

Delta Diablo

(a California Special District)

Board of Directors Finance Committee Meeting

4:30 PM, Monday, September 30, 2024

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 (Anika Lyons)**
- C. REVIEW CAPITAL FACILITIES CAPACITY CHARGE DEVELOPMENT OVERVIEW AND KEY ASSUMPTIONS (Nitish Sharma)**
- D. 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.

Delta Diablo | 2500 Pittsburg-Antioch Hwy, Antioch, CA 94509 | Main 925.756.1900 | Fax 925.756.1961

TRANSFORMING WASTEWATER TO RESOURCES





MEMORANDUM

DATE: September 30, 2024

TO: Juan Banales, Chair, Finance Committee

THROUGH: Vince De Lange, General Manager

FROM: Nitish Sharma, Business Services Director
Anika Lyons, Finance Manager

SUBJECT: REVIEW PROPOSED ADJUSTMENTS TO RECYCLED WATER SERVICE CHARGES

Recommendation

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

Background Information

RWSC adjustments ensure recovery of costs to produce recycled water (RW) at the District's Recycled Water Facility (RWF) and distribute this valuable resource to customers. RWSCs were last approved by the Board in September 2023. Adjustments are necessary to address increases in chemical (+\$0.22 million or 16% increase in FY24/25 Budget [\$1.63 million] versus \$0.81 million in actual expenditures in FY22/23) and utilities costs. The FY24/25 chemical budget increased significantly due to sodium hypochlorite unit price increases in FY23/24 (+104%) and FY24/25 (+14%). Staff will present the financial analysis and proposed RWSCs for each of the District's RW customers at the Finance Committee Meeting on September 30, 2024. The following background information is relevant to this analysis:

- In FY24/25, 6.5 million gallons per day (MGD) of RW was produced from 13.8 MGD of influent flow at the District's Wastewater Treatment Plant (WWTP).
- Approximately 93-95% of RW produced by the District is used for industrial cooling tower purposes by Calpine Corporation (Calpine) at is Delta Energy Center (DEC) and Los Medanos Energy Center (LMEC) facilities.
- Approximately 5-7% 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 FY24/25 Budget and 5-year CIP, which were adopted by the Board on June 12, 2024. 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 FY24/25 and FY25/26 is estimated at \$3.97 million and \$4.23 million, respectively, which reflects increases in chemical and utilities costs from prior years. Annual cost escalation factors (e.g., utilities, 5%; chemicals, 3%; salaries, 3.5%; benefits, 5%) were used to forecast O&M expenditures beyond FY24/25.
- RW Capital Budget: A total of \$1.4 million and \$4.0 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 RW consumption (4,516-8,103 acre-feet [AF]) by Calpine has varied significantly since this surcharge was implemented. 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.

Proposed RWSC Adjustments: Assuming future RW consumption is consistent with actual consumption in FY23/24, the RWSC financial analysis indicates annual revenues need to increase

by ~6% (+\$109k) to recover the District’s costs associated with RW production and distribution. The proposed RWSCs would collect an estimated \$2,398,291 (56%) from variable costs and \$1,853,800 (44%) from fixed charges (exclusive of the special project-related surcharge for Antioch). The RWSC revenue covers the total revenue requirement of \$4,252,000. The proposed variable-rate component is expected to increase by approximately 12% (+\$250k) mainly due to a \$221k increase in chemical costs and a \$102k increase in utility costs in the approved FY24/25 Budget. Annual fixed revenue need decreased by \$141k and is largely attributed to a decrease in labor costs due to salary savings in the FY24/25 budget. For irrigation customers, fixed-cost allocations generally decreased. As shown on the FY24/25 RWSC Revenue Estimates (Attachment 1), revenue projections with current and proposed RWSCs are \$4,143,120 and \$4,252,091, respectively, and are based on actual RW consumption in FY23/24.

As shown on the Proposed FY24/25 RWSCs (Attachment 2), the current variable rate is \$279 per AF and the proposed variable rate is \$332 per AF based on planned increases for chemicals and utilities, offset by a decrease in the 5-year CIP for RW CAR projects. This represents an increase of \$53 per AF. Based on the decrease in the FY24/25 RW CA budget, fixed charges for Calpine decreased \$12,954 per month from the current fixed charges of \$159,859 per month. The fixed charges per AF for most 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 \$505 for FY24/25 (excluding project-related surcharges) compared to current RWSCs of \$499 per AF. This represents a marginal increase of \$6 per AF (1%). The proposed RWSCs, excluding the city of Antioch surcharge, are well under the estimated cost of water from the Contra Costa Water District for FY24/25, which is estimated to be \$906 per AF for raw water and \$2,958 per AF for treated water. Staff reviewed the proposed RWSCs with key RW customers at a special RW Technical Advisory Committee (TAC) meeting on September 24, 2024.

