METRO TAC AGENDA
(Technical Advisory Committee to Metro JPA/Commission)

TO: Metro TAC Representatives

CC: Metro Directors (for information only)

DATE: Wednesday, January 17, 2024

TIME: 11:00 a.m. to 1:30 p.m.

LOCATION: Metro TAC is holding its January meeting virtually. An e-mail containing information on how to participate in the meeting will be distributed to the Metro TAC members e-mail list and approved San Diego City Staff by Monday, January 15, 2024 by 5:00 p.m. If you do not receive the e-mail, please contact Lori Peoples at lorimetrojpa@gmail.com PRIOR to the meeting date.

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1. **ACTION**: Review and Approve MetroTAC Action Minutes for the Meeting of October 18, 2023 (**Attachment**)

2. **ACTION**: Consideration and Possible Action to Approve the Meeting Calendar for 2024 (**Below**)

3. **PRESENTATION:** Goals of the Second Amended Restated Agreement (SARA) (Paul Brown) (**Attachment**)

4. **PRESENTATION:** Wastewater System: Planning and Operations (Lisa Celaya/ Keli Balo) (**Attachment**)

5. **ACTION:** Authorization for a First Amendment to the contract with California Water Technologies, LLC to purchase Ferrous Chloride for Wastewater Treatment Plants, Public (Craig Boyd) (**Attachment**)

6. **ACTION:** Award of the As-Needed Engineering Technical Services Agreement with Stantec Consulting Services, Inc for Phase 2 of the Pure Water Program (Amy Dorman)**(Attachment)**

7. **UPDATE:** Metro Wastewater (General) (Standing Item) (Lisa Celya)
   a. April 2020 Spill Update

8. **UPDATE:** Pure Water Program Update (Amy Dorman/Doug Owen**)**
   a. Quarterly Construction Report **(Attachment)**

9. **UPDATE:** Metro Wastewater Financial (Standing Item) (Adam Jones)
   a. Fiscal Year 2025-2029 Five-Year Financial Outlook (**Attachment**)
   b. Brief Review FY 2025 Estimate

10. **UPDATE:** JPA Financial (Standing Item) (Karyn Keze)

11. **UPDATE:** Integrated Regional Water Management Program Update (Karen Jassoy/Alisa Nicols)

12. **UPDATE:** Metro Capital Improvement Program and Funding Sources FY 2024 1st Quarter (Tung Phung) **(Attachment)**

13. **UPDATE**: Industrial Wastewater Control Committee (Dexter Wilson) **(Attachment)**

14. **UPDATE**: Metro Commission/JPA Board Meeting Recap (Standing Item) (Alisa Nichols)

15. Review of Items to be Brought Forward to the Regular Metro Commission/Metro JPA Meeting (**February 1, 2024**)

16. Other Business of Metro TAC

17. Adjournment (To the next Regular Meeting February 21, 2024)

Metro TAC 2024 Meeting Schedule

January 17	May 15	September 18
February 21	June 19	October 16
March 20	July 17	November 20
April 17	August 21	December 18

ATTACHMENT 1

MINUTES OF

OCTOBER 18, 2023

MetroTAC

(Technical Advisory Committee to Metro Commission/JPA)

ACTION MINUTES

DATE OF MEETING: October 18, 2023

TIME: 11:00 AM

LOCATION: Zoom Meeting held Online

MEETING ATTENDANCE:

Members Present
Beth Gentry, Chula Vista
Leon Firsht, Coronado (absent)
Joe Bride, Del Mar (absent)
Yazmin Arellano, El Cajon (absent)
Mike James, El Cajon
Blake Behringer, El Cajon
Eric Minicilli, Imperial Beach (absent)
Joe Kuhn, La Mesa
Izzy Murguia, Lemon Grove
Carmen Kasner, National City
Bob Kennedy, Otay WD
Steve Beppler, Otay WD
Lito Santos, Otay WD
Paul Clarke, Padre Dam MWD
Peejay Tubongbanua, Padre Dam MWD
Jeff Moneda, Padre Dam MWD
Alisa Nichols, Poway
NO CURRENT REP, County of San Diego

Staff/Consultants Present
Karyn Keze, the Keze Group
Scott Tulloch, NV5
Dexter Wilson, Dexter Wilson Engineering
Kathleen Heitt, Dexter Wilson Engineering
Lori Anne Peoples, Metro JPA Board Secretary

San Diego City Staff/Consultants
Lisa Celaya, City of San Diego
Adam Jones, City of San Diego
Amy Dorman, City of San Diego
Andrea Demich, City of San Diego
Tung Phung, City of San Diego
Doug Campbell, City of San Diego
Ryan Cross, City of San Diego

Others Present
Doug Owen, STANTEC

1. **ACTION: Review and Approve MetroTAC Action Minutes for the Meeting of September 20, 2023**

ACTION: Motion by Steve Beppler, seconded by Carmen Kasner, the Minutes be approved. Motion carried unanimously.

2. ACTION: Consideration and Possible Action to Recommend for Approval to the Metro Wastewater JPA a First Amendment to the Agreement with AON Risk Insurance Services Wet for the Owner Controlled Insurance Program

Andrea Demich, Assistant Deputy Director Public utilities Department provided a brief overview of her PowerPoint presentation (copy included in the agenda package)

Steve Beppler requested the cost savings be provided in the presentation to the JPA as a beneficial point.

Karyn Keze noted that she and Dexter had met with the consultants running the program for a workshop and was very impressed with their audit capabilities .for the final reconciliation of the Phase 1 project. Their reconciliation should make her reconciliation of the total Phase 1 project easier.

ACTION: Motion by Steve Beppler, seconded by Eric Minicilli, to approve the item moving forward to the JPA. Motion carried unanimously.

3. ACTION: Appointment of New MetroTAC Chair and Vice Chair

Beth Gentry thanked everyone for making her chairing enjoyable. She then explained the appointment process.

Beth Gentry recommended the appointment of Alisa Nichols from Poway as Chair and Blake Behringer from El Cajon as Vice Chair. She then opened the discussion.

Peejay Tubongbauna of Padre Dam MWD noted that these were great nominations, however there was nothing specific called out in the Bylaws for nominations. He requested consideration of a voting process that 3 months prior to expiration of the Chair and Vice Chair terms, there be a call for nominations where nomination emails are sent to the to Metro Board Secretary and then TAC vote on these nominations.

Steve Beppler requested the current recommended candidates express their interest in serving.

Both Alisa Nichols and Blake Behringer expressed their interest in serving in the recommended capacities.

ACTION: Motion by Beth Gentry, seconded by Izzy Murguia, to approve the recommended appointments. Motion carried unanimously.

4. PRESENTATION: Functional Design Based Cost Allocation

Dexter Wilson provided a verbal overview of the PowerPoint presentation included in the agenda package.

Adam Jones noted that STANTEC was in this meeting taking copious notes on the questions asked by the TAC members.

Dexter noted that anyone who wanted to meet to discuss anything in the presentation further, was welcome to contact him, Karyn or Kathleen and they would all be available to assist as they are part of the FAB working group. The current Metro cost allocation system hasn't been revised since its inception in 1991 and was based on preliminary design numbers for the Clean Water Facilities which changed prior to their final design. The current cost allocation used for Metro billings was not revised to reflect the actual Metro facilities that comprise the current transmission, treatment and disposal system.

5. UPDATE: Metro Wastewater (General)

a. April 2020 Spill Update

Lisa Celaya stated they were moving forward with Pump Stations 1 & 2 CIPs as a "regulatory priority."

Regarding OPRA 2, Lisa stated this is a priority in the city and the Mayor was meeting with elected officials next week to discuss actions to take.

b. January 2023 Spill Update

Lisa Celaya stated she had no update on the January 2023 spill.

6. UPDATE: UPDATE: JPA Financial

Karyn Keze noted that they had presented today, what she and Dexter had been primarily working on (Item 4). They are running 1 to 2 presentations per week between the Ad Hoc, TAC and JPA, plus individual meetings with PAs as requested.

7. UPDATE: Integrated Regional Water Management Program

Alicia Nichols stated that a meeting was held on October 4 where they reviewed current funding and grant opportunities at State level. On February 9, 2024, details will follow. Prop 84 Round 3 results are available and the Colorado River Water update Drought Resiliency Program. The final memo will be available at the end of October.

8. UPDATE: Metro Capital Improvement Program and Funding Sources

Chair Gentry stated that Tung Phung was available to answer any questions regarding the report included in the agenda package.

9. UPDATE: Industrial Wastewater Control Committee

Chair Gentry stated that Ryan Cross was taking over the program as the new manager and he had stated that the Industrial Use Fees with increased costs were sent out.

Ryan Cross was present and introduced himself and provided a brief background on his involvement with the program.

10. UPDATE: Metro JPA/Commission Board Meeting Recap

Chair Gentry stated that the JPA had received the same presentations that the MetroTAC had seen previously and had similar comments.

11. Review of Items to be Brought Forward to the Regular Metro JPA/Commission Meeting – November 2, 2023

Chair Gentry noted that items 2, 3 and 4 would be moving forward to the JPA.

12. Other Business of MetroTAC

Chair Gentry requested that prior comments from Peejay regarding the Chair and Vice Chair appointments be included in the minutes and noted that the December 20, 2024, MetroTAC meeting would not be held.

13. Adjournment to the Next Regular Meeting

There being no further business the meeting was adjourned at 12:56 p.m. The next regular meeting will most likely be held January 17, 2024.

ATTACHMENT 3

GOALS OF 2ND AMENDED RESTATED AGREEMENT (SARA)

Amended and Restated Regional Wastewater Disposal Agreement (SARA)

Goals and Process Update Presentation

Paul Brown, Facilitator

Parties to Agreement

- Agreement (dated 4 December 2018) Between the City of San Diego and Participating Agencies including:

  - City of Chula Vista
  - City of Coronado
  - City of Del Mar
  - City of El Cajon
  - City of Imperial Beach
  - City of La Mesa
  - Lemon Grove Sanitation District
  - City of National City
  - City of Poway
  - Otay Water District
  - Padre Dam Municipal Water District
  - San Diego County Sanitation District

Negotiations Team (Passed)

Metro TAC Chair

City of Chula Vista

- Beth Gentry

Metro TAC Vice-Chair

City of El Cajon

- Yazmin Arellano

City of San Diego

- Melissa Ables
- Jean Jordan
- Lisa Celaya
- Adam Jones
- Ricardo Calzada

Consultants

- Dexter Wilson (Dexter Wilson Engineering)
- Kathleen Heitt (Dexter Wilson Engineering)
- Scott Tulloch (NV5)
- Karyn Keze (Keze Group)
- Greg Moser (Procopio)
- Adriana Ochoa (Procopio)
- Victor Occiano (Brown and Caldwell)
- Doug Owen (Stantec)
- Paul Brown (Paul Redvers Brown Inc.)

Negotiation Goals

1. Establish a ***revised rate structure that is fair to all parties***, as the Metro system evolves to support water reuse
2. Obtain ***unanimous support*** for the new rate structure
3. Establish a rate structure where ***30% to 50% of the user charge is capacity rights based*** (capital replacement, maintenance, unused capacity)
4. Bring the rate structure into ***alignment with other California JPA's***
5. Strive to ***keep agency charges near current costs***, unless they have a far greater portion of unused capacity than other agencies
6. Determine what to do with ***unused capacity rights***

Key Questions

What will the revised rate structure look like?

- Will there be a fixed portion of rate that is based on peak capacity needs?

How will the revised agreement incorporate new peak flow information?

- What percentage of total costs will be allocated to the fixed portion of the rates?

What revisions to contract capacities (Exhibit B) will be needed?

- Will it be possible to allocate all of the existing capacity currently contracted to PAs? Avoiding unused capacity.

Negotiation Tasks and Decisions

Comprehensive Analysis of Costs (Financial and Technical)

- Segregating the costs of the Pure Water Program
- Breaking down remaining costs by function
- Characterizing the fixed and variable components of costs

Updating Administrative Procedures (Management and Legal)

- Payments and Monitoring
- Dispute Resolution
- Other Contractual Requirements and Protocols

Deciding on a rate structure that fairly recovers costs (Policy)

- What percentage of the user charge will be capacity based?
- How will the total capacity be allocated among PAs?

Schedule

- Negotiating Team Meetings meets every three (3) weeks
- Subgroups (Engineering, Finance, and Legal) convene between meetings
- All necessary revisions have been flagged for updating and/or changes
- Expect at least three months will be needed for final reviews and approvals

Discussion

ATTACHMENT 4

WASTEWATER SYSTEM

PLANNING & OPERATIONS

Public Utilities Department

City of San Diego
Wastewater System: Planning and Operations

Board Meeting of the Regional Water Quality Control Board (R9)
November 8, 2023

The City of SAN DIEGO

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Presentation Discussion

1. Provide an overview of the region's wastewater system
2. Discuss our history and how the City addressed past issues
3. Identify how the current environment is different and how the City is pivoting
4. Provide financial information
5. Next Steps

2 sandiego.gov

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Wastewater System Overview

- Four Treatment Plants that serve 2+ million residents regionally
  - Point Loma (132.5 MGD Average)
  - North City (12.0 MGD Average – Recycled Water)
  - South Bay (4.8 MGD Average – Recycled Water)
  - Metro Biosolids Center (10,996 wet tons of biosolids produced/month)
- Two Ocean outfalls
  - Point Loma
  - South Bay
- Over 3,000 miles of collection system pipelines
  - 82 pump station (8 large, 74 small)

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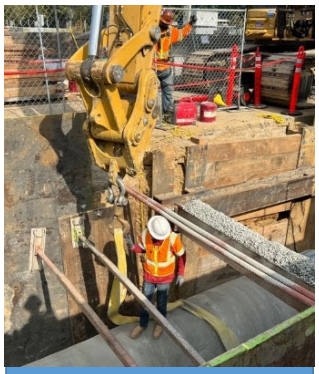
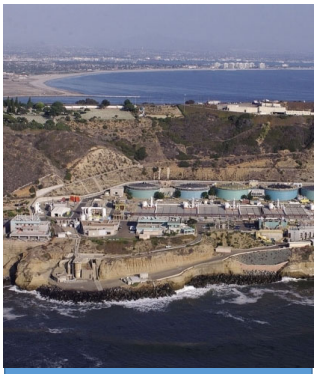
Wastewater System Overview



COLLECTION SYSTEM
City of San Diego residents

PUMP STATIONS
City of San Diego residents and 12 participating agencies



TREATMENT PLANT
City of San Diego residents and 12 participating agencies

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Public Utilities Asset Management Program

Public Utilities Department

Asset Management Program

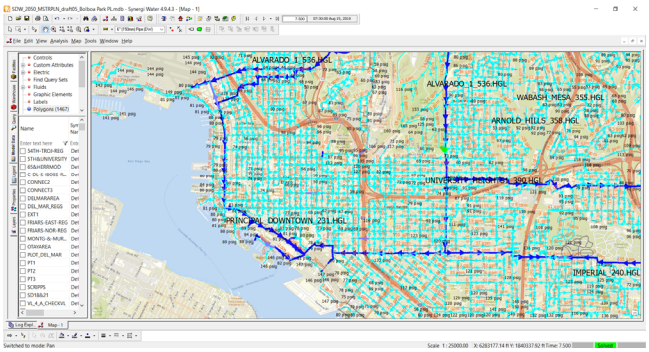
Purpose: Maximize Useful Life of Assets

Condition Assessment Program

Facility Master Planning

Project Prioritization

Capital Improvement Program



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Comprehensive Condition Assessment Program

Assess 75 miles of pipeline/year

Facility Specific Condition Assessments

Public Utilities Department

Comprehensive Condition Assessment Program

Risk Based Scoring- Industry Standard

Likelihood of Failure(LoF) (Condition, Performance)

Consequence of Failure(CoF) (Regulatory, Social, Financial)

40% Consequence

60% Likelihood

	1	1.5	2	2.5	3	3.5	4	4.5	5
1.0	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6
1.5	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9
2.0	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2
2.5	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5
3.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8
3.5	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.1
4.0	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4
4.5	3.1	3.3	3.5	3.7	3.9	4.1	4.3	4.5	4.7
5.0	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0

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Facility Master Planning and Prioritization

Operational
Regulatory
Condition
Hydraulic Capacity
Technology

→

Facility Master Plan

→

Project Priority Scoring

=

Capital Project

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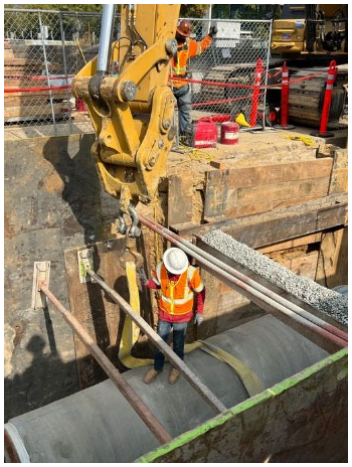
Capital Improvement Program

- Rehabilitate/Replace 40 miles of sewer pipe/year.
- 24 Major Sewer Projects are currently being designed/constructed.
- Fiscal Year 2024 Sewer CIP $136,000,000
- Anticipate $1.3 Billion in Capital investments to the Wastewater System in the next 5 years.



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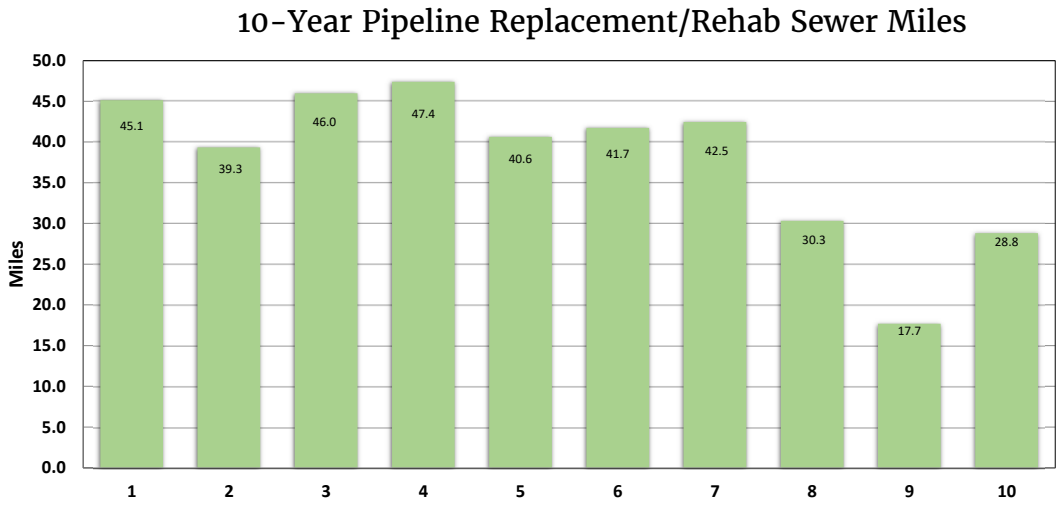
Capital Improvement Program



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Prioritizing the Collection System

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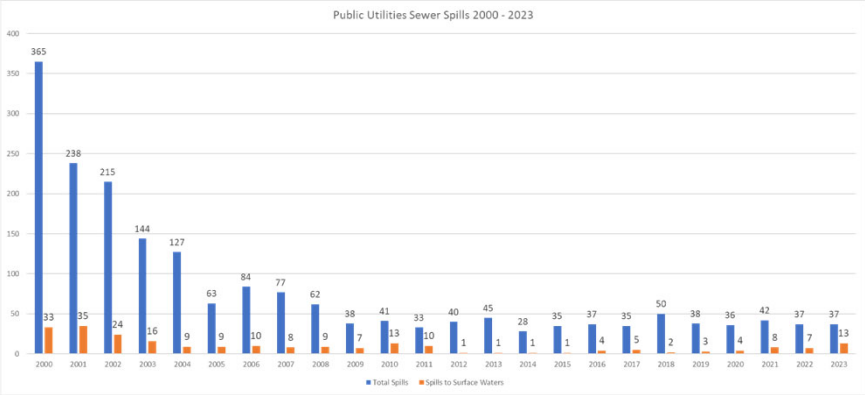
History of sewer spills

- Improvements in collection system management have resulted in significant and sustained reduction in number of sewer spills



