts to the District will include a) the cost of constructing new wells, distribution pipelines, and a regional nitrate removal facility, b) new operating costs for nitrate removal, and c) future revenue reduction due to reduced water sales.
- The District's share of near-term funding needs for the Basin Plan total \$2.25 million.
- New operating costs for nitrate removal and related brine disposal are projected to phase in to \$100,000 annually by 2016/17.

➤ **Capital Improvement Program**

- In 2014, the District's consulting engineer, the Wallace Group, developed a Capital Improvement Program (CIP) identifying \$23.5 million (current \$) of capital needs to fund the District's share of Basin Plan requirements, address existing water system deficiencies, improve operation efficiencies, improve system reliability, and replace/rehabilitate aging and substandard infrastructure.
- High-priority near-term needs total \$4.9 million. This total includes funding for the District's share of near-term Basin Plan funding requirements as well as over \$2.6 million of additional capital needs to address the replacement of deficient water pipelines and improve operational performance and reliability.
- Longer-term funding needs total \$19.5 million (current \$), with roughly \$1 million of intermediate funding needs, and \$18.4 million identified for longer-term replacement of aging, substandard water pipelines.

➤ **Reduced Water Sales**

- Water sales have declined in recent years and are expected to decrease further due to additional conservation measures and customer response to rate increases
- Water consumption in the current fiscal year, metered from July through October, was down over 10% compared to the prior fiscal year.
- Reduced levels of water consumption results in reduce water sales revenues, which in turn puts upward pressure on water rates. However, customers who conserve will end up purchasing fewer units of water which helps mitigate the impact of rate increases.
- Projected water sales assume higher percentage cutbacks in higher-tier water sales, coupled with lower percentage cutbacks in the lower tiers. Hence a 5% cutback in water sales would result in a roughly 5.5% decrease in revenues.

➤ **Operating Cost Inflation**

- Annual rate increases are needed to keep revenues in line with ongoing operating cost inflation. Cost inflation for water & wastewater utilities (whose costs are largely related to labor and capital) has historically been higher than CPI, which is more of a measure of urban goods and services.

Financial Projections

BWA developed 10-year water financial projections for to evaluate annual revenue requirements and project rate increases. The projections are based on reasonable and slightly conservative assumptions and estimates. The projections facilitate evaluation of long term financial needs so that the District can set course in the right direction with rate increases. The proposed rates should be viewed as near-term steps along a longer path. Finances should be re-evaluated in future years to ensure the District's rates remain on track to meet future revenue requirements and continue to fund the District's costs of providing service.

➤ Key financial plan assumptions include:

- Financial projections are based on the 2014/15 Budget with a few minor modifications to better reflect current and future expenses based on input from District staff.
- Operating cost inflation is projected at 4% per year for planning purposes.
- The projections assume a relatively no growth for the first 5 years, followed by a future growth of 5 new single family homes (or equivalents) per year.
- Water consumption is projected to decrease 10.5% in the current fiscal year based on data from bills sent July - November. Future water sales assume additional 5% reductions in water demand in each of the next two fiscal years, followed by small future reductions based on an estimated -0.20 elasticity (each 10% of future rate increases results in a corresponding 2% decrease in water sales starting 2017/18).

- Water sales revenues also account for two schools transitioning to recycled water for irrigation needs starting January 2017 (with completion of the wastewater treatment plant). The revenue loss at current rates is estimated at approximately \$50,000 per year adjusted by future rate increases.
- Assumes the District receives recycled water revenues for school irrigation at the rate of \$4.35 per ccf. These revenues initially offset a little over 40% of the loss of potable water sales for school irrigation. However, the revenue loss increases in future years as potable rates rise, while the recycled water rate remains unchanged.
- Property tax revenues based on 2014/15 budget of \$180,000 escalating by 2% per year.
- Interest earning based on beginning fund balance plus the \$281,000 restricted debt service reserve, multiplied by projected interest earning rate shown for each year.
- Assumes the District issues debt to finance \$4 million of high-priority capital improvements by early 2015/16. At this stage, it is difficult to pinpoint how much lenders would be comfortable lending to the District. Annual debt service is estimated at \$75,000 per each \$1 million of project funding based on a 20-year loan at 4%. Some banks may not be comfortable with repayment terms over 15 years, which would increase the annual payment. At the same time, an I-Bank loan could result in lower annual debt service, but it is currently not known if the District would qualify for a new I-Bank loan.
- The District's share of ISJ Inter-Agency Cost Sharing is projected at \$50,000 for the next 2 fiscal years then decreases to \$20,000 annually plus cost inflation.
- New brine disposal costs are projected at \$50,000 in the current fiscal year, then escalate to \$100,000 over the next 2 years and increase to account for cost inflation thereafter.
- Assumes water conservation program funding of \$30,000 per year plus cost inflation.
- Capital improvement expenditures are based on CIP funding projections and account for 3% annual construction cost inflation.
- AMR meter replacement expenses are projected to continue at their current level adjusted for cost inflation through 2022/23, when the program is expected to be completed.
- Minimum fund reserve target for planning purposes recommended at 25% of annual operating, maintenance and debt service expenses, plus \$500,000 for emergency capital reserves.

Draft Rate Projections

- Cash flow projections indicate the need for the following overall target % rate increases.

	2015/16	2016/17	2017/18	2018/19
Projected Overall Rate Increase %	15%	15%	8%	8%

- Projected reductions in water purchases will offset the impact of the rate increases, resulting in a 14% lower increase in water rate revenues than would have occurred from the rate increases alone.
- Due to proposed minor modifications in the rate structure, the actual impacts on the water rate components and customer bills will vary a bit.
- Deferring or reducing necessary rate increases in the near-term would result in the need for higher rate increases in future years (and vice versa)

Water Rate Structure

- LOCSD's water rates include 2 components:
 - A uniform, fixed bi-monthly service charge levied on all accounts. The fixed charges are estimated to generate roughly 41% of total water rate revenues in the current fiscal year. All customers pay the same fixed charge regardless of meter size.
 - Current fixed bi-monthly service charge: \$45.76 (\$22.88 per month).
 - Water consumption charges billed in 4 inclining rate tiers. These charges are expected to recover approximately 59% of rate revenues in the current fiscal year. All customers pay for water consumption via the same tiered rate structure.
 - Current tiered water consumption charges:

	<u>Bi-Monthly Usage</u>	<u>Rate (\$/ccf)</u>
Tier 1	0 - 5 ccf	\$1.63
Tier 2	6 - 10 ccf	3.07
Tier 3	11- 20 ccf	5.23
Tier 4	>20 ccf	7.20

- The average residential bill for a customer with 15 ccf bi-monthly water use equals \$95.41, or \$47.71 per month.
- The District's water rates are currently in the middle range compared to other regional water agencies. Based on a regional rate survey, the average monthly equivalent charge for a residential customer with average bi-monthly use of 15 ccf (7.5 ccf per month) is roughly 19% below the regional average and about 9% below the regional median.

- The current rate structure became effective on July 1, 2010 and was developed in-house, based on substantial analysis by the District and members of its rate committee. The current rate structure made a number of improvements to the prior rate structure.
- Due to evolving legal requirements and opinions regarding compliance with Articles 10 and 13D of the California Constitution, BWA recommends the District's legal counsel review the existing rate structure.
- Based on input from the District, BWA developed new rates based on a cost-of-service approach that aims to generally maintain the District's current rate structure with minor modifications.

Rate Structure Modifications

- Fixed Service Charges: Revenue recovery from fixed bi-monthly service charges is projected to increase from the current level of 41% to 45% of total rate revenues over the next 4 years. This is largely due to the impact of reduced water sales, resulting in fixed charges accounting for a slightly higher percentage of total rate revenues. Although the percentage of rate recovery from fixed charges increases, the actual fixed service charge is projected to increase at a lower percentage than if rates had been increased across-the-board.
- Water Consumption Charges: The steepness, or percentage difference between the tiered water consumption charges, is reduced a little over the next four years. At the same time, the dollar difference between the lowest and highest tiers increases as rate increases are implemented.
 - Current: Tier 4 is 4.42x the rate of Tier 1 with a rate differential of \$5.57
 - Proposed: Tier 4 is 4.00x the rate of Tier 1 with rate differential of \$7.80
 - Modifications to tiered rates are phased in over 4 years to minimize the annual impact.
 - Over the next 4 years, Tier 1 rates are projected to increase by a \$0.97 per ccf while Tier 4 rates are projected to increase by \$3.20 per ccf.
- Water Consumption Charges: The proposed rates include relatively small modifications to the difference between each tier resulting in a uniform difference between the rates for each tier. Under the current rate structure, the increase in tier rates varies from tier to tier.

Water Rate Projections

The following table shows projected water rates for the next 4 fiscal years along with additional information including a) the overall target rate increase and projected revenue increase generated from the rates offset by reduced water sales, b) the total 4-year increase to each component of the rate structure, and c) the differences between the water consumption rates per tier each year.

Projected Water Rates						
	Current	Projected			4-Year	
	2014/15	2015/16	2016/17	2017/18	2018/19	Increase
Overall Rate Increase		15%	15%	7.5%	7.5%	52.8%
Projected Revenue Increase		12.5%	9.5%	5.8%	6.6%	39.0%
Fixed Bi-Monthly Service Charge	\$45.72	\$52.36	\$59.32	\$64.64	\$70.42	\$24.70
Monthly Equivalent	22.86	26.18	29.66	32.32	35.21	12.35
Water Consumption Charges (\$/ccf)						
Tier 1 0 - 5 ccf	\$1.63	\$2.00	\$2.35	\$2.50	\$2.60	\$0.97
Tier 2 6 - 10 ccf	3.07	3.75	4.40	4.80	5.20	2.13
Tier 3 11- 20 ccf	5.23	6.00	6.75	7.25	7.80	2.57
Tier 4 >20 ccf	7.20	8.20	9.20	9.80	10.40	3.20
<i>1 ccf = one hundred cubic feet = 748 gallons</i>						
Difference Between Tier Rates						
Tier 1 - 2	\$1.44	\$1.75	\$2.05	\$2.30	\$2.60	
Tier 2 - 3	2.16	2.25	2.35	2.45	2.60	
Tier 3 - 4	1.97	2.20	2.45	2.55	2.60	

Rate Impacts

The following table shows the rate impacts on the monthly charges to residential customers under a range of water usage levels assuming no additional conservation. As shown at the bottom of the table, conservation can significantly reduce the impacts of the proposed water rate increases.

Projected Rate Impacts to Monthly Residential Charges									
Usage Level	Monthly Use		Current \$/Month	Projected Monthly Water Bills				4-Year Impact	Avg Annual Impact
				2015/16	2016/17	2017/18	2018/19		
LOW	3 hcf	Monthly Bill	\$27.75	\$32.18	\$36.71	\$39.82	\$43.01		
		Increase \$		\$4.43	\$4.53	\$3.11	\$3.19	\$15.26	\$3.82
		Increase %		16.0%	14.1%	8.5%	8.0%	55.0%	11.6%
MED-LOW	5 hcf	Monthly Bill	\$31.01	\$36.18	\$41.41	\$44.82	\$48.21		
		Increase \$		\$5.17	\$5.23	\$3.41	\$3.39	\$17.20	\$4.30
		Increase %		16.7%	14.5%	8.2%	7.6%	55.5%	11.7%
AVERAGE	7 hcf	Monthly Bill	\$37.15	\$43.68	\$50.21	\$54.42	\$58.61		
		Increase \$		\$6.53	\$6.53	\$4.21	\$4.19	\$21.46	\$5.37
		Increase %		17.6%	14.9%	8.4%	7.7%	57.8%	12.1%
2X AVG	14 hcf	Monthly Bill	\$67.28	\$78.93	\$90.41	\$97.82	\$105.41		
		Increase \$		\$11.65	\$11.48	\$7.41	\$7.59	\$38.13	\$9.53
		Increase %		17.3%	14.5%	8.2%	7.8%	56.7%	11.9%
3X AVG	21 hcf	Monthly Bill	\$105.86	\$123.13	\$140.11	\$151.12	\$162.61		
		Increase \$		\$17.27	\$16.98	\$11.01	\$11.49	\$56.75	\$14.19
		Increase %		16.3%	13.8%	7.9%	7.6%	53.6%	11.3%
HIGH USER WITH 20% CONSERVATION			With 20% Conservation Over 4 Years						
	Wtr Use (ccf)	20	19	18	17	16			
	Monthly Bill	\$98.66	\$108.93	\$117.41	\$119.57	\$121.01			
	Increase \$		\$10.27	\$8.48	\$2.16	\$1.44	\$22.35	\$5.59	
	Increase %		10.4%	7.8%	1.8%	1.2%	22.7%	5.2%	
Conservation can significantly mitigate the impacts of the proposed water rate increases.									

Water Rate Structure Alternatives

- There are many other rate structures the District could opt to implement; California water agencies use a wide range of rate structures to recover costs of service.
- However, modifications to the rate structure could result in substantially differing impacts on different types of customers and customers with different water usage profiles. Some customers would financially benefit from rate structure adjustments, while others would have to pay more.

- In cases where rate structure modifications are being implemented concurrently as significant rate increases, customers worse off from the rate structure adjustments may feel they are being unfairly burdened due to the compounded effect of both overall and structural rate increases.
- BWA generally prefers to work within agencies' existing rate structures, only recommending modifications when appropriate.
- Potential rate structure alternatives could include:
 - Adopting across-the-board rate increases with no rate structure modifications
 - Levying fixed bi-monthly service charges based on each customer's meter size and capacity. This would result in higher fixed charged for larger customers.
 - Maintaining the current tiered water consumption rate structure for single family and potentially small commercial accounts, but transitioning to a uniform average rate for larger customers, many of which currently purchase the majority of their water in the higher tiers.
 - Changing the level of cost recovery from fixed vs. variable rates.
 - Potentially further reducing the steepness of current tiered consumption charges. This would result in increased impacts on low to moderate water users and reduced impacts on high water users compared to the proposed rates.
 - Transitioning to some form of budget-based water rates (similar to water rationing) with customers allocated water based on number of residents per household and potentially other factors. Water use within a customer's allocation would be billed at a lower rate, and water use above their allocation would be billed at a higher rate to discourage unnecessary use.
- Based on conceptual discussion and input provided by the District's FAC and UAC, the proposed rates maintain the District's current rate structure with a few relatively minor modifications noted earlier.