Table 1: RWSCs per Acre Foot (AF)			
Customers	Current	Proposed	% Change
Industrial Users	\$542	\$597	10%
Irrigation Users	\$499	\$505	1%
City of Antioch with Surcharge	\$933	\$837	-10%

Following a recommendation by the Finance Committee, staff will request the Board set a public hearing for November 6, 2024, at the October 9, 2024 Board Meeting. Following the public hearing, the Board will consider adopting an ordinance adjusting RWSCs. If the Board approves RWSC adjustments, the updated RWSCs would be implemented on RW customer monthly invoices for services beginning in January 2025.

Financial Impact

If approved by the Board on November 6, 2024, the proposed RWSCs would generate sufficient revenue to cover the District’s RW production and distribution costs, which were incorporated into the FY24/25 Budget approved by the Board in June 2024.

Attachments

1. FY24/25 RWSC Revenue Estimates
2. Proposed FY24/25 RWSCs

FY24/25 Recycled Water Service Charge Revenue Estimates

	Current RWSCs	FY24/25 Proposed RWSCs	Difference
RW Usage per acre-foot (AF) - Calpine	7,313	6,683	(630)
RW Usage per AF - All Other Customers	377	538	162
Total Customer Usage	7,690	7,221	(469)
Fixed Revenue w/o Antioch Surcharge			
Calpine	\$ 1,918,305	\$ 1,762,862	\$ (155,443)
Antioch	38,780	42,997	4,217
Pittsburg	20,211	19,822	(389)
All Other Customers	17,184	28,119	10,935
Total Fixed Revenue w/o Antioch Surcharge	\$ 1,994,480	\$ 1,853,800	\$ (140,680)
Variable Revenue			
Calpine	\$ 2,043,469	\$ 2,219,605	\$ 176,136
All Other Customers	105,171	178,686	73,515
Total Variable Revenue	\$ 2,148,640	\$ 2,398,291	\$ 249,651
Total Revenue			
Calpine	\$ 3,961,774	\$ 3,982,467	\$ 20,693
All Other Customers	181,346	269,624	88,278
Total Revenue	\$ 4,143,120	\$ 4,252,091	\$ 108,971
Estimated Revenue Need	-	\$ 4,252,000	-
Est Gross Revenue less Revenue Need	-	\$ 91	-

Proposed FY24/25 Recycled Water Service Charges

	Current Rates	FY24/25 Proposed Rates	%Change
Variable Rate per Acre-Foot (AF)			
Recycled Water Facility O&M	\$ 246	\$ 299	22%
RW Capital Asset Replacement	\$ 34	\$ 33	-1%
Total Variable Rate per AF	\$ 279	\$ 332	19%
Fixed Monthly Charges			
Calpine:			
O&M Calpine	\$ 107,345	\$ 102,725	-4%
Capital Asset	\$ 16,667	\$ 8,333	-50%
Firm Capacity Surcharge	\$ 847	\$ 847	0%
Revenue Stability Surcharge	\$ 35,000	\$ 35,000	0%
Total Calpine Monthly Fixed Charges	\$ 159,859	\$ 146,905	-8%
City of Antioch:			
O&M Antioch	\$ 3,232	\$ 3,583	11%
Antioch Project Surcharge	\$ 6,826	\$ 6,826	0%
Total City of Antioch Monthly Fixed Charges	\$ 10,057	\$ 10,409	3%
City of Pittsburg:			
O&M Pittsburg	\$ 1,684	\$ 1,652	-2%
Total City of Pittsburg Monthly Fixed Charges	\$ 1,684	\$ 1,652	-2%
Other Users:			
MDRRP	\$ 344	\$ 342	-1%
PUSD	\$ 972	\$ 937	-4%
Caltrans	\$ 116	\$ 120	4%
Pittsburg Data Hub*	\$ -	\$ 945	-
Total Other Users' Monthly Fixed Charges	\$ 1,432	\$ 2,344	64%
Assumed Annual Consumption (AF)			
Calpine	7,313	6,683	-9%
Antioch	189	248	31%
Pittsburg	97	132	35%
MDRRP	27	23	-14%
PUSD	60	61	2%
Caltrans	4	8	104%
Pittsburg Data Hub*	-	66	-
Total Usage (AF)	7,690	7,221	-6%

*Potential new recycled water customer expected to be added in future



MEMORANDUM

DATE: September 30, 2024

TO: Juan Banales, Chair, Finance Committee

THROUGH: Vince De Lange, General Manager

FROM: Nitish Sharma, Business Services Director

SUBJECT: REVIEW CAPITAL FACILITIES CAPACITY CHARGE DEVELOPMENT OVERVIEW AND KEY ASSUMPTIONS

Recommendations

Review and comment on Capital Facilities Capacity Charge (CFCC) development overview and associated key assumptions.

