



OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

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Proposed Potable and Recycled Water Rate Adjustments

OVERVIEW

At the August 5, 2015 meeting of the Environment Committee, the Public Utilities Department (PUD) presented a Cost of Service Study (COSS) for potable water rates and a modified COSS for recycled water, and made recommendations to increase potable and recycled water rates over the next four years. The Committee requested that PUD provide responses to several questions, and forwarded the COSS and associated requests to the City Council without recommendations.

The PUD specifically recommends that potable water rates be increased by the following amounts according to the following timeline:¹

Table with 5 columns: January 1, 2016 (9.8%), July 1, 2016 (6.9%), July 1, 2017 (6.9%), July 1, 2018 (5.0%), July 1, 2019 (7.0%)

Increases in water rates are necessary largely due to three factors:

- 1) Decreases in revenue associated with increased conservation and drought mandates;
2) Increases in the cost of water purchased by PUD; and
3) Expansion of PUD's capital program, including ongoing capital costs and implementation of the City's Pure Water program.

Additionally, PUD recommends that the City increase the rate charged for non-potable recycled

1 These proposed increases include pass-through increases associated with projected increases in the cost to purchase water from the County Water Authority (CWA). The projections assume that CWA rates will increase by 2.5% in 2017 and 2018, and 3.0% in 2019; should actual CWA rates changes be different, PUD's rates for those years would be adjusted accordingly, with up to 7% of any CWA rate increase being passed through to PUD customers.

water from its current rate of \$0.80 per hundred cubic feet (HCF) to \$1.73 per HCF.

Our office has reviewed the COSS and proposed rate increases, and agrees that there is a need to increase water rates to ensure that PUD revenues are sufficient to support the department's operations and programs. Per Proposition 218, on September 15, 2015 the City Council will be requested to authorize issuance of a notice of public hearing on setting water rates, with that hearing to be held on November 17, 2015.² Any action to modify rates would be taken at the meeting on November 17, 2015.

This report provides an overview of the proposed increases and major issues that impact PUD's operations and revenues. Should Council approve issuance of a public hearing notice, it would be appropriate for Council to additionally present any further questions, requests, or proposals to PUD in advance of the November hearing.

FISCAL/POLICY DISCUSSION

Potable Water Rates

Existing and Proposed Rates

At present, the typical residential customer with a 3/4" meter pays a base-fee of \$20.31/month, and then additional commodity charges based on actual consumption of water.³ 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

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.

Total revenue from existing rates *without* any rate increase is expected to total \$385.4 million in FY 2016, and to increase to \$398.5 million by FY 2020. If the proposed rate increases are approved, total revenue from rates will grow to \$561.8 million in FY 2020, as detailed below.

² Proposition 218, approved by California voters on November 5, 1996, sets forth a process by which municipalities can adjust fees for certain services, and includes notice-requirements that are described in the PUD staff report. Proposition 218 also prohibits fees from exceeding the cost to provide a service.

³ 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.

Projected Water Rate Revenue (\$ in millions)					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Without Rate Increase	\$385.4	\$388.6	\$391.9	\$395.2	\$398.5
With Rate Increase	\$404.3	\$456.1	\$491.7	\$520.6	\$561.8

Factors Driving Increased Rates

There are three primary factors that are driving the need for increased rates:

- 1) A decrease in the volume of water purchased by PUD customers,
- 2) An increase in the cost of water purchased by PUD, and
- 3) Ongoing and increasing debt-service and capital needs.

Each factor is detailed below.

Decrease in Water Purchases

Due to the ongoing drought, in April Governor Brown mandated that water agencies statewide reduce water use by 25% compared with 2013 levels. Due to past conservation measures, San Diego's PUD was required to reduce water use by 16%. The COSS assumes a corresponding reduction in water sales revenue in FY 2016. While this conservation does result in a decrease in total PUD water purchase costs, that decrease in costs is offset by a corresponding decrease in revenue.

The COSS includes total revenue under existing rates for FY 2016 as \$385.4 million, which reflects the new conservation mandates, and represents a decrease in revenue received in FY 2015 of \$431.4 million.⁴

It is additionally important to note that the conservation rates assumed in the COSS meet – *but do not exceed* – the 16% conservation mandate. In each month since its implementation, the City has exceeded the 16% mandate, reducing water use by 24% in June and 29% in July. It will be important to monitor actual conservation over the coming months to track whether the 16% conservation rate assumed in the COSS is accurate.

Increase in Water Purchase Costs

Historically, PUD has purchased 85 to 90 percent of its water from the County Water Authority (CWA). Over the last several years, the CWA has embarked on a number of programs to diversify its water supplies so that it is not primarily reliant on water purchases from the Metropolitan Water District. Major programs include the Carlsbad Desalination Project, which is expected to be completed this fall, and an agreement to buy water directly from the Imperial Irrigation District. While such programs increase water supply diversity and reliability, they also carry costs: in June 2015, the CWA board approved increases in wholesale rates of 6.6% for untreated water and 5.4% for treated water. This will increase the City's water purchase costs by

⁴ This figure is unaudited and may be subject to change.

an estimated \$12.1 million annually.

Additionally, PUD projects that CWA rate increases will continue from FY 2017-2019, with increases of 2.5% in FYs 2017 and 2018 and 3.0% in 2019. Altogether, water purchase costs are projected to increase by 22% from FY 2016 through FY 2020, as detailed in the table below.