Water Shortage Emergency Rates

- BWA also developed Water Shortage Emergency Rates with the goal of helping the District to remain financially stable during periods of emergency water shortages and resulting reductions in water sales.
 - The proposed rates are designed to support financial stability and are not designed to drive down water use. The District previously developed and adopted a *Water Shortage Contingency Plan* in August 2014. The Plan defines 5 stages of water reduction targets and includes escalating water use restrictions and penalties designed to reduce water consumption to achieve the reduction targets.

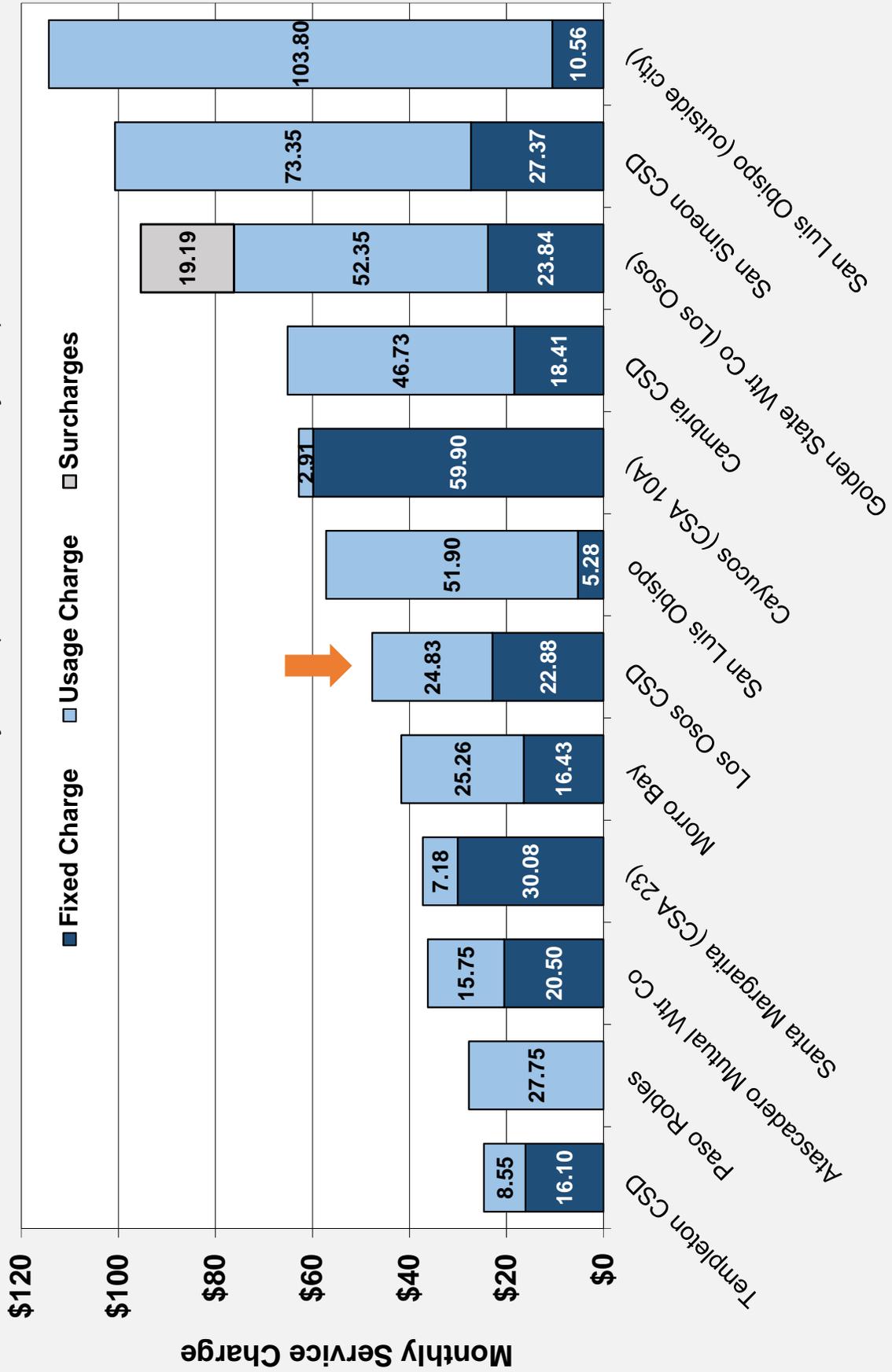
- Under the *Water Shortage Contingency Plan*, customers are required to cut back water use to various designated levels associated with each stage of warning or emergency. Beginning with a Stage 3 Emergency, water use in excess of the allowed allocations is subject to penalties of 2x and 4x the District's regular water rates. The proposed Water Shortage Emergency Rates assume customers reduce consumption to comply with the cutback requirements.
- Trigger points for implementing emergency water shortage rates:
 - BWA recommends the District establish a clear process for implementing Water Shortage Emergency Rates.
 - Trigger points for Water Shortage Emergency Rates are designed to correspond with the escalating emergency stages identified in the Water Shortage Contingency Plan.
 - Water Shortage Emergency Rates can be phased in at Board direction, such as via Board action declaring escalating Water Shortage Emergency Stages.
 - Water Shortage Emergency Rates should be gradually phased out as water sales return to normal levels projected for each year. Emergency Rates should not immediately be rescinded when a water shortage stage is declared over as it typically takes additional time for water sales to return to normal-year levels.
- The proposed Water Shortage Emergency Rates are designed to a) account for projected water use reductions already factored into the normal-year water rate projections, b) compensate for reduced water sales revenues, and c) compensate for an estimate of additional costs the District may need to incur to help ensure compliance with the various water shortage emergency stages.
 - The proposed rates assume higher cutback levels in higher tiers, and less in lower tiers, in response to the escalating water shortage emergency stages.
 - The proposed rates also assume additional conservation program costs of \$50,000 in Stage 3 escalating to \$150,000 in Stage 5.
- BWA developed Water Shortage Emergency Rates under two scenarios:
 - Emergency rates for 2015/16 under the various contingency stages.
 - Maximum emergency rates through 2018/19.
- The Maximum Water Shortage Emergency Rates should be adopted along with regular water rate increases via the Proposition 218 process in order to give LOCS D the legal authority to implement emergency rates when needed. The District can opt to phase in emergency rates as needed provided the rates do not exceed the maximum levels noticed and adopted via the Proposition 218 process.

Proposed Water Shortage Emergency Rates			
	Stage 3	Stage 4	Stage 5
Proposed Water Shortage Emergency Rates	Emergency Water Shortage	Severe Water Shortage Emergency	Critical Water Shortage Emergency
2015/16 Emergency Rates			
Required Additional Increase %	9.5%	31.5%	47.7%
Tier 1	\$2.19	\$2.63	\$2.95
Tier 2	\$4.11	\$4.93	\$5.54
Tier 3	\$6.57	\$7.89	\$8.86
Tier 4	\$8.98	\$10.78	\$12.11
2018/19 Maximum Emergency Rates			<u>MAXIMUM</u>
Required Additional Increase %	-	20.9%	34.9%
Tier 1	-	\$3.14	\$3.51
Tier 2	-	\$6.29	\$7.02
Tier 3	-	\$9.43	\$10.52
Tier 4	-	\$12.57	\$14.03

Note: Due to anticipated reductions in normal-year water sales factored into the regular water rate increases, no additional rate increases would be needed to support financial stability in a Stage 1 or Stage 2 emergency or under a Stage 3 emergency in 2018/19.

Monthly Residential Water Rate Survey

7.5 ccf monthly use (15 ccf bi-monthly use)



Los Osos Community Services District
Water Financial Plan & Rate Study
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Water Shortage Emergency Rates

Table 1	-	Water Shortage Emergency Stages & Reduction Requirements
Table 2	-	Projected Water Shortage Emergency Rates
Table 3A	-	Water Cutback Stages & Rate Requirements 2015/16
Table 4A	-	Projected Annual Water Sales 2015/16
Table 5A	-	Projected Water Sales Revenues with Cutback 2015/16
Table 3B	-	Water Cutback Stages & Rate Requirements 2018/19
Table 4B	-	Projected Annual Water Sales 2018/19
Table 5B	-	Projected Water Sales Revenues with Cutback 2018/19

Table 1
 Los Osos Community Services District
 Current Water Rates

Fixed Bi-Monthly Service Charge	\$45.76	\$22.88 per month		
		\$0.75 per day		
Water Consumption Charges (\$/ccf)				
<u>Tier</u>	<u>Bi-Monthly Usage</u>	<u>Rate (\$/ccf)</u>	<u>\$/100 gallons</u>	<u>Tier Difference</u>
Tier 1	0 - 5 ccf	\$1.63	\$0.22	-
Tier 2	6 - 10 ccf	3.07	0.41	1.44
Tier 3	11- 20 ccf	5.23	0.70	2.16
Tier 4	>20 ccf	7.20	0.96	1.97

Note: 1 ccf = 100 cubic feet or approximately 748 gallons.
 Rates effective 07/01/14.

Table 2

Los Osos Community Services District
Water Rate History

Current rate structure in effect since July 1, 2010

	May 19 2007	July 1 2010	July 1 2011	Sept 1 2012	July 1 2013	July 1 2014
Fixed Bi-Monthly Charge	\$34.01	\$35.00	\$35.81	\$40.11	\$44.92	\$45.76

Water Consumption Charge (\$/ccf)

<u>Tier</u>	<u>Bi-Monthly Use</u>		<u>Bi-Monthly Use</u>			
Tier 1	0 - 9 ccf	no charge	Tier 1	0 - 5 ccf	\$1.25	\$1.63
			Tier 2	6 - 10 ccf	2.35	3.07
Tier 2	10 - 15 ccf	3.94	Tier 3	11 - 20 ccf	4.00	5.13
Tier 3	16 - 21 ccf	4.33			4.58	5.23
Tier 4	> 21 ccf	5.47	Tier 4	>20 ccf	5.50	7.20

Note: 1 ccf = 100 cubic feet or approximately 748 gallons.
Rates effective 07/01/14.

Los Osos Community Services District Historical Water Charges

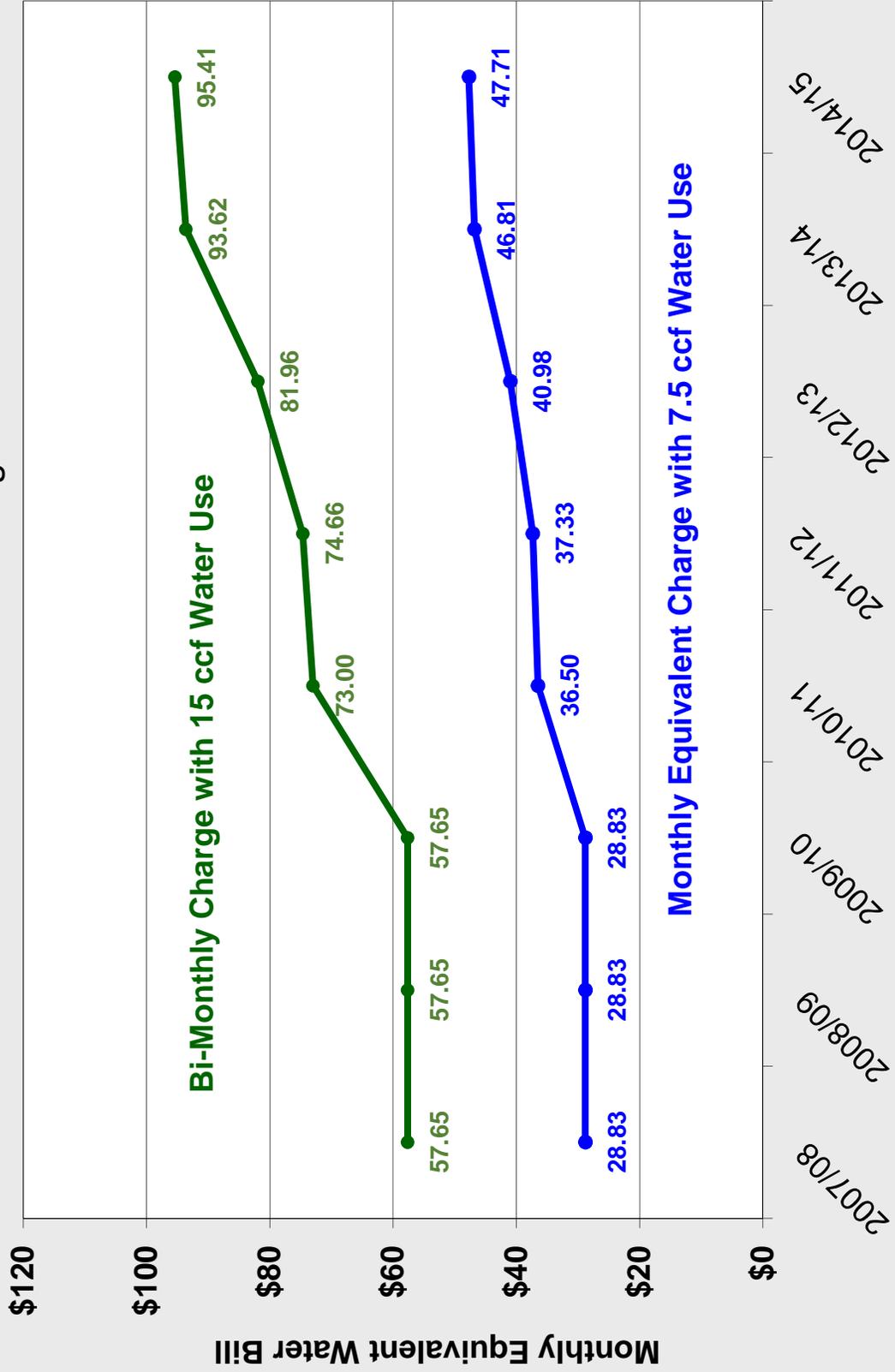


Table 3
 Los Osos Community Services District
 Water Fund Reserves 06/30/14

Fund	Description	Estimated 06/30/14
Operating & Capital Fund Reserves		
3050	Water Quality Trust Reserve	\$91,517
3110	Reserve for Replacement: Vehicles & Equipment	42,197
3111	General Contingency Reserve	198,783
3160	Capital Outlay Reserve	623,407
3163	Water Stabilization Reserve	192,856
3165	Designation for Basin Management	39,288
3167	Designation for Water Conservation	<u>25,031</u>
Subtotal		1,213,079
Restricted Reserves		
3162	Reserve for Outstanding I-Bank Loan	281,233
Total		1,494,312