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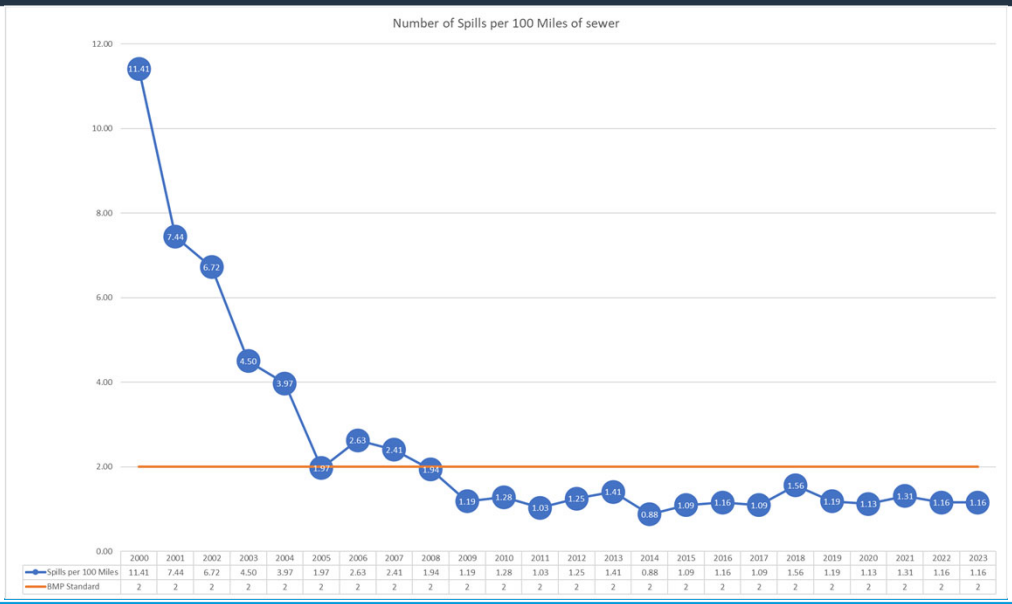

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Spills per 100 Miles	11.41	7.44	6.72	4.50	3.97	1.97	2.63	2.41	1.94	1.19	1.28	1.03	1.25	1.41	0.88	1.09	1.16	1.09	1.56	1.19	1.13	1.31	1.16	1.16
BMP Standard	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

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Collection System Maintenance - Improvements

- Developed clear and effective standard operating procedures to ensure consistency and quality of service
  - Sanitary Sewer Management Plan (SSMP)
  - Standard Operating Procedures (SOP)
  - Standard Operating Manuals (SOM)
- Implemented a comprehensive and ongoing training program
  - Accredited program
  - Annual trainings, Operator Academy, ongoing routine trainings
- Developed Optimization Program for maintenance of collection system
  - Data driven decision that calculates sewer pipe segments at risk

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Example: Emergency Response

- Developed and implemented a Sewer Spill Response and Tracking Plan
- Established dedicated resources to ensure 24/7 response to emergencies within 30 minutes

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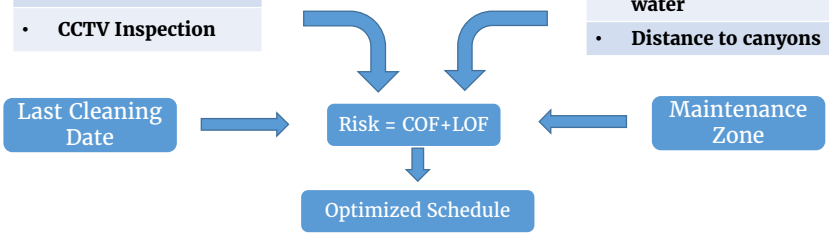
Collection System Maintenance Optimization

Likelihood of Failure (LoF)
• Cleaning frequency
• Operators' findings
• Pipe material and age
• Pipe slope
• Flow velocity
• CCTV Inspection

Consequence of Failure (CoF)
• Potential for large overflows
• Type of road
• Land use areas
• Distance to railroad
• Easements
• Distance to surface water
• Distance to canyons



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Priorities are evolving due to changed circumstances

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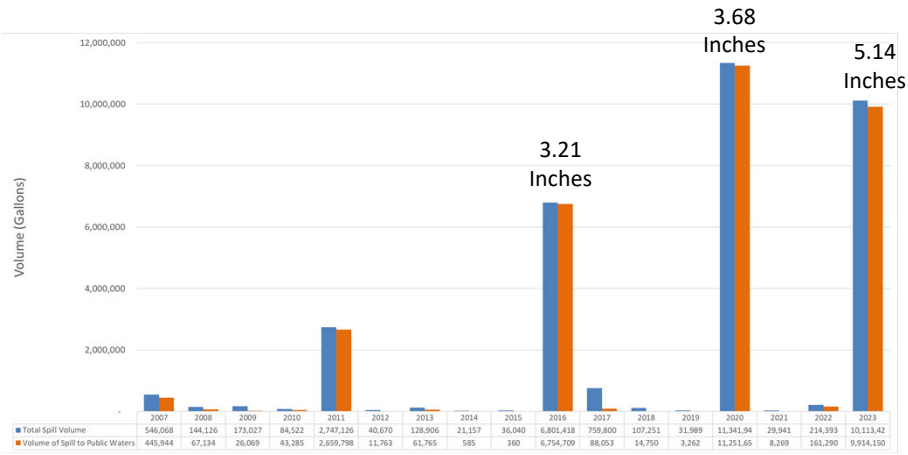
What's different compared to early 2000s?



Number of spills are down, but the *volume* of the individual spill is much higher

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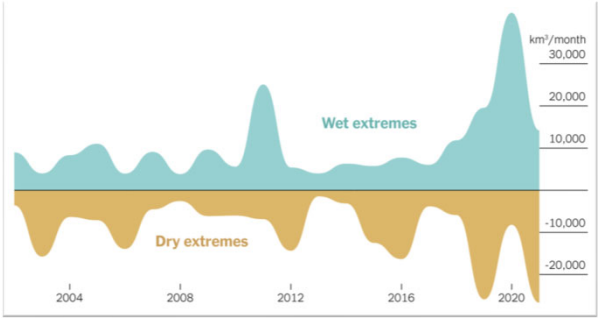
Planning for Climate Change Effects

- System Planning for Extremes
  - Low-low and high-highs
- Dry Weather Flows +95% year
- Peak Flows 300% of Dry Flows



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System Improvements – Completed Projects

Pump Station 1

- ✓ Lab Trailer Replacement
- ✓ Cooling Tower Replacement
- ✓ Serpentix Conveyor Replacement

Pump Station 2

- ✓ Cooling Tower Replacement

North City Water Reclamation Plant

- ✓ Gas detection system replacement in Headworks & Influent
- ✓ 30" Check valve replacements
- ✓ Tertiary Filter Media Replacement
- ✓ Tertiary Filter Level Control Valves
- ✓ Wet well cleanings
- ✓ VFD Replacements on Pumps #2 and #3
- ✓ EDR #3 membrane replacement

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Pump Station Improvements – In Process Projects

Pump Station 2 – Power Reliability & Surge Protection

Meet EPA standards for backup power with two separate and independent sources of power

Project is nearly complete

- Completed installation of two 3 MW Natural Gas generator for primary power
- Completed installation of two 4 MW Diesel engine generators for emergency power
- Completed installation of Switchgear

Commissioning anticipated November 2024

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Pump Station Improvements – In Process Projects

Pump Station 1 - Major Rehabilitation to Improve Performance and Reliability

Rehabilitation and replacement of pumps, motors, piping, valving, and meters

Schedule

- Consultant Procurement: June 2023 - Fall 2023, $637,000
- Bridging Design: Fall 2023 - Spring 2024
- Advertise and Award: Spring 2024 - Winter 2024, $16.3M
- Notice to Proceed (NTP) for Design-Build: Winter 2024

Complete Construction by Fall of 2028

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Pump Station Improvements – In Process Projects

Pump Station 2 - Major Rehabilitation to Improve Performance and Reliability

Rehabilitation of wet wells and pumps, replacement of valves, repairs to corroded components and liners

Schedule

- Procure Designer July 2023-Spring 2024, $2.5 M
- Design Phase: Spring 2024– Winter 2025
- Bid/Award: Winter 2025 – Summer 2026
- Construction: Summer 2026 – Winter 2029, $11.2M

Complete Construction Winter of 2029

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Pump Station Operational Focus

- Prioritize repairs to bring critical equipment back up to designed standards
- Allocate key resources to strategic locations
- Develop redundancies through power plant upgrades
- Implement wet weather strategies
  - Includes lowering tank levels in certain parts of the system to provide capacity
  - Identify trigger points
- Communicate effectively across the system (within the City and regionally)

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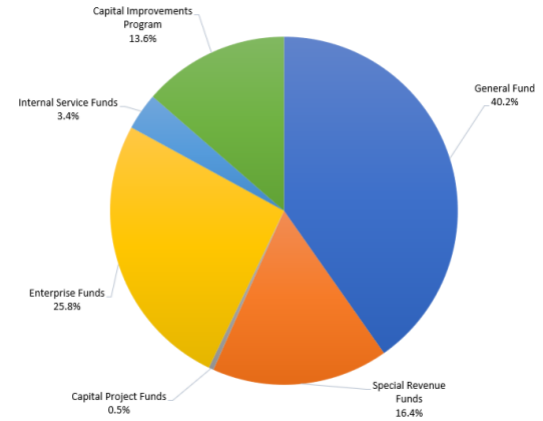
Financial Background

- Public Utilities is separate from the General Fund
  - Legally required to be accounted for separately as an "enterprise fund"
- Distinct funding source
  - Supported by water and sewer rate payer funds

Figure 1 - Fiscal Year 2024 Adopted Expenditure Budget by Fund Type/Program

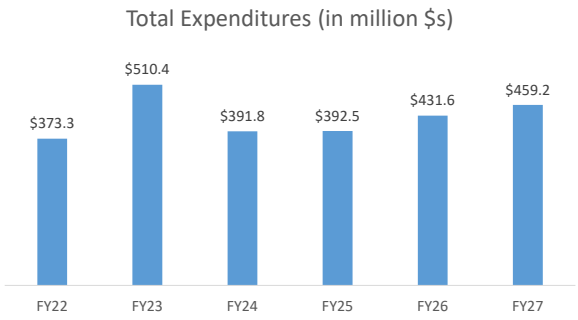


Note: Percentages may not add to 100% due to rounding.

Public Utilities Department

Financial Background

- In September 2021, the City Council unanimously approved a four-year rate increase for sewer
  - Operations
  - Capital renewal
    - Protect environment
    - Provide reliable service
    - Address aging infrastructure
  - Proactive approach to long-term planning



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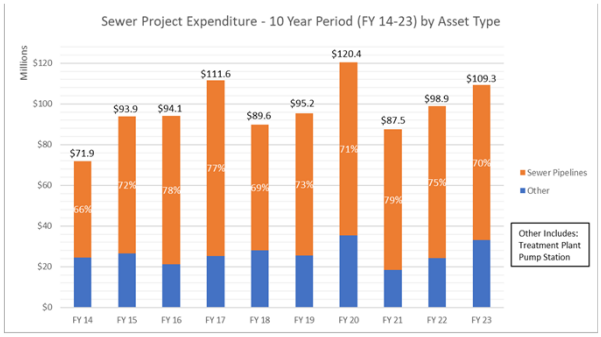
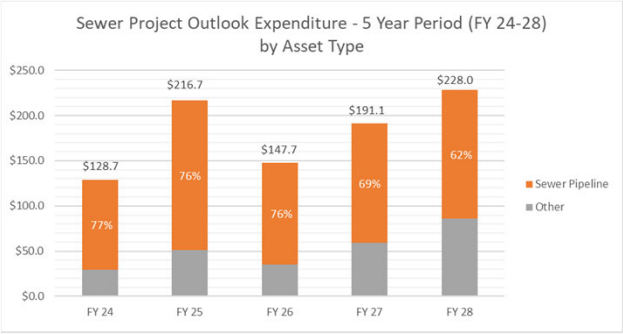
Capital Expenditures (exclusive of Pure Water)





Public Utilities Department

Looking Ahead

- ✓ Initiate Condition Assessment of five Sewer Pump Stations
- ✓ Integrated Master Plan
- ✓ Updated Hydraulic Modeling
- ✓ Pure Water Phase 2 Planning

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Questions

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ATTACHMENT 5

1ST AMENDMENT

CALIFORNIA WATER TECHNOLOGIES LLC

FERROUS CHLORIDE

The City of San Diego

Staff Report

DATE ISSUED:	November 9, 2023	
TO:	City Council	
FROM:	Public Utilities Department	
SUBJECT:	Authorization for a First Amendment to the contract with California Water Technologies, LLC to purchase Ferrous Chloride for Wastewater Treatment Plants, Public Utilities Department	
Primary Contact:	Craig Boyd, Deputy Director	Phone: (858) 654-4433
Secondary Contact:	David Bryant, Assistant Deputy Director	Phone: (858) 654-4245

Council District(s): 2, 6, and 8

OVERVIEW:
This action is to request authorization to execute a First Amendment to the contract with California Water Technologies, LLC to add an additional six months to purchase ferrous chloride for wastewater treatment plant facilities.

PROPOSED ACTIONS:

1. A Resolution authorizing the Mayor, or his designee, to execute a First Amendment to the contract with California Water Technologies, LLC to provide ferrous chloride for wastewater treatment plants, as required, in an amount not to exceed $1,716,855, thus increasing the total amount of the contract to $4,716,855 for the remaining duration of the contract, contingent upon the Chief Financial Officer furnishing one or more certificates certifying that funds necessary for expenditure are, or will be, on deposit with the City Treasurer; and

2. The Chief Financial Officer is authorized to expend an amount not to exceed $1,716,855, as required, of which $1,430,712 is estimated to be spent in Fiscal Year 2024, and $286,143 in Fiscal Year 2025, from Fund 700001, Metro Sewer Utility Fund, for the purpose of funding the First Amendment to the California Water Technologies, LLC contract, contingent upon the adoption of the Annual Appropriation Ordinance for the applicable fiscal year, and contingent upon the Chief Financial Officer furnishing one or more certificates certifying that funds necessary for expenditure are, or will be, on deposit with the City Treasurer.

DISCUSSION OF ITEM:
Ferrous Chloride ($FeCl_2$) is a chemical used for hydrogen sulfide (H_2S) control in wastewater treatment plants. H_2S is a corrosive chemical which causes odor and is hazardous to human health. Control of H_2S concentrations in the wastewater treatment process is an environmental, safety, and regulatory requirement. Additionally, control of H_2S is important for preserving the wastewater system infrastructure.

The Public Utilities Department, Wastewater Treatment and Disposal Division requires ferrous chloride at the Point Loma Wastewater Treatment Plant, Metropolitan Biosolids Center and North City Water Reclamation Plant.

On May 19, 2021, the City issued ITB 10089748-21-V to procure ferrous chloride for the Wastewater Treatment Plants. The City executed a contract with California Water Technologies, LLC (CWT) on January 16, 2022, through Resolution 313820, for a period of five (5) years for an amount not to exceed $14,840,995 for the price of $638.00 per dry ton.

In September 2022, CWT requested to increase pricing for ferrous chloride from $638.00 to $1,151.00 per dry ton due to the significant increases to raw material costs from the COVID-19 pandemic, climate weather impacts, and global supply chain issues which impacted the cost to produce and supply the required chemicals. The price increase represented an 80% increase. Considering the contract was newly awarded, the City denied the price increase.

In December 2022, CWT again requested an increase request for ferrous chloride to align with the anniversary year of the contract under the same terms as originally requested. The Public Utilities Department (PUD) determined it was in the best interest of the City to rebid the contract to allow for open and fair competition based on the current market conditions. Therefore, the existing contract was terminated on February 1, 2023. Considering ferrous chloride is essential and critical for PUD to meet regulatory requirements and ensure public health and safety with the treatment of odor control for wastewater treatment processes, PUD requested approval of an immediate interim sole source contract (SS #4540) with CWT to avoid disruption of services to allow time to rebid the contract.

Under the interim sole source contract, CWT offered the City the price of $935 per dry ton to ensure the City receives the chemicals without interruption. The price represented a 46% increase based on the recent contract price. Due to the unprecedented cost increases for key raw materials used for production of ferrous chloride driven by the culmination of many factors creating a supply/demand imbalance, PUD determined the pricing offered by CWT was the best value to the City. This interim sole source contract ends on January 31, 2024.

For the extension requested, CWT is offering a new rate of $1,245 per dry ton.

This sole source modification requests the approval to extend the interim sole source contract for an additional six months, through July 31, 2024, to ensure continuous chemical supply for all affected wastewater treatment facilities. The extension will allow PUD to complete the new contract solicitation process and request City Council approval. The amount of this modification is $1,716,855, and the new not to exceed amount will be $4,716,855.

It is recommended to adopt this resolution.

City of San Diego Strategic Plan:
Over 2.3 million regional wastewater users have a stake in the system's safe and reliable treatment of wastewater, and its full compliance with all applicable regulations. This commitment directly ties to Strategic Plan's Priority Area: "Protect & Enrich Every Neighborhood" by ensuring safe removal and treatment of wastewater to protect the communities we serve. This action also supports the Strategic Plan's Priority Area: "Champion Sustainability" by providing reliable wastewater services, which helps provide a built environment that best sustains our natural environment and public health.

Fiscal Considerations:
The total amount not to exceed for the First amendment is $1,716,855. Funds are, or will be, available in the Metro Sewer Utility Fund 700001, contingent upon the adoption of the Annual Appropriation Ordinance for the applicable fiscal year, and contingent upon the Chief Financial Officer furnishing one or more certificates certifying that funds necessary for expenditure are, or will be, on deposit with the City Treasurer.

Purchases to be made on an as-required basis.

The estimated expenditures from Fund 700001, Metro Sewer Utility Fund, are as follows:

$1,430,712	FY 2024
286,143	FY 2025
$1,716,855	Total First Amendment

Charter Section 225 Disclosure of Business Interests:
PVS Technologies Inc.
Phibro Tech.

Environmental Impact:
This activity to execute an amendment to the California Water Technologies, LLC contract to provide ferrous chloride, is not a "project" as defined by the California Environmental Quality Act Section 21065 and State CEQA Guidelines Section 15378(b)(2), as it involves continuing administrative or maintenance activities, such as purchases for supplies, personnel-related actions, general policy and procedure making, which will not result in direct or indirect physical changes in the environment. Therefore, this activity is not subject to CEQA pursuant to State CEQA Guidelines Section 15060(c)(3).

Climate Action Plan Implementation: N/A – Does not have a connection to the CAP

Equal Opportunity Contracting Information (if applicable):
This agreement is subject to the City's Equal Employment Opportunity Outreach Program (San Diego Ordinance No. 18173, Municipal Code Sections 22.2701 through 22.2708) and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517).

Previous Council and/or Committee Actions:
Previous Resolution R-313820 dated December 17, 2021
Environment Committee Meeting, November 18, 2021

Planning Commission Action: N/A

Key Stakeholders and Community Outreach Efforts:
N/A

Lisa Celaya	Kris McFadden
Public Utilities Department Executive Assistant Director	Deputy Chief Operating Officer

ATTACHMENT 6

AS-NEEDED ENGINEERING TECHNICAL SVS AGMT WITH STANTEC CONSULTING SVS INC

PHASE 2 PURE WATER PROGRAM

METRO JPA/TAC
Staff Report
Date: 1/8/2024

Project Title:
Award of the As-Needed Engineering Technical Services Agreement with Stantec Consulting Services, Inc for Phase 2 of the Pure Water Program (H2226024)

Presenter(s) Name:
Andrea Demich

Presenter(s) Title:
Assistant Deputy Director

Requested Action:

1. Authorization to execute the agreement with Stantec, Inc., for As-Needed Engineering Technical Services for 10 years in an amount not-to exceed $100,000,000; and
2. Authorization to expend an amount not-to-exceed $100,000,000.00 in total over the term of this Agreement from Fund 700011, Water Utility Operating, Fund 700010, Water Utility CIP, Fund 700001, Metro Sewer Utility, and Fund 700009, Metro Sewer CIP, for the purpose of funding the As-Needed Engineering Technical Services Agreement with Stantec Consulting Services, Inc.; and
3. Authorization to expend an amount not-to-exceed $1,000 from Fund 700011, Water Utility Operating, for the purpose of executing this agreement and meeting minimum contract requirements.

Recommendations:
Approve actions

Metro TAC:	Approve the subject item and forward to Metro JPA/ Metro Commission for approval
IROC:	N/A
Prior Actions: (Committee/Commission, Date, Result)	N/A

Fiscal Impact:

Is this projected budgeted?	Yes __X_ No ____
Cost breakdown between Metro & Muni:	Cost breakdown will be assessed as tasks are opened. General tasks will be split 62% Water, 38% Metro, 0% Muni.
Fiscal impact to the Metro JPA:	Pure Water Phase 2: 33.5% of Metro cost

Capital Improvement Program:

New Project?	Yes _X_ No ___ N/A ___
Existing Project?	Yes ___ No _X__ Upgrade/addition ___ Change ___

Previous TAC/JPA Action:
None

Additional/Future Action:
Present item to Metro JPA/ Metro Commission in February 2024

City Council Action:
Environment Committee 1/18/2024, City Council approval expected in February 2024

Background: *Provide background information on the need for the project*
Pure Water San Diego is the City of San Diego's (City) Program to provide a safe, drought-resistant, locally-controlled drinking water supply for San Diego; it has the added benefit of reducing Metro Wastewater System flows and ocean discharges from the Point Loma Wastewater Treatment Plant.

Non-potable recycled water will be turned into drinking water through the use of a five-step water purification process. Pure Water is integral to both the application to renew Point Loma's permit and the proposed legislation for secondary equivalency. The Program will make San Diego more water independent and resolves regional wastewater issues.

