



THE CITY OF SAN DIEGO

OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

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Item Number: 330

Proposed Potable Water Rate Increase

OVERVIEW

On September 15, 2015, the City Council heard a presentation from the Public Utilities Department (PUD) on a Proposition 218 notice for a series of proposed water rate increases. Our office provided an overview of the proposed rate increases in IBA Report 15-33, and agreed that an increase in water rates is necessary to ensure continued PUD operations, meet bond covenant requirements, and implement the Pure Water program. At that meeting, several Councilmembers requested additional information in advance of the hearing on the water rates scheduled for November 17, 2015.

PUD issued a memo to the City Council on October 21, 2015 that discussed the consequences of not increasing water rates. Our report discusses the consequences noted in that memo, and provides additional information on water rates throughout the San Diego region. We also briefly address different approaches towards rate tier structures, and note that PUD has committed to investigating different structures in the future.

Our office continues to agree with the need to increase water rates to ensure that PUD revenues are sufficient to support the department's operations and programs. Absent an increase in water rates, PUD's current and planned work will need to be scaled back, and implementation of the Pure Water program – and the corresponding modified permit application for the Point Loma Wastewater Treatment Plant– would be jeopardized.

FISCAL/POLICY DISCUSSION

A brief summary of the proposed rate increase is included below, followed by a discussion of impacts associated with not increasing rates, additional information on the water rates of other agencies in the San Diego region, and a discussion of rate structures.

Proposed Rate Increase¹

At present, the typical residential customer with a ¾-inch meter pays a base-fee of \$20.31/month, and then additional commodity charges based on actual consumption of water.² Commodity charges – or charges based on the volume of water consumed – use a four-tier system in which prices range from \$3.90 per hundred cubic feet (HCF) to \$8.77 per HCF, and represent the cost associated with importing water from various sources.

PUD proposes to increase base-fees and per-HCF commodity rates in the following fashion:

	Current	Jan 2016	July 2016	July 2017	July 2018	July 2019
Base Fee	\$20.31	\$22.26	\$24.75	\$26.06	\$27.56	\$29.46
Tier 1 (0-4 HCF)	\$3.90	\$4.24	\$4.44	\$4.77	\$5.04	\$5.39
Tier 2 (5-12 HCF)	\$4.36	\$4.75	\$4.98	\$5.34	\$5.65	\$6.03
Tier 3 (13-18 HCF)	\$6.23	\$6.79	\$7.11	\$7.63	\$8.07	\$8.62
Tier 4 (19+ HCF)	\$8.87	\$9.55	\$10.00	\$10.73	\$11.34	\$12.12
Percentage Increase	N/A	9.8%	6.9%	6.9%	5.0%	7.0%

Rate increases for multi-family residential and non-residential users largely follow the same pattern of annual increases, though such users do not use a tiered rate system.

Impacts of Not Increasing Water Rates

If no rate increase is approved, PUD will need to make immediate cuts this fiscal year, and would also need to adjust its long-term operational and capital plans in future fiscal years.

Cuts in planned expenditures would be necessary in the following amounts:

FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
\$54.5 M	\$66.5 M	\$79.5 M	\$91.0 M	\$91.0 M

Immediate Impacts in FY 2016

The FY 2016 Adopted Budget for the Water Fund included \$464.3 million of revenue from the sale of water. However, due to the statewide conservation mandate, only \$385.4 million in revenue is currently projected. While the decline in revenue is partially offset by lower costs associated with purchasing a smaller amount of water from the San Diego County Water Authority (SDCWA) – water purchases initially projected at \$246.2 million are expected to decrease to \$225.1 million – the decreased revenue from water sales, in addition to added expenses associated with implementing drought mandates, lead to a funding gap of \$54.5 million in FY 2016 should no rate-increase be approved. That gap would have to be made up through use

¹ For a more detailed review of the proposed rate increases and the factors driving those increases, see [IBA Report 15-33](#).

² According to staff, the typical residential PUD customer has a ¾-inch meter, though some larger homes have a 1-inch meter and have slightly higher base-fees. Multi-family and non-residential customers may have larger meters, and are assessed different base-fees and commodity rates.

of existing department reserves and cuts to planned operations, maintenance, and capital expenditures.