Source: Reserve Statement June 30, 2014 (Budget Page 60)

Table 4
 Los Osos Community Services District
 2004 I-Bank Loan Outstanding Debt Service

Total Issue Size	\$5,000,000
Annual Interest Rate	3.05%
Annual Admin Fee	0.30%
Repayment Term	30 Years

Year	Total Payments
2014/15	\$278,261
2015/16	277,267
2016/17	277,257
2017/18	276,732
2018/19	276,191
2019/20	275,634
2020/21	275,059
2021/22	274,468
2022/23	273,857
2023/24	273,229
2024/25	272,581
2025/26	271,914
2026/27	271,226
2027/28	270,517
2028/29	269,786
2029/30	269,033
2030/31	268,258
2031/32	267,458
2032/33	266,634
2033/34	265,786
2034/35	264,911

Annual Debt Service Coverage Requirement: 1.00x

Parity Debt Test: 1.10x Maximum Annual Debt Service
Allows for additional revenues from adopted rate increases

Table 5
 Los Osos Community Services District
 Water CIP & Funding Sources

Funding Source	Summary of Potential Projects	Approximate Project Cost (2014 dollars)
High-Priority Projects Existing Reserves	BP-1: Program A, Intertie	\$50,000
	BP-2: Program A, Upper aquifer well - design and permitting (including final engineering)	60,000
	BP-3: Program C, East side lower aquifer well-design and permitting (including final engineering)	160,000
	Subtotal - Existing Reserves	270,000
High-Priority Projects Debt Financing (e.g. I-Bank) supplemented by Pay-Go funding	BP-2: Program A, Upper aquifer well (not including design/permitting)	540,000
	BP-3: Program C, East side lower aquifer well (not including design/pe rmitting)	1,440,000
	IA-1: AC main replacement, 11th Street (Los Olivos to Ramona)	731,000
	IA-2: AC main replacement,7th Street (Romona to Santa Ysabel)	874,000
	IA-3: Valve upgrades	313,000
	DSP-1: 18th/Paso Robles loop upgrade	50,000
	DSP-2: 10th Street/Santa Maria valve upgrade	50,000
	DSP-3 : Ferrel loop upgrade	20,000
	DSP-4: 12th/S. Paula upgrade	178,000
	DSP-5: 2nd/Santa Ysabel upgrade	198,000
	DSP-6: 15th Street dead-end upgrade	98,000
	OE-1: Water operations building improvements (Phase 1- Shop/storage improvement)	70,000
	OE-2: Supervisory Control and Data Acquisition (SCADA) - Phase 1	75,000
	Subtotal - Debt financing - immediate	4,637,000
Intermediate Needs 5 - 10 Years Pay-as-you-go funding	OE-5 : Water operations building improvements (Phase 2 - Ops Building)	70,000
	OE-4: Automated meter reading (AMR) meters - 5% complete	800,000
	OE-3: SCADA - Phase 2	200,000
	Subtotal - Pay as you go funding 5 - 10 years	1,070,000
Long-Term Capital Needs Pay-Go and/or Debt Financing	Other IA main replacement projects - remaining AC waterlines (not including DSP projects)	13,000,000
	Other second priority pipeline projects from 2010 CIP update	2,610,000
	Other third priority pipeline projects from 2010 CIP update	2,800,000
	Subtotal - Long term projects	18,410,000
Total CIP Projects		24,387,000

Source: LOCSO Final CIP Recommendations.

Table 6
 Los Osos Community Services District
 Projected Water CIP Funding by Year (Current \$)

Project Description	Cost Estimate (2014 \$)	Project Timing	Funding Source	1 2014/15	2 2015/16	3 2016/17	4 2017/18	5 2018/19	6 2019/20	7 2020/21	8 2021/22	9 2022/23	10 2023/24
High-Priority Projects													
BP-1: Program A, Interite	\$50,000	Immediate	Reserves	50,000									
BP-2: Program A, Upper aquifer well - design/permitting	60,000	Immediate	Reserves	60,000									
BP-3: Program C, East side lower aquifer well-design/permitting	160,000	Immediate	Reserves	160,000									
BP-2: Program A, Upper aquifer well construction	540,000	Immediate	Debt		540,000								
BP-3: Program C, East side lower aquifer well construction	1,440,000	Immediate	Debt		1,440,000								
IA-1: AC main replacement, 11th Street (Los Olivos to Ramona)	731,000	Immediate	Debt		731,000								
IA-2: AC main replacement, 7th Street (Romona to Santa	874,000	Immediate	Debt		874,000								
IA-3: Valve upgrades	313,000	Immediate	Debt		313,000								
DSP-1: 18th/Paso Robles loop upgrade	50,000	1-5 Years	Pay-Go			50,000							
DSP-2: 10th Street/Santa Maria valve upgrade	50,000	1-5 Years	Pay-Go			50,000							
DSP-3 : Ferrel loop upgrade	20,000	1-5 Years	Pay-Go			20,000							
DSP-4: 12th/S. Paula upgrade	178,000	1-5 Years	Pay-Go				178,000						
DSP-5: 2nd/Santa Ysabel upgrade	198,000	1-5 Years	Pay-Go				20,000	178,000					
DSP-6: 15th Street dead-end upgrade	98,000	1-5 Years	Pay-Go					98,000					
OE-1: Water ops bldg improvements (Phase 1- Shop/storage)	70,000	1-7 Years	Pay-Go						70,000				
OE-2: Supervisory Control & Data Acq. (SCADA) - Phase 1	75,000	1-7 Years	Pay-Go						70,000				
Subtotal	4,637,000			270,000	3,898,000	120,000	198,000	276,000	140,000	0	0	0	0
Intermediate Needs 5 - 10 Years													
OE-5 : Water ops bldg improvements (Phase 2 - Ops Building)	70,000	6-10 Years	Pay-Go						70,000				
OE-4: Automated meter reading (AMR) meters	800,000	1-10 Years	Pay-Go	48,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
OE-3: SCADA - Phase 2	200,000	6-10 Years	Pay-Go						100,000	100,000			
Subtotal	1,070,000			48,000	50,000	50,000	50,000	50,000	220,000	150,000	50,000	50,000	0
Long-Term Capital Needs													
Other IA main replacement projects - remaining AC pipes	13,000,000	7-25 Years	tbid							250,000	350,000	400,000	500,000
Other second priority pipeline projects from 2010 CIP update	2,610,000	10-25 Years	tbid										
Other third priority pipeline projects from 2010 CIP update	2,800,000	10-25 Years	tbid										
Subtotal	18,410,000			0	0	0	0	0	0	250,000	350,000	400,000	500,000
Total CIP Projects	24,117,000			318,000	3,948,000	170,000	248,000	326,000	360,000	400,000	400,000	450,000	500,000

Table 7
 Los Osos Community Services District
 Projected Water CIP Funding by Year (Future \$)
 Future CIP Costs with 3% Construction Cost Inflation

Project Description	Funding Source	1 2014/15	2 2015/16	3 2016/17	4 2017/18	5 2018/19	6 2019/20	7 2020/21	8 2021/22	9 2022/23	10 2023/24
Annual Cost Escalation		-	3%	3%	3%	3%	3%	3%	3%	3%	3%
Cost Escalator		1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
High-Priority Projects											
BP-1: Program A, Intertie	Reserves	50,000									
BP-2: Program A, Upper aquifer well - design/permitting	Reserves	60,000									
BP-3: Program C, East side lower aquifer well-	Reserves	160,000									
BP-2: Program A, Upper aquifer well construction	Debt		556,000								
BP-3: Program C, East side lower aquifer well construction	Debt		1,483,000								
IA-1: AC main replacement, 11th Street (Los Olivos to	Debt		753,000								
IA-2: AC main replacement, 7th Street (Romona to Santa	Debt		900,000								
IA-3: Valve upgrades	Debt		322,000								
DSP-1: 18th/Paso Robles loop upgrade	Pay-Go			53,000							
DSP-2: 10th Street/Santa Maria valve upgrade	Pay-Go			53,000							
DSP-3 : Ferrel loop upgrade	Pay-Go			21,000							
DSP-4: 12th/S. Paula upgrade	Pay-Go				195,000						
DSP-5: 2nd/Santa Ysabel upgrade	Pay-Go				22,000	200,000					
DSP-6: 15th Street dead-end upgrade	Pay-Go					110,000					
OE-1: Water ops bldg improvements (Phase 1 - Shop/storage)	Pay-Go						81,000				
OE-2: Supervisory Control & Data Acq. (SCADA) - Phase 1	Pay-Go						81,000				
Subtotal		270,000	4,014,000	127,000	217,000	310,000	162,000	0	0	0	0
Intermediate Needs 5 - 10 Years											
OE-5 : Water ops bldg improvements (Phase 2 - Ops Building)	Pay-Go						81,000				
OE-4: Automated meter reading (AMR) meters	Pay-Go	48,000	52,000	53,000	55,000	56,000	58,000	60,000	61,000	63,000	
OE-3: SCADA - Phase 2	Pay-Go						116,000	119,000			
Subtotal		48,000	52,000	53,000	55,000	56,000	255,000	179,000	61,000	63,000	0
Long-Term Capital Needs											
Other IA main replacement projects - remaining AC pipes	tbd							299,000	430,000	507,000	652,000
Other second priority pipeline projects from 2010 CIP update	tbd										
Other third priority pipeline projects from 2010 CIP update	tbd										
Subtotal		0	0	0	0	0	0	299,000	430,000	507,000	652,000
Total CIP Projects		318,000	4,066,000	180,000	272,000	366,000	417,000	478,000	491,000	570,000	652,000

Table 8
 Los Osos Community Services District
 Debt Service Estimates

	Bank Loan/Private Placement Estimates			I-Bank ISRF Loan Estimates		
	10-Year	15-Year	20-Year	20-Year	25-Year	30-Year
Draft Project Funding Target	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Loan Amount						
Project Funding Reserve Fund	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Issuance Costs (est. for planning purposes)	tbd	tbd	tbd	tbd	tbd	tbd
Total Loan Amount	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>
	5,075,000	5,075,000	5,075,000	5,075,000	5,075,000	5,075,000
Loan Terms						
Term (years)	10	15	20	20	25	30
Interest Rate (estimated)	3.00%	3.75%	4.00%	3.25%	3.50%	3.75%
Annual Debt Service	\$595,000	\$449,000	\$373,000	\$349,000	\$308,000	\$285,000
Debt Service per \$1 Million of Project Funding	\$119,000	\$89,800	\$74,600	\$69,800	\$61,600	\$57,000
Total Payments Over Term of Loan	\$5,950,000	\$6,735,000	\$7,460,000	\$6,980,000	\$7,700,000	\$8,550,000
Present Value of Payments Discounted at 3%	5,075,000	5,360,000	5,549,000	5,192,000	5,363,000	5,586,000

Note: Bank Loans and I-Bank ISRF Loans may require the District to set aside funds for a debt service reserve fund equal to annual debt service.

Table 9
 Los Osos Community Services District
 Estimated Reduction in Water Sales from Transition to Recycled Water

	WATER CONSUMPTION (CCF)						TOTAL
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEPT/OCT	NOV/DEC	
LOS OSOS MIDDLE SCHOOL							
<i>Includes Both Indoor & Outdoor Use</i>							
2011	1,003	1,652	4,807	4,905	4,194	2,188	18,749
2012	2,435	2,625	3,286	3,297	2,032	645	14,320
2013	346	1,148	1,885	2,075	2,126	1,670	9,250
2014	1,546	1,015	2,122	2,586	2,403	<i>tbd</i>	9,672
Projected	1,200	1,000	2,000	2,200	2,200	1,500	10,100
Projected Indoor Use	1,000	1,000	1,000	500	1,000	1,000	5,500
Projected Outdoor Use	200	0	1,000	1,700	1,200	500	4,600
BAYWOOD ELEMENTARY SCHOOL - DOMESTIC METER							
<i>Includes Indoor Use Only</i>							
2011	7	12	12	16	4	19	70
2012	9	13	10	9	4	18	63
2013	6	12	13	8	n/a	14	53
2014	8	9	11	6	4	12	50
BAYWOOD ELEMENTARY SCHOOL - IRRIGATION METER							
<i>Includes Outdoor Use Only</i>							
2011	183	142	531	1,187	351	1,977	4,371
2012	896	1,020	612	187	2,381	1,113	6,209
2013	641	407	666	802	592	508	3,616
2014	200	182	408	548	667	698	2,703
Projected Outdoor Use	200	180	400	550	600	700	2,630
Total Outdoor Use	400	180	1,400	2,250	1,800	1,200	7,230
Revenues at Current Rates	\$2,812	\$1,228	\$10,012	\$16,132	\$12,892	\$8,572	\$51,647
Subtotal: January - June			\$14,051				
Subtotal: July - December						\$37,595	