The Pure Water Program will provide 83 million gallons per day of Pure Water at completion and will supply nearly one half of the City's drinking water. The program is being built in two phases. The Phase 1 system is currently in construction and as shown on the map below, will be located in the northern part of the City. Phase 1 will produce 30 million gallon per day of Pure Water, which will be conveyed to the Miramar Reservoir. Construction is more than 40% complete; the total estimated cost for Phase 1 is $1.5 billion.

Phase 2 will produce the remaining 53 of 83 million gallons per day of Pure Water through an entirely separate system of facilities from the Phase 1 system. The Phase 2 facilities will be located in the central part of the City. There are two reservoir options under consideration for the delivery of the Phase 2 Pure Water: Lake Murray or San Vicente. Under both options the water will be treated at the Alvarado Water Treatment Plant. Detailed analyses of the challenges and benefits of each reservoir must be performed before a final selection can be made. Such analyses will be performed under this proposed contract.

Aside from the Phase 2 reservoir analyses, Phase 2 implementation will encompass design and construction of new treatment and conveyance facilities, financial and economic evaluations, public outreach and education, securing regulatory approvals from the California Division of Drinking Water, Regional Water Quality Control Board, and the United States Environmental Protection Agency (USEPA). To support these efforts and decisions at both the project and program level, the City has a need for professional engineering and technical services on an as-needed basis. Such support for Phase 1 implementation has been obtained through a similar contract (also with Stantec) and has been instrumental in reaching several milestones. Two of the most noteworthy of these milestones are:

- Securing the first-ever permit under the State's Surface Water Augmentation Regulations, for the North City Pure Water Project
- Preparing the Water Infrastructure Financing Innovation Act loan application through which the City obtained over $700 million in low-interest financing from the USEPA.

The City will utilize Stantec to obtain program management and preliminary design, as well as other services that extend beyond common technical support for Phase 2. The unique services needed to implement Pure Water Phase 2 primarily relate to its extensive regulatory requirements, and that it is a large and complex water recovery and delivery system. These services include:

1) Treatment demonstration testing and operations. The source wastewater for Phase 2 is from a different area than for Phase 1; therefore, demonstration testing must be performed specifically for Phase 2. The Phase 2 demonstration facility is currently under construction; when complete, Stantec will execute the formal test plan to demonstrate that the treatment process removes all regulated contaminants and contaminants of emerging concern to required levels.
2) Conducting necessary studies to support Phase 2 regulatory approval by both the Division of Drinking Water and Regional Water Quality Control Board. Examples of these activities include performing extensive reservoir modeling and tracer studies to demonstrate required dilutions, assessing the impact of purified water on existing drinking water infrastructure, assessing the

impact of treatment residuals on wastewater processing facilities, and preparing Phase 2 system operations plans. There is minimal precedence for many of these and will require close coordination with regulators. Furthermore, the determination on whether Phase 2 is a direct or indirect potable reuse project will also need to occur. Regulations for direct potable reuse are expected to be finalized this winter.

3) Supporting the City's Industrial Waste Control Program's implementation of an enhanced wastewater source control program that meets the specific and rigorous needs for potable (drinking water) reuse. The focus of such enhancements will apply to the sewer shed influent to the Phase 2 system.
4) Facilitating the City's preparation of operations and maintenance readiness plans and conducting operator training.
5) Supporting development and implementation of system-wide control strategies.
6) Developing and implementing a system-wide commissioning strategy for the constructed facilities.
7) Establishing, monitoring, and providing technical support for an Owner Controlled Insurance Program applied to the Phase 2 facility construction.

In October 2022, the Public Utilities Department (PUD) advertised for an As-Needed Technical Services for Phase 2 of Pure Water with proposals due in December 2022. The Request for Proposals resulted in one proposal. The one proposer was interviewed in January 2023 and Stantec, Inc. was selected as a qualified firm. Several meetings with Stantec were held in the Spring and Summer of 2023 to clarify how they proposed to conduct the work and to negotiate their hourly rates. The proposed contract with Stantec will last 10 years with a not-to-exceed amount of $100,000,000.

The Phase 1 as-needed program management contract was used as a benchmark in gauging the amount and duration needed for this contract. The Phase 1 contract was initially entered into for $30 million and five years and has since been increased to $94 million for a duration of 10 years. The Phase 2 Pure Water system will be larger and more complex related to system operations, interagency coordination, and regulatory compliance. Thus, the City is proposing this $100 million, 10-year contract.

Discussion: *Provide information on decisions made to advance the project*

Bid Results: *If bidding was done provide bidding format and results*
N/A

Public Utilities Department

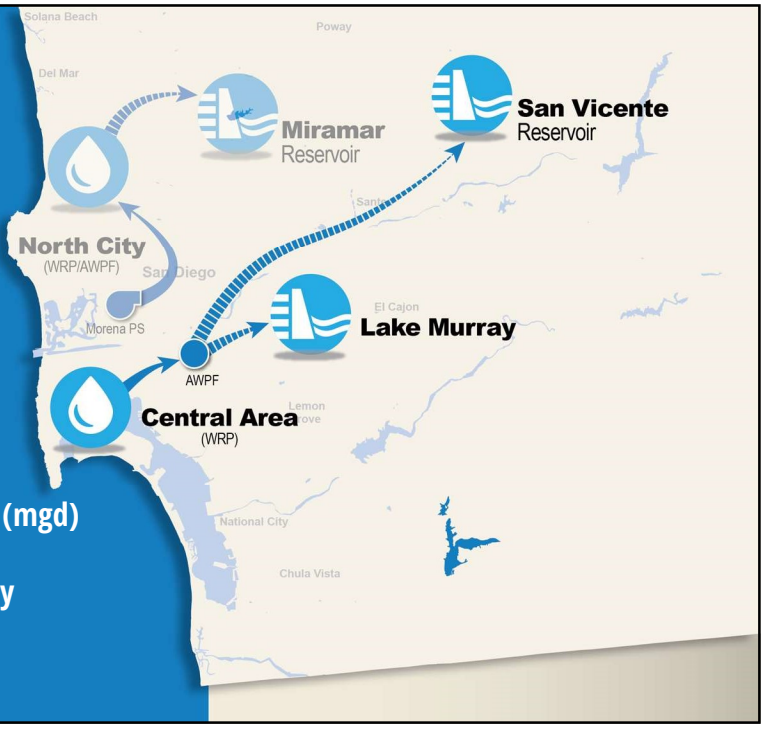
Award of the As-Needed Engineering Technical Services Agreement with Stantec Consulting Services, Inc for Phase 2 of the Pure Water Program (H2226024)

Metro TAC
January 17, 2024

The City of SAN DIEGO

1

Pure Water
will produce
1/2
of your water
locally



Phase 2
- 53 million gallons per day (mgd)
- Central Area PWF to San Vicente or Lake Murray

2

Public Utilities Department

Comparing the Phases

Phase 1

- Produces 30 mgd of Pure Water
- Regulatory framework: Indirect Potable Reuse
- North of Interstate 8, within City boundaries
- Leverages surplus treatment capacity at North City

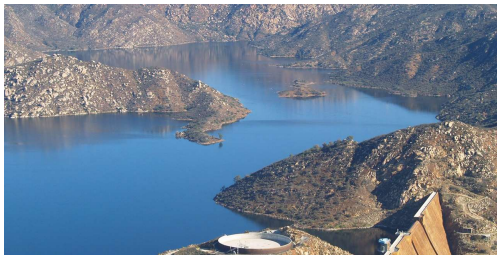
Phase 2

- Produces 53 million mgd of Pure Water
- Regulatory framework options: Indirect Potable OR Direct Potable Reuse
- Facility locations: central City, potentially County of San Diego and City of Santee
- Requires all-new infrastructure

Public Utilities Department

Phase 2 Implementation

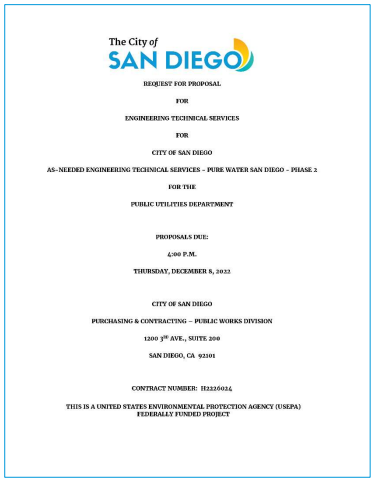
- Reservoir analyses
- Engineering studies
- Design and construction
- Financial / economic evaluations
- Regulatory approvals
- Public outreach



Public Utilities Department

Pure Water Phase 2 As-Needed Engineering Technical Services Contract

- Supports Phase 2 implementation
- Supports decisions at program and project level
- During Phase 1, enabled significant achievements
  - Secured first-ever permit under State's Surface Water Augmentation Regulations
  - Prepared WIFIA loan application, securing over $700M in low-interest financing



The City of SAN DIEGO

REQUEST FOR PROPOSAL

FOR

ENGINEERING TECHNICAL SERVICES

FOR

CITY OF SAN DIEGO

AS-NEEDED ENGINEERING TECHNICAL SERVICES – PURE WATER SAN DIEGO – PHASE 2

FOR THE

PUBLIC UTILITIES DEPARTMENT

PROPOSALS DUE:

4:00 P.M.

THURSDAY, DECEMBER 8, 2022

CITY OF SAN DIEGO

PURCHASING & CONTRACTING – PUBLIC WORKS DIVISION

1200 3RD AVE., SUITE 200

SAN DIEGO, CA 92101

CONTRACT NUMBER: H22256024

THIS IS A UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA) FEDERALLY FUNDED PROJECT

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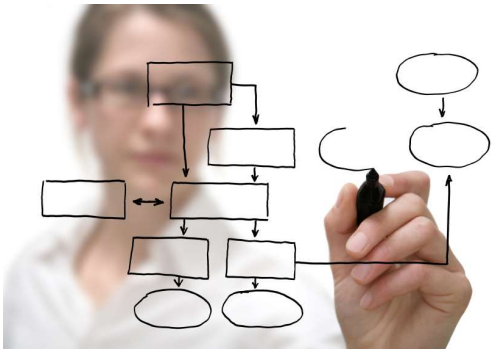
Public Utilities Department

Scope of Work

- Program Administration and Controls
- Planning and Engineering Support (including preliminary design)
- Design Support
- Environmental Consultant Coordination
- Permitting and Regulatory Support
- Public Education and Stakeholder Engagement



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Public Utilities Department

Specialized Services

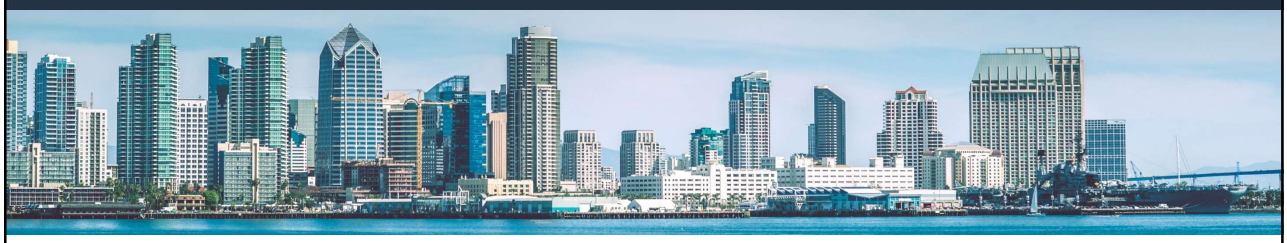
- Treatment demonstration testing and operations
- Vendor and product pre-qualification
- Significant studies to support regulatory approval
- Industrial Waste Control Program support
- System-wide commissioning strategies
- Owner-Controlled Insurance Program assistance

Public Utilities Department

Year 1 - Facility Plan Validation and Project Definition

- Current Plan Developed in 2011
- Emergence of Additional Drivers
  - Regional Potable Reuse
  - Effects of Water Conservation
  - Regional Water Supply Initiatives
  - Sea Level Rise
- Alternative Project Delivery Methods
- Updated Phase 2 Program Schedule and Budget

Public Utilities Department



Selected Consultant

- Stantec Consulting Services, Inc.
  - Proven experience successfully supporting Phase 1
  - Teamed with numerous specialized and local firms
  - Depth and breadth of resources needed for Phase 2
  - Demonstrated commitment to E/SLBE and DBE participation

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Public Utilities Department

Proposed Contract

- Phase 1 leveraged as benchmark to gauge the contract amount / duration
- Phase 2 is larger and more complex
  - System operations, interagency coordination, and regulatory compliance
- Proposed Contract: 10 years, $100M

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Public Utilities Department

Stantec Contract: Target Approval Schedule

Activity	Date
Environment Committee Consideration	January 2024
First City Council Approval Consideration	February 2024
Second City Council Approval Consideration	February 2024
Notice to Proceed	March 2024

Public Utilities Department

Requested Actions:

- ✓ 1. Authorization to execute the agreement with Stantec, Inc., for As-Needed Engineering Technical Services for 10 years in an amount not-to-exceed $100,000,000
- ✓ 2. Authorization to expend an amount not-to-exceed $100,000,000 in total over the term of this agreement from Fund 700011 – Water Utility Operating, Fund 700010 – Water Utility CIP, Fund 700001 – Metro Sewer Utility, and Fund 700009 – Metro Sewer CIP
- ✓ 3. Authorization to expend an amount not-to-exceed $1,000 from Fund 700011 – Water Utility Operating, for the purpose of executing this agreement and meeting minimum contract requirements

Questions

ATTACHMENT 8

PURE WATER PROGRAM

QUARTERLY CONSTRUCTION REPORT

30-Sep-23

Construction Package	Actual Bid Date	Actual Contractor Notice-To-Proceed	Contract Substantial Completion (3)	Updated Engineer's Estimate	Bid Award (1)	Change Orders (2)	Total Contract	Paid to Date (2)	Construction Company
Early Sitework	October 18, 2018	May 22, 2019	July 27, 2021	$16,403,300	$16,403,300	$1,184,211	$17,587,511	$17,587,511	Shimmick
NC Pure Water Facility & NC Pure Water Pump Station	August 7, 2020	April 19, 2021	February 26, 2025	$455,704,000	$356,681,930	$9,798,280	$366,480,210	$202,282,709	Shimmick
Morena Northern Alignment & Tunnels	August 17, 2020	June 14, 2021	August 30, 2024	$98,936,360	$95,243,645	$6,143,002	$101,386,647	$35,529,054	OHL USA, Inc
Morena Pump Station	October 21, 2020	June 14, 2021	February 3, 2026	$109,700,000	$110,386,350	$19,626,866	$130,013,216	$69,914,739	Flat Iron West
NC Pure Water Pipeline and Dechlorination Facility & Subaqueous Pipeline	November 30, 2020	June 1, 2021	April 21, 2025	$138,010,000	$123,456,027	-$17,720,517	$105,735,510	$38,337,567	W.A. Rasic Construction Company, Inc.
NCWRP Expansion & PWF Influent Conveyance	December 16, 2020	August 4, 2021	April 16, 2026	$208,660,000	$255,138,000	$4,913,987	$260,051,987	$81,875,989	Kiewit Infrastructure West Co.
NC MBC Improvements	February 9, 2020	September 15, 2021	March 12, 2025	$40,384,677	$40,086,690	$1,787,977	$41,874,667	$22,831,881	PCL Construction, Inc.
NCWRP EQ Basins	May 11, 2021	December 6, 2021	December 5, 2023	$10,540,000	$11,886,000	$11,637	$11,897,637	$1,806,429	Kiewit Infrastructure West Co.
Morena Conveyance Southern & Middle	December 28, 2021	October 3, 2022	July 18, 2025	$115,954,829	$129,753,895	$317,035	$130,070,930	$24,367,380	Sukut Construction, LLC
Miramar Reservoir Pump Station Improvements	March 18, 2022	October 25, 2022	November 19, 2024	$10,253,000	$12,692,000	$87,528	$12,779,528	$4,663,291	Shimmick
				$1,204,546,166	**$1,151,727,837**	**$26,150,005**	**$1,177,877,843**	**$499,196,550**	

1. Bid Award values are enterered when Notice-of-Intent to Award has been issued.

2. Change order and paid-to-date amounts through September 30, 2023.

3. Projected Substantial Completion is based on the current construction contract date, inclusive of any time-related change orders.

ATTACHMENT 9a

METRO WASTEWATER FINANCIAL

FISCAL YEAR 2025-2029

FIVE YEAR FINANCIAL OUTLOOK

The City *of*

SAN DIEGO

PUBLIC UTILITIES DEPARTMENT

FISCAL YEAR 2025-2029

FIVE-YEAR FINANCIAL OUTLOOK

Todd Gloria
Mayor

Eric K. Dargan
Chief Operating Officer

Kris McFadden
Deputy Chief Operating Officer

Juan Guerreiro
Director

Lisa M. Celaya
Executive Assistant Director

Yajaira Gharst
Interim Assistant Director

Adam Jones
Deputy Director

NOVEMBER 2023

Disclaimer:
The City files its disclosure documents, including official statements, audited financial statements, annual comprehensive financial reports, annual financial information, material event notices, and voluntary disclosures with the Municipal Securities Rule Making Board's Electronic Municipal Market Access ("EMMA") system. The Five-Year Financial Outlook ("Outlook") is utilized by the City as a planning tool and as such, is not filed on EMMA and therefore should not be relied upon by investors to make any investment decisions. The City will provide the Outlook to the rating agencies, its bond insurers and other interested parties for informational purposes and welcomes and encourages their careful review of this document. All readers are cautioned that the numbers presented in the Outlook represent the City's best estimates for the next five years based on facts and factors currently known to the City and may differ materially from actual results. As of the date any reader reviews the Outlook, the City makes no representation that there is not a material difference between the City's actual performance as of such date and the financial data presented in the Outlook. Certain statements herein constitute forward-looking statements or statements which may be deemed or construed to be forward-looking statements. Forward-looking statements involve and are subject to known and unknown risks, uncertainties and other factors which could cause the City's actual results, performance (financial or operating) or achievements to differ materially from future results, performance (financial or operating) or achievements expressed or implied by such forward-looking statements. All forward-looking statements herein are expressly qualified in their entirety by the above-stated cautionary statement. The City disclaims any obligation to update forward-looking statements contained in the Outlook. Fiscal Year 2023 activity reflects unaudited activity and is subject to change. Final activity will be published in the City's Annual Comprehensive Financial Report.

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Tables may not foot due to rounding

MISSION STATEMENT

To provide reliable water utility services that protect the health of our communities and the environment

VISION STATEMENT

A world-class water utility for a world-class city

EXECUTIVE SUMMARY

The Public Utilities Department (PUD or Department) Fiscal Year 2025-2029 Five-Year Financial Outlook (PUD Outlook or Outlook) is provided to guide long-range planning and serve as the framework for the development of the Fiscal Year (FY) 2025 Proposed Budget for the Water and Wastewater Funds. The purpose of this report is to provide an overview of the Public Utilities Department's long-range needs and to guide programmatic decisions.

The PUD Outlook focuses on the overall fiscal condition of the Water and Wastewater Funds and assesses impacts to revenues and expenditures from regional water and wastewater demands. It also explores a funding strategy to finance major capital investments in Water and Wastewater System infrastructure and the Pure Water Program construction. The PUD Outlook quantifies new costs that are critical to accomplishing PUD's strategic goals over the next five-year period. These goals include:

Goal 1: Water Supply/Environmental Stewardship

- Water supply and conservation
- Carbon footprint and energy management

Goal 2: Organization Excellence

- Rate structure optimization
- Safety
- Training and development
- Culture of accountability

Goal 3: Community Engagement

- Stakeholder understanding and support
- Customer service strategies

Goal 4: Infrastructure Management

- Asset management
- Infrastructure investment

The PUD Outlook is not a budget, and projected revenues and expenditures in any given year of the PUD Outlook may not correspond exactly to those in future Proposed Budgets. Nevertheless, the PUD Outlook can serve as a planning tool to assist in budget decisions and the allocation of resources to meet PUD's strategic goals that are critical to providing the community with a reliable and high-quality water and wastewater service. The PUD Outlook also provides the City Council, key stakeholders, and the public with information to facilitate discussions during the development of the FY 2025 Budget.

As enterprise funds, the Water and Wastewater Funds differ from the General Fund in that their services are supported with revenue derived from rates charged to customers. These rates are determined through a process prescribed by state law, which requires a cost of service analysis and Council approval of any rate adjustments at a public hearing. For the Wastewater System, rates and the corresponding revenues from a cost of service study approved September 2021 are reflected in FY 2023 through FY 2025 of the PUD Outlook. For the Water System, the City Council's approved rate adjustments from September 2023's are incorporated into this Outlook. The PUD Outlook identifies the overall system needs, whereas the cost of service analysis allocates those needs to establish applicable rate recovery by the different user classes.

During this Outlook period, both the Water and Wastewater systems are facing significant changes attributed to the increases in general wage adjustments and chemical and energy cost increases. Separate but noteworthy impacts to the Water system include the shift in rate adjustments by City Council, in comparison to what was proposed, and reductions in projected water consumption due to weather. To account for these changes corresponding adjustments have been made in capital spending, utilization of rate stabilization reserves, stored water usage and modifications to future rate assumptions ensuring there is enough revenue to support the Systems' continued operations.