In its memo to Council, PUD suggests that the FY 2016 gap could be partially filled through use of the entire Rate Stabilization Reserve Fund, which could provide up to \$38.5 million. Use of a reserve without a plan to replenish it in future years, however, is not advisable, and could result in a downgrade in PUD's credit rating. No plan to replenish the reserve without rate increases has been contemplated at this time.

If the entire rate stabilization reserve fund is used in FY 2016, a \$16 million gap will remain. As much of PUD's outstanding debt requires the department to maintain certain debt-service-coverage ratios, significant cuts in operations would be necessary.

PUD specifically proposes suspending the Pure Water program, freezing hiring, ending EAM funding, halting condition assessments, halting the Advanced Metering Infrastructure (AMI) smart meters program, and making other cuts. Cutting the Pure Water program could result in significant savings – per the Adopted Budget, \$5.9 million was budgeted for operations in FY 2016, and the Cost of Service Study projected \$23.1 million in capital expenditures for Pure Water. A portion of these amounts has already been expended. Suspending the Pure Water program, however, is inadvisable due to the City's application for a modified permit at the Point Loma Wastewater Treatment Plant, which is discussed below. Cutting the AMI program would also reduce planned expenditures this fiscal year – AMI was budgeted as a \$9.6 million expenditure for FY 2016, though again a portion of this amount has already been expended.

A specific plan of cutbacks will have to be prepared if no rate increase is approved. An inadvisable use of the rate stabilization reserve in combination with cuts to multiple programs would be necessary to ensure a balanced budget for FY 2016.

Future Fiscal Year and Long-Term Impacts

Additional significant cuts would be necessary in future years. Cuts of \$66.5 million in planned expenditures would be required in FY 2017, \$79.5 million in FY 2018, \$91.0 million in FY 2019, and \$91.0 million in FY 2020. In addition to the immediate cuts discussed for FY 2016, which would be sustained in FYs 2017-2020, expenditures on facility and pipe maintenance, technology upgrades, PUD's fleet, and repair materials would need to be considered. Adjustments would need to be included in future year budgets.

Most importantly in discussing long-term impacts, without increased revenue from a rate increase, the City will have no mechanism to finance the Pure Water program. Per the Cost of Service Study, cutting the Pure Water program would reduce anticipated capital expenditures by the amounts on the following page in future years, though as funding for these amounts would largely come from future bond issuances and State Revolving Fund loans, eliminating these expenditures will not necessarily correspond to an equal reduction in the above funding gaps.

Future Year Pure Water Program Capital Expenditures			
FY 2017	FY 2018	FY 2019	FY 2020
\$60.1 M	\$29.7 M	\$14.7 M	\$226.8 M

The Pure Water program was approved by the City Council in 2014, and is expected to generate a third of the City’s water supply by 2035. This local supply of water is expected to help insulate City ratepayers from increasing costs to import water – over the last ten years, the price of imported water, which supplies roughly 85% of the City’s water, has climbed from \$500 per acre foot to over \$1,200.

While water generated from the Pure Water program is not expected to be less expensive than imported water in the near future, as the cost of imported water increases, the cost of water generated by the Pure Water program does approach parity. However, a major *additional* benefit of the Pure Water program is making expensive upgrades at the Point Loma plant unnecessary.

The connection between implementing the Pure Water program and obtaining a modified permit for the Point Loma Wastewater Treatment Plant is of special importance. A modified permit that will allow Point Loma to continue treating water to advanced primary standards *is contingent on* moving forward with the Pure Water program. If that permit cannot be obtained, upgrades that allow the plant to treat wastewater to secondary standards would be necessary. The cost of those upgrades is estimated at \$1.8 to \$2.0 billion.³ No funding for those upgrades has been identified, as implementation of Pure Water would render those upgrades unnecessary.

Suspending the Pure Water program would require the City to identify funding of \$1.8 to \$2.0 billion for Point Loma plant upgrades in the near future.

Potential General Fund Impacts

The City Attorney has advised that there is no language in the City Charter that prevents the General Fund from making contributions to an enterprise fund. Should PUD be unable to provide basic levels of service with existing revenue, General Fund contributions to the department could become necessary.

PUD faces both operational expenses and debt-service expenses. In general, PUD revenue must be used to pay for outstanding debt service, and bond covenants don’t recognize General Fund contributions in calculating debt-service coverage ratios. However, dedicating increasing proportions of PUD’s water-sales revenue to debt-service could result in the General Fund being necessary to support PUD’s operational expenses.