Table 10
Los Osos Community Services District
Cash Flow Assumptions

GENERAL	
Growth	No growth through 2018/19, then 5 new single family homes or equivalent per year.
Water Demand	Base year water demand based on analysis of water consumption data from 2012/13, 2013/14, and year-to-date water sales. Assumes 10.5% decline in water sales from 2012/13 to current fiscal year 2014/15. Assumes additional 5% declines in water sales in 2015/16 and 2016/17. Future reduction in water sales assume -0.20 price elasticity (usage decreases 2% per 10% of future rate increases starting 2017/18). Loss of revenues from transition to recycled water for school irrigation is estimated and accounted for separately.
Operating Cost Escalation	Projected at 4% per year for financial planning purposes.
Construction Cost Escalation	Projected at 3% per year for planning purposes.
REVENUES	
Fixed Service Charges	Based on projected rates and number of accounts.
Water Consumption Charges	Based on projected rates and projected water sales by tier. Reduction in water sales to schools due to transition to recycled water starts Jan-2017, with partial reduction in 2016/17 and full reduction starting 2018/19.
Recycled Water Revenues	Placeholder estimate based on 7,000 hcf of school irrigation use x \$4.35 per ccf.
Interest Earnings	Estimated based on beginning annual fund reserves plus District's reserve fund for the outstanding I-Bank Loan, multiplied by the projected interest rate shown.
Property Taxes	Projected based on 2014/15 Budget and escalate at the annual rate of 2%.
Other Revenues	Projected based on 2014/15 Budget and escalate at the annual rate of 2%.
Debt Service	Assumes \$4 million of debt financing for high-priority capital improvements.
EXPENSES	
Operating Expenses	Based on 2014/15 Budget with a few minor modifications based on District input. No significant changes in operating costs are projected other than cost inflation.
ISJ Cost Sharing	Estimated at \$50,000 annually for next 2 years, then \$20,000 annually thereafter plus cost inflation.
Brine Disposal	Phases in from \$50,000 in 2014/15 to \$100,000 in 2016/17 plus cost inflation.
Water Conservation Program	Projected at \$30,000 per year plus cost inflation.
Debt Service	Estimated at \$75,000 per year per each \$1 million of project funding; roughly based on a 20-year loan at 4%. Actual debt service may vary based on type of financing received, repayment term, and interest rate.
Capital Improvements	Capital improvement funding based on CIP shown on Table 7, which accounts for 3% annual construction cost inflation.
Meter Replacement Program	Projected to continue at current level of approximately 25 replacements per month, or 300 per year, for approximately the next 8 years when program is complete.
OTHER	
Minimum Fund Reserve Target	Projected at 25% of operating, maintenance, and debt service expenses each year plus \$500,000 for emergency capital reserves.
Debt Service Coverage	Calculated based on total annual revenues less operating and maintenance expenses, divided by annual debt service.

Table 11 Los Osos Community Services District - Water Cash Flow Projections

Years 1 - 5	Budget	Projected			
	2014/15	2015/16	2016/17	2017/18	2018/19
Effective Date of Rate Adjustment	07/01/14	07/01/15	07/01/16	07/01/17	07/01/18
Rate Adjustment Target %	1.83%	15%	15%	7.5%	7.5%
Net Water Rate Revenue Increase	-	12.5%	9.5%	5.8%	6.6%
Beginning Accounts	2,770	2770	2,770	2,770	2,770
Growth:Single Family Homes or Equivalent	-	-	-	-	-
Future Water Sales Elasticity	-	-	-	(0.20)	(0.20)
Change in Annual Water Consumption	-10.5%	-5.0%	-5.0%	-1.5%	-1.5%
Projected Water Sales (ccf) (with school use)	261,640	248,560	236,130	232,590	229,100
Water Service Connection Fee	\$2,584	\$2,584	\$2,584	\$2,584	\$2,584
Debt Service per \$1 Million Project Funding	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Interest Earnings Rate	0.25%	0.25%	0.50%	1.0%	1.0%
Annual Cost Escalator	-	4.0%	4.0%	4.0%	4.0%
Beginning Fund Reserves	\$1,213,000	\$1,099,000	\$1,108,000	\$1,129,000	\$1,164,000
REVENUES					
Fixed Service Charges	760,000	870,000	986,000	1,074,000	1,170,000
Water Consumption Charges	1,090,000	1,211,000	1,304,000	1,376,000	1,445,000
Revenue Reduction from School Irrigation	0	0	(20,000)	(69,000)	(74,000)
<i>Subtotal Water Service Charges</i>	<i>1,850,000</i>	<i>2,081,000</i>	<i>2,270,000</i>	<i>2,381,000</i>	<i>2,541,000</i>
Recycled Water Revenues from Schools	0	0	8,000	30,000	30,000
Property Taxes (From Service Area)	180,000	184,000	188,000	192,000	196,000
Interest Earnings	4,000	3,000	7,000	14,000	14,000
Other Revenues	62,000	63,000	64,000	65,000	66,000
Subtotal	2,096,000	2,331,000	2,537,000	2,682,000	2,847,000
Debt Proceeds		4,000,000			
EXPENSES					
Operating & Maintenance					
Water System Personnel	549,000	571,000	594,000	618,000	643,000
Transfer for Administration	383,000	398,000	414,000	431,000	448,000
Contract/Legal/Professional Services	203,000	180,000	187,000	194,000	202,000
Rents & Utilities	128,000	133,000	138,000	144,000	150,000
Repairs & Maintenance	107,000	111,000	115,000	120,000	125,000
Other Operating Expenses	119,000	124,000	129,000	134,000	139,000
ISJ Inter-Agency Cost Sharing	45,000	50,000	50,000	20,000	21,000
Brine Disposal Costs	50,000	80,000	100,000	104,000	108,000
Water Conservation Program	30,000	31,000	32,000	33,000	34,000
Subtotal	1,614,000	1,678,000	1,759,000	1,798,000	1,870,000
Debt Service					
2004 I-Bank Loan	278,000	278,000	277,000	277,000	276,000
2015 Debt Issue	0	300,000	300,000	300,000	300,000
Subtotal	278,000	578,000	577,000	577,000	576,000
<i>Net Funding Generated for Pay-Go CIP</i>	<i>204,000</i>	<i>75,000</i>	<i>201,000</i>	<i>307,000</i>	<i>401,000</i>
Capital Improvements					
High-Priority CIP: Debt Financed	0	4,000,000	0	0	0
High-Priority CIP: Pay-Go & Reserve Funding	270,000	14,000	127,000	217,000	310,000
Intermediate & Long-Term CIP	0	0	0	0	0
AMR Meter Replacement Program	48,000	52,000	53,000	55,000	56,000
Subtotal	318,000	4,066,000	180,000	272,000	366,000
Total Expenses	2,210,000	6,322,000	2,516,000	2,647,000	2,812,000
Revenues Less Expenses	(114,000)	9,000	21,000	35,000	35,000
Ending Fund Reserves	1,099,000	1,108,000	1,129,000	1,164,000	1,199,000
Min Fund Rsrv Target (25% O&M+Debt + \$500K)	973,000	1,064,000	1,084,000	1,094,000	1,112,000
	PASS	PASS	PASS	PASS	PASS
Debt Service Coverage	1.73	1.13	1.35	1.53	1.70

Table 11 Los Osos Community Services District - Water Cash Flow Projections

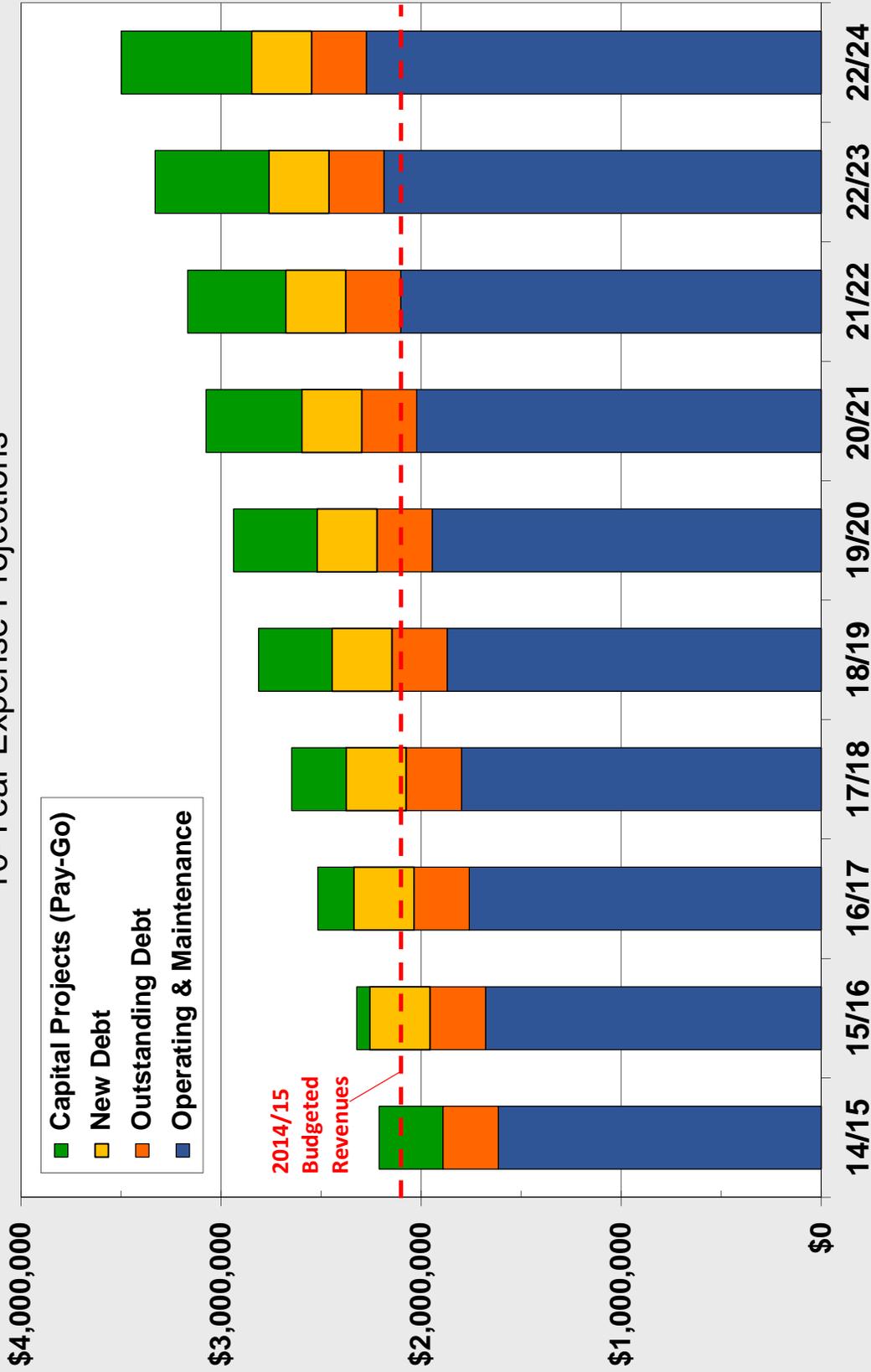
Years 6 - 10	Projected					Esc
	2019/20	2020/21	2021/22	2022/23	2023/24	Factor
Effective Date of Rate Adjustment	07/01/19	07/01/20	07/01/21	07/01/22	07/01/23	
Rate Adjustment Target %	4%	4%	4%	4%	4%	
Net Water Rate Revenue Increase	4.0%	4.0%	4.1%	4.1%	4.1%	
Beginning Accounts	2,770	2,775	2,780	2,785	2,790	
Growth: Single Family Homes or Equivalents	5	5	5	5	5	
Future Water Sales Elasticity	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)	
Change in Annual Water Consumption	-0.8%	-0.8%	-0.8%	-0.8%	-0.8%	
Projected Water Sales (hcf)	227,270	225,450	223,650	221,860	220,090	
Water Service Connection Fee	\$2,584	\$2,584	\$2,584	\$2,584	\$2,584	1.5%
Debt Service per \$1 Million Project Funding	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	
Interest Rate	1.0%	1.0%	1.0%	1.0%	1.0%	
Annual Cost Escalator	4.0%	4.0%	4.0%	4.0%	4.0%	
Beginning Fund Reserves	\$1,199,000	\$1,229,000	\$1,249,000	\$1,309,000	\$1,344,000	
REVENUES						
Fixed Service Charges	1,217,000	1,268,000	1,321,000	1,377,000	1,434,000	
Water Consumption Charges	1,503,000	1,563,000	1,626,000	1,691,000	1,759,000	
Revenue Reduction from School Irrigation	(77,000)	(80,000)	(83,000)	(86,000)	(89,000)	
<i>Subtotal Water Service Charges</i>	<i>2,643,000</i>	<i>2,751,000</i>	<i>2,864,000</i>	<i>2,982,000</i>	<i>3,104,000</i>	
Recycled Water Revenues	30,000	30,000	30,000	30,000	30,000	
Property Taxes (From Service Area)	200,000	204,000	208,000	212,000	216,000	2.0%
Interest Earnings	15,000	15,000	15,000	16,000	16,000	
Other Revenues	80,000	95,000	110,000	125,000	141,000	2.0%
Subtotal	2,968,000	3,095,000	3,227,000	3,365,000	3,507,000	
Debt Proceeds						
EXPENSES						
Operating & Maintenance						
Water System Personnel	669,000	696,000	724,000	753,000	783,000	
Transfer for Administration	466,000	485,000	504,000	524,000	545,000	
Contract/Legal/Professional Services	210,000	218,000	227,000	236,000	245,000	
Rents & Utilities	156,000	162,000	168,000	175,000	182,000	
Repairs & Maintenance	130,000	135,000	140,000	146,000	152,000	
Other Operating Expenses	145,000	151,000	157,000	163,000	170,000	
ISJ Inter-Agency Cost Sharing	22,000	23,000	24,000	25,000	26,000	
Brine Disposal Costs	112,000	116,000	121,000	126,000	131,000	
Water Conservation Program	35,000	36,000	37,000	38,000	40,000	
Subtotal	1,945,000	2,022,000	2,102,000	2,186,000	2,274,000	
Debt Service						
2004 I-Bank Loan	276,000	275,000	274,000	274,000	273,000	
2015 Debt Issue	300,000	300,000	300,000	300,000	300,000	
Subtotal	576,000	575,000	574,000	574,000	573,000	
<i>Net Funding Generated for CIP</i>	<i>447,000</i>	<i>498,000</i>	<i>551,000</i>	<i>605,000</i>	<i>660,000</i>	
Capital Improvements						
High-Priority CIP: Debt Financed	0	0	0	0	0	
High-Priority CIP: Pay-Go & Reserve Funding	162,000	0	0	0	0	
Intermediate & Long-Term CIP	197,000	418,000	430,000	507,000	652,000	
AMR Meter Replacement Program	58,000	60,000	61,000	63,000	0	
Subtotal	417,000	478,000	491,000	570,000	652,000	
Total Expenses	2,938,000	3,075,000	3,167,000	3,330,000	3,499,000	
Revenues Less Expenses	30,000	20,000	60,000	35,000	8,000	
Ending Fund Reserves	1,229,000	1,249,000	1,309,000	1,344,000	1,352,000	
Min Fund Rsrv Target (25% O&M+Debt + \$500K)	1,130,000	1,149,000	1,169,000	1,190,000	1,212,000	
	PASS	PASS	PASS	PASS	PASS	
Debt Service Coverage	1.78	1.87	1.96	2.05	2.15	