Background Information

Staff is currently developing an update to the District's CFCCs to ensure fair, equitable, and cost-of-service based revenue need allocation to appropriate customers, while complying with regulatory and legal requirements for collection of capacity charges. Key background information regarding the District's CFCCs includes the following:

- Current CFCCs: Per Board Ordinance No. 87 (July 2006), the District currently assesses the following CFCCs in its service area: 1) Bay Point (Zone 1): \$3,940/equivalent residential unit (ERU), 2) Pittsburg (Zone 2): \$4,358/ERU and 3) Antioch (Zone 3): \$5,033/ERU.
- Annual CFCC Revenue Assumption: The approved FY24/25 Budget includes an assumption of \$1.9 million in CFCC revenue. The District incorporates CFCC revenue and growth in its service area into financial planning activities on an annual basis.
- Service Area Growth Trend: Over the past five years, average annual growth in the District's service area is equal to 745 ERUs, which includes 1,406 ERUs in 2021.
- Existing CFCC Revenue: The District places CFCC revenue in its Wastewater Expansion Fund, which has a balance of \$15.7 million (as of June 30, 2024), to pay a portion of existing debt service and the cost of new facilities required to serve growth.
- 5-Year CIP – CFCC Funding Allocation: The approved 5-year Capital Improvement Program totals \$187.1 million, which includes \$17.0 million in CFCC-funded capital improvements.

Following review of the CFCC development overview and associated key assumptions by the Finance Committee on September 30, 2024, staff would present this information to the Board on October 9, 2024.

Analysis

In November 2022, the District completed the Resource Recovery Facility Master Plan, which included future flow and loading projections for the District's Wastewater Treatment Plant (WWTP), an assessment of available WWTP capacity and capital expansion needs, and

recommended capital improvements to address WWTP capacity needs with preliminary cost estimates. The District is currently completing design of the \$110 million Secondary Process Improvements Phase 1 Project, which will address WWTP capacity needs. Based on this foundational information, staff has procured a consultant to develop an updated CFCC Study and proposed CFCCs for consideration by the Board.

Staff will present the cost allocation methodology used in developing updated CFCCs, which includes a “hybrid method” to combine costs associated with the “buy-in method,” in which new development shares in capital costs previously incurred but discounted to factor in the age of existing infrastructure, and the “incremental method,” in which new development pays for projected capital costs to be incurred in the future to provide capacity for new development. Key assumptions for each CFCC component are highlighted below.

Buy-In Component (Existing Assets)

- Utilize “Replacement Cost Less Depreciation” approach (versus “Book Value” or “Market Value”) to determine Existing System Value
- Existing System Value = \$161 million
- Capital Work-in-Progress = \$21 million
- Capital-Related Reserves = \$50 million
- Outstanding Debt (Principal) = \$27.9 million
- Interest Secured by CFCCs = \$0.53 million (net present value)

Incremental Component (Future Asset Needs)

Staff has identified two key capital improvement projects with significant CFCC-funding assumptions, because these projects address growth-related needs in the District’s wastewater conveyance and treatment system:

- Secondary Process Improvements Phases 1 (\$110 million) and 2 (\$100 million): An estimated total CFCC revenue of \$32.6 million is required to fund project costs associated with providing wastewater treatment infrastructure to meet forecasted growth and regulatory compliance needs (estimated at 15.5% of total project cost).
- Antioch Pump Station and Conveyance System Improvements (\$22.0 million): An estimated total CFCC revenue of \$4.1 million is required to fund project costs associated with providing wastewater conveyance infrastructure to meet forecasted growth needs (estimated at 18% of total project cost).

Preliminary CFCC Study Recommendations

The following preliminary recommendations are expected to be included in the CFCC Study:

1. Apply “Hybrid Method” for cost allocation that includes “Buy-in Method” combined with “Incremental Cost Method.”
2. Assess CFCC for Wastewater Treatment for all three District zones (Bay Point, Pittsburg, Antioch) with additional CFCC component for Bay Point only for Wastewater Collection System costs (i.e., CFCCs in Bay Point will be higher due to District-owned collection system, Pittsburg/Antioch own and maintain their respective systems; similar to District Sewer Service Charges, which include surcharge for Bay Point collection system).
3. Implement changes to CFCC assessment for accessory dwelling units (ADUs) consistent with recent changes in regulatory and legal requirements.
4. Establish CFCC adjustment factor(s) for multi-family residential developments.
5. Index CFCCs to the Engineering News-Record Construction Cost Index (ENR-CCI) to provide for annual CFCC adjustments for each zone.

Staff will highlight planned outreach efforts with local chambers of commerce, the Building Industry Association (BIA), and the development community. Following completion of the CFCC Study, staff intends to present the proposed CFCCs to the Board on November 6, 2024, along with a request to schedule a public hearing for consideration of approval of the proposed CFCCs at the Board Meeting on December 11, 2024.

Financial Impact

None.

Attachments

None.