³ A significant portion of this cost is associated with geographic challenges presented by the Point Loma plant’s location, but even without geographic challenges, costs associated with upgrading treatment plants to full secondary treatment are significant. As points of reference, the Hyperion Treatment Plant in Los Angeles has roughly twice Point Loma’s treatment capacity, and required \$1.6 billion in upgrades in the 1980s to move to full secondary treatment. San Francisco’s Southeast Treatment Plant has roughly half the capacity of Point Loma, and is currently undergoing upgrades that are anticipated to cost \$1.3 billion.

Other San Diego Water Agencies

Our office reviewed the water rates of all other water agencies that are members of the San Diego County Water Authority. Attached to this report is a spreadsheet which details the water rates charged by those agencies. PUD's proposed rate increases are consistent with rate increases adopted by most other water agencies in the region.

While rate structures can vary considerably from agency to agency, San Diego's current rates are lower than most other water agencies in the region. A single-family-house that uses 12 HCF a month is currently charged \$70.79 in San Diego; the average cost of all water agencies in San Diego for the same amount is approximately \$78.79.⁴

Additionally, water agencies in the region face the same increased water costs and decreased water sales experienced by the City. A majority of water agencies in the region have approved rate increases in the last year, and several others are currently considering rate increases. The water agencies of Carlsbad, Oceanside, Poway, Rainbow, and Santa Fe all have hearings on water rate increases scheduled in the next three months. Further, multi-year schedules of annual rate increases that extend through 2019 have been approved by the water agencies of Del Mar, Helix, and Rincon del Diablo.

Rate Structures

At the Council meeting on September 15th, several councilmembers questioned whether PUD's tiered rate structure is appropriate or fiscally prudent. Specifically, there were questions related to whether the flat base-fee charged to customers is appropriate, and whether additional tiers should be considered.

All water agencies in the region operate using a flat base-fee in addition to volumetric charges. In most cases, volumetric charges are tiered, so that those who use large quantities of water pay more per unit of water than those who use less. As increased use leads to stepped up unit-prices, tiers can help encourage conservation of water. However, California law requires that there be a nexus between tiered water rates and the cost to provide water – a tiered structure that is solely based on encouraging conservation is not allowed.⁵ San Diego is one of seven utilities in the region that has four tiers for water; nearly all remaining agencies in the region have between one and three tiers. Only one water district in the region – Fallbrook – has more than four tiers.

Councilmembers additionally questioned whether the flat base-fee should be increased to cover more of PUD's fixed costs.⁶ While increasing the base-fee to cover more fixed costs would result in a more predictable revenue stream, it would also decrease volumetric charges and could thereby discourage conservation. As PUD's goals include both ensuring sufficient revenue to support the department's operations *and* increasing water conservation, there will continue to be

⁴ Regional water agency prices for 12 HCF range from a low of \$55.43 per month to a high of \$113.36 per month. The average cost is \$78.79 per month, and the median cost is \$75.89 per month.

⁵ The water agency in San Juan Capistrano had a tiered rate system that was not based on the cost to provide water, and was found by the California 4th District Court of Appeals to have thereby violated Proposition 218.

⁶ Fixed costs are those that are not associated with the cost of purchasing water – the cost to build and maintain water pipes, treatment plants, and pumps, for instance, does not decrease when less water is used.

a tension between base-fees and volumetric charges when setting rates.

Conclusion

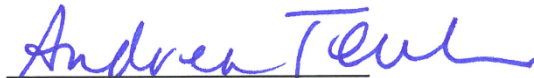
Our office concurs with the findings of the Cost of Service Study prepared for PUD by Black & Veatch, and with PUD's recommendations to increase water rates in the City. Increases are necessary to ensure that PUD has sufficient revenue to continue to meet its operational needs, implement the Pure Water program, and comply with debt-service coverage ratios identified in bond covenants. If rate increases are not approved, immediate and ongoing cuts to PUD will be required both this fiscal-year and in future years.

The two most significant reductions available to offset loss of water rate revenues are full use of the rate stabilization reserve fund – with no plan to replenish it – and suspension of the Pure Water program. Neither action is advisable.