SUMMARY OF KEY FINANCIAL DATA

This section presents a summary of the PUD Outlook, and the overall fiscal condition of the Water and Wastewater Systems. Tables 1.1 and 1.3 summarize revenues projected to support operations, Capital Improvements Program (CIP) related expenditures, and key financial metrics for the Water and Wastewater Systems, respectively. Further details on CIP expenses and revenue sources for those expenses is also provided.

Additional detail on each line item in these summaries can be found in the corresponding sections of this report. Baseline operating expenditures are those expenditures that are sufficient to allow PUD to continue providing its existing level of service without expanding any operational programs. Critical operating expenditures are those associated with expanded operations for PUD; a significant portion of these critical operating expenditures are associated with Phase 1 of the Pure Water Program coming online. CIP expenditure projections are also detailed in Tables 1.2 and 1.4 and are split into Pure Water CIP expenditures, which are associated with the Pure Water Program, and Baseline CIP expenditures, which consist of capital expenditures on all non-Pure Water related capital improvements, which includes pipelines, pump stations and storage infrastructure. Revenue projections include revenue that will be required to adequately cover operating expenses, CIP expenses, and to meet financial metrics necessary to operate the systems.

Water and Wastewater Systems

Overall, the PUD Outlook for both the Water and Wastewater Systems forecasts baseline operating expenditures to grow over the next five years; however, increases in critical operating expenditures are expected as PUD begins operations and maintenance of Phase 1 of the Pure Water Program as well as debt service expenditures for constructing Pure Water Phase 1. Conversely, CIP expenditures during the Outlook period are expected to peak in FY 2025 due to Pure Water Phase 1 and then gradually decrease through FY 2029, as Phase 1 construction of the Pure Water Program nears completion and efforts shift to planning for Phase 2 of Pure Water.

In addition to Pure Water, the City's network of nine dams are expected to become another core expenditure program with expenditures ramping up in the next five to 20 years. This will impact both the operating and capital budget. This Outlook builds on earlier budget adds proposed by the Mayor and approved by City Council in what is expected to be a billion dollar plus program. As expected in prior outlooks, new data has influenced the size and scope of the portfolio of Dam projects included in this outlook, which is expected to increase as more projects are identified and completed.

For the Water System, water purchase expenses are expected to decline during the Outlook period due to the additional use of stored water from prior years' rain events and availability of local water supply produced from Phase 1 of Pure Water coming online.

Revenues for both the Water and Wastewater Systems are projected to increase over the next five years, primarily due to increased rates to support the operations as forecasted in FY 2025 through FY 2029. The PUD Outlook also anticipates the transfer of funds to and from the Rate Stabilization Fund for each system to smooth revenue needs through the Outlook period, which would otherwise require additional rate increases or a reduction in expenditures. Both systems expect to deviate from target levels of rate stabilization reserves levels, which will be brought back to target levels with future rate adjustments.

PUD continues to project the use of financing to fund the CIP, including the Pure Water Program, as illustrated in Tables 1.2 and 1.4.

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Table 1.1 - Water System Fiscal Year 2025-2029 Financial Outlook ($ in Millions)						
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water Sales	$609.2	$689.0	$743.1	$819.5	$885.0	$946.5
Capacity Charges	$16.9	$15.0	$15.0	$15.0	$15.0	$15.0
Revenue from Use of Property	$7.0	$7.0	$7.0	$7.0	$7.0	$7.0
Other Revenue	$51.4	$53.1	$50.2	$45.9	$48.2	$50.0
TOTAL SYSTEM REVENUES	**$684.4**	**$764.0**	**$815.3**	**$887.4**	**$955.2**	**$1,018.5**
Salaries & Wages	$73.7	$77.9	$81.8	$84.3	$86.8	$89.5
Fringe Benefits	$47.1	$49.1	$50.1	$51.1	$52.1	$53.2
Water Purchases	$263.1	$283.6	$331.9	$316.8	$314.6	$331.1
Other Non-Personnel Expenditures	$169.2	$172.4	$183.7	$189.4	$190.5	$195.2
BASELINE OPERATING EXPENDITURES	**$553.1**	**$583.0**	**$647.4**	**$641.6**	**$644.1**	**$669.0**
CRITICAL OPERATING EXPENDITURES	**$0.0**	**$11.8**	**$22.4**	**$30.0**	**$30.1**	**$30.3**
Contribution to CIP	($1.2)	($32.7)	$226.2	$60.4	($7.5)	$147.8
Debt Service	$101.4	$124.4	$146.3	$152.7	$183.3	$190.0
(Use of) / Contribution to Reserves	($18.0)	($4.6)	($48.2)	$18.1	$10.5	$8.6
NON-OPERATING EXPENDITURES	**$82.1**	**$87.2**	**$324.4**	**$231.2**	**$186.3**	**$346.5**
TOTAL EXPENDITURES	**$635.2**	**$682.0**	**$994.1**	**$902.8**	**$860.7**	**$1,045.7**
Impact to Fund Balance	**$49.2**	**$82.0**	**($178.9)**	**($15.4)**	**$94.5**	**($27.2)**
Debt Service Coverage Ratio	**1.53 x**	**1.43 x**	**1.39 x**	**1.36 x**	**1.50 x**	**1.66 x**
Assumed Rate Increase[1]	**10.2%**	**8.7%**	**11.8%**	**8.9%**	**8.2%**	**7.4%**

[1] City Council has approved maximum rate levels for water through January 1, 2025. All rate increases reflect the value effective on the date of the rate increase, apart from FY 2024, which reflects the cumulative impact from the December 1, 2023 (5.0%) and July 1, 2024 (5.2%) increases. Revenues in the PUD Outlook reflect the impact of those increases from the effective date in that fiscal year

Tables may not foot due to rounding.

Table 1.2 - Water System Fiscal Year 2025-2029 Financial Outlook Summary of Capital Improvements Program Key Financial Data ($ in Millions)						
	FY 2024	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Baseline CIP	$144.2	$249.7	$319.8	$304.0	$274.7	$247.9
Pure Water CIP	$349.3	$140.2	$50.6	$26.2	$32.6	$38.3
TOTAL CIP EXPENDITURES	**$493.5**	**$389.9**	**$370.4**	**$330.2**	**$307.3**	**$286.2**
Sources of Funds						
Bonds	$127.0	$273.0	$50.0	$190.0	$260.0	$100.0
State Revolving Funds	$1.8	$29.9	$48.1	$78.4	$54.8	$38.4
WIFIA	$365.9	$119.7	$46.0	$1.4	$0	$0
Grants	$0	$0	$0	$0	$0	$0
Cash	($1.2)	($32.7)	$226.2	$60.4	($7.5)	$147.8
REVENUE SOURCES	**$493.5**	**$389.9**	**$370.4**	**$330.2**	**$307.3**	**$286.2**

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Table 1.3 - Wastewater System Fiscal Year 2025-2029 Financial Outlook ($ in Millions)						
	FY 2024	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Sewer Service Charges	$311.8	$323.3	$340.7	$364.8	$387.6	$411.9
Capacity Charges	$23.2	$23.2	$23.2	$23.2	$23.2	$23.2
Grants	$0	$0	$0	$0	$0	$0
Other Revenue	$126.7	$115.6	$115.8	$117.9	$116.5	$115.1
TOTAL SYSTEM REVENUES	**$461.7**	**$462.2**	**$479.7**	**$505.9**	**$527.2**	**$550.1**
Salaries & Wages	$74.2	$78.4	$82.3	$84.8	$87.4	$90.1
Fringe Benefits	$44.8	$46.6	$48.5	$49.5	$50.4	$51.5
Other Non-Personnel Expenditures	$210.2	$210.0	$217.5	$223.8	$230.2	$236.9
BASELINE OPERATING EXPENDITURES	**$329.1**	**$335.1**	**$348.3**	**$358.1**	**$368.1**	**$378.4**
CRITICAL OPERATING EXPENDITURES	**$0**	**$2.8**	**$3.0**	**$3.7**	**$2.8**	**$3.0**
Contribution to CIP	$128.5	($53.2)	$67.4	($100.8)	$188.0	($80.9)
Debt Service	$97.7	$112.2	$90.9	$116.6	$114.1	$128.0
(Use of) / Contribution to Reserves	($13.5)	($28.3)	$2.6	($18.0)	$0.4	($1.9)
NON-OPERATING EXPENDITURES	**$212.7**	**$30.7**	**$160.9**	**($2.3)**	**$302.6**	**$45.3**
TOTAL EXPENDITURES	**$542.7**	**$369.6**	**$512.4**	**$359.6**	**$673.5**	**$426.6**
Impact to Fund Balance	**($81.1)**	**$92.5**	**($32.7)**	**$146.3**	**($146.2)**	**$123.5**
Debt Service Coverage Ratio	**1.41 x**	**1.36 x**	**1.38 x**	**1.39 x**	**1.40 x**	**1.38 x**
Assumed Rate Increase[2]	**4.0%**	**3.0%**	**7.0%**	**6.0%**	**6.0%**	**6.0%**

[2] City Council has approved maximum rate levels for wastewater through January 1, 2025. All rate increases reflect the value effective on the date of the rate increase. Revenues in the PUD Outlook reflect the impact of those increases from the effective date in that fiscal year

Table 1.4 - Wastewater System Fiscal Year 2025-2029 Financial Outlook Summary of Capital Improvements Program Key Financial Data ($ in Millions)						
	FY 2024	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Baseline CIP	$128.7	$216.7	$147.7	$191.1	$208.3	$131.9
Pure Water CIP	$230.6	$166.0	$43.6	$20.0	$16.9	$17.2
TOTAL CIP EXPENDITURES	**$359.3**	**$382.7**	**$191.3**	**$211.2**	**$225.2**	**$149.1**
Sources of Funds						
Commercial Paper / Bonds	$2.5	$210.0	$0	$260.0	$0	$200.0
State Revolving Funds	$205.2	$202.8	$100.6	$28.8	$14.0	$6.8
Grants	$0	$0	$0	$0	$0	$0
Cash	$151.6	($30.1)	$90.6	($77.7)	$211.1	($57.7)
REVENUE SOURCES	**$359.3**	**$382.7**	**$191.3**	**$211.2**	**$225.2**	**$149.1**

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REPORT OUTLINE

The PUD Outlook is organized into two main sections: Water System and Wastewater System. The Water System is comprised of the Water Utility Fund and the Wastewater System is comprised of the Metropolitan and Municipal Sewer Funds, collectively known as the Sewer Revenue Funds.

Similar to the organization of the Five-Year Financial Outlook for the General Fund, the PUD Outlook provides a brief overview of the Water and Wastewater Systems and the impacts of the Pure Water Program, as well as a discussion of projected operating and capital expenditures, projected revenues, and potential rate adjustments. This Outlook also reflects the impacts of the commissioning of Phase 1 of the Pure Water Program which factors in the cost competitive, reliable and sustainable increase in local water supplies as well as the debt service for the project. The PUD Outlook is presented in a different order than the General Fund Outlook; expenditures are discussed first, followed by a discussion of revenue. This is due to the nature of rate forecasts, which are driven by the need to support operations and achieve key financial metrics.

The Water System and Wastewater System sections of the PUD Outlook include additional details on the projections for the next five years of ongoing revenues and expenditures that were displayed in Table 1.1 – Water System Fiscal Year 2025-2029 Financial Outlook, and Table 1.3 – Wastewater System Fiscal Year 2025-2029 Financial Outlook, respectively. Each section begins with a discussion of operating expenditures. 'Baseline' projections for operating expenditures represent those necessary to support current service levels provided by PUD. Unaudited Expenditures[3] for FY 2023 are presented for context but FY 2024 projections are the starting point for personnel and non-personnel baseline expenditures unless otherwise noted. As noted earlier, the PUD Outlook projections in any given year may not correspond exactly to the revenues and expenditures in future Proposed Budgets.

For this PUD Outlook, the primary Critical Operating Expenditures associated with implementing the Pure Water Program have been called out separately from baseline expenditures[4]. The Critical Operating Expenditures are discussed within each expenditure category. In some cases, expenditures are allocated in both water and wastewater funds. For instance, the Pure Water Program is displayed in both Water and Wastewater sections as both systems benefit. Previous Critical Operating Expenditures that were identified in prior PUD Outlooks and the FY 2024 budget were incorporated as baseline expenses in the PUD Outlook. All expenditures projected in this report will be further refined during the budget development process for each respective fiscal year.

Projections for CIP expenditures and funding sources are also provided, with Pure Water CIP expenses and funding sources broken out from the Department's baseline capital program which covers pumps, treatment plants, pipelines, and reservoirs, among other capital infrastructure.

[3] The City's Annual Comprehensive Financial Report (ACFR) includes the financial statements of all funds of the City, is prepared in accordance with Generally Accepted Accounting Principles, including those standards established by the Governmental Accounting Standards Board and portions of it at audited by an independent audit. The financial activity presented in this report was prepared in advance of the 2023 ACFR.

[4] Note – this presentation differs from PUD's financial disclosure documents. Critical Operating Expenditures in the PUD Outlook are broken out from Baseline Operating Expenditures to show programmatic additions to Department operations. Disclosure documents do not show these expenditures separately.

Finally, each section includes revenue projections and a discussion of the projected water and wastewater rates that are assumed in those revenue projections. Rates adjustments are determined through a process prescribed by state law and require a cost of service analysis and City Council approval at a public hearing.

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OVERVIEW OF THE WATER AND WASTEWATER SYSTEMS

The City of San Diego is a major metropolis, ranked as the eighth largest city by population in the United States and the second largest city in California. The City's total population is over 1.4 million. The City's climate is semiarid with cycles of multi-year droughts. Average rainfall does not provide adequate local water supplies for the City and is supplemented with water imported from outside the region.

The City's Water and Wastewater Systems are maintained and operated by the City of San Diego (City) Public Utilities Department. The Public Utilities Department (PUD) provides water to the City of San Diego as well as to the cities of Del Mar, Coronado and Imperial Beach, primarily from two water sources: (1) local supplies, which provide on average 10 - 15% of water needs, and (2) the San Diego County Water Authority (CWA), which provides 85 - 90% of water needs. The City's Water System extends over 404 square miles, with average (FY 2018–2022) potable water deliveries of approximately 162,619 acre-feet (AF) per year. PUD's extensive raw water system includes nine reservoirs, which capture rain and local runoff from rainfall and store purchased imported water. The water is then sent to PUD's three water treatment plants for treatment and distribution. While PUD expects water conservation efforts to continue, it also expects the demand for potable water to follow changes in population and the singles largest variable for yearly water demands is the weather patterns each fiscal year.

The City's Wastewater System owns and operates wastewater treatment plants that serve the City as well as other agencies of other cities and districts outside San Diego City boundaries (Participating Agencies). The Wastewater System serves over 2.3 million regional customers by providing wastewater collection, treatment, and disposal services. The Wastewater System is comprised of two sub-systems, the Municipal Sub-System and the Metropolitan ("Metro") Sub-System. The Municipal Sub-System is a sewage collection system for the City's customers and consists of all elements required for the collection and conveyance of wastewater generated by the service area, which currently consists of more than 275,000 accounts. The Metropolitan Sub-System is a regional sewage treatment and disposal system that serves the City and twelve other Participating Agencies near the City. The Wastewater System covers approximately 450 square miles, including most of the City, and stretches from Del Mar and Poway to the north, Alpine and Lakeside to the east, and San Ysidro to the south. The communities and agencies served by the PUD Wastewater System form the third largest metropolitan area in the State, surpassed only by the Los Angeles and San Francisco metropolitan areas. The Point Loma Wastewater Treatment Plant serves as a regional treatment facility handling sanitary waste from both Municipal Sub-System and Metropolitan Sub-System customers. Additionally, the Wastewater System operates and maintains two water reclamation plants (North City and South Bay), and a solids management facility (Metropolitan Biosolids Center).

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Regional Water Supply

In any given year, the City uses local water supplies to meet 10 - 15% of demand and relies on imported water from the CWA to meet the other 85 - 90% of demand. The CWA is a wholesale water agency that provided approximately 398,218 AF of imported and desalinated water to its member agencies in FY 2023, including 158,880 AF supplied to PUD. CWA currently acquires the majority of its water from three main sources: conserved water from the Imperial Irrigation District, water from the Metropolitan Water District (MWD), and desalinated water. MWD obtains its water from the Colorado River through the United States Bureau of Reclamation, and from northern California via the State Water Project through the California Department of Water Resources (DWR). MWD is one of 29 public water agencies that have long-term contracts for water service from DWR, and it is the largest agency in terms of the number of people its water serves (approximately 19 million).

Both CWA and MWD are actively engaged in developing strategies for enhancing long-term water supply reliability in the face of challenges related to drought and decreased reliance on Colorado River water. These strategies encompass storage initiatives and the pursuit of supplementary water sources, such as water transfers, with the aim of reducing dependence on imported water. These efforts gain significance in light of the dwindling water resources from both the State Water Project, responsible for transporting water from Northern California to Southern California, and the Colorado River, which provides water to the basin states of Arizona, California, Colorado, New Mexico, Nevada, Utah, and Wyoming. Furthermore, there is a looming threat of unilateral cuts to Colorado River allocations by the Federal government if the basin states fail to take decisive actions to curtail water consumption.

In response to the ongoing water challenges in California, the Governor unveiled a long-term strategy aimed at bolstering the state's water supply resilience. This multifaceted plan entails the expansion of reservoir storage capacity and a significant upscaling of water recycling efforts throughout the state, all designed to augment the long-term viability of California's water resources. In the short-term the State and the southwest have benefited from a historically wet winter in FY 2023, which has augmented local supplies as well as recharged a portion of the Colorado Watershed, but these short-term gains pale in comparison to the long-term declines in water supply for the southwest region.

PUD operates a recycled water system that supplies a portion of the San Diego region, with non-potable recycled water. Recycled water is wastewater treated to a level that makes it safe for a variety of uses including irrigation, dust suppression and soil compaction at construction sites, in cooling towers, in ornamental fountains, and office building toilet and urinal flushing; that system is supplied by two water reclamation plants – the North City Water Reclamation Plant (NCWRP) and South Bay Water Reclamation Plant (SBWRP). The City supplies recycled water to retail customers and three wholesale customers: the City of Poway, the Olivenhain Municipal Water District, and the Otay Water District. Recycled water is a joint venture between the Water (for distribution) and Wastewater (for treatment) Systems. Recycled water revenue is split between the two utilities once debt for the recycled water distribution network is paid off, which is expected to occur by the end of FY 2024.

Participating Agencies

Pursuant to the Regional Wastewater Disposal Agreement, the Metropolitan Sub-System provides "wholesale" treatment and disposal services, including some sewage transportation, to the cities of

Chula Vista, Coronado, Del Mar, El Cajon, Imperial Beach, La Mesa, National City and Poway, the Lemon Grove Sanitation District, the Otay Water District, the Padre Dam Municipal Water District, and the County of San Diego (on behalf of Winter Gardens Sewer Maintenance District and the Alpine Lakeside and Spring Valley Sanitation Districts). These cities and districts are collectively referred to as the Participating Agencies.

The Regional Wastewater Disposal Agreement requires the Participating Agencies to pay their respective share of planning, design, and construction of Metropolitan Sub-System facilities, as well as costs related to the operation and maintenance of the Metropolitan Sub-System. Since FY 2011, the Participating Agencies have constituted approximately 33% of the total Metropolitan Sub-System costs. Recently, the City of El Cajon, San Diego County and the Padre Dam Municipal Water District, formed the East County Advanced Water Purification Joint Powers Authority, which is expected to divert up to 25% of the Participating Agencies flow away from the Metropolitan Sub-System when the Advanced Water Purification goes live during the Outlook period. The Outlook assumes that this action will reduce projected costs attributed to the agencies by $10 million per year. The City is in negotiations with the participating agencies on changes to the billing structure which may mitigate this impact revenue in future years. Negotiations and ratification of the new agreement is expected to be complete before Pure Water Phase 1 is operational.

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Pure Water Program

Background

The Pure Water Program will provide a safe, secure, cost competitive, and sustainable local drinking water supply for San Diego. Advanced water purification technology will be used to produce potable water from recycled water. The City and its regional partners face significant issues with water supply and wastewater treatment primarily due to the increasing cost of imported water and the increasingly stringent regulations on wastewater treatment and disposal. The region's reliance on imported water causes the water supply to be vulnerable to shortages and susceptible to price increases beyond the control of the City.

The Pure Water Program is a 20-year (2015-2035) multi-phased water and wastewater capital improvements program that is expected, upon full implementation by the end of Calendar Year (CY) 2035, to create 83 million gallons per day (mgd) of locally controlled water, which will provide nearly half of the City's total potable water needs. The Pure Water Program will divert treated wastewater from the Point Loma Wastewater Treatment Plant's (PLWTP) ocean outfall and recycle a valuable and limited resource that is currently discharged to the ocean.