Los Osos Community Services District
Summary of Water Cash Flow Projections (\$ millions)

Fiscal Year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Rate Increase Target Effective July 1	1.8%	15%	15%	7.5%	7.5%	4%	4%	4%	4%	4%
Beginning Fund Reserves	\$1.2	\$1.1	\$1.1	\$1.1	\$1.2	\$1.2	\$1.2	\$1.2	\$1.3	\$1.3
REVENUES										
Water Rate Revenues	1.9	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.4
Other Revenues	0.2	1.5	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.1
Debt Proceeds	-	4.0	-	-	-	-	-	-	-	-
Total	2.1	6.3	2.5	2.7	2.8	3.0	3.1	3.2	3.4	3.5
EXPENSES										
Operating Expenses	1.6	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.2	2.3
Debt Service	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Capital Expenditures	0.3	4.1	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.7
Total	2.2	6.3	2.5	2.6	2.8	2.9	3.1	3.2	3.3	3.5
Revenues Less Expenses	(0.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Ending Fund Reserves	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.4
Min Fund Reserve Target	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2
Debt Service Coverage	1.73	1.13	1.35	1.53	1.70	1.78	1.87	1.96	2.05	2.15

Los Osos Community Services District

10-Year Expense Projections



Excludes capital projects funded by debt; but includes projected debt service for financing these projects..

Table 12
 Los Osos Community Services District
 Metered Water Use by Month

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2013/14													
Single Family	18,543	27,621	16,209	24,753	16,971	21,603	14,053	21,390	11,778	17,839	15,031	23,268	229,059
Multi-Family	2,978	1,255	2,726	1,243	1,898	1,099	1,721	773	1,608	953	1,917	1,060	19,229
Commercial	2,313	3,671	2,172	3,587	1,969	3,208	1,584	2,515	1,454	2,097	1,633	3,722	29,923
Irrigation	838	-	601	-	522	-	209	1	190	1	442	-	2,804
Total	24,671	32,547	21,707	29,583	21,360	25,909	17,567	24,678	15,030	20,890	19,023	28,050	281,015
2012/13													
Single Family	18,949	28,695	18,782	24,212	16,225	20,951	12,857	19,298	12,673	19,640	16,684	25,916	234,881
Multi-Family	3,163	1,409	3,067	1,249	2,692	1,140	2,388	1,233	2,482	1,096	2,981	1,218	24,116
Commercial	2,012	4,707	2,216	3,400	1,816	1,705	1,578	1,233	1,617	2,199	1,951	3,372	27,804
Irrigation	187	-	2,384	-	1,119	-	641	-	422	-	678	-	5,430
Total	24,310	34,811	26,448	28,861	21,851	23,795	17,464	21,764	17,194	22,934	22,293	30,506	292,231

Table 13
 Los Osos Community Services District
 Metered Water Use by Bi-Monthly Billing Cycle

	JUL/AUG	SEP/OCT	NOV/DEC	JAN/FEB	MAR/APR	MAY/JUN	TOTAL
2013/14							
Single Family	46,164	40,962	38,573	35,443	29,617	38,299	229,059
Multi-Family	4,233	3,969	2,997	2,494	2,561	2,977	19,229
Commercial	5,984	5,759	5,177	4,099	3,551	5,355	29,923
Irrigation	838	601	522	210	191	442	2,804
Total	57,218	51,290	47,269	42,245	35,920	47,073	281,015
% of Avg	122%	110%	101%	90%	77%	101%	
2012/13							
Single Family	47,644	42,994	37,175	32,155	32,313	42,600	234,881
Multi-Family	4,572	4,316	3,832	3,621	3,578	4,199	24,116
Commercial	6,718	5,616	3,521	2,811	3,816	5,323	27,804
Irrigation	187	2,384	1,119	641	422	678	5,430
Total	59,121	55,309	45,647	39,227	40,128	52,799	292,231
% of Avg	121%	114%	94%	81%	82%	108%	
2-Year Avg	58,169	53,300	46,458	40,736	38,024	49,936	286,623
Base Bill Cycle	38,024	38,024	38,024	38,024	38,024	38,024	228,143
Peaking Factor	1.53	1.40	1.22	1.07	1.00	1.31	1.26

Table 14
 Los Osos Community Services District
 Water Use by Tier

FY 2012/13

Tier	Usage in Tier	SFR	MFR	COMM	IRR	TOTAL	% of TTL
Bills Ending in Tier							
Tier 1	0 - 5 ccf	2,289	78	152	15	2,534	15.1%
Tier 2	6 - 10 ccf	3,288	135	103	1	3,527	21.0%
Tier 3	11- 20 ccf	5,714	301	162	2	6,179	36.8%
Tier 4	>20 ccf	<u>3,787</u>	<u>468</u>	<u>285</u>	<u>6</u>	<u>4,546</u>	<u>27.1%</u>
Subtotal		15,078	982	702	24	16,786	100.0%
Accounts		2,513	164	117	4	2,798	
Total Water Use for Bills Ending in Tier							
Tier 1	0 - 5 ccf	6,506	241	403	3	7,153	2.4%
Tier 2	6 - 10 ccf	26,730	1,116	811	6	28,663	9.8%
Tier 3	11- 20 ccf	85,252	4,770	2,504	27	92,553	31.7%
Tier 4	>20 ccf	<u>116,409</u>	<u>17,991</u>	<u>24,088</u>	<u>5,395</u>	<u>163,883</u>	<u>56.1%</u>
Subtotal		234,897	24,118	27,806	5,431	292,252	100.0%
Avg Use per Bill (ccf)		15.6	24.6	39.6	226.3	17.4	
Avg Use per Bill (gpd)		192	302	487	2,783	214	
Water Use Billed in Tier							
Tier 1	0 - 5 ccf	70,451	4,761	3,153	48	78,413	26.8%
Tier 2	6 - 10 ccf	57,795	4,286	2,531	41	64,653	22.1%
Tier 3	11- 20 ccf	65,982	6,440	3,734	67	76,223	26.1%
Tier 4	>20 ccf	<u>40,669</u>	<u>8,631</u>	<u>18,388</u>	<u>5,275</u>	<u>72,963</u>	<u>25.0%</u>
Subtotal		234,897	24,118	27,806	5,431	292,252	100.0%
% of Water Use in Tier							
Tier 1	0 - 5 ccf	30.0%	19.7%	11.3%	0.9%	26.8%	
Tier 2	6 - 10 ccf	24.6%	17.8%	9.1%	0.8%	22.1%	
Tier 3	11- 20 ccf	28.1%	26.7%	13.4%	1.2%	26.1%	
Tier 4	>20 ccf	<u>17.3%</u>	<u>35.8%</u>	<u>66.1%</u>	<u>97.1%</u>	<u>25.0%</u>	
Subtotal		100.0%	100.0%	100.0%	100.0%	100.0%	
Note: 1 ccf = 100 cubic feet or approximately 748 gallons.							

Table 15
 Los Osos Community Services District
 Water Use by Tier

FY 2013/14 (Partial Year)
Billed Nov-Jun
Missing High-Use Summer Months

Tier	Usage in Tier	SFR	MFR	COMM	IRR	TOTAL	% of TTL	FY 2012/13
								<i>for comparison</i>
Bills Ending in Tier								
No Use	-	251	7	31	10	299	2.7%	
Tier 1	0 - 5 ccf	1,462	45	90	2	1,599	14.4%	
Tier 2	6 - 10 ccf	2,585	74	61	2	2,722	24.6%	
Tier 3	11- 20 ccf	3,844	127	103	1	4,075	36.8%	
Tier 4	>20 ccf	1,991	206	170	5	2,372	21.4%	
Subtotal		10,133	459	455	20	11,067	100.0%	
Accounts		1,689	77	76	3	1,845		
Water Use Billed in Tier								
Tier 1	0 - 5 ccf	47,106	2,183	1,951	42	51,282	29.7%	51,962
Tier 2	6 - 10 ccf	37,068	1,886	1,558	37	40,549	23.5%	41,918
Tier 3	11- 20 ccf	38,505	2,723	2,221	54	43,503	25.2%	45,980
Tier 4	>20 ccf	19,263	4,237	12,452	1,232	37,184	21.6%	37,954
Subtotal		141,942	11,029	18,182	1,365	172,518	100.0%	177,814
Avg Use per Bill		14.0	24.0	40.0	68.3	15.6		
Avg Use per Bill (gpd)		172	295	491	839	192		
% of Water Use in Tier								
Tier 1	0 - 5 ccf	33.2%	19.8%	10.7%	3.1%	29.7%		29.2%
Tier 2	6 - 10 ccf	26.1%	17.1%	8.6%	2.7%	23.5%		23.6%
Tier 3	11- 20 ccf	27.1%	24.7%	12.2%	4.0%	25.2%		25.9%
Tier 4	>20 ccf	13.6%	38.4%	68.5%	90.3%	21.6%		21.3%
Subtotal		100.0%	100.0%	100.0%	100.0%	100.0%		100.0%
Note: 1 ccf = 100 cubic feet or approximately 748 gallons.								

Table 16
 Los Osos Community Services District
 Water Consumption & Revenues by Month

Water use down but revenues up in 2014/15

Billing Period	Month Billed	% of Accounts	Fiscal Year			
			2011/12	2012/13	2013/14	2014/15
Water Consumption						
5/11 to 7/10	Jul	43%	25,333	24,209	24,600	20,494
6/11 to 8/10	Aug	57%	33,701	34,766	32,165	27,574
7/11 to 9/10	Sep	43%	25,458	26,400	21,505	21,375
8/11 to 10/10	Oct	57%	32,933	28,897	29,600	26,474
9/11 to 11/10	Nov	43%	21,453	21,597	21,381	
10/11 to 12/10	Dec	57%	27,210	22,854	31,204	
11/11 to 1/10	Jan	43%	19,548	16,584	17,519	
12/11 to 2/10	Feb	57%	25,793	21,688	21,348	
1/11 to 3/10	Mar	43%	19,862	17,027	15,889	
2/11 to 4/10	Apr	57%	24,482	22,400	20,800	
3/11 to 5/10	May	43%	18,294	22,305	18,891	
4/11 to 6/10	Jun	57%	30,785	30,357	27,875	
Total			304,851	289,083	282,775	95,916
% Change				-5.2%	-2.2%	
Subtotal Jul-Oct			117,425	114,272	107,870	95,916
% Change				-2.7%	-5.6%	-11.1%
Water Bills						
5/11 to 7/10	Jul	43%	\$129,524	\$127,738	\$150,402	\$137,753
6/11 to 8/10	Aug	57%	167,062	175,799	147,247	187,468
7/11 to 9/10	Sep	43%	134,651	139,628	145,135	147,808
8/11 to 10/10	Oct	57%	165,625	163,699	187,432	182,464
9/11 to 11/10	Nov	43%	113,044	128,919	143,029	0
10/11 to 12/10	Dec	57%	141,492	142,026	206,188	0
11/11 to 1/10	Jan	43%	105,371	104,328	120,500	0
12/11 to 2/10	Feb	57%	134,692	132,434	137,046	0
1/11 to 3/10	Mar	43%	105,314	95,488	111,475	0
2/11 to 4/10	Apr	57%	128,369	135,948	121,944	0
3/11 to 5/10	May	43%	99,288	133,939	128,785	0
4/11 to 6/10	Jun	57%	156,744	172,139	187,230	0
Total			1,581,177	1,652,085	1,786,412	655,493
% Change				4.5%	8.1%	
Subtotal Jul-Oct			596,862	606,864	630,216	655,493
% Change				1.7%	3.8%	4.0%

Note: December 2013 meter read date was delayed to end of month during billing system transition.

Note: August 2014 billings show decreased water sales volume but increased revenues, this may be partially due to high levels of irrigation sales at highest tier rate. *This anomaly does not have any impact on the financial projections.*

Table 17
 Los Osos Community Services District
 Estimated Water Use by Tier

		Water Sales 2012/13	Est. Change	Projected Sales 2014/15	% of Total
Projected Water Sales by Tier					
Tier 1	0 - 5 ccf	78,413	-6%	73,708	28.2%
Tier 2	6 - 10 ccf	64,653	-9%	58,834	22.5%
Tier 3	11- 20 ccf	76,223	-12%	67,076	25.6%
Tier 4	>20 ccf	<u>72,963</u>	-15%	<u>62,019</u>	<u>23.7%</u>
Total		292,252		261,637	100.0%
Change				-10.5%	

Projected Revenues Sales by Tier

At Current 2014/15 Rates

Tier 1	\$1.63	\$127,813	-6%	\$120,144	10.9%
Tier 2	3.07	198,485	-9%	180,620	16.4%
Tier 3	5.23	398,646	-12%	350,807	31.9%
Tier 4	7.20	<u>525,334</u>	-15%	<u>446,537</u>	<u>40.7%</u>
Total		1,250,278		1,098,109	100.0%
Change				-12.2%	

Note: Water use by tier based on 2012/13 data since full year of data not available for 2013/14 due to transition to new utility billing system.

