

Delta Diablo

(a California Special District)

Board of Directors Finance Committee Meeting

4:30 PM, Thursday, August 24, 2023

Plant Operations Center Conference Room
2500 Pittsburg-Antioch Highway, Antioch, CA 94509

AGENDA

A. PUBLIC COMMENTS

B. REVIEW PROPOSED ADJUSTMENTS TO RECYCLED WATER SERVICE CHARGES (Brian Thomas)

C. ADJOURNMENT

The District will provide reasonable accommodations for persons with disabilities who plan to participate in Board (or committee) meetings by contacting the Secretary to the Board 24 hours prior to the scheduled meeting at (925) 756-1927. Disclosable public records related to an open session item on a regular meeting agenda and distributed by the District to a majority of members of the Board of Directors less than 72 hours prior to that meeting are available for public inspection on the District website at www.deltadiablo.org and also at the District Administration Building located at 2500 Pittsburg-Antioch Highway, Antioch, CA 94509 during normal business hours.



MEMORANDUM

DATE: August 24, 2023

TO: Juan Banales, Chair, Finance Committee

FROM: Brian Thomas, Deputy General Manager/District Engineer *BAT*

SUBJECT: REVIEW PROPOSED ADJUSTMENTS TO RECYCLED WATER SERVICE CHARGES

Recommendation

Review and comment on proposed adjustments to Recycled Water Service Charges (RWSCs).

Background Information

At its meeting on August 17, 2023, the Board set a public hearing for September 13, 2023, to consider RWSC adjustments to ensure recovery of costs to produce recycled water (RW) at the District's Recycled Water Facility and distribute this valuable resource to customers. Because RWSCs were last approved by the Board in July 2019, adjustments are necessary to address substantial increases in chemical (+\$0.75 million or 118% increase in FY23/24 Budget [\$1.41 million] versus \$0.66 million in actual expenditures in FY21/22) and utilities costs in recent years. Staff will present the financial analysis and proposed RWSCs for each of the District's RW customers at the Finance Committee Meeting on August 24, 2023. The following background information is relevant to this analysis:

- In FY23/24, 7.0 million gallons per day (MGD) (or 49%) of RW was produced from 14.2 MGD of influent flow at the District's Wastewater Treatment Plant (WWTP).
- Approximately 90-95% of RW produced by the District is used for industrial cooling tower purposes by Calpine Corporation (Calpine) at its Delta Energy Center (DEC) and Los Medanos Energy Center (LMEC) facilities.
- Approximately 5-10% of RW produced by the District is used for irrigation purposes (City of Antioch golf course, parks, medians; City of Pittsburg parks, medians; Pittsburg Unified School District; Mt. Diablo Resource Recovery Park; and Caltrans).
- The District's RWF was funded by Calpine and placed into service in June 2001. The District utilizes voluntary user service agreements with each RW customer that provide Calpine with the first right to RW and "interruptible" service to all other customers. These agreements require RWSCs to be set by the Board.

In developing the financial analysis for RWSC revenue needs, staff incorporated the following guiding principles:

- Critically review RW operating budget costs by major category to accurately identify cost drivers and potential cost-savings opportunities
- Ensure effective prioritization of RW projects within the District's 5-year Capital Improvement Program (CIP) to address critical infrastructure needs in a timely manner
- Utilize a 5-year financial plan (with a 10-year outlook) to forecast projected annual operating and capital costs, and develop associated RWSC revenue needs

- Maintain a minimum reserve balance of 40 percent of annual budgeted operating expenses in the Recycled Water Operations & Maintenance (RW O&M) Fund

Analysis

Staff has developed an RWSC financial model that incorporates cash flow projections for current and future fiscal years with rates based on the costs of providing RW service to customers. The proposed RWSCs reflect costs identified in the District's FY23/24 Budget and 5-year CIP, which were adopted by the Board on June 14, 2023. The following key assumptions were incorporated into the financial model to identify revenue needs and the proposed RWSCs:

- RW Operating Budget: The RW operating budget for FY23/24 and FY24/25 is estimated at \$3.85 million and \$3.98 million, respectively, which reflects a significant increase in chemical and utilities costs from prior years. Annual cost escalation factors (e.g., utilities, 5%; chemicals, 8%; salaries, 3.2%; benefits, 6%) were used to forecast O&M expenditures beyond FY23/24 and FY24/25.
- RW Capital Budget: A total of \$1.7 million and \$4.6 million were included for RW Capital Asset (RW CA) Fund and RW Capital Asset Replacement (RW CAR) Fund projects in the 5-year CIP. Capital project expenditures beyond the approved 5-year CIP were estimated for Years 6 through 10.
- Fixed and Variable-rate Components: All RW customers pay the same variable-rate RWSC component per unit based on consumption to recover RW CAR, chemicals, and utilities costs. In addition, each RW customer pays its allocable share of fixed costs, including labor, office expenses, outside services, repairs and maintenance, and distribution system O&M costs. Calpine is responsible for paying all of the RW CA project costs per its agreement with the District. Capital assets are categorically funded in this manner because RWF capital funding requirements do not typically change with the addition of other customers.
- Calpine Firm Capacity Surcharge and Revenue Stability Surcharge: As part of its fixed-cost component, Calpine also pays a Firm Capacity Surcharge and a Revenue Stability Surcharge. The Firm Capacity Surcharge includes certain costs allocated based on the Calpine receiving "firm" capacity, while irrigation customers receive interruptible service. The District continues to implement the Revenue Stability Surcharge, which was established in FY11/12 to stabilize revenue after Calpine experienced a decline in consumption from historical levels. The Revenue Stability Surcharge (\$20,000-\$35,000 per month) and annual recycled water consumption (4,516-8,103 AF) by Calpine has varied significantly since this surcharge was implemented. Based on demand volatility in recent years, staff is proposing to maintain the surcharge at \$35,000 per month to ensure cost recovery.
- City of Antioch RW Project Surcharge: In FY12/13, an additional surcharge was established for the city of Antioch to cover its \$1.1 million share of the Antioch Recycled Water Project costs that exceeded the city's \$5 million cap for the low-interest State Revolving Fund (SRF) loan secured by the District. The city of Antioch is paying the District for its share of SRF loan principal and interest for the \$5 million cap amount annually when the SRF loan payments are due. Based on the city of Antioch owning and being able to sell extra capacity in its distribution system, the remaining amount of the city of Antioch's project costs is being repaid to the District over a 20-year period at 4.25% interest through a monthly rate surcharge of \$6,825.65.
- City of Pittsburg RW Distribution System Project Surcharge: During construction, an existing city of Pittsburg pipeline was reused for a portion of the project. This pipeline was near the end of its useful life and required rehabilitation, which was 75% grant funded and 25% locally funded. The local share is the responsibility of the city of Pittsburg, which requested that the District recover those costs over time through an RWSC surcharge. Based on the local share of \$328,500, a fixed monthly surcharge was established in FY13/14 at \$3,365.92 at an interest rate of 4.25% over a

ten-year period which ended in June 2023. This surcharge will no longer be applied to the city of Pittsburg's monthly billing.

Proposed RWSC Adjustments: Assuming future RW consumption is consistent with actual consumption in FY22/23, the RWSC financial analysis indicates annual revenues need to increase by 7.5% (+\$288k from \$3.86 million to \$4.14 million) to recover the District's costs associated with RW production and distribution. The proposed RWSCs would collect an estimated \$2,148,640 (52%) from variable costs and \$1,994,480 (48%) from fixed charges (exclusive of the special project-related surcharge for Antioch). The RWSC revenue covers the total revenue requirement of \$4,143,120. The proposed variable-rate component is expected to increase by approximately 13.8% (+\$259k) due to a \$507k increase in chemical costs and a \$108k increase in utility costs in the approved FY23/24 Budget. Annual fixed revenue need increased by \$28,656 and is largely attributed to increases in labor costs, office and operating expenses, and small-scale RW CAR project needs. For irrigation customers, fixed-cost allocations generally decreased. As shown on the FY23/24 Recycled Water Service Charge Revenue Estimates (Attachment 1), revenue projections with current and proposed RWSCs are \$3,854,621 and \$4,143,120, respectively, and are based on actual recycled water consumption in FY22/23.

As shown on the Proposed Recycled Water Service Charges (Attachment 2), the current variable rate per acre-foot (AF) is \$246, and the proposed variable rate is \$279 based on planned increases for chemicals, utilities, and the 5-year CIP for RW CAR projects. This represents an increase of \$33 per AF. Based on increased RW CAR project and repairs and maintenance costs due to the RWF age, fixed charges for Calpine increase by \$7,243 per month from the current fixed charges of \$152,616 per month. The fixed charges per AF for all irrigation users have decreased. As shown in Table 1 below, by spreading all charges allocated to the cities over projected consumption, the total cost per AF is \$499 for FY23/24 (excluding project-related surcharges) compared to current RWSCs of \$585 per AF. This represents an overall decrease of \$86 per AF (15%). The proposed RWSCs, excluding the city of Antioch surcharge, are well under the estimated cost of water from the Contra Costa Water District for FY23/24, which is estimated to be \$844 per AF for raw water and \$2,079 per AF for treated water. Staff reviewed the proposed RWSCs with key RW customers at a special RW Technical Advisory Committee (TAC) meeting on June 19, 2023.