In 2010, the City received a renewal of the Modified Permit for the PLWTP and agreed to identify opportunities to maximize recycling of wastewater for potable and non-potable uses. The City submitted its renewal application on March 24, 2022, 180 days prior to the expiration of the current permit, which is jointly issued by the EPA and the San Diego Regional Water Quality Control Board. The modified permit was administratively extended by the EPA on September 27, 2022. Administrative extension of NPDES permits by the State of California (through the San Diego Regional Water Quality Control Board) are automatic upon expiration (and upon submittal of a timely renewal application) prior to adoption of a subsequent permit. It is anticipated that continuation of the Pure Water Program will be reflected in future permits, which will eliminate the need for the City to make over $1.8 billion in upgrades to the PLWTP that would otherwise be necessary, based on the City's 2018 cost estimate.

Phase 1 of the Pure Water Program is estimated to cost approximately $1.56 billion. The Water and Wastewater Funds will share in these expenditures according to allocating cost based on completed design and engineering studies. Approximately $906 million (58%) is allocated to the Water Utility Fund and approximately $656 million (42%) is allocated to the Sewer Revenue Fund. Total cost allocations will continue to be adjusted as any potential change orders are issued for the project. Final cost allocation will be done in the fiscal year following substantial completion of the project.

Project Update

Pure Water Phase 1 is the largest construction effort the City has ever taken on and significant progress has been made towards completion. Each of the eleven construction contracts (early site work contract has been completed) have been awarded and construction is currently estimated to be about 40% through construction. Although Phase 1 is being constructed through ten individual construction contracts via eight independent prime contractors and numerous subcontractors; it is one interconnected project. The Morena Pump Station dewatering changed condition has delayed the pump station's completion by more than a year. The full extent of the delay is not yet known but is

anticipated to be clear during FY 2024. The strategy referred to as "Partial Flow Commissioning" was conceived when the significance of the Morena Pump Station delay became apparent. Partial Flow Commissioning accelerates the start of Pure Water production compared to waiting for the Morena Projects to complete by gradually producing potable reuse water.

To achieve Pure Water Phase 1 full production of 30 mgd, a partial flow commission schedule has been developed. Partial Flow Commissioning will mitigate Morena Pump Station's impact on the timeline for producing 30 mgd of purified water. Based on current contractor forecast schedules, purified water production can begin nine to 12 months sooner than waiting for the Morena Projects to complete before proceeding with system-wide commissioning. Currently, the North City Water Reclamation Plant receives more wastewater than is needed to meet recycled water customer demands; the surplus can be used to produce between 8 and 18 mgd of purified water.

Following Partial Flow Commissioning activities, purified water deliveries to the Miramar Reservoir would be started at 7.5 mgd. After demonstrating to the regulators that all water quality and other permit requirements are sufficiently met, purified water deliveries could be increased to 10 mgd. At that point additional wastewater via the Morena Projects will be needed to further increase production and reach Phase 1's ultimate goal of producing 30 mgd of purified water •by December 31, 2027. A more detailed update on the Pure Water program was provided to the Environment Committee on October 12, 2023.

Cost of Service Analysis

Pursuant to State law, PUD uses a cost of service process to determine how to set its rates to ensure they meet PUD's overall revenue requirements. Cost of service studies detail projected expenditures determine the total revenue required to cover those expenditures and allocate those revenue needs based on the demands each customer class places on PUD's systems. Revenue requirements not only support operating and capital costs but are set to ensure appropriate reserve and debt service coverage ratios.

The City concluded a cost of service study and rate case for the Wastewater System in September 2021, which included rate adjustments for FY 2022 through FY 2025, as approved by the City Council. The City concluded a cost of service study and rate case for the Water System in September 2023, which included rate adjustments for FY 2024 and FY 2025. At the Public Hearing, the City Council modified the proposed rate adjustments by splitting the December 1, 2023 rate increase of 10.2% into two, 5.2% effective December 1, 2023 and 5.0% effective July 1, 2024. As a result, the revenue assumed for FY 2023 has been reduced by $12 million.

Council's approval provides a maximum authority for the rate increases through FY 2025 for both Systems. Any adjustments in assumptions utilized to support the rate adjustments, will require mitigating actions, including the additional use of rate stabilization reserves, modifications to the capital spending plan, and/or higher projected rate adjustments in years beyond FY 2025. This and future PUD Outlook's will define these actions in the financial sections of the report.

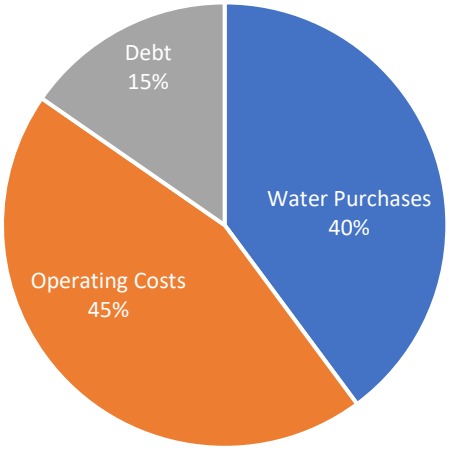
WATER SYSTEM

This section discusses baseline expenditure projections, upcoming critical operational expenditures, and projected capital improvements program needs and financing options for the next five years for the Water Utility Fund. An overview of Water System revenue projections is also included.

Water System Expenditures

Water Utility Fund expenditures are comprised of both personnel and non-personnel expenditures including debt service and other non-discretionary payments. The largest single expenditure of the Water Utility Fund is for water purchases, representing approximately 40% of FY 2023 operating expenditures. As show in Figure 1.5

Figure 1.5 Fiscal Year 2024 Water Operations and Maintenance Expenses



These expenditures are therefore discussed separately. The following sections discuss in detail each expenditure category and include a description of the category, projected growth rates, and a discussion of any related critical strategic expenditures. Strategic critical expenditures identified in prior Outlooks are now included in baseline expenditures for the FY 2025-2029 Outlook, including positions associated with Dam Safety, distributed control system and customer support.

Water Purchases

The City currently imports approximately 85-90% of its water through the CWA. Water purchases contribute to the largest expense in the Water Utility Fund and make up approximately 40% of the Water Utility Fund's operating budget. CWA charges a volumetric rate that includes both a commodity

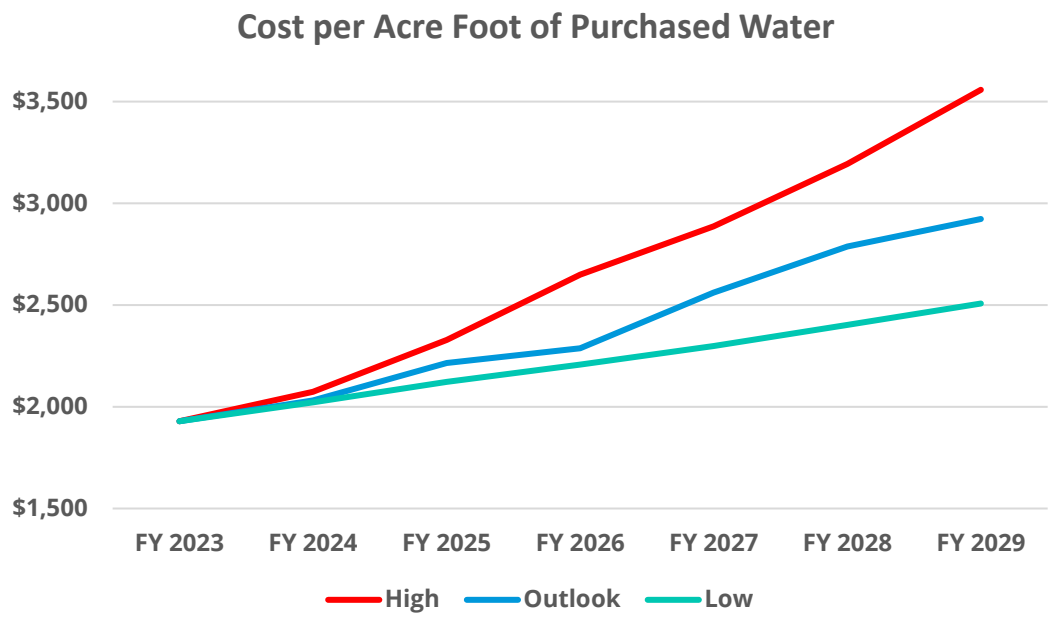
rate and a transportation rate. In addition to the rate charged by acre foot, CWA and MWD also levy fixed charges on their member agencies.

Table 2.1 – Water Purchases - Baseline Expenditures ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Projections	$263.7	$263.1	$283.6	$331.9	$316.8	$314.6	$331.1
Acre Feet	136,686	129,472	128,012	144,992	123,689	112,888	113,287

Table 2.1 presents projected costs for purchasing water from CWA. As a result of the significant rain events that occurred in Fiscal Year 2023 and are projected in Fiscal Year 2024, the Outlook assumes less water purchases as demands are depressed and the water stored in the City's dams is used instead of buying from the CWA. The Outlook assumes a return to a normalized level of purchases in Fiscal Year 2025, but then forecasts a decline in Fiscal Year 2027 as Phase 1 of the Pure Water Program is expected to be substantially complete. From a financial perspective, the Outlook assumes a conservative approach for forecasting the impact from Pure Water being operational. If water from Pure Water is delivered earlier, the costs for water purchases will be reduced.

During the forecast period, PUD is forecasting to spend $263M to $331.9M per year to buy water from the CWA and is dependent on the rate increases projected by the CWA In September 2021, CWA adopted a Long-Range Financing Plan (2021 Financing Plan) which identified high and low rate and charge forecasts Figure 1.6 below shows the impact of these scenarios vs the assumptions used in the PUD Outlook.

Figure 1.6 High/Low and Outlook Cost Per Acre foot of Purchased Water



The PUD Outlook assumes a mid-range forecast; however, there is a strong probability that the increases will be different than the assumptions for following reasons:

1. The guidance provided by CWA is at the "all in" level but actual rate increases will be implemented based on multiple rate and charge categories. For the City of San Diego, applicable rate and charge categories include four fixed categories (Storage, Customer Service, Supply Reliability and Infrastructure Access) and a volumetric rate based on the actual volume of water purchased. Depending on rate increases per category, the result may have a different impact on the City. For instance, if fixed charges are increased, the City could be impacted substantially more than if volumetric rates are increased.
2. CWA's historical approach has been to maintain their projected rates within the range defined by the high and low forecasts outlined in the 2021 Financing Plan. Consequently, the decision to opt for lower rates in earlier years does not limit their ability to raise rates in subsequent years to realign with the higher rates projected for the future. This adjustment is evident in the 2024 rates, as they shifted from the lower end of the rate increase spectrum in 2023 to match the high scenario for 2024 as originally projected in the 2021 Financing Plan.
3. CWA is currently evaluating their rate structure and the PUD Outlook does not make any assumptions on the outcome of this effort. The rate structure review is focusing on adjustments to fixed charges, which if that does occur, would have a substantive impact on the City.
4. Additionally, the results of two agencies approved detachment from CWA will have an impact, but that is still unknown.

Personnel Expenditures

Personnel expenditures include salaries, wages, and fringe benefits. Salaries and wages are comprised of regular salaries and wages, hourly wages, special pay, overtime, and pay in lieu of annual leave. Fringe benefits include pension payment or Actuarially Determined Contribution (ADC), flexible benefits, retiree health or Other Post-Employment Benefits (OPEB), workers' compensation, Supplemental Pension Savings Plan (SPSP), and other fringe benefits. Projected FY 2024 Water Utility Fund salaries, wages, and fringe benefits are $120.8 million and includes 979.9 full-time equivalent (FTE) positions. Table 2.2 displays unaudited actuals for FY 2023 and projections through FY 2029 for Water System personnel expenditures.

Table 2.2 –Baseline Personnel Expenditures ($ in Millions)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Salary and Wages	$62.4	$73.7	$77.9	$81.8	$84.3	$86.8	$89.5
Fringe	$42.9	$47.1	$49.1	$50.1	$51.1	$52.1	$53.2

The salary and wages category incorporates only those expenditures associated with staff included in the FY 2024 Adopted Budget. FY 2024 salaries and wages were double (6.85% vs 3.05%) assumed in

prior outlooks. This increases compounds throughout the years included in the Outlook. Position adds identified for FY 2025-2029 to support critical expenditures are discussed below. Consistent with the General Fund, the PUD Outlook accounts for all current negotiated MOUs and an assumed 3.05 percent salary increase for pending MOU negotiations in future years; 3.05 percent is aligned with the assumptions included in the San Diego City Employees' Retirement System (SDCERS) Actuarial Valuation Report as of June 30, 2022. Any future negotiated general wage increases that deviate from the 3.05 percent assumption will impact future year personnel costs included in the outlook period and increase the rate revenue requirement.

The Department's fringe budget has been increased based on its past proportional relationship between it and salaries and wages category.

Critical Operating Expenditures

Table 2.3 - Critical Strategic Expenditures - Personnel

Request	FTE/Exp	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
	FTE	4.00	4.00	4.00	4.00	4.00
Dam Repairs and Replacement	Expense	$509,949	$523,739	$537,950	$552,594	$567,684
	FTE	16.24	16.24	19.24	19.24	19.24
Pure Water Phase 1 Operations	Expense	$1,758,957	$1,805,446	$2,194,264	$2,252,708	$2,312,933
	FTE	5.75	8.75	8.75	8.75	8.75
Regulatory Compliance and Equipment	Expense	$515,213	$797,150	$817,606	$838,686	$860,408
	FTE	5.17	9.87	14.57	19.27	19.27
Street Preservation Ordinance	Expense	$439,348	$835,826	$1,252,007	$1,688,785	$1,731,798
	Total FTE	**31.16**	**38.86**	**46.56**	**51.26**	**51.26**
	Total Expense	**$3,223,467**	**$3,962,162**	**$4,801,827**	**$5,332,772**	**$5,472,824**

Table 2.3 identifies personnel expenditures, including fringe benefits, for the addition of staff to support Department new programs and/or critical needs as detailed below:

- The Dam Repairs and Replacement critical strategic add addresses two different aspects of the City's dam and reservoir system: short-term repairs and other maintenance projects and long-term improvements and/or replacements of existing dams. It is estimated that the City's dam system has at least $1 billion of short and long-term projects needed to safely operate and maintain these assets, which are critical for local water storage in the region. Given the size, scale, timeline and specialization of this work, a dedicated team within the Public Utilities Department is needed. This request creates a team to design, manage and execute the needed improvements. The team includes resources for both operational staff that manage the day-to-day operations of the facilities and the project teams that are required to design, engineer and construct replacement facilities as the dams reach the end of life design. Items approved in the Fiscal Year 2024 Adopted budget are included in the baseline, with the critical adds representing the increases over the budgeted positions in outyears.

- The identified funding needs for the Pure Water Program are for the operation and maintenance of new and expanded Pure Water facilities and related staffing needs. Pure

Water positions are gradually being ramped up, so personnel are fully trained to operate and maintain the facilities when they come online. A total of 19.24 FTEs from the Water System (of 22.00 total FTEs) are anticipated to be required when Pure Water Phase 1 becomes fully operational. These estimates will be further refined as the City gets closer to bringing the facilities online.

- Regulatory compliance includes staffing needed to comply with new and updated discharge regulations.

- The Street Preservation Ordinance is the City's policy on how to restore streets after work is done in the public right-of-way. The critical strategic add will meet the needs for Trench Restoration and Repair Program for Public Utilities projects. This work is currently handled by the Transportation Department, but as part of this Outlook the Public Utilities Department is taking that work in house, to allow Transportation staff to address general city road work. The additions are expected to be cost neutral for the Public Utilities Department, since the existing Transportation staff charge Public Utilities for work performed on Public Utilities Projects.

Supplies

The Supplies category includes costs for chemicals, water meters, pipe fittings, asphalt road materials, machine parts, and low value assets. Table 2.4 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Supplies category.

Table 2.4 - Baseline Supplies ($ in Millions)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	6.7%	3.0%	2.8%	2.8%	2.8%	3.0%
Projection[1]	$21.6	$23.0	$23.7	$24.4	$25.0	$25.7	$26.5

[1]Figure excludes expenditures associated with water purchases

The Supplies category includes various components. The Supplies baseline projection is increased by the forecasted growth in the CPI to account for the average change of costs over the Outlook period; the forecast for CPI growth is based on the UCLA Anderson October 2023 Economic Forecast, with a small increase specifically for chemicals. In FY 2022 and FY 2023, the City saw a sharp increase in key chemicals, including chlorine, which has driven large growth in the Department's supplies costs over past years. This rate of increase slowed in Fiscal Year 2023 and Fiscal Year 2024 but are not expected to return to pre-FY 2023 levels. Given the importance of these chemicals in the treatment process, the Department would prioritize the use of other resources to ensure sufficient supplies of treatment chemicals were available in any applicable fiscal year and will continue closely monitoring these costs.

Critical Operating Expenditures

Table 2.5 - Critical Strategic Expenditure - Supplies					
Request	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Pure Water Phase 1 Operations	$500,000	$2,450,000	$3,670,556	$7,341,112	$7,341,112
Street Preservation Ordinance	$15,000	$30,000	$45,000	$60,000	$75,000
Total Expense	**$515,000**	**$2,480,000**	**$3,715,556**	**$7,401,112**	**$7,416,112**

Table 2.5 identifies increased expenditures in the Supplies category for critical expenditures. Pure Water supply expenses are anticipated to become necessary as facilities come online, and include chemical costs, consumables, pumps, and other materials necessary for operation and maintenance of facilities and equipment. The supplies for Street Preservation Ordinance support trench restoration and repair include asphalt/concrete and slurry seal.

Contracts

Contracts are a non-personnel expense category that include the cost of contractual services, professional consultant fees, general government services billing, City services billings, fleet vehicle usage and assignment fees, rental expenses, security services, and other contractual expenses. Table 2.6 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Contracts category.

Table 2.6 - Baseline Contracts ($ in Millions)							
	FY 2023	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
YOY Growth	N/A	10.5%	1.1%	2.8%	2.8%	2.8%	2.0%
Projection[1]	$92.5	$102.2	$103.3	$106.2	$109.2	$112.2	$114.5

[1]Figure excludes expenditures associated with water purchases

The Contracts baseline projection is increased by the forecasted growth in the CPI to account for the average change of costs over the Outlook period; the forecast for CPI growth is based on the UCLA Anderson October 2023 Economic Forecast. Adjustments are based on known and anticipated events, including prior critical strategic expenditures and prior spending levels. The 1.1% growth rate for Fiscal Year 2025 will ultimately be dependent on actual level of expenditures in Fiscal Year 2024, which will be re-forecasted in the Mid-Year Monitoring Report. In addition, the PUD Outlook assumes additional transfers from the Water Fund to the Metropolitan Wastewater Fund, per their revenue sharing agreement.

Critical Operating Expenditures

Table 2.7 - Critical Strategic Expenditure - Contracts					
Request	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Pure Water Phase 1 Operations	$400,000	$400,000	$417,500	$267,500	$287,500
Pure Water Phase 2	$2,805,000	$3,490,000	$1,840,000	$1,590,000	$1,640,000
Street Preservation Ordinance	($739,044)	($1,412,415)	($2,115,968)	($1,749,032)	($1,815,968)
Total Expense	**$2,465,956**	**$2,477,585**	**$141,532**	**$108,468**	**$111,532**

Table 2.7 identifies increased contractual expenditures associated with increased support for Phase 1 of the Pure Water Program for operational contracts, and the on ramping of costs for planning and studies required for Phase 2 of Pure Water.

The Street Preservation Ordinance request includes contract repair funding to address trench restoration and repairs. The adds are a negative at the bottom-line level due to the decreases in charges from the Transportation Department which shows as a contract expense., As work moves in-house, transportation department charges go down but PUD sees corresponding increases in other categories likes supplies and personnel. The Outlook assumes PUD fully in-housing trench repairs by the end of Fiscal Year 2027.

Information Technology

The Information Technology category includes both discretionary expenses and non-discretionary allocations to the Water Utility Fund. The Information Technology category includes the costs related to hardware and software maintenance, help desk support, and other information technology (IT) services. Table 2.8 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Information Technology category.

Table 2.8 - Baseline Information Technology ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	59.5%	3.0%	2.8%	2.8%	2.8%	2.0%
Projection	$12.1	$19.2	$19.8	$20.3	$20.9	$21.5	$21.9

The projections include estimates of IT costs and systems critical to treatment plant and distribution system operations, which accounts for the majority of the increase between Fiscal Year 2023 and Fiscal Year 2024. The baseline discretionary costs are then increased by the forecasted growth in the CPI to reflect the average change of costs over the outlook period; the forecast for CPI growth is based on the UCLA Anderson October 2023 Economic Forecast. The majority of the growth is seen in centralized IT costs maintained by the Department of IT also includes PC replacement costs that spike in Fiscal Year 2024 and 2025.

There are no critical strategic adds for Information Technology for this outlook period.

Energy & Utilities

The Energy & Utilities category includes the Water Utility Fund's costs for electricity, water services, fuel, and other utility and energy expenses. Table 2.10 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Energy & Utilities category.