Projected Water Purchase Costs (\$ in millions)				
FY 2016	FY 2017	FY2018	FY 2019	FY 2020
\$225.1	\$239.0	\$253.8	\$273.1	\$275.2

Increased Capital and Debt Service Costs

At present, PUD has approximately \$800 million in outstanding bond and State Revolving Fund (SRF) loan obligations. Over the period from FY 2016 to FY 2020, the COSS projects \$874 million in additional capital costs. \$354 million of these costs are associated with implementation of the Pure Water program.⁵ Further costs are associated with replacement of 30+ miles of water main per year. While these capital costs will be partially cash and grant funded, over 84% of costs will be financed through a combination of bond and commercial paper issuances and SRF loans.

In order to comply with bond covenants and maintain the PUD's credit rating, PUD must ensure that it generates sufficient revenue to pay for its ongoing operations as well as its annual debt service. Black & Veatch, the City's COSS consultant, recommends that PUD maintain a debt service coverage ratio (DSC) of 1.25.⁶

Based on anticipated capital expenditures and financing mechanisms in FY 2016 through 2020, the DSC ratios both without rate adjustments and with proposed rate adjustments are provided below:

Debt Service Coverage Ratios, With and Without Rate Increase					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Without Rate Increase	0.90	.027	(0.02)	(0.20)	0.12
With Rate Increase	1.19	1.24	1.28	1.36	2.04

⁵ Advancement of the Pure Water program was approved by the City Council in 2014, and is expected to provide a third of the City's drinking water by 2035 through advanced treatment and purification of wastewater. Phase 1 of the Pure Water program is expected to enter construction in FY 2020, which will continue through FY 2023; significant increases in debt service payments associated with the capital costs of Pure Water will begin in FY 2021.

⁶ The debt service coverage ratio is the department's net operating revenue divided by its debt service obligations. A DSC ratio of 1.0 implies that the department has *only* sufficient revenue to fund its operations and make debt service payments on existing debt. A ratio below 1.0 implies that the department cannot make its full debt service payments and may be in danger of default, and a ratio above 1.0 implies that more than sufficient revenue exists to fund operations and make current debt service payments.

Without any rate increases, assuming continued expansion of PUD's capital program and implementation of Pure Water, PUD will be unable to use revenues to fully fund its operations and make required debt service payments as early as FY 2016. While the DSC ratios in FYs 2019 and 2020 – assuming the proposed rate increases are implemented – exceed the 1.25 (significantly so in 2020 at 2.04), it should be noted that \$286.6 million in new SRF loans and bond funding is planned to be issued in 2020, largely associated with beginning of construction on the Pure Water program's North City plant. As debt service payments on that amount will begin in FY 2021, the DSC ratio will decrease substantially in FY 2021.

Recycled Water Rates

Background

The City currently operates two treatment plants that together provide the capacity to produce 45 million gallons per day (mgd) of non-potable recycled water that is suitable for irrigation use. The North City Water Reclamation Plant (NCWRP) has a capacity of 30 mgd, and the South Bay Water Reclamation Plant (SBWRP) has a capacity of 15 mgd. Both facilities were constructed to comply with the Ocean Pollution Reduction Act (OPRA), which allowed the City to apply for a waiver that allows the Point Loma Wastewater Treatment Plant to treat wastewater to an advanced primary stage before being discharged into the ocean, under the condition that the City develop a 45 mgd water reclamation program.

The NCWRP distributes recycled water over a system of over 93 miles of City-owned pipeline. The City's SBWRP distribution system is limited to less than a mile of pipeline, which connects to the Otay Water District's retail distribution system.

Current Rates and Proposed Increase

The City currently charges customers \$0.80 per HCF of recycled water. The City initially sold recycled water at the rate of \$1.34 per HCF, though this rate was lowered in 2001 to encourage use of recycled water. While the City's wastewater treatment program does benefit from the recycled water program, the current rate of \$0.80 per HCF does not recoup costs associated with producing and distributing recycled water.

PUD proposes to increase the rate of recycled water to \$1.73 per HCF of recycled water, to ensure that operating costs and capital costs of distribution and tertiary and demineralization facilities at both plants is recovered.

Issues to Consider

The Otay Water District has objected to a unitary rate being applied to recycled water customers across the City. Otay contends that the NCWRP and SBWRP serve two different areas, and its own investment in a distribution system in the South Bay would result in it being unfairly charged more than the cost of providing recycled water from the SBWRP. Otay instead advocates that two zone rates be established – one for NCWRP customers and one for SBWRP customers.

PUD staff has indicated that it considers the water reclamation program a single system, and that

a unitary rate is appropriate given that all metropolitan wastewater users have both benefited from the system and borne its costs. While our office believes that rates for recycled water should be adjusted upwards to coincide with the costs of providing that water, the decision to increase rates through a unitary or zone approach is a policy call for Council. Should the Council wish to adjust recycled water rates using a zone-based system, PUD indicates that the cost of recycled water from the SBWRP should be \$1.17 per HCF, and recycled water from the NCWRP should be \$2.14 per HCF. If the Council would like to move forward with a zone-rate, the City Attorney has advised that the City study the zone-rate model with its rate consultant to identify any possible issues or conflicts before it implements any rate increases.

Conclusion

This is a high-level review of PUD's proposed water rate increases. Based on our review of PUD's operations and plan for capital improvements and the COSS prepared for PUD by Black & Veatch, we agree with the need to increase water rates to ensure that PUD has sufficient revenue to continue to meet its operational needs, implement the Pure Water program, and ensure that sufficient revenue exists to comply with debt-service coverage ratios identified in bond covenants.

At this time, the City Council is being asked to initiate the notification process that would allow Council to take action to adjust water rates in November. Taking action on September 15th does not commit Council to approving rate increases in November, though will allow Council to make increases at that time if it chooses. We recommend that Council authorize issuance of a notice for a public hearing on November 17, 2015 pursuant to Proposition 218. Our office remains available to provide additional analysis of the proposed rate adjustments should Council request it.



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