Customers	Current	Proposed	%Change
Industrial Users	\$498	\$542	9%
Irrigation Users	\$585	\$499	-15%
City of Antioch with Surcharge	\$1,019	\$933	-8%

Following a recommendation by the Finance Committee, this RWSC analysis will be presented to the Board at its September 13, 2023 meeting, with a Public Hearing and consideration to adopt an ordinance adjusting RWSCs. If the Board approves adjustments, the RWSCs would be implemented on RW customer monthly invoices beginning in November 2023.

Fiscal Impact

If approved by the Board on September 13, 2023, the proposed RWSCs would generate sufficient revenue to cover the District's RW production and distribution costs, which were incorporated into the FY23/24 Budget approved by the Board in June 2023.

Attachments

1. FY23/24 Recycled Water Service Charge Revenue Estimates
2. Proposed Recycled Water Service Charges

FY23/24 Recycled Water Service Charge Revenue Estimates

	Current RWSCs	Proposed RWSCs	Difference
RW Usage per acre-foot (AF) - Calpine	7,313	7,313	-
RW Usage per AF - All Other Customers	377	377	-
Total Customer Usage	7,690	7,690	-
Fixed Revenue w/o Antioch Surcharge			
Calpine	\$ 1,831,388	\$ 1,918,305	\$ 86,917
Antioch	67,534	38,780	\$ (28,754)
Pittsburg	48,196	20,211	\$ (27,985)
All Other Customers	18,706	17,184	\$ (1,522)
Total Fixed Revenue w/o Antioch Surcharge	\$ 1,965,824	\$ 1,994,480	\$ 28,656
Variable Revenue			
Calpine	\$ 1,796,346	\$ 2,043,469	\$ 247,123
All Other Customers	92,451	105,171	12,720
Total Variable Revenue	\$ 1,888,797	\$ 2,148,640	\$ 259,843
Total Revenue			
Calpine	\$ 3,627,734	\$ 3,961,774	\$ 334,040
All Other Customers	226,887	181,346	(45,541)
Total Revenue	\$ 3,854,621	\$ 4,143,120	\$ 288,499
Estimated Revenue Need	-	\$ 4,143,000	-
Est Gross Revenue less Revenue Need	-	\$ 120	-

Proposed FY23/24 Recycled Water Service Charges

	Current Rates	FY23/24 Proposed	%Change
<u>Variable Rate per Acre-Foot (AF)</u>			
Recycled Water Facility O&M	\$ 222	\$ 246	11%
RW Capital Asset Replacement	\$ 24	\$ 34	39%
Total Variable Rate per AF	\$ 246	\$ 279	14%
<u>Fixed Monthly Charges</u>			
Calpine:			
O&M Distribution	\$ 3,274	\$ 3,450	5%
O&M Treatment	\$ 87,517	\$ 103,895	19%
Capital Asset	\$ 25,978	\$ 16,667	-36%
Firm Capacity Surcharge	\$ 847	\$ 847	0%
Revenue Stability Surcharge	\$ 35,000	\$ 35,000	0%
Total Calpine Monthly Fixed Charges	\$ 152,616	\$ 159,859	5%
City of Antioch:			
O&M Antioch	\$ 5,628	\$ 3,232	-43%
Antioch Project Surcharge	\$ 6,826	\$ 6,826	0%
Total City of Antioch Monthly Fixed Charges	\$ 12,453	\$ 10,057	-19%
City of Pittsburg:			
O&M Pittsburg	\$ 4,016	\$ 1,684	-58%
Pittsburg RW Distribution System Project Surcharge	\$ 3,366	\$ -	-100%
Total City of Pittsburg Monthly Fixed Charges	\$ 7,382	\$ 1,684	-77%
Other Users:			
MRRRP	\$ 358	\$ 344	-4%
PUSD	\$ 935	\$ 972	4%
Caltrans	\$ 266	\$ 116	-57%
Total Other Users' Monthly Fixed Charges	\$ 1,559	\$ 1,432	-8%
<u>Assumed Annual Consumption (AF)</u>			
Calpine	7,313	7,313	0%
Antioch	189	189	0%
Pittsburg	97	97	0%
Caltrans	4	4	0%
PUSD	60	60	0%
MRRRP	27	27	0%
Total Usage (AF)	7,690	7,690	0%