Table 2.10- Baseline Energy & Utilities ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	13.2%	3.8%	4.0%	3.7%	3.8%	4.5%
Projection	$19.0	$21.5	$22.3	$23.2	$24.0	$24.9	$26.1

The Energy & Utilities category includes various costs including prior critical strategic expenditures. The majority of the rates for each category are based on the Annual Energy Outlook 2023 Report prepared by the U.S. Energy Information Administration and forecasted CPI growth based on the UCLA Anderson October 2023 Economic Forecast. Fuel growth rates are developed by the General Services Department. The Sustainability and Mobility Department prepared the forecasts for electric and gas services. The General Fund Five Year Outlook expands on how these forecasts were developed in more detail.

Critical Operating Expenditures

Table 2.11 - Critical Strategic Expenditures - Energy & Utilities ($ in Millions)					
Request	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Pure Water Phase 1 Operations	$0	$7,241,181	$14,482,361	$14,482,361	$14,482,361
Total Expense	**$0**	**$7,241,181**	**$14,482,361**	**$14,482,361**	**$14,482,361**

Table 2.11 identifies increased energy and utility expenditures associated with the Pure Water Program. These expenditures are necessary as new and expanding Pure Water facilities come online and include increased electricity, water, and natural gas expenditures necessary for the daily operation of facilities.

Other Expenditures

Expenses included in this category are transfers to other funds, capital expenses, taxes, and other miscellaneous expenditures. Debt service obligations, including payments for bonds, commercial paper, State Revolving Fund (SRF) loans and WIFIA payments, are excluded from this category and are discussed in the Water System Capital Improvements Program section of this report. Table 2.12 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Other Expenditures category.

Table 2.12 - Baseline Other Expenditures ($ in Millions)							
	FY 2023	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
YOY Growth	N/A	75.2%	0%	0%	0%	0%	0%
Projection	$0.3	$0.6	$0.6	$0.6	$0.6	$0.6	$0.6

The increase between Fiscal Year 2023 and Fiscal Year 2024 is related to ongoing laboratory equipment purchases that were added in the Fiscal year 2023 budget. The current forecasts do not take into account the additional costs associated with converting PUD fleet to electric, which requires coordination with the General Services Department for charging infrastructure and vehicle procurement.

Critical Strategic Expenditures

Table 2.13 - Critical Strategic Expenditure - Other Expenditures					
Request	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Dam Repairs and Replacement	$3,200,000	$3,650,000	$4,100,000	$0	$0
Pure Water Phase 1 Operations	$1,948,000	$2,156,000	$2,600,000	$2,600,000	$2,600,000
Regulatory Compliance and Equipment	$450,000	$360,000	$54,000	$0	$0
Street Preservation Ordinance	$51,000	$102,000	$153,000	$204,000	$255,000
Total Expense	**$5,649,000**	**$6,268,000**	**$6,907,000**	**$2,804,000**	**$2,855,000**

Table 2.13 identifies increased other expenditures. Significant expenditures are associated with new laboratory operating equipment needed for Phase 1 of the Pure Water Program, for new regulatory equipment including those specifically related to microplastics and vehicles and other equipment for dam repairs and street preservation.

Reserves Contributions

The City has established accounts within the Water Utility Fund for four reserve funds: The Emergency Operating Reserve (Operating Reserve), the Secondary Purchase Reserve, the Rate Stabilization Fund Reserve (Rate Stabilization Fund), and the Emergency Capital Reserve (Capital Reserve). The Department maintains these reserve funds in accordance with the City's Reserves Policy (the City Reserves Policy). At the end of FY 2022, the Water Utility Fund is estimated to have total reserves of approximately $176 million.

Table 2.14 details reserve targets and projected funding levels. Reserves are projected to be fully funded throughout the PUD Outlook period., except for the rate stabilization reserve.

Table 2.14 - Reserve Targets and Estimated Funding Levels ($ in Millions)						
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating Reserve Target ($)	$56.7	$60.3	$65.3	$66.8	$67.8	$68.5
Operating Reserve Level ($)	$56.7	$60.3	$65.3	$66.8	$67.8	$68.5
Secondary Purchase Reserve Target ($)	$15.8	$17.0	$19.9	$19.0	$18.9	$19.9
Secondary Purchase Reserve Level ($)	$16.7	$17.0	$19.9	$19.9	$19.9	$19.9
Rate Stabilization Fund Target ($)	$29.4	$31.3	$35.3	$38.0	$41.9	$45.1
Rate Stabilization Fund Level ($)	$78.1	$69.1	$14.1	$29.1	$38.1	$45.1
Capital Reserve Target ($)	$5.0	$5.0	$5.0	$5.0	$5.0	$5.0
Capital Reserve Level ($)	$5.0	$5.0	$5.0	$5.0	$5.0	$5.0

The Secondary Purchase Reserve Target for FY 2028 reflects a decrease in water purchases as Phase 1 of the Pure Water Program is completed.

The Rate Stabilization Reserve Fund is funded above targeted levels until Fiscal year 2026. This is due to several one-time revenue sources from prior years, including the sale of the stadium site, one-time grant funding and legal settlements from the MWD that have allowed the City to make large contributions to the stabilization reserve. Saving one-time revenue for use in a reserve is a financial best practice so that the funds can be used to provide one-time operating revenue to offset or mitigate the need for sudden or dramatic rate increases in the future. The PUD Outlook projects use of the Rate Stabilization Reserve Fund in FY 2023 through FY 2026. In FY 2026, rate stabilization reserve is projected to dip below target level but forecasted to return to target levels by FY 2029. The use of the reserves allows for a more gradual increase in rate increases than would otherwise be required to meet financial targets. In accordance with the reserve policy, a plan to address this dip below the target will be included in the next COSS.

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Water System Capital Improvements Program

The Water System CIP is established to address current and future system needs in a cost-effective manner. The program's principal drivers are:

- continuing the implementation of the Pure Water Program;
- improving infrastructure to reduce pipeline breaks and emergency repairs;
- funding for improvements to Hodges Dam;
- improving treatment and distribution process technology;
- Support for SAP Modernization and smart meters
- expanding the Water System to accommodate growth; and
- complying with the Federal Safe Drinking Water Act and the Division of Drinking Water (DDW) Compliance Order.

Table 3.1 shows categories of projects with the estimated cost of expenditures contained in the CIP for the period of FY 2025 through FY 2029. The City's Adopted Budget includes multi-year project pages for non-routine and large projects. The PUD Outlook includes a high-level summary of the CIP to understand the financial impact on the Water System; the City's Five-Year Capital Infrastructure Planning Outlook provides additional information on the capital infrastructure needs for the entire city.

Table 3.1 - Summary of Projected CIP Projects
Fiscal Year 2024-2028
($ in Millions)

Water CIP Projects	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Outlook Total
Pure Water Program	$166.0	$349.3	$140.2	$50.6	$26.2	$32.6	$38.3	**$287.9**
Transmission Pipelines	$34.4	$23.9	$75.6	$90.6	$59.3	$59.0	$77.3	**$361.9**
Pipelines	$87.8	$99.2	$139.1	$148.5	$145.8	$108.6	$26.0	**$568.1**
Storage Facilities	$3.0	$7.1	$9.4	$26.9	$30.0	$34.6	$72.3	**$173.3**
Water Treatment Plants	$4.4	$9.3	$9.5	$17.2	$13.9	$19.7	$33.1	**$93.4**
Pump Stations	$3.5	$1.6	$3.8	$11.2	$13.9	$17.6	$14.7	**$61.3**
Miscellaneous Projects	$0.4	$3.2	$12.3	$25.3	$41.1	$35.2	$24.4	**$138.3**
Total	**$299.5**	**$493.5**	**$389.9**	**$370.4**	**$330.2**	**$307.3**	**$286.2**	**$1,684.1**

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Capital Improvements Program (CIP) Financing Plan

Table 3.2 describes the projected sources of funds to finance the Water System CIP during the PUD Outlook period for FY 2025 through FY 2029; FY 2023 and FY 2024 activity are provided for reference and are not a part of the PUD Outlook period.

PUD anticipates incurring approximately $1.1 Billion of additional debt obligations for the Baseline Water System CIP and $167.2 million of additional obligations for the Pure Water CIP over the PUD Outlook period. The City is projecting an increase in borrowing rates, related to the Federal Reserve's attempts to combat inflation, and the increase in federal borrowing costs for risk-free treasury offerings. Capacity fees and cash are anticipated to fund an additional $393.8 million.

Although grant funding is currently not reflected during the PUD Outlook period, the Department is actively applying for additional grant funding and continually searching for new grant opportunities. Any grant funding awarded will be used to offset cash funding. The City has identified many grant opportunities in recent federal bills but would note that a large portion of funding has been restricted to specific agencies, for smaller jurisdictions or capping the value of the grants at relatively low dollar values. Please note fiscal years that show the use of negative cash reflect reimbursement of prior cash expenditures from grant, bonds, or loans.

Table 3.2 - Sources of Funds for the Water Capital Improvement Program ($ in Millions)

Source of Funds	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Outlook Total
Pure Water CIP								
Commercial Paper/ Bonds	$0	$0	$0	$0	$0	$0	$0	**$0**
WIFIA Loans	$112.1	$365.9	$119.7	$46.0	$1.4	$0	$0	**$167.2**
SRF Loans	$0	$0	$0	$0	$0	$0	$0	**$0**
Grants	$0	$0	$0	$0	$0	$0	$0	**$0**
Cash	$53.9	($16.5)	$20.4	$4.5	$24.8	$32.6	$38.3	**$120.7**
Total	**$166.0**	**$349.3**	**$140.2**	**$50.6**	**$26.2**	**$32.6**	**$38.3**	**$287.9**
Baseline CIP								
Revenue Bonds/ Commercial Paper	$30.0	$127.0	$273.0	$50.0	$190.0	$260.0	$100.0	**$873.0**
SRF Loans	$0	$1.8	$29.9	$48.1	$78.4	$54.8	$38.4	**$249.5**
Grants	$0	$0	$0	$0	$0	$0	$0	**$0**
Capacity Fees/Cash	$103.5	$15.3	($53.1)	$221.7	$35.7	($40.1)	$109.5	**$273.7**
Total	**$133.5**	**$144.2**	**$249.7**	**$319.8**	**$304.0**	**$274.7**	**$247.9**	**$1,396.2**
Total Funding	**$299.5**	**$493.5**	**$389.9**	**$370.4**	**$330.2**	**$307.3**	**$286.2**	**$1,684.1**

The City expects several large projects to be financed over the outlook period, including Phase 1 & 2 of Pure Water and the Dam rehabilitation projects. The City has secured financing of up to $733.5

million for the Water System's share of the Pure Water Program Phase 1 through the EPA's Water Infrastructure Finance and Innovation Act (WIFIA) Loan Program which will provide funding through FY 2027. Additional funding for the Water System's portion of Pure Water CIP (including Phase 2) expenses includes $120.7 million in cash. The Department has assumed that similar to Phase 1 of Pure Water, Pure Water Phase 2 and Dam Rehabilitation will initially be cashed funded with the potential to be reimbursed through loans and grants. The Department expects to create a financing plan in conjunction with the Department of Finance Debt Management team during the Outlook period, which will be incorporated into future Outlooks.

For the Water System's baseline CIP, the Department anticipates financing the costs of certain projects in the amount of $249.5 million through SRF loans the City has already secured or for which it plans to apply for. The proceeds from additional SRF loans are assumed to provide funding in FY 2025 through FY 2029. SRF loans are one of the least expensive sources of financing available to the City. This year's outlook reflects a lower level of assumed SRF funding due to limited funding at the State level for the program and unprecedented demand for funding. The City has increases the amount of non-SRF funding during this period, which has resulted in debt service expenses than in past outlooks.

Debt Service Coverage Ratios

As the Water System makes use of various financing instruments to fund its CIP, it is important that it maintain good financial metrics to ensure its creditworthiness and its ability to issue debt at advantageous terms. One of the key components to measuring the Water System's credit quality is its debt service coverage ratio (DSCR). The DSCR is a measure of a system's ability to make payments on its existing and projected debt service and compares the system's net operating revenues against its debt service payments.

While variations in revenues and expenditures will result in varying DSCRs in given years, the Department generally targets a DSCR of 1.5x, a financial target that gives the Department the ability to maintain high credit quality leading to continued low borrowing rates. Additionally, the Department's bond covenants require it to maintain a DSCR of 1.2x for its senior debt and 1.1x for its aggregate debt. The projected DSCRs over the PUD Outlook period are displayed in Table 3.3. In FY 2025, the DSCR is projected to dip below target level but is forecasted to return to target levels by FY 2028. The 1.68X coverage ratio in Fiscal Year 2029 is expected to decrease, all else being equal, when the Pure Water Phase 2 and Dams financing plans are complete, since they will likely result in additional long-term debt being issued. However, it is important for rates to continue to increase to support the debt service for Pure Water Phase 2 and loans supporting the City's dams and reservoirs.

Table 3.3 - Projected Debt Service Coverage Ratios ($ in Millions)						
	FY 2024	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Net Systems Revenues	$155.4	$177.9	$203.9	$207.7	$274.8	$318.8
Debt Service	$101.4	$124.4	$146.3	$152.7	$183.3	$190.0
Debt Service Coverage Ratio	**1.53 x**	**1.43 x**	**1.39 x**	**1.36 x**	**1.50 x**	**1.68 x**

Water System Revenues

The primary revenue sources of the Water Utility Fund are generated from water sales, capacity fees, interest earnings, and rental income. This section discusses each revenue category, and includes a description of revenue sources, projected growth rates, and a discussion of future revenue streams and how they impact the Water Utility Fund.

Water Sales

Background. The majority of Water Utility Fund revenue is generated from water sales which makes up over 90% of the Water Utility Fund's total revenue. City utility bills include water and sewer charges and storm drain fees, but only receipts from water charges are revenues to the Water Utility Fund. The water charge is comprised of two parts: a fixed monthly service charge and a commodity charge that is based on the volume of water used. The fixed service charge is based on the size of a customer's meter, which provides an approximation of the amount of water the customer could have delivered to the customer's property.

The commodity charge is determined using a set rate based upon each hundred cubic feet (HCF), or approximately 750 gallons, of water consumed. The City has a tiered commodity charge structure for single family residential (SFR) customers that is broken down by water usage within each rate block. The remaining retail customers – Multi-Family Residential (MFR), Non-Residential, Temporary Construction and Irrigation – are billed under a uniform commodity charge for their respective customer classification.

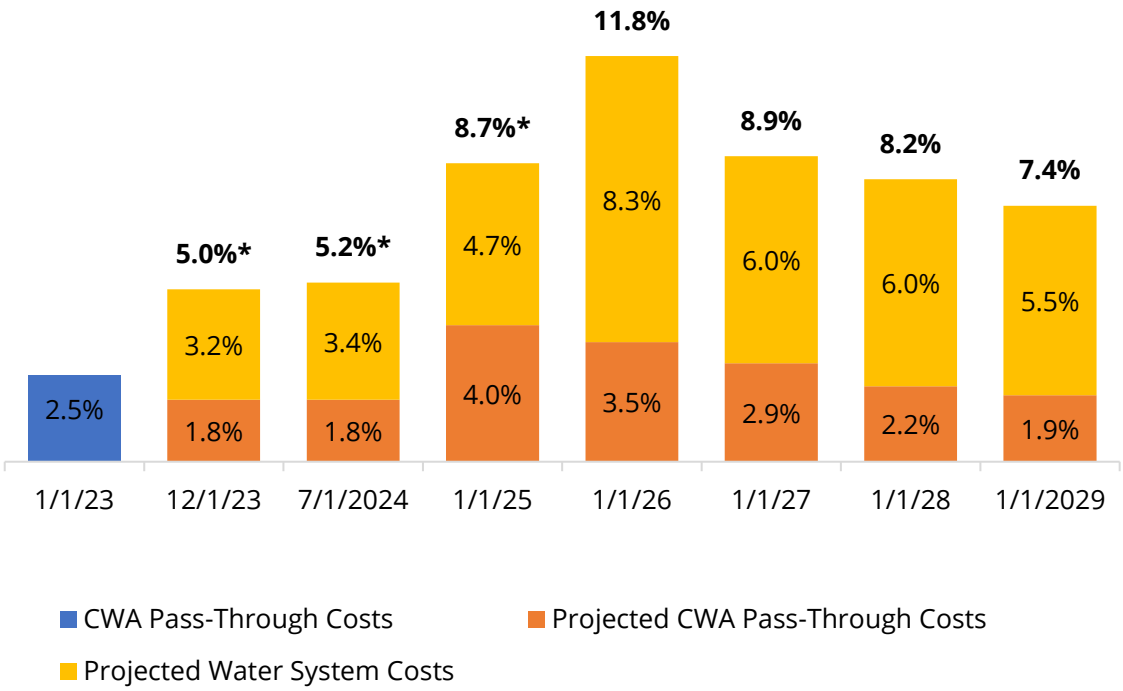
Water Service Charge Rate Increases PUD last released a Water System cost of service study in 2022, which produced a two-year rate case (the 2023 Rate Case). The 2023 Rate Case was based on comprehensive forecasted annual operations and maintenance costs, capital cost expenditures and purchased water costs that increase every January 1 from CWA. The 2023 Rate Case covered FY 2024 through FY 2025 and was approved by the City Council in September 2023. Council approved a maximum authority of rate increases of 5% December 1, 2023, 5.2% July 1, 2024 and 8.7% January 1, 2025.

Based on the revenue required to support projected expenditures, fund reserves appropriately, and achieve the target financial metrics, this Outlook includes projected water rate revenue adjustments on a system-wide basis of 11.8% on January 1, 2026 2, 8.9% on January 1, 2027, 8.2% on January 1,

2028 and 7.4% on January 1, 2029. Actual rate increases and the individual customer class impact will be subject to finalization of the cost of service study for future rate periods and City Council consideration.

Roughly one half to one third of these rate adjustments are necessary to pay for increased CWA water rates, as indicated in Figure 4.1. Increases in revenue necessary to support PUD water operations range from 4.7% to 8.3% in each year.

Figure 4.1 – Water Service Charge Rate Increases



*Rate reflects approved Maximum Authority

Forecast. Table 4.2 presents forecasted revenues for FY 2024 through FY 2029 for revenue from water sales. The growth rates reflect overall revenue growth and include revenue impacts of both proposed rate adjustments. Revenue from the MWD's Local Resources Program, which provides credits for development of local water supplies is tied to the Pure Water production timeline. Upon full production, the incentives are expected to be $11.4 million per year for 25 years.

Table 4.2 - Water Sales Revenue Projections ($ in Millions)							
	FY 2023	FY 2024 Projection	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Potable Water							
YOY Growth	N/A	6.0%	13.2%	8.2%	9.6%	7.8%	7.2%
Projection	$537.1	$569.2	$644.5	$697.1	$763.8	$823.2	$882.4
Other Water Sales							
YOY Growth	3.7%	18.5%	11.3%	3.7%	21.0%	11.0%	3.6%
Projection	$33.7	$39.9	$44.4	$46.1	$55.8	$61.9	$64.1

Economic Trends. While PUD continues to promote water conservation, the demand for water within the City's service area is projected to increase as the population continues to grow and development expands over the long-term. The City updated its Urban Water Management Plan (UWMP) in 2021, which projected single-family residential water use to increase by 0.62% over the period of 2025 to 2045. Growth is anticipated in the multi-family residential water use as forecasted in the UWMP which reflects an increase by 34% over the period of 2025 to 2045. The average demand over the last five years has not grown significantly, with some small growth in demand largely caused by increases in population.

On a short-term basis, forecasts due assume a reduction in water usage that was assumed in last year's Outlook. As discussed in the Water Purchases expenditure section, this is due to a reduction in water sales in FY 2023 from above average rainfall forecasted to continue in FY 2024. The Outlook assumes a return to a normalized level of sales in Fiscal Year 2025,

Sensitivity Analysis. While these projections represent PUD's best estimate of water sales revenues throughout the PUD Outlook period, actual results will depend on the factors discussed above. Assuming the above rates, every 1,000 acre foot reduction in water sales volumes/sales, revenues could decrease by approximately $3 million, which would require an approximately 1% increase in the rate levels projected in this Outlook.

Water Capacity Charges

Background. Capacity charges are development fees included in permits for new or expanded water connections and are based on an estimate of the increase in water consumption as measured by equivalent dwelling units (EDUs). Capacity charge proceeds are used to construct, improve, and expand the Water System to accommodate the additional business of such added dwellings or commercial or industrial units.

Pursuant to State law, capacity charges can be used only to pay costs associated with capital expansion, bonds, contracts, or other indebtedness of the Water System related to expansion.

Because capacity charges are primarily collected on the issuance of new construction permits within the City, revenues obtained from such charges vary based upon construction permitting activity.

In February 2007, the Mayor and City Council approved increasing the water capacity charge by 19.5% to $3,047 per EDU, which was estimated to provide full cost recovery for Water System expansion projects.