Table 18
 Los Osos Community Services District
 Consumption per Tier

Bills & Consumption by Tier			
	Bi-Monthly Use	Bills Ending in Tier %	Projected Water Use in Tier
Tier 1	0 - 5 ccf	15.1%	28.2%
Tier 2	6 - 10 ccf	21.0%	22.5%
Tier 3	11- 20 ccf	36.8%	25.6%
Tier 4	>20 ccf	27.1%	23.7%

Note: Based on billing data from FY 2012/13 with adjustments.

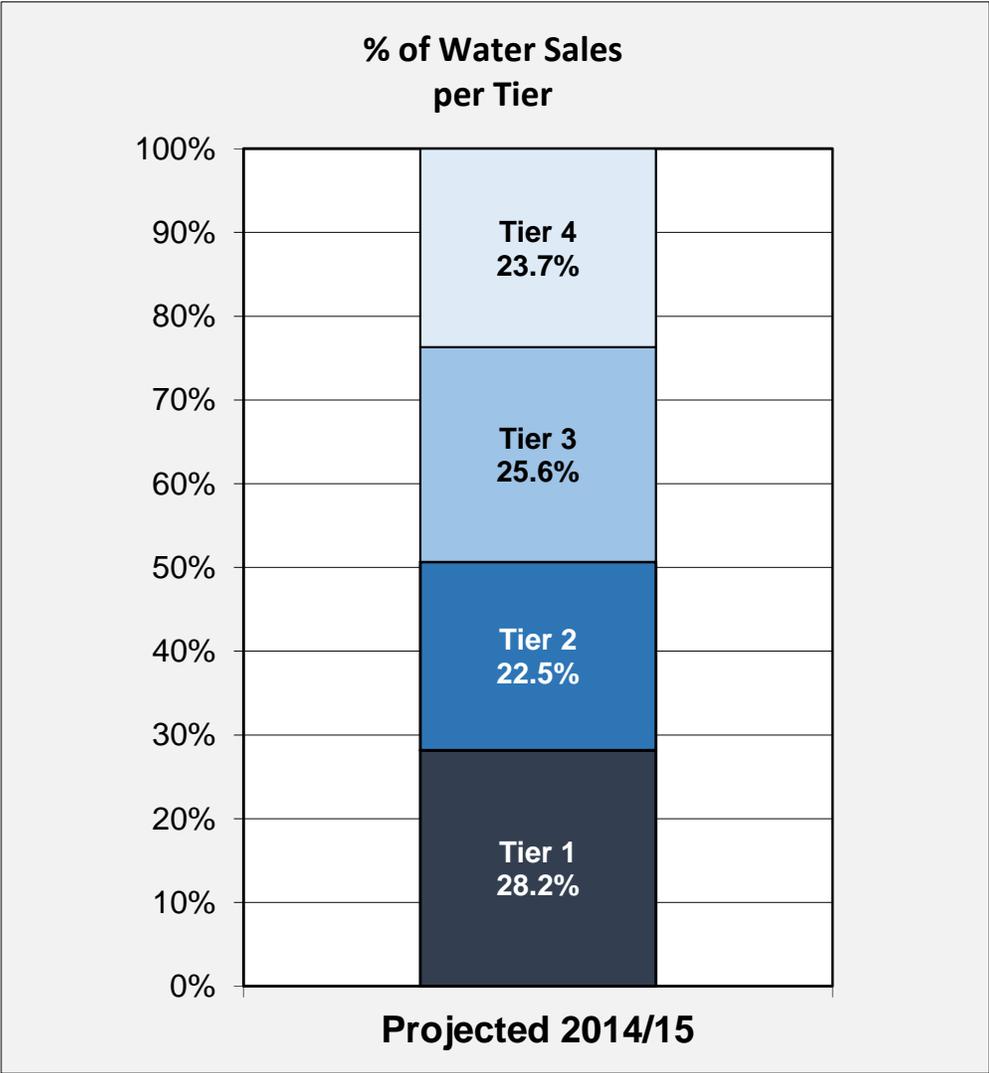


Table 19
 Los Osos Community Services District
 Projected Water Use by Tier

	Tier Reduction Factor*	Projected Water Sales by Tier				
		2014/15	2015/16	2016/17	2017/18	2018/19
Projected Change in Demand		-10.5%	-5.0%	-5.0%	-1.5%	-1.5%
<i>Decrease in water sales due to transition to recycled water for school irrigation calculated separately.</i>						
Projected Water Sales by Tier						
Tier 1	0 - 5 ccf	80%	-4.00%	-4.00%	-1.20%	-1.20%
Tier 2	6 - 10 ccf	90%	-4.50%	-4.50%	-1.35%	-1.35%
Tier 3	11- 20 ccf	110%	-5.50%	-5.50%	-1.65%	-1.65%
Tier 4	>20 ccf	120%	<u>-6.00%</u>	<u>-6.00%</u>	<u>-1.80%</u>	<u>-1.80%</u>
Total			-4.97%	-4.96%	-1.49%	-1.49%
Projected Water Sales by Tier						
Tier 1	0 - 5 ccf		73,708	70,760	67,930	67,115
Tier 2	6 - 10 ccf		58,834	56,186	53,658	52,934
Tier 3	11- 20 ccf		67,076	63,387	59,901	58,913
Tier 4	>20 ccf		<u>62,019</u>	<u>58,298</u>	<u>54,800</u>	<u>53,814</u>
Total			261,637	248,631	236,289	232,776
Change				-5.0%	-5.0%	-1.5%
% of Water Use by Tier						
Tier 1	0 - 5 ccf		28.17%	28.46%	28.75%	28.83%
Tier 2	6 - 10 ccf		22.49%	22.60%	22.71%	22.74%
Tier 3	11- 20 ccf		25.64%	25.49%	25.35%	25.31%
Tier 4	>20 ccf		<u>23.70%</u>	<u>23.45%</u>	<u>23.19%</u>	<u>23.12%</u>
Total			100.00%	100.00%	100.00%	100.00%
Estimated Average Use per Single Family Residence						
Average Use (gpd)		192	172	163	155	152
					152	150

* Represents the percentage of the total overall projected change in demand applied to each tier; assumes a lower % reduction in lower tier water use and a higher % reduction in higher tier water use.

Table 20
 Los Osos Community Services District
 4-Year Average Expenses

	2015/16	2016/17	2017/18	2018/19	4-Year Avg
EXPENSES					
Operating & Maintenance					
Water System Personnel	571,000	594,000	618,000	643,000	606,500
Transfer for Administration	398,000	414,000	431,000	448,000	422,750
Contract/Legal/Professional Services	180,000	187,000	194,000	202,000	190,750
Rents & Utilities	133,000	138,000	144,000	150,000	141,250
Repairs & Maintenance	111,000	115,000	120,000	125,000	117,750
Other Operating Expenses	124,000	129,000	134,000	139,000	131,500
ISJ Inter-Agency Cost Sharing	50,000	50,000	20,000	21,000	35,250
Brine Disposal Costs	80,000	100,000	104,000	108,000	98,000
Water Conservation Program	31,000	32,000	33,000	34,000	32,500
Subtotal	1,678,000	1,759,000	1,798,000	1,870,000	1,776,250
Debt Service	578,000	577,000	577,000	576,000	577,000
Capital Improvements					
High-Priority CIP: Debt Financed	n/a	n/a	n/a	n/a	n/a
High-Priority CIP: Pay-Go & Reserve Funding	14,000	127,000	217,000	310,000	167,000
Intermediate & Long-Term CIP	0	0	0	0	0
AMR Meter Replacement Program	52,000	53,000	55,000	56,000	54,000
Subtotal	66,000	180,000	272,000	366,000	221,000
Total Expenses	2,322,000	2,516,000	2,647,000	2,812,000	2,574,250

Table 21
 Los Osos Community Services District
 Cost Recovery Allocation

Based on Projected 4-Year Average

	Projected 4-Year Avg	Cost Recovery %		Cost Recovery \$	
		Fixed	Variable	Fixed	Variable
REVENUES OTHER THAN WATER RATES					
Recycled Water Revenues (potential)	17,000				
Property Taxes	190,000				
Interest Earnings	9,500				
Other Revenues	64,500				
Total	281,000				
EXPENSES					
Operating & Maintenance					
Water System Personnel	606,500	50%	50%	303,250	303,250
Transfer for Administration	422,750	50%	50%	211,375	211,375
Contract/Legal/Professional Services	190,750	90%	10%	171,675	19,075
Rents & Utilities	141,250	90%	10%	127,125	14,125
Repairs & Maintenance	117,750	50%	50%	58,875	58,875
Other Operating Expenses	131,500	50%	50%	65,750	65,750
ISJ Inter-Agency Cost Sharing	35,250	0%	100%	0	35,250
Brine Disposal Costs	98,000	0%	100%	0	98,000
Water Conservation Program	32,500	0%	100%	0	32,500
Subtotal	1,776,250	53%	47%	938,050	838,200
Debt Service (assumes 20-yr loan)	577,000	25%	75%	144,250	432,750
Capital Improvements					
High-Priority CIP: Debt Financed	<i>excluded, funded by debt</i>				
High-Priority CIP: Pay-Go & Reserve Funding	167,000	25%	75%	41,750	125,250
Intermediate & Long-Term CIP	0	25%	75%	0	0
AMR Meter Replacement Program	54,000	100%	0%	54,000	0
Subtotal	221,000	43%	57%	95,750	125,250
Total Expenses	2,574,250	46%	54%	1,178,050	1,396,200
NET FUNDING TARGET FROM WATER RATES					
Total Expenses	2,574,250	46%	54%	1,178,050	1,396,200
Less Funding Sources Other Than Rates	(281,000)	50%	50%	(140,500)	(140,500)
Net Funding Requirement from Water Rates	2,293,250	45.2%	54.8%	1,037,550	1,255,700
Rounded		45%	55%		

Excludes capital improvement projects funded by grants and debt, but includes associated debt service.

Table 22
 Los Osos Community Services District
 Fixed Meter Charge Calculation

	Est. 2014/15	2015/16	2016/17	2017/18	2018/19
Target Rate Revenue Recovery					
Total Expenses		\$2,322,000	\$2,516,000	\$2,647,000	\$2,812,000
Less Non-Rate Revenues		<u>(250,000)</u>	<u>(267,000)</u>	<u>(301,000)</u>	<u>(306,000)</u>
Rate Revenue Target	1,850,000	2,072,000	2,293,000	2,442,000	2,601,000
Fixed Rate Recovery					
<i>Note: Fixed rate recovery increases due to disproportionate decrease in water sales revenues.</i>					
Cost Recovery Allocation %	41%	42%	43%	44%	45%
Cost Recovery Allocation \$	\$760,000	\$870,240	\$985,990	\$1,074,480	\$1,170,450
Accounts	2,770	2,770	2,770	2,770	2,770
Rate per Meter Equivalent					
Annual	\$274.37	\$314.17	\$355.95	\$387.90	\$422.55
Bi-Monthly	45.72	52.36	59.32	64.64	70.42
Monthly Equivalent	22.86	26.18	29.66	32.32	35.21
Monthly Increase		3.32	3.48	2.66	2.89

Note: 2014/15 fixed service charge calculation shown for informational purposes only, actual bimonthly charge is \$45.76.

Table 23

Los Osos Community Services District
Revenue Recovery Allocation to Tiered Water Rates 2018/19