Additionally, without funding for the Pure Water program, the City's permit application for the Point Loma Wastewater Treatment Plant would be jeopardized. This could lead to increased costs of \$1.8 to \$2.0 billion to upgrade the treatment plant, and would not provide any of the additional water-supply benefits associated with the Pure Water program.



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Attachment – Regional Water Agencies Potable Water Rates

The following rates assume a ¾-inch meter.

Agency	Base Rate	HCF in Tier 1	Tier 1 Unit Cost	HCF in Tier 2	Tier 2 Unit Cost	HCF in Tier 3	Tier 3 Unit Cost	HCF in Tier 4	Tier 4 Unit Cost	HCF in Tier 5	Tier 5 Unit Cost	Total Cost for 12 HCF
* †San Diego	\$20.31	0-4	\$3.90	5-12	\$4.36	13-18	\$6.23	19+	\$8.77	N/A	N/A	\$70.79
<i>Fallbrook</i>	\$45.97	0-6.5	\$3.28	7-36	\$3.61	36.5-72	\$5.41	72.5-108	\$6.31	108.5+	\$7.21	\$87.15
‡Padre Dam	\$31.16	0-9	\$6.71	10-27	\$7.27	28-36	\$8.08	37+	\$8.68	N/A	N/A	\$113.36
‡Vallecitos	\$36.52	0-5	\$2.87	6-17	\$3.91	18-36	\$5.12	37+	\$7.20	N/A	N/A	\$78.24
Sweetwater (includes National City and South Bay)	\$13.66	0-5	\$4.06	6-8	\$4.95	9-13.5	\$6.59	14+	\$7.10	N/A	N/A	\$75.17
Olivenhain	\$34.72	0-6	\$2.36	7-25	\$4.11	26-80	\$5.29	81+	\$5.91	N/A	N/A	\$73.54
San Dieguito	\$20.29	0-6	\$3.00	7-10	\$4.47	11-20	\$5.28	21+	\$6.67	N/A	N/A	\$66.73
Otay	\$33.06	0-5	\$1.95	6-10	\$3.04	11-22	\$3.95	23+	\$6.08	N/A	N/A	\$65.91
Vista	\$37.63	0-10	\$3.73	11-60	\$4.27	61+	\$4.27	N/A	N/A	N/A	N/A	\$83.47
<i>Escondido</i>	\$34.08	0-9.5	\$3.78	10-20	\$4.89	20.5+	\$6.20	N/A	N/A	N/A	N/A	\$82.47
†Del Mar	\$37.56	0-14	\$3.74	14.5-42	\$4.82	42.5+	\$7.20	N/A	N/A	N/A	N/A	\$82.44
<i>‡Rincon Del Diablo</i>	\$30.79	0-6.5	\$3.93	7-32	\$4.59	32.5+	\$4.87	N/A	N/A	N/A	N/A	\$81.61
†Helix	\$21.78	0-7	\$3.97	8-17	\$4.70	18+	\$5.92	N/A	N/A	N/A	N/A	\$73.07
*Carlsbad	\$28.38	0-10	\$3.35	11-18	\$4.45	19+	\$6.42	N/A	N/A	N/A	N/A	\$70.78
*†Santa Fe	\$29.24	0-7.5	\$2.70	8-150	\$3.84	151+	\$4.39	N/A	N/A	N/A	N/A	\$66.77
*Poway	\$15.76	0-100	\$4.27	101+	\$6.09	N/A	N/A	N/A	N/A	N/A	N/A	\$67.00
*‡Rainbow	\$69.68	0-6	\$3.39	7+	\$3.54	N/A	N/A	N/A	N/A	N/A	N/A	\$111.26
*Oceanside	\$18.41	0-13	\$3.87	14+	\$4.42	N/A	N/A	N/A	N/A	N/A	N/A	\$64.85
Lakeside	\$10.13	0-6	\$3.73	7+	\$3.82	N/A	N/A	N/A	N/A	N/A	N/A	\$55.43
Ramona	\$32.33	0+	\$5.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$98.57
‡Valley Center	\$35.76	0+	\$4.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$88.08
Yuima	\$37.97	0+	\$3.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$76.61

Italicized agencies charge per 1,000 gallons used; their rates and tiers have been adjusted above to reflect a HCF basis

*Hearing on Rate Increase scheduled in next three months

† Multi-year annual rate increase approved/proposed

‡ Unit rates include an estimated average pumping fee