AB 2536 (2022) "Development fees: impact fee nexus studies: connection fees and capacity charges" became law on July 19, 2022. This bill increased the requirements for connection and capacity charges effective January 1, 2022, to be in alignment with other development impact fees, which have more specific reporting and project listing requirements than what had previously required. The City had planned to include a proposal to increase capacity charges in the COSS, but as a result of these new requirements, adjustments to water capacity fees will be addressed in a future nexus study.

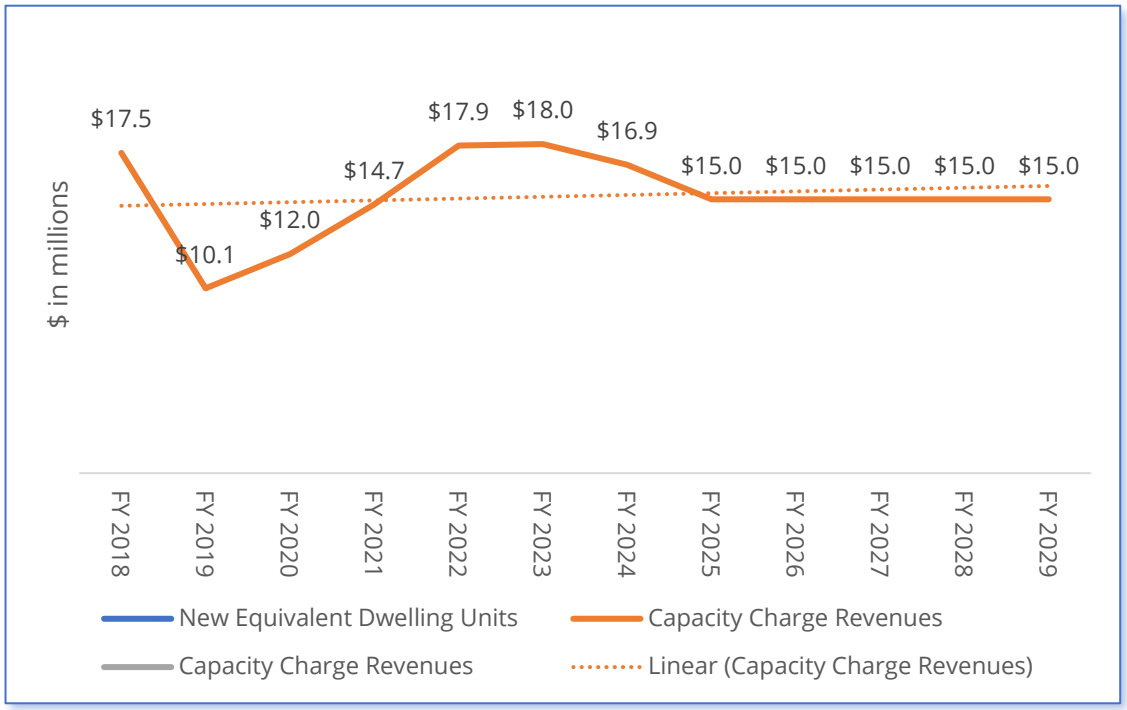
Forecast. Table 4.3 displays the FY 2023 unaudited actuals and projections through FY 2028 for water capacity charges. This revenue source represents less than 2% of the Water System's overall revenue receipts.

Table 4.3 - Capacity Charges ($ in Millions)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	(6.3%)	(11.2%)	0%	0%	0%	0%
Projection	$18.0	$16.9	$15.0	$15.0	$15.0	$15.0	$15.0

Projected revenues for capacity charges are determined using conservative growth estimates, primarily relying on historical spending patterns observed from FY 2018 through FY 2022, as illustrated in Figure 4.4. During the period spanning FY 2016 to FY 2020, the average capacity fee revenue stood at approximately $15.0 million. The projections are based on the assumption that development activity may slow down in FY 2024 and FY 2025. It's important to note that this revenue projection follows a distinct trend compared to the wastewater forecast. This distinction arises from the fact that water revenue tends to exhibit greater variability compared to wastewater, mainly due to factors like outdoor water usage. Consequently, changes in capacity revenue have a relatively milder impact on rate adjustments, allowing for a more gradual decline in revenue projections compared to what is indicated in the wastewater forecast.

Figure 4.4 - Water Capacity Charge Revenue Forecast



Economic Trends As previously mentioned, water capacity charges are primarily based on new water connections related to new construction and are directly influenced by population growth and residential and commercial development. The current population for the City of San Diego is 1.4 million. San Diego's population grew by approximately 7% between the 2000 Census and the 2010 Census and 6.6% between 2010 and 2020. As population continues to change in the region, the demand for housing is also expected to change in order to meet population demands.

According to SANDAG's 2013 study, multi-family units will make up over half of the new housing that will need to be built over the next 30 years. As a result, SANDAG forecasts that 40% of the total units in the region will be multi-family by 2030.

The uncertainty surrounding any recessionary impacts on residential construction contribute to generally flat capacity fee revenue projections over the next five years.

Revenue from Use of Property

Revenue from Use of Property includes revenues from non-agricultural lease of land, such as the San Diego Zoo Safari Park; storage by private companies on utility-owned lands; agricultural leases of land in San Pasqual Valley; and telecom leases for cell towers on utility-owned properties.

Table 4.5 displays the FY 2023 unaudited actuals and projections through FY 2029 for use of property. This revenue source represents less than 1% of the Water System's overall revenue receipts.

Table 4.5 - Revenue from Use of Property ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	0%	0%	0%	0%	0%	0%
Projection	$7.0	$7.0	$7.0	$7.0	$7.0	$7.0	$7.0

Actual revenues in this category can vary slightly each year as new lease agreements are entered into while other lease agreements expire; however, the projections are kept flat.

Other Revenue

The Other Revenue category includes refunds or reimbursements from private parties for damages to utility-owned equipment, buildings, or fire hydrants; refunds from vendors; reimbursements from services provided to other City departments/funds; receipts from the sale of recycled materials or equipment (paper, computers, metal); grant revenue; and interest earnings on pooled investments.

Table 4.6 displays the FY 2023 unaudited actuals and projections through FY 2029 for the other revenue category. This revenue source traditionally represents 2.0% of the Water System's overall revenue receipts.

Table 4.6 - Other Revenue ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	6.2%	3.2%	(5.4%)	(8.5%)	5.0%	3.9%
Projection	$48.4	$51.4	$53.1	$50.2	$45.9	$48.2	$50.1

Other revenue in FY 2026 through FY 2026 is projected to decline due to higher expenses than forecast in the 2023 rate study resulting in less unrestricted cash, decreasing interest earning. Changes from year to year are largely due to changes to projected interest income, as well as charges for services, including storage and transportation agreements with other local agencies.

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Other Assumptions and Considerations

Litigation

The City's Water System is currently involved in litigation in *Patz v. City of San Diego* regarding the use of tiered water rate structure for single-family residential customers. The lawsuit alleges that the City's rates for water service do not reflect the actual cost to provide the water service to each parcel in violation of Article XIIID of the California Constitution (Proposition 218). The City contends that its water rates are strictly based on cost of service principles and compliant with Proposition 218.

On September 13, 2021, the court ruled in favor of plaintiffs on the Proposition 218 claim and on March 25, 2022 the petitioner class was awarded $79.5 million in refunds based on estimated overcharges from August 14, 2014 to March 31,2022. In addition, the class was also awarded pre and post judgement interest and refunds would increase $644,000 each month until the rates were put in compliance with the order. The City disagrees with the ruling and filed an appeal on April 1, 2022. Single family residences are the largest customer class of the Water System and a ruling against the City will have a wide-ranging impact of the rates charged to that customer group moving forward. The PUD Outlook has assumed the liability through the end of Calendar Year 2023, when new rates go into effect that are not covered under the litigation. The City expects a ruling on the appeal in Fiscal Year 2024.

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WASTEWATER SYSTEM

The Wastewater System is comprised of the Metropolitan and Municipal Utility Funds, collectively known as the Sewer Revenue Funds. This section discusses the Wastewater System's baseline expenditure projections, upcoming critical operational expenditures, projected capital improvement program needs and financing options for the next five years. Wastewater System revenues are also discussed.

Wastewater System Expenditures

The Wastewater System expenditures are comprised of both personnel and non-personnel expenditures including debt service and other non-discretionary payments. The following sections will discuss in detail each expenditure category and will include a description of the expenditures, projected growth rates, and a discussion of critical strategic expenditures.

The following are some of prior strategic critical expenditures that are now included in the baseline for FY 2025-2029:

- Cost increases for Treatment Chemicals
- Positions to support system resiliency; and
- Positions and resources for customer service support.

Personnel Expenditures

Personnel expenditures include the salaries and wages category as well as fringe benefits category. The salaries and wages category is comprised of regular salaries and wages, special pays, overtime, step increases, and vacation pay in lieu, whereas the fringe benefits category includes pension payments or Actuarially Determined Contribution (ADC), flexible benefits, retiree health or Other Post-Employment Benefits (OPEB), workers' compensation, Supplemental Pension Savings Plan (SPSP), and other fringe benefits. The FY 2024 Adopted Budget for the Sewer Funds salaries, wages, and fringe benefits was $119 million and included 952.4 FTEs. Table 5.1 displays the FY 2023 unaudited actuals and projections through FY 2029 for personnel expenditures.

Table 5.1 – Baseline Personnel ($ in Millions)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Salary and Wages	$64.5	$74.2	$78.4	$82.3	$84.8	$87.4	$90.1
Fringe	$42.3	$44.8	$46.6	$48.5	$49.5	$50.4	$51.5

The salary and wages category incorporates only those expenditures associated with staff included in the FY 2024 Adopted Budget. Position adds identified for FY 2024-2028 to support critical expenditures are discussed below. Consistent with the General Fund, the PUD Outlook accounts for all current negotiated MOUs and an assumed 3.05 percent salary increase for pending MOU negotiations in

future years; 3.05 percent is aligned with the assumptions included in the San Diego City Employees' Retirement System (SDCERS) Actuarial Valuation Report as of June 30, 2022. Any future negotiated general wage increases that deviate from the 3.05 percent assumption will impact future year personnel costs included in the outlook period and increase the rate revenue requirement.

The Department's fringe budget has been increased based on its past proportional relationship between it and salaries and wages category.

Critical Strategic Expenditures

Table 5.2 - Critical Strategic Expenditure - Personnel

Request	FTE/Exp	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Pure Water Phase 1 Operations	FTE	1.76	176	1.76	2.76	2.76
	Expense	$195,377	$200,560	$205,901	$331,197	$340,082
Regulatory Compliance and Equipment	FTE	2.25	2.25	2.25	2.25	2.25
	Expense	$250,650	$257,303	$264,158	$271,223	$278,504
Street Preservation Ordinance	FTE	5.83	11.13	16.43	21.73	21.73
	Expense	$495,435	$942,528	$1,411,837	$1,904,375	$1,952,879
	Total FTE	**9.84**	**15.14**	**20.44**	**26.74**	**26.74**
	Total Expense	**$941,462**	**$1,400,390**	**$1,881,897**	**$2,506,796**	**$2,571,465**

Table 5.2 identifies increased personnel expenditures, including fringe benefits, for the addition of staff to support various key Department functions. This includes laboratory staff and industrial discharge staff for regulatory compliance and labor force staff for street repaving program needs.

The identified funding needs for the Pure Water Phase 1 are for the operation and maintenance of new and expanding Pure Water facilities under Phase 1. The Wastewater System is responsible for all work done before secondary treatment or ocean discharge standard of treatment. Pure Water positions are gradually being ramped up so personnel are fully trained to operate and maintain the facilities when they come online. A total of 2.76 FTEs from the Wastewater System (of 22.00 total FTEs) are anticipated to be required when Pure Water becomes fully operational. These estimates will be further refined as the City gets closer to bringing the facilities online.

Supplies

The Supplies category includes costs for chemicals, machine parts, electrical materials, laboratory supplies, and pipe fittings. Table 5.3 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Supplies category.

Table 5.3 - Baseline Supplies ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	6.0%	2.8%	2.8%	2.8%	2.8%	2.8%
Projection	$43.2	$45.8	$47.1	$48.4	$49.8	$51.1	$52.6

The Supplies category includes various components. The Supplies baseline projection is increased by the forecasted growth in the CPI to account for the average change of costs over the outlook period; the forecast for CPI growth is based on the UCLA Anderson October 2023 Economic Forecast, with a small increase specifically for chemicals. In prior fiscal years, the City saw a sharp increase in key chemicals, including chlorine, which has driven large growth in the Department's supplies costs. This rate of increase slowed in Fiscal Year 2023 and Fiscal Year 2024, but future increases could exceed the level of expenses assumed in this Outlook. Given the importance of these chemicals in the treatment process, the Department would prioritize the use of other resources to ensure sufficient supplies of treatment chemicals were available in any applicable fiscal year and will continue closely monitoring these costs.

Critical Strategic Expenditures

Table 5.4 - Critical Strategic Expenditures - Supplies ($ in Millions)					
Request	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Street Preservation Ordinance	$5,000	$10,000	$15,000	$20,000	$25,000
Total Expense	**$5,000**	**$10,000**	**$15,000**	**$20,000**	**$25,000**

Table 5.4 identifies increased expenditures associated with the Street Preservation Ordinance. These expenditures are necessary for supplies needed for trench restoration and repair and include asphalt/concrete and slurry seal.

Contracts

Contracts are a non-personnel expense category that includes the cost of professional consultant fees, general government services billing, rent, city services billings, fleet vehicle usage and assignment fees, contractual services, and other contractual expenses. Table 5.5 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Contracts category.

Table 5.5 - Baseline Contracts ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Growth Rate	N/A	19%	(0.8%)	3.7%	2.8%	2.8%	2.8%
Projection	$88.1	$105.0	$104.2	$108.1	$111.1	$114.2	$117.4

The Contracts & Services baseline projection is increased by the forecasted growth in the CPI to account for the average change of costs over the outlook period; the forecast for CPI growth is based on the UCLA Anderson October 2023 Economic Forecast. Adjustments are based on known and anticipated events, including prior critical strategic expenditures and prior spending levels. The 1.1% growth rate for Fiscal year 2024 will ultimately be dependent on actual level of expenditures in Fiscal Year 2024, which will be re-forecasted in the Mid-Year Monitoring Report.

Critical Strategic Expenditures

Table 5.6 - Critical Strategic Expenditure - Contracts ($ in Millions)					
Request	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Pure Water Phase 2	$1,520,000	$1,520,000	$1,520,000	$0	$0
Street Preservation Ordinance	($285,739)	($545,939)	($817,876)	($757,876)	($697,876)
Total Expense	**$1,234,261**	**$974,061**	**$702,124**	**($757,876)**	**($697,876)**

Table 5.6 identifies increased contractual expenditures associated with support for Phase 1 of the Pure Water Program as it comes online and then decreases in the outer years reflecting movement of resources to Phase 2 of Pure Water. These are updated estimates that were included in last year's Outlook.

The Street Preservation Ordinance request includes contract repair funding to address trench restoration and repairs. The bottom-line reductions in costs are associated to the decreases in charges from the Transportation Department, as work moves in-house, which are categorized as internal contract charges. The Outlook assumes PUD fully in-housing trench repairs by the end of Fiscal Year 2027.

Information Technology

The Information Technology category includes both discretionary expense and non-discretionary allocations. The Information Technology category includes the costs related to hardware and software maintenance, help desk support, and other information technology (IT) services. Table 5.7 displays

the FY 2023 unaudited actuals and projections through FY 2029 for the Information Technology category.

Table 5.7 - Baseline Information Technology ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	51.8%	2.9%	2.8%	2.8%	2.8%	2.8%
Projection	$11.9	$18.0	$18.6	$19.1	$19.6	$20.2	$20.7

The projections include estimates of IT costs and systems critical to treatment plant and distribution system operations, which accounts for the majority of the increase between Fiscal Year 2023 and Fiscal year 2024. The baseline discretionary costs are then increased by the forecasted growth in the CPI to reflect the average change of costs over the outlook period; the forecast for CPI growth is based on the UCLA Anderson October 2023 Economic Forecast. The majority of the growth is seen in centralized IT costs maintained by the Department of IT also includes PC replacement costs that spike in Fiscal Year 2024 and 2025.

There are no critical strategic adds for Information Technology for this outlook period.

Energy & Utilities

The Energy & Utilities category includes costs for electricity, water services, fuel, and other utility and energy expenses. Table 5.9 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Energy & Utilities category.

Table 5.9 - Baseline Energy & Utilities ($ in Millions)							
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	14.4%	(3.0%)	5.0%	3.6%	3.6%	3.6%
Projection	$31.8	$36.4	$35.3	$37.1	$38.4	$39.8	$41.2

The Energy & Utilities category includes various costs including prior critical strategic expenditures. The majority of the rates for each category are based on the Annual Energy Outlook 2023 Report prepared by the U.S. Energy Information Administration and forecasted CPI growth based on the UCLA Anderson October 2023 Economic Forecast. Fuel growth rates are developed by the General Services Department. The Sustainability and Mobility Department prepared the forecasts for electric and gas services, The General Fund Five Year Outlook expands on how these forecasts were developed. The sewer system sees a spike in energy usage in FY 2024, which the department expects to decrease in Fiscal Year 2025, with the expected decrease in wet-weather flows as the system sees less rain.

Critical Strategic Expenditures

Table 5.10 - Critical Strategic Expenditures - Energy & Utilities ($ in Millions)					
Request	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Pure Water Phase 1 Operations	$0	$0	$1,000,000	$1,000,000	$1,000,000
Total Expense	**$0**	**$0**	**$1,000,000**	**$1,000,000**	**$1,000,000**

Table 5.10 identifies increased energy and utility expenditures for the Wastewater System. Expenditures for Pure Water are necessary as new and expanding Pure Water facilities come online and include expenditures for the Morena Pump Station, North City Water Reclamation Plant, and the Metropolitan Biosolids Center.

Other Expenditures

Expenses included in this category are transfers to other funds, capital expenses, and other miscellaneous expenditures. Debt service obligations, including bond and State Revolving Fund (SRF) loan payments, are excluded from this category and are discussed in detail within the Wastewater System Capital Improvements Program section of this report. Table 5.11 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Other Expenditures category.

Table 5.11 - Baseline Other Expenditures ($ in Millions)							
	FY 2023	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
YOY Growth	N/A	(1.9%)	0%	0%	0%	0%	0%
Projection	$5.0	$4.9	$4.9	$4.9	$4.9	$4.9	$4.9

No growth rate was applied to Other Expenditures as the expenses in this category do not typically recur on an annual basis. Due to the small expenses in this category, minor changes under $100,000, such as equipment purchases, can result in large percentage changes. The current forecasts do not consider the additional costs associated with converting PUD fleet to electric; the Department is currently working on developing that forecast. which requires coordination with the General Services Department for charging infrastructure and vehicle procurement.

Critical Strategic Expenditures

Table 5.12 - Critical Strategic Expenditure – Other Expenditures					
Request	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Pure Water Phase 1 Operations	$600,000	$600,000	$0	$0	$0
Street Preservation Ordinance	$19,000	$38,000	$57,000	$76,000	$95,000
Total Expense	**$619,000**	**$638,000**	**$57,000**	**$76,000**	**$95,000**

Table 5.12 identifies increased capital equipment expenditures for setting up the Pure Water Phase 1 operations and resources to address enhanced testing requirements, replacement of equipment for regulatory compliance and a preliminary estimate to replace the ocean monitoring vessel.

Street Preservation Ordinance equipment needed for the trench restoration and repair program.

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Reserves Contributions

The City has established accounts within the Sewer Revenue Fund for three reserve funds: The Emergency Operating Reserve (Operating Reserve), the Rate Stabilization Fund Reserve (Rate Stabilization Fund), and the Emergency Capital Reserve (Capital Reserve). The Department operates these reserve funds in accordance with the City's reserve policy. At the end of FY 2024, the Sewer Revenue Fund is estimating total reserves of approximately $142.4 million. Table 5.13 details reserve targets and projected funding levels. Reserves are projected to be fully funded throughout the PUD Outlook period, with the exception of the rate stabilization reserve.

The PUD Outlook projects use of the Rate Stabilization Reserve Fund in FY 2023 through FY 2026. In FY 2026, rate stabilization reserve is projected to dip below target level and expected to return to target levels by FY 2030. The use of the reserves allows for a more gradual increase in rate increases than would otherwise be required to meet financial targets. In accordance with the reserve policy, a plan to address this dip below the target will be included in the next COSS.

Table 5.13 - Reserve Target Levels and Estimated Funding Levels ($ in Millions)

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating Reserve Target ($)	$63.1	$64.5	$66.8	$68.7	$70.6	$72.7
Operating Reserve Level ($)	$63.1	$64.5	$668	$68.7	$70.6	$72.7
Rate Stabilization Fund Target ($)	$19.6	$20.8	$20.9	$21.7	$22.9	$24.1
Rate Stabilization Fund Level ($)	$69.3	$39.3	$39.3	$19.3	$17.9	$14.1
Capital Reserve Target ($)	$10.0	$10.0	$10.0	$10.0	$10.0	$10.0
Capital Reserve Level ($)	$10.0	$10.0	$10.0	$10.0	$10.0	$10.0

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Wastewater System Capital Improvements Program

The Wastewater System CIP is established to address current and future system needs in a cost-effective manner. The program's principal drivers are:

- continuing the implementation of the Pure Water Program;
- modernization of key equipment for Pump Station 1, Pump Station 2 and Point Loma Treatment plant
- improving infrastructure to reduce emergency spills and repairs;
- improving process technology;
- Support for SAP Modernization and smart meters
- ongoing replacement and rehabilitation of 40 miles of sewer pipelines each year.