	Projected 2018/19	Variable Rate Recovery		Allocation \$ Approach	Tiered Rate Allocation %				Tiered Rate Allocation \$						
		%	\$		Tier 1	Tier 2	Tier 3	Tier 4	Total	Tier 1	Tier 2	Tier 3	Tier 4	Total	
PROJECTED WATER USE BY TIER 2018/19 (cct)															
% of Total					66,310	57,941	52,845	229,315	28.9%	22.8%	25.3%	52.8%	23.0%	23.0%	100.0%
VARIABLE CHARGE REVENUE RECOVERY															
A) Pro-Rata Allocation					28.9%	22.8%	25.3%	100.0%	28.9%	22.8%	25.3%	23.0%	23.0%	100.0%	
B) Peak Allocation Weighting Weighted by Water Use per Tier Net Peak Allocation					5.0%	30.0%	60.0%	90.0%	1.4%	6.8%	15.2%	20.7%	44.2%		
C) 2/3 Pro-Rata & 1/3 Peak Allocation ¹					3.3%	15.5%	34.3%	100.0%	3.3%	15.5%	34.3%	46.9%	100.0%		
D) 1/2 Pro-Rata & 1/2 Peak Allocation					20.4%	20.3%	28.3%	100.0%	20.4%	20.3%	28.3%	31.0%	100.0%		
E) Allocation to Higher Tiers					16.1%	19.1%	29.8%	100.0%	16.1%	19.1%	29.8%	35.0%	100.0%		
					0.0%	0.0%	35.0%	100.0%	0.0%	0.0%	35.0%	65.0%	100.0%		
EXPENSES															
Operating & Maintenance															
Water System Personnel	643,000	50%	321,500	C	20.4%	20.3%	28.3%	100.0%	20.4%	20.3%	28.3%	31.0%	100.0%	65,485	99,704
Transfer for Administration	448,000	50%	224,000	C	20.4%	20.3%	28.3%	100.0%	20.4%	20.3%	28.3%	31.0%	100.0%	45,626	63,355
Contract/Legal/Professional Svcs	202,000	10%	20,200	D	16.1%	19.1%	29.8%	100.0%	16.1%	19.1%	29.8%	35.0%	100.0%	3,251	6,018
Rents & Utilities	150,000	10%	15,000	A	28.9%	22.8%	25.3%	100.0%	28.9%	22.8%	25.3%	23.0%	100.0%	4,337	3,416
Repairs & Maintenance	125,000	50%	62,500	D	16.1%	19.1%	29.8%	100.0%	16.1%	19.1%	29.8%	35.0%	100.0%	10,059	11,949
Other Operating Expenses	139,000	50%	69,500	D	16.1%	19.1%	29.8%	100.0%	16.1%	19.1%	29.8%	35.0%	100.0%	11,186	13,287
ISJ Inter-Agency Cost Sharing	21,000	100%	21,000	E	0.0%	0.0%	35.0%	100.0%	0.0%	0.0%	35.0%	65.0%	100.0%	0	7,350
Brine Disposal Costs	108,000	100%	108,000	E	0.0%	0.0%	35.0%	100.0%	0.0%	0.0%	35.0%	65.0%	100.0%	0	37,800
Water Conservation Program	34,000	100%	34,000	E	0.0%	0.0%	35.0%	100.0%	0.0%	0.0%	35.0%	65.0%	100.0%	0	11,900
Subtotal	1,870,000	47%	875,700		16.0%	16.4%	29.7%	100.0%	16.0%	16.4%	29.7%	37.9%	100.0%	139,944	143,444
Debt Service															
2004 I-Bank Loan	276,000	75%	207,000	D	16.1%	19.1%	29.8%	100.0%	16.1%	19.1%	29.8%	35.0%	100.0%	33,316	39,574
2015 Debt Issue: Basin Plan Portion	150,000	75%	112,500	A	3.3%	15.5%	34.3%	100.0%	3.3%	15.5%	34.3%	46.9%	100.0%	3,682	17,397
2015 Debt Issue: Non-Basin Plan	150,000	75%	112,500	D	16.1%	19.1%	29.8%	100.0%	16.1%	19.1%	29.8%	35.0%	100.0%	18,106	21,507
Subtotal	576,000	75%	432,000		12.8%	18.2%	31.0%	100.0%	12.8%	18.2%	31.0%	38.1%	100.0%	55,104	78,478
Capital Improvements															
High-Priority CIP: Pay-Go/Resiv Funding	310,000	75%	232,500	D	16.1%	19.1%	29.8%	100.0%	16.1%	19.1%	29.8%	35.0%	100.0%	37,420	44,449
Intermediate & Long-Term CIP	0	75%	0		-	-	-	-	-	-	-	-	-	-	-
AMR Meter Replacement Program	56,000	0%	0		-	-	-	-	-	-	-	-	-	-	-
Subtotal	366,000	64%	232,500		16.1%	19.1%	29.8%	100.0%	16.1%	19.1%	29.8%	35.0%	100.0%	37,420	44,449
Less Non-Rate Revenues	(306,000)	50%	(153,000)	A	28.9%	22.8%	25.3%	100.0%	28.9%	22.8%	25.3%	23.0%	100.0%	(44,242)	(34,841)
Total	2,506,000	55%	1,387,200		13.6%	16.7%	30.6%	100.0%	188,226	231,530	424,866	542,577	1,387,200		
Projected Water Consumption per Tier 2018/19					66,310	52,219	57,941	229,315						66,310	52,219
Tiered Rate Allocation Divided by Projected Water Use					\$2.84	\$4.43	\$7.33	\$10.27						\$2.84	\$4.43

Note: Fixed charges sized to recover 45% of rate revenues in 2018/19; this table allocates revenue recovery for the remaining portion of expenses to each consumption rate tier.
1 Water use in the Peak Billing Cycle was 153% of the Low Billing Cycle based on 2-year average for 2012/13 - 2013/14, with peaking accounting for about 1/3 of use in peak cycle.

Table 24
 Los Osos Community Services District
 Water Consumption Charges by Tier

	Current	2015/16	2016/17	2017/18	2017/18	
Water Rate Revenue Recovery	\$1,850,000	\$2,072,000	\$2,293,000	\$2,442,000	\$2,601,000	
Variable Rate Recovery						
Cost Recovery Allocation %	59%	58%	57%	56%	55%	
Cost Recovery Allocation \$	\$1,090,000	\$1,201,760	\$1,307,010	\$1,367,520	\$1,430,550	
Projected Use per Tier						
Tier 1	0 - 5 ccf	73,708	70,760	67,930	67,115	66,310
Tier 2	6 - 10 ccf	58,834	56,186	53,658	52,934	52,219
Tier 3	11- 20 ccf	67,076	63,387	59,901	58,913	57,941
Tier 4	>20 ccf	<u>62,019</u>	<u>58,298</u>	<u>54,800</u>	<u>53,814</u>	<u>52,845</u>
Total		261,637	248,631	236,289	232,776	229,315
Rate per Unit						
Tier 1	0 - 5 ccf	\$1.63	\$2.00	\$2.35	\$2.50	\$2.60
Tier 2	6 - 10 ccf	3.07	3.75	4.40	4.80	\$5.20
Tier 3	11- 20 ccf	5.23	6.00	6.75	7.25	\$7.80
Tier 4	>20 ccf	7.20	8.20	9.20	9.80	\$10.40
Revenues per Tier						
Tier 1	0 - 5 ccf	\$120,144	\$141,520	\$159,636	\$167,788	\$172,406
Tier 2	6 - 10 ccf	180,620	210,698	236,095	254,083	271,539
Tier 3	11- 20 ccf	350,807	380,322	404,332	427,119	451,940
Tier 4	>20 ccf	<u>446,537</u>	<u>478,044</u>	<u>504,160</u>	<u>527,377</u>	<u>549,588</u>
Total		1,098,109	1,210,583	1,304,222	1,376,367	1,445,473
Difference from Revenue Target	\$8,109	\$8,823	(\$2,788)	\$8,847	\$14,923	
% Difference	0.7%	0.7%	-0.2%	0.6%	1.0%	

Table 25
 Los Osos Community Services District
 Projected Water Rates

	Current 2014/15	Projected Water Rates				4-Year Increase	
		2015/16	2016/17	2017/18	2018/19		
Fixed Bi-Monthly Service Charge	\$45.72	\$52.36	\$59.32	\$64.64	\$70.42	\$24.70	
<i>Monthly Equivalent</i>	22.86	26.18	29.66	32.32	35.21	12.35	
Water Consumption Charges (\$/ccf)							
Tier 1	0 - 5 ccf	\$1.63	\$2.00	\$2.35	\$2.50	\$2.60	\$0.97
Tier 2	6 - 10 ccf	3.07	3.75	4.40	4.80	5.20	2.13
Tier 3	11- 20 ccf	5.23	6.00	6.75	7.25	7.80	2.57
Tier 4	>20 ccf	7.20	8.20	9.20	9.80	10.40	3.20

1 ccf = one hundred cubic feet = 748 gallons

Table 26
 Los Osos Community Services District
 Projected Monthly Water Bill Impacts

Monthly Use (hcf)	Current \$/Month	Projected Monthly Bills				4-Year Impact		
		2015/16	2016/17	2017/18	2018/19	\$/month	%	\$/day
0	\$22.86	\$26.18	\$29.66	\$32.32	\$35.21	\$12.35	54.0%	\$0.41
1	24.49	28.18	32.01	34.82	37.81	13.32	54.4%	0.44
2	26.12	30.18	34.36	37.32	40.41	14.29	54.7%	0.47
3	27.75	32.18	36.71	39.82	43.01	15.26	55.0%	0.50
4	29.38	34.18	39.06	42.32	45.61	16.23	55.2%	0.53
5	31.01	36.18	41.41	44.82	48.21	17.20	55.5%	0.57
6	34.08	39.93	45.81	49.62	53.41	19.33	56.7%	0.64
7	37.15	43.68	50.21	54.42	58.61	21.46	57.8%	0.71
8	40.22	47.43	54.61	59.22	63.81	23.59	58.7%	0.78
9	43.29	51.18	59.01	64.02	69.01	25.72	59.4%	0.85
10	46.36	54.93	63.41	68.82	74.21	27.85	60.1%	0.92
11	51.59	60.93	70.16	76.07	82.01	30.42	59.0%	1.00
12	56.82	66.93	76.91	83.32	89.81	32.99	58.1%	1.08
13	62.05	72.93	83.66	90.57	97.61	35.56	57.3%	1.17
14	67.28	78.93	90.41	97.82	105.41	38.13	56.7%	1.25
15	72.51	84.93	97.16	105.07	113.21	40.70	56.1%	1.34
16	77.74	90.93	103.91	112.32	121.01	43.27	55.7%	1.42
17	82.97	96.93	110.66	119.57	128.81	45.84	55.2%	1.51
18	88.20	102.93	117.41	126.82	136.61	48.41	54.9%	1.59
19	93.43	108.93	124.16	134.07	144.41	50.98	54.6%	1.68
20	98.66	114.93	130.91	141.32	152.21	53.55	54.3%	1.76
21	105.86	123.13	140.11	151.12	162.61	56.75	53.6%	1.87
22	113.06	131.33	149.31	160.92	173.01	59.95	53.0%	1.97
23	120.26	139.53	158.51	170.72	183.41	63.15	52.5%	2.08
24	127.46	147.73	167.71	180.52	193.81	66.35	52.1%	2.18
25	134.66	155.93	176.91	190.32	204.21	69.55	51.6%	2.29
26	141.86	164.13	186.11	200.12	214.61	72.75	51.3%	2.39
27	149.06	172.33	195.31	209.92	225.01	75.95	51.0%	2.50
28	156.26	180.53	204.51	219.72	235.41	79.15	50.7%	2.60
29	163.46	188.73	213.71	229.52	245.81	82.35	50.4%	2.71
30	170.66	196.93	222.91	239.32	256.21	85.55	50.1%	2.81
31	177.86	205.13	232.11	249.12	266.61	88.75	49.9%	2.92
32	185.06	213.33	241.31	258.92	277.01	91.95	49.7%	3.02
33	192.26	221.53	250.51	268.72	287.41	95.15	49.5%	3.13
34	199.46	229.73	259.71	278.52	297.81	98.35	49.3%	3.23
35	206.66	237.93	268.91	288.32	308.21	101.55	49.1%	3.34
36	213.86	246.13	278.11	298.12	318.61	104.75	49.0%	3.44
37	221.06	254.33	287.31	307.92	329.01	107.95	48.8%	3.55
38	228.26	262.53	296.51	317.72	339.41	111.15	48.7%	3.65
39	235.46	270.73	305.71	327.52	349.81	114.35	48.6%	3.76
40	242.66	278.93	314.91	337.32	360.21	117.55	48.4%	3.86
50	314.66	360.93	406.91	435.32	464.21	149.55	47.5%	4.92
75	494.66	565.93	636.91	680.32	724.21	229.55	46.4%	7.55
100	674.66	770.93	866.91	925.32	984.21	309.55	45.9%	10.18
200	1,394.66	1,590.93	1,786.91	1,905.32	2,024.21	629.55	45.1%	20.70

Table 27

Los Osos Community Services District
 Projected Residential Monthly Water Bill Impacts

Monthly Use	Current \$/Month	Projected Monthly Water Bills			4-Year Avg Annual Impact
		2015/16	2016/17	2017/18	
LOW					
3 hcf Monthly Bill	\$27.75	\$32.18	\$36.71	\$39.82	\$43.01
Increase \$		4.43	4.53	3.11	3.19
Increase %		16.0%	14.1%	8.5%	8.0%
					15.26
					55.0%
					11.6%
MED-LOW					
5 hcf Monthly Bill	\$31.01	\$36.18	\$41.41	\$44.82	\$48.21
Increase \$		5.17	5.23	3.41	3.39
Increase %		16.7%	14.5%	8.2%	7.6%
					17.20
					55.5%
					11.7%
AVERAGE					
7 hcf Monthly Bill	\$37.15	\$43.68	\$50.21	\$54.42	\$58.61
Increase \$		6.53	6.53	4.21	4.19
Increase %		17.6%	14.9%	8.4%	7.7%
					21.46
					57.8%
					12.1%
2X AVG					
14 hcf Monthly Bill	\$67.28	\$78.93	\$90.41	\$97.82	\$105.41
Increase \$		11.65	11.48	7.41	7.59
Increase %		17.3%	14.5%	8.2%	7.8%
					38.13
					56.7%
					11.9%
3X Avg					
21 hcf Monthly Bill	\$105.86	\$123.13	\$140.11	\$151.12	\$162.61
Increase \$		17.27	16.98	11.01	11.49
Increase %		16.3%	13.8%	7.9%	7.6%
					56.75
					53.6%
					14.19
					11.3%
HIGH USER WITH 20% CONSERVATION					
Water Use (hcf)		20% Conservation Over 4 Years			
		19	18	17	16
Monthly Bill	\$98.66	\$108.93	\$117.41	\$119.57	\$121.01
Increase \$		10.27	8.48	2.16	1.44
Increase %		10.4%	7.8%	1.8%	1.2%
					22.35
					22.7%
					5.59
					5.2%

Los Osos Community Services District



Water Shortage Emergency Rates

Revised Draft 11-24-14



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Table 1
 Los Osos Community Services District
 Water Shortage Emergency Stages & Reduction Requirements

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
	Water Shortage Alert	Water Shortage Warning	Emergency Water Shortage	Severe Water Shortage Emergency	Critical Water Shortage Emergency
Base Assumptions					
Water Use Reduction Target [1]	5%	15%	25%	35%	50%
Water Shortage Stages [1]					
Residential Household Allocation (gpd)	183	174	154	135	125
Commercial Allocation	Voluntary	Voluntary Limited	Voluntary Irrig for Community Recreation Only	10% Below Baseline No Irrigation Permitted	15% Below Baseline No Irrigation Permitted
Outdoor Irrigation	Voluntary			4x rate	4x rate
Penalty for Use Over Allocation	None	None	2x rate		
Est Avg Single Family Use (gpd)					
<i>Already built into financial projections</i>					
2013/14	192	192	192	192	192
2014/15	172	172	172	172	172
2015/16	163	163	163	163	163
2016/17	155	155	155	155	155
2017/18	152	152	152	152	152
2018/19	150	150	150	150	150
Add'l Residential Cutback Required					
<i>Above sales decrease already assumed</i>					
<i>% of projected normal-year use</i>					
2015/16	-	-	-5.5%	-17.1%	-23.3%
2016/17	-	-	-0.5%	-12.8%	-19.2%
2017/18	-	-	-	-11.5%	-18.0%
2018/19	-	-	-	-10.1%	-16.8%
Est. Additional Commercial Cutback					
<i>Above sales decrease already assumed</i>					
2015/16				-5.0%	-10.0%
2016/17				-5.0%	-10.0%
2017/18				-5.0%	-10.0%
2018/19				-5.0%	-10.0%

1 Source: Water Shortage Contingency Plan 2014

Table 2
 Los Osos Community Services District
 Projected Water Shortage Emergency Rates

	Stage 1 Water Shortage Alert	Stage 2 Water Shortage Warning	Stage 3 Emergency Water Shortage	Stage 4 Severe Water Shortage Emergency	Stage 5 Critical Water Shortage Emergency
2015/16 Water Shortage Emergency Rates					
Required Additional Increase %	-	-	9.5%	31.5%	47.7%
Tier 1	-	-	\$2.19	\$2.63	\$2.95
Tier 2	-	-	\$4.11	\$4.93	\$5.54
Tier 3	-	-	\$6.57	\$7.89	\$8.86
Tier 4	-	-	\$8.98	\$10.78	\$12.11
2018/19 Water Shortage Emergency Rates					
Required Additional Increase %	-	-	-	20.9%	<u>MAXIMUM*</u> 34.9%
Tier 1	-	-	-	\$3.14	\$3.51
Tier 2	-	-	-	\$6.29	\$7.02
Tier 3	-	-	-	\$9.43	\$10.52
Tier 4	-	-	-	\$12.57	\$14.03

* Maximum projected Emergency Water Shortage Rates through 2018/19.