Infrastructure improvements generally consist of wastewater treatment plants, pipelines, pump stations, and projects required by or related to applicable State and Federal regulations and orders. The Wastewater System's CIP for this PUD Outlook period includes improvements to the Wastewater System infrastructure, as well as Phase 1 and Phase 2 of the multi-year Pure Water Program.

Table 6.1 shows categories of projects with the estimated cost of expenditures contained in the CIP for the period of FY 2025 through FY 2029. The City's Adopted Budget includes multi-year project pages for individual capital projects. The PUD Outlook includes a high-level summary of the CIP to understand the financial impact on the Wastewater System; the City's Five-Year Capital Infrastructure Planning Outlook provides additional information on the capital infrastructure needs for the entire city.

Table 6.1 - Summary of Projected CIP Projects
Fiscal Year 2025-2029
($ in Millions)

Wastewater CIP Projects	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Outlook Total
Pure Water Program	$86.7	$230.6	$166.0	$43.6	$20.0	$16.9	$17.2	**$263.6**
Trunk Sewers	$6.2	$13.6	$21.1	$23.7	$34.7	$52.0	$49.5	**$181.0**
Municipal Pump Station	$0.4	$0.6	$0.5	$1.5	$1.8	$6.6	$10.2	**$20.6**
Sewer Pipelines	$69.7	$85.4	$144.3	$88.8	$97.2	$90.1	$27.3	**$447.7**
Miscellaneous Projects	$4.8	$3.0	$5.1	$8.3	$22.1	$28.0	$14.0	**$77.6**
SDG&E Relocation	$14.7	$0	$0	$0	$0	$0	$0	**$0**
Sewer Treatment Plants	$20.8	$27.0	$38.1	$17.7	$18.5	$15.2	$7.2	**$96.7**
Large Sewer Pump Station	$2.8	($0.8)[5]	$7.6	$7.6	$16.8	$16.4	$23.7	**$72.3**
Total	**$206.0**	**$359.3**	**$382.7**	**$191.3**	**$211.2**	**$225.2**	**$149.1**	**$1,159.4**

[5] Adjustment to account for prior year activity

Capital Improvements Program (CIP) Financing Plan

Table 6.2 below describes the projected sources of funds to finance the Water System CIP during the PUD Outlook Period for FY 2025 through FY 2029; FY 2023 and FY 2024 activity are provided for reference and are not a part of the PUD Outlook Period.

PUD anticipates incurring approximately $670.0 million of additional debt obligations for the Baseline Wastewater System CIP and $353.1 million of additional obligations for the Pure Water CIP over the PUD Outlook period. Additional amounts will be funded with capacity fee revenue and cash. The City is projecting an increase in borrowing rates, due to the Federal Reserve's attempts to combat inflation and the increase in federal borrowing costs for risk-free treasury offerings. Although grant funding is currently not reflected during the PUD Outlook period, the Department is actively applying for additional grant funding and continually searching for new grant opportunities. Any grant funding awarded will be used to offset cash funding. The City has identified many grant opportunities in recent federal bills but, would note a large portion of funding has been restricted to specific agencies, for smaller jurisdictions or grant awards being capped at relatively low dollar values. Please note fiscal years that show the use of negative cash reflect reimbursement of prior cash expenditures from grant, bonds, or loans.

Table 6.2 - Revenues Sources for the Wastewater Capital Improvement Program ($ in Millions)

Revenue Sources	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Outlook Total
Pure Water CIP								
SRF Loans	$25.1	$194.5	$202.8	$100.6	$28.8	$14.0	$6.8	**$353.1**
Grants	$0	$0	$0	$0	$0	$0	$0	**$0**
Capacity Fees/Cash	$61.5	$36.1	($36.8)	($57.1)	($8.8)	$2.8	$10.4	**($89.4)**
Total	**$86.7**	**$230.6**	**$166.0**	**$43.6**	**$20.0**	**$16.9**	**$17.2**	**$263.6**
Baseline CIP								
Revenue Bonds	$70.7	$2.5	$210.0	$0	$260.0	$0	$200.0	**$670.0**
SRF Loans	$0.6	$10.7	$0	$0	$0	$0	$0	**$0**
Grants	$0	$0	$0	$0	$0	$0	$0	**$0**
Capacity Fees/Cash	$48.1	$115.5	$6.7	$147.7	($68.9)	$208.3	($68.1)	**$225.8**
Total	**$119.4**	**$128.7**	**$216.7**	**$147.7**	**$191.1**	**$208.3**	**$131.9**	**$895.8**
Total Funding	**$206.0**	**$359.3**	**$382.7**	**$191.3**	**$211.2**	**$225.2**	**$149.1**	**$1,159.4**

The City anticipates financing approximately $667 million of the Wastewater System's portion of Pure Water Phase 1 and $353.1 in the Outlook Period through low-interest State Revolving Fund (SRF) loans which will provide funding through FY 2029. The SRF proceeds will reimburse not only projected expenditures for FY 2025 through FY 2029, but also expenditures from prior years. Because SRF loans are provided on a reimbursable basis, cash is initially used to fund construction before reimbursements are received; this is reflected in the Table 6.2 by negative cash values for Pure Water

financing in FY 2025 through FY 2027. The Department has assumed like with Phase 1 of Pure Water, Phase 2 will initially be cashed funded seeking reimbursement through loans and grants. The Department expects to create a financing plan during the Outlook period, which will be incorporated into future outlooks.

As noted in the discussion of the Water System CIP, SRF loans are one of the least expensive sources of financing available to the City. If the City is not awarded the SRF loans projected over this PUD Outlook period, it will need to seek financing sources that carry higher interest rates.

The City anticipates financing approximately $670 million of the Wastewater System for Baseline CIP through revenue bonds over the outlook period. It is expected that a total of $225.8 million will come from capacity fees and cash on a pay-as-you-go-basis.

Debt Service Coverage Ratio

Similar to the Water System, as the Wastewater System makes use of various financing instruments to fund its capital program, it is important that it maintain good financial metrics to ensure its creditworthiness and its ability to issue debt at advantageous terms. One of the key components to measuring the Wastewater System's credit quality is its debt service coverage ratio (DSCR). The DSCR is a measure of a system's ability to make payments on its existing and projected debt service and compares the system's net operating revenues against its debt service payments.

While variations in revenues and expenditures will result in varying DSCRs in given years, the Department generally targets a DSCR of 1.5x, a financial target that gives the Wastewater system the ability to maintain high credit quality leading to continued low borrowing rates. Additionally, the Department's bond covenants require it to maintain a DSCR of 1.2x for its senior debt and 1.1x for its aggregate debt. Table 6.3 displays the projections through FY 2029.

Table 6.3 - Estimated Debt Service Coverage Ratios ($ in Millions)

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Net System Revenues	$137.5	$152.6	$125.7	$162.1	$159.6	$176.7
Debt Service	$97.7	$112.2	$90.9	$116.6	$114.1	$128.0
Debt Service Coverage Ratio	**1.41 x**	**1.36 x**	**1.38 x**	**1.39 x**	**1.40 x**	**1.38 x**

During the PUD Outlook period the debt service peaks in FY 2029 associated with the debt service on Pure Water and bond offerings during the Outlook Period. In FY 2025, the DSCR is projected to dip below target level but is forecasted to return to target levels after the outlook period. The changes in net system revenue are discussed in the expenditures and revenues sections of this report.

Wastewater System Revenue

The following section provides details of revenue projections for the Sewer Revenue Funds. The primary revenue sources of the Wastewater System are generated from wastewater service charges, capacity fees, interest earnings from the investments of available funds, and revenues from the

Participating Agencies. This section will discuss in detail each revenue category and will include a description of the revenue source, projected growth rates, and a discussion of future revenue streams and how they impact the Wastewater System.

Sewer Service Charges

Background. PUD manages and operates the Wastewater System with funds derived primarily from service charges that are deposited in the Sewer Revenue Funds and are used for the operation, maintenance and capital improvements of the Metropolitan Sub-System and the Municipal Sub-System.

The City establishes fees based upon the costs incurred by the City to collect, treat and discharge wastewater and cover debt service on capital improvements.

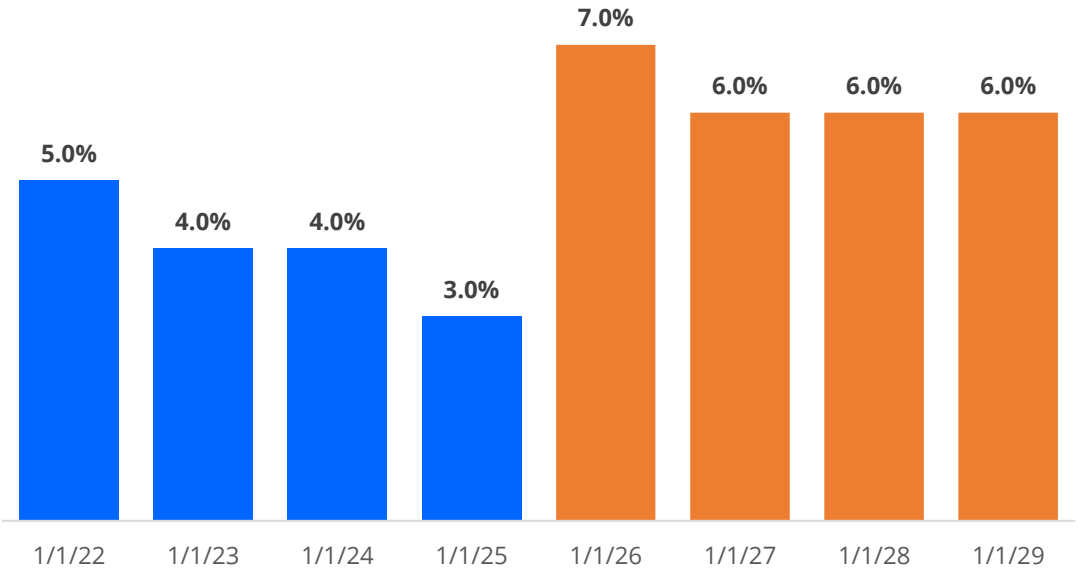
Sewer service charges are based on the characteristics of the wastewater discharged by each wastewater user. All wastewater users are charged based upon the amount of flow, and the solids and organic material which they discharge into the Sewer System. As sewage discharge is not metered, water consumption is used to approximate each customer's sewage flow.

Sewer service charge revenues are comprised of two parts: a base fee and a sewer service charge (flow charge). The base fee is a fixed service fee charged to all customers to recover certain fixed and indirect costs. The flow charge is based on the amount (flow) and strength of the wastewater discharged to the system and incorporates allowances for system return that differs by customer class. This adjustment factor recognizes that not all water consumed discharges to the Wastewater System. The flow charge for both Single Family Residential (SFR) and Multi-Family Residential (MFR) customers include a 95% return to sewer factor, while Commercial/Industrial (C/I) customers average between a 73% and 79% return to sewer factor, which varies depending on the type of business. Additionally, the flow charge for SFR customers is based on the least amount of water used during the previous winter and includes a water usage cap of 20 HCF.

Wastewater Service Charge Rate Increases. The City Council approved the Department's Wastewater Rate Case in September of 2021 (the 2021 Rate Case). The 2021 Rate Case covers increases for four years from January 1, 2022, to January 1, 2025, and was based on a comprehensive forecast of annual operations and maintenance costs and projected capital expenditures. The 2021 Rate Case included a maximum rate increases of 5.0% on January 1, 2022, 4.0% on January 1, 2023, 4.0% on January 1, 2024, and 3.0% on January 1, 2025. This was the first wastewater rate increase in over ten years. The rates are the maximum authority authorized, which each rate being evaluated during the budget process and finalized in November of each year.

The figure below shows the maximum rate increases that have been approved (blue) and proposed (orange)

Figure 7.1 – Wastewater Rate Increases assumed in the Outlook.



Forecast Table 7.2 displays the FY 2023 unaudited actuals and projections through FY 2029 for wastewater sewer service charge revenue. This revenue source represents approximately 72% of the Sewer Revenue Funds' overall revenue receipts for the Outlook Period. The forecast assumes a 0.25% increase in accounts and reflects rate increases beginning January 1, 2023 and each January thereafter through January 1, 2025. The PUD Outlook currently assumes the maximum 4.0% increase is implemented on January 1, 2024. The Department will include in the FY 2025 Budget presentation the level of rate increase assumed for January 2025.

Table 7.2 - Sewer Service Charge Revenue ($ in Millions)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	8.5%	3.7%	5.4%	7.1%	6.3%	6.3%
Projection	$287.5	$311.8	$323.3	$340.7	$364.8	$387.6	$411.9

Economic Trends. Overall demand for sewer services closely tracks with population growth and overall water use. The demand for sewer services within the City's service area is tracked with changes in populations. The average demand over the last five years has not grown significantly, with some small growth in demand largely caused by increases in population. The Wastewater forecasts assumed water reduction shown in the water portion of this report, will primarily come from outdoor water usage, which does not impact expected sewer flows.

Sensitivity Analysis. While these projections represent PUD's best estimate of wastewater revenues throughout the PUD Outlook period, actual results will depend on the factors discussed above. The impact in revenue from potential rate increases ranges from $2 to $4 million for each percent added or subtracted from projected rate increases depending on the year in which sewer service charges are adjusted, for those years outside of the approved rate case through FY 2025.

Wastewater Capacity Charges

Background. Capacity charges are development fees within permits for new or expanded wastewater connections and are based on an estimate of the increase in wastewater discharge as measured by equivalent dwelling units (EDU). Capacity charge proceeds are used to construct, improve and expand the Wastewater System to accommodate the additional impacts of such added dwellings or commercial or industrial units.

As with water capacity charges, wastewater capacity charges can be applied only for the purpose of paying costs associated with capital expansion, bonds, contracts, or other indebtedness of the Wastewater System related to expansion. Because capacity charges are primarily collected on new construction within the City, revenues obtained from such charges vary based upon construction activity.

In September 2021, the City Council approved raising the capacity charge to $5,154 per EDU, which was estimated to provide for full cost recovery for Wastewater System expansion projects.

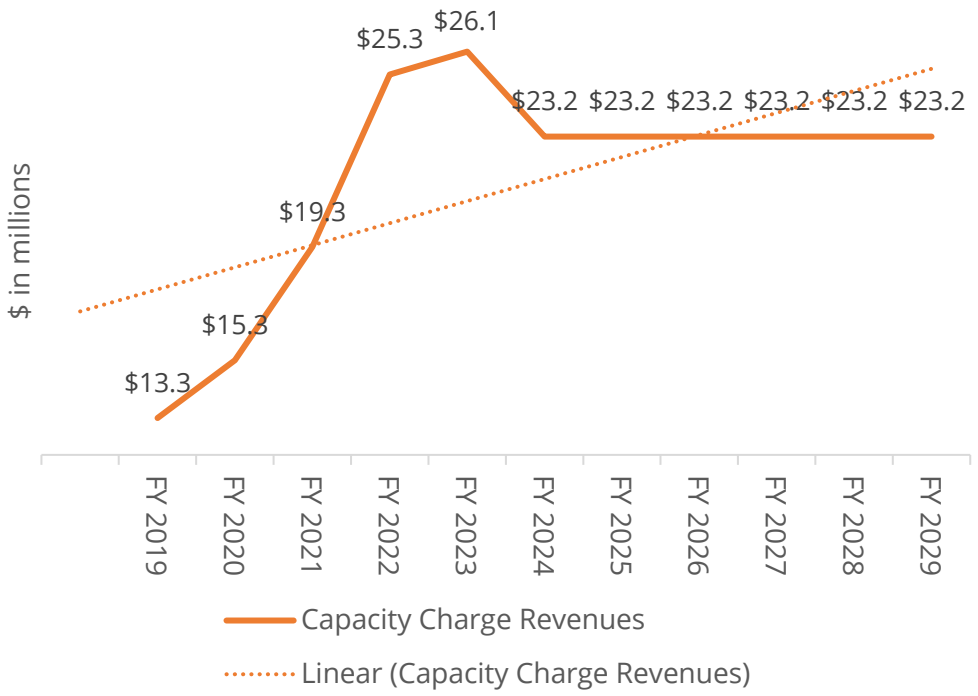
Forecast. Table 7.3 displays the FY 2023 unaudited actuals and projections through FY 2029 for wastewater capacity charge revenue. This revenue source represents approximately 4% of the Wastewater System's overall revenue receipts.

Table 7.3 - Capacity Charge Revenue ($ in Millions)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	(11.4%)	0%	0%	0%	0%	0%
Projection	$26.1	$23.2	$23.2	$23.2	$23.2	$23.2	$23.2

Projected revenues for wastewater capacity charges use conservative growth estimates based on historical trends for the previous five-year period. The fluctuation by year reflects the fluctuations from the past as depicted in Figure 7.4. Because wastewater revenues are less volatile than water revenues, the wastewater system projects a quicker return to historical trends to ensure the volatility of development doesn't result in an over dependence on capacity fee revenue.

Figure 7.4 - Wastewater Capacity Charge Revenue Forecast



Economic Trends. As previously mentioned, wastewater capacity charges are primarily based on new wastewater connections related to new construction and are directly influenced by population growth and residential and commercial development. As discussed in the Water Capacity Charges section of this report, The current population for the City of San Diego is 1.4 million. San Diego's population grew by approximately 7% between the 2000 Census and the 2010 Census and 6.6% between 2010 and 2020. As population changes in the region, the demand for housing and business creation is also expected to change proportionate to population demands. Long-term projections mirror those of Water Capacity Charges by remaining flat. For a more detailed discussion on population and housing growth, refer to the Water Capacity Charges section of this report.

Other Revenue

The primary component of the Other Revenue category is revenue received from Participating Agencies (PAs) for use of the City's wastewater treatment system. As discussed earlier, PAs are other cities and districts that collect wastewater from their customers and send it to the City's wastewater treatment facilities. Currently, each PA pays for its actual impact on the Wastewater System based on a measurement of the strength and flow of wastewater.

Revenue from the PAs averages $85 million per year over the PUD Outlook period, which is $10 million below prior years and represents approximately 73% of revenues in the Other Revenue category. This percentage could change as the East County Advanced Water Purification Joint Powers Authority (ECAWP JPA), which includes the City of El Cajon, County of San Diego and the Padre Dam Municipal Water District, start directing sewer flow to their advanced water purification facility.

Currently, the City and the Metro JPA are in negotiations on modifications to its billing structure. As mentioned before the existing billing methodology is based on the strength and flow of wastewater. However, its been identified that with agencies developing local supply projects, the impact would significantly decrease flows. This decrease in wastewater flows would be during average, dry weather periods; however, during higher volume rainfall events (commonly referred to as "peak" events) a significant increase in wastewater flows would need to be transported by the wastewater system. As such the system needs to be maintained and operated at all times, regardless of low or high volume flows. To address this change in how the system will be utilized, a rate structure that equitably treats all agencies is being considered. Changes to the rate structure are anticipated to be finalized during the Outlook period and any impact would be included in future Outlooks.

The Other Revenue category also includes revenue received for the sale of recycled water, interest on pooled investments, reimbursements from services provided to other City departments/funds, grants revenue, and other miscellaneous revenues.

Table 7.5 displays the FY 2023 unaudited actuals and projections through FY 2029 for the Other Revenue category.

Table 7.5 - Other Revenue Projections ($ in Millions)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
YOY Growth	N/A	(0.7%)	(8.7%)	0.2%	1.8%	(1.2%)	(1.2%)
Projection	$127.5	$126.7	$115.6	$115.8	$117.9	$116.5	$115.1

The decline seen in Fiscal Year 2025 is the modeling the potential impact the East County Advanced Water Purification Joint Powers Authority, which is expected to divert up to 25% of the Participating Agencies flow away from the Metropolitan Sub-System when the Advanced Water Purification goes live during the Outlook period. The Outlook assumes that this action will reduce projected costs attributed to the agencies by $10 million per year. The City is in negotiations with the participating agencies on changes in the billing structure which may lessen or increase these changes in revenue in future years. Negotiations and ratification of the new agreement is expected to be complete before Pure Water Phase 1 is operational.

ATTACHMENT 12

METRO CAPITAL IMPROVEMENT PROGRAM AND FUNDING SOURCES FY 2024 - 1ST QUARTER

THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: December 20, 2023

TO: Metro Technical Advisory Committee (Metro TAC)

FROM: Keli Balo, Interim Deputy Director, Public Utilities Department

SUBJECT: FY2024 Capital Improvements Projects (CIP) Report – 1st Quarter

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