Note: Emergency Water Shortage Rates can be implemented with Board declaration of Water Shortage Contingency Plan Stages, but should be gradually phased out as water sales return to normal levels projected for each year; emergency rates should not be immediately rescinded when a water shortage stage is declared over.

Rates with 2015/16 Implementation

Table 3A
Los Osos Community Services District
Water Cutback Stages & Rate Requirements 2015/16

	Base Assumptions (Estimated)	Stage 1 Water Shortage Alert	Stage 2 Water Shortage Warning	Stage 3 Emergency Water Shortage	Stage 4 Severe Water Shortage Emergency	Stage 5 Critical Water Shortage Emergency
Water Sales Impact (ccf)						
Projected 2015/16 Water Sales						
Single Family Residential	199,776	199,776	199,776	199,776	199,776	199,776
Irrigation	4,619	4,619	4,619	4,619	4,619	4,619
All Other	44,160	44,160	44,160	44,160	44,160	44,160
Total	248,555	248,555	248,555	248,555	248,555	248,555
Reduction in Water Sales 2015/16						
Single Family Residential				-5.5%	-17.1%	-23.3%
Irrigation				-10.0%	-100.0%	-100.0%
All Other					-5.0%	-10.0%
Water Sales with Reduction 2015/16						
Single Family Residential	199,776	199,776	199,776	188,832	165,534	153,273
Irrigation	4,619	4,619	4,619	4,157	0	0
All Other	44,160	44,160	44,160	44,160	41,952	39,744
Total	248,555	248,555	248,555	237,149	207,487	193,017
Required Add'l Cutback 2015/16 (ccf)						
% of Projected 2015/16 Use		0	0	-11,406	-41,068	-55,538
		0.0%	0.0%	-4.6%	-16.5%	-22.3%
Add'l Revenue Requirement						
Water Sales Revenue Loss [1]	\$0	\$0	\$0	\$59,000	\$214,000	\$289,000
Add'l Conservation Program Costs [2]	0	0	0	50,000	100,000	150,000
Total Add'l Revenue Requirement	0	0	0	109,000	314,000	439,000
Est. Usage Revenues Prior to Cutback						
		\$1,210,583	\$1,210,583	\$1,151,165	\$996,638	\$921,257
Required Add'l Rate Increase %						
		0.0%	0.0%	9.5%	31.5%	47.7%
Proposed Quantity Charges 2015/16						
Tier 1 0-5 ccf	\$2.00	\$2.00	\$2.00	\$2.19	\$2.63	\$2.95
Tier 2 6-10 ccf	\$3.75	\$3.75	\$3.75	\$4.11	\$4.93	\$5.54
Tier 3 11-20 ccf	\$6.00	\$6.00	\$6.00	\$6.57	\$7.89	\$8.86
Tier 4 >20 ccf	\$8.20	\$8.20	\$8.20	\$8.98	\$10.78	\$12.11

1 Based on water use projections; assumes lower levels of cutback in lower tiers and a higher percentage of cutback in higher tiers.

2 Placeholder estimate for future costs of additional conservation program staffing, program costs, and/or incentives needed to achieve required reduction in demand.

2015/16 Implementation

Table 4A
 Los Osos Community Services District
 Projected Annual Water Sales 2015/16

		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
	2015/16 Assumptions	Water Shortage Alert	Water Shortage Warning	Emergency Water Shortage	Severe Water Shortage Emergency	Critical Water Shortage Emergency
Water Use Reduction Target		5%	15%	25%	35%	50%
Net Cutback Required From 2015/16		0.0%	0.0%	-4.6%	-16.5%	-22.3%
Water Cutback By Tier						
Tier 1 0-5 ccf		0.0%	0.0%	-3.7%	-13.2%	-17.9%
Tier 2 6-10 ccf		0.0%	0.0%	-4.1%	-14.9%	-20.1%
Tier 3 11-20 ccf		0.0%	0.0%	-5.0%	-18.2%	-24.6%
Tier 4 >20 ccf		0.0%	0.0%	-5.5%	-19.8%	-26.8%
2015/16 Water Sales With Cutback (ccf)						
Tier 1 0-5 ccf	70,760	70,760	70,760	68,162	61,407	58,111
Tier 2 6-10 ccf	56,186	56,186	56,186	53,866	47,831	44,887
Tier 3 11-20 ccf	63,387	63,387	63,387	60,187	51,866	47,807
Tier 4 >20 ccf	<u>58,298</u>	<u>58,298</u>	<u>58,298</u>	<u>55,088</u>	<u>46,739</u>	<u>42,666</u>
Total	248,631	248,631	248,631	237,303	207,843	193,472
<i>% Reduction from 2015/16 Projections</i>		0.0%	0.0%	-4.6%	-16.4%	-22.2%

2015/16 Implementation

Table 5A
 Los Osos Community Services District
 Projected Water Sales Revenues with Cutback 2015/16

	2018/19 Assumptions	Stage 1 Water Shortage Alert	Stage 2 Water Shortage Warning	Stage 3 Emergency Water Shortage	Stage 4 Severe Water Shortage Emergency	Stage 5 Critical Water Shortage Emergency
Water Use Reduction Target	0%	5%	15%	25%	35%	50%
Annual Water Sales (ccf)						
Tier 1	70,760	70,760	70,760	68,162	61,407	58,111
Tier 2	56,186	56,186	56,186	53,866	47,831	44,887
Tier 3	63,387	63,387	63,387	60,187	51,866	47,807
Tier 4	<u>58,298</u>	<u>58,298</u>	<u>58,298</u>	<u>55,088</u>	<u>46,739</u>	<u>42,666</u>
Total Water Sales	248,631	248,631	248,631	237,303	207,843	193,472
Quantity Rates 2015/16						
Tier 1	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00
Tier 2	3.75	3.75	3.75	3.75	3.75	3.75
Tier 3	6.00	6.00	6.00	6.00	6.00	6.00
Tier 4	8.20	8.20	8.20	8.20	8.20	8.20
Revenue Loss with Cutback						
Tier 1	\$141,520	\$141,520	\$141,520	\$136,325	\$122,814	\$116,223
Tier 2	210,698	210,698	210,698	201,996	179,366	168,326
Tier 3	380,322	380,322	380,322	361,125	311,198	286,843
Tier 4	<u>478,044</u>	<u>478,044</u>	<u>478,044</u>	<u>451,720</u>	<u>383,260</u>	<u>349,865</u>
Total	\$1,210,583	\$1,210,583	\$1,210,583	\$1,151,165	\$996,638	\$921,257
Revenue Loss with Cutback	\$0	\$0	\$0	(\$59,418)	(\$213,945)	(\$289,326)

**Table 3B
Los Osos Community Services District
Water Cutback Stages & Rate Requirements 2018/19**

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
	Water Shortage Alert	Water Shortage Warning	Emergency Water Shortage	Severe Water Shortage Emergency	Critical Water Shortage Emergency
Base Assumptions (Estimated)					
Water Sales Impact (ccf)					
Projected 2018/19 Water Sales					
Single Family Residential	184,136	184,136	184,136	184,136	184,136
Irrigation	4,257	4,257	4,257	4,257	4,257
All Other	40,703	40,703	40,703	40,703	40,703
Total	229,097	229,097	229,097	229,097	229,097
Reduction in Water Sales 2018/19					
Single Family Residential					
Irrigation				-10.1%	-16.8%
All Other				-100.0%	-100.0%
				-5.0%	-10.0%
Water Sales with Reduction 2018/19					
Single Family Residential	184,136	184,136	184,136	165,534	153,273
Irrigation	4,257	4,257	4,257	0	0
All Other	40,703	40,703	40,703	38,668	36,633
Total	229,097	229,097	229,097	204,203	189,906
Required Add'l Cutback 2018/19 (ccf)					
% of Projected 2015/16 Use	0 0.0%	0 0.0%	0 0.0%	-24,894 -10.9%	-39,191 -17.1%
Add'l Revenue Requirement					
Water Sales Revenue Loss [1]	\$0	\$0	\$0	\$167,000	\$263,000
Add'l Conservation Program Costs [2]	0	0	0	100,000	150,000
Total Add'l Revenue Requirement	0	0	0	267,000	413,000
Est. Usage Revenues Prior to Cutback	\$1,445,473	\$1,445,473	\$1,445,473	\$1,278,247	\$1,182,208
Required Rate Adjustments					
Required Rate Increase %	0.0%	0.0%	0.0%	20.9%	34.9%
Proposed Quantity Charges 2018/19					
Tier 1 0-5 ccf	\$2.60	\$2.60	\$2.60	\$3.14	\$3.51
Tier 2 6-10 ccf	\$5.20	\$5.20	\$5.20	\$6.29	\$7.02
Tier 3 11-20 ccf	\$7.80	\$7.80	\$7.80	\$9.43	\$10.52
Tier 4 >20 ccf	\$10.40	\$10.40	\$10.40	\$12.57	\$14.03

1 Based on water use projections; assumes lower levels of cutback in lower tiers and a higher percentage of cutback in higher tiers.

2 Placeholder estimate for future costs of additional conservation program staffing, program costs, and/or incentives needed to achieve required reduction in demand.

2018/19 Implementation

Table 4B
 Los Osos Community Services District
 Projected Annual Water Sales 2018/19

		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
	2018/19 Assumptions	Water Shortage Alert	Water Shortage Warning	Emergency Water Shortage	Severe Water Shortage Emergency	Critical Water Shortage Emergency
Water Use Reduction Target		5%	15%	25%	35%	50%
Net Cutback Required From 2015/16		0.0%	0.0%	0.0%	-10.9%	-17.1%
Water Cutback By Tier						
Tier 1 0-5 ccf		0.0%	0.0%	0.0%	-8.7%	-13.7%
Tier 2 6-10 ccf		0.0%	0.0%	0.0%	-9.8%	-15.4%
Tier 3 11-20 ccf		0.0%	0.0%	0.0%	-12.0%	-18.8%
Tier 4 >20 ccf		0.0%	0.0%	0.0%	-13.0%	-20.5%
2018/19 Water Sales with Cutback (ccf)						
Tier 1 0-5 ccf	66,310	66,310	66,310	66,310	60,546	57,235
Tier 2 6-10 ccf	52,219	52,219	52,219	52,219	47,112	44,179
Tier 3 11-20 ccf	57,941	57,941	57,941	57,941	51,015	47,038
Tier 4 >20 ccf	52,845	52,845	52,845	52,845	45,954	41,997
Total	229,315	229,315	229,315	229,315	204,628	190,449
% Reduction from 2018/19 Projections		0.0%	0.0%	0.0%	-10.8%	-16.9%

2018/19 Implementation

Table 5B
Los Osos Community Services District
Projected Water Sales Revenues with Cutback 2018/19

	2018/19 Assumptions	Stage 1 Water Shortage Alert	Stage 2 Water Shortage Warning	Stage 3 Emergency Water Shortage	Stage 4 Severe Water Shortage Emergency	Stage 5 Critical Water Shortage Emergency
Water Use Reduction Target	0%	5%	15%	25%	35%	50%
Annual Water Sales (ccf)						
Tier 1	66,310	66,310	66,310	66,310	60,546	57,235
Tier 2	52,219	52,219	52,219	52,219	47,112	44,179
Tier 3	57,941	57,941	57,941	57,941	51,015	47,038
Tier 4	<u>52,845</u>	<u>52,845</u>	<u>52,845</u>	<u>52,845</u>	<u>45,954</u>	<u>41,997</u>
Total Water Sales	229,315	229,315	229,315	229,315	204,628	190,449
Quantity Rates 2015/16						
Tier 1	\$2.60	\$2.60	\$2.60	\$2.60	\$2.60	\$2.60
Tier 2	5.20	5.20	5.20	5.20	5.20	5.20
Tier 3	7.80	7.80	7.80	7.80	7.80	7.80
Tier 4	10.40	10.40	10.40	10.40	10.40	10.40
Revenue Loss with Cutback						
Tier 1	\$172,406	\$172,406	\$172,406	\$172,406	\$157,419	\$148,812
Tier 2	271,539	271,539	271,539	271,539	244,983	229,732
Tier 3	451,940	451,940	451,940	451,940	397,920	366,896
Tier 4	<u>549,588</u>	<u>549,588</u>	<u>549,588</u>	<u>549,588</u>	<u>477,925</u>	<u>436,768</u>
Total	\$1,445,473	\$1,445,473	\$1,445,473	\$1,445,473	\$1,278,247	\$1,182,208
Revenue Loss with Cutback	\$0	\$0	\$0	\$0	(\$167,225)	(\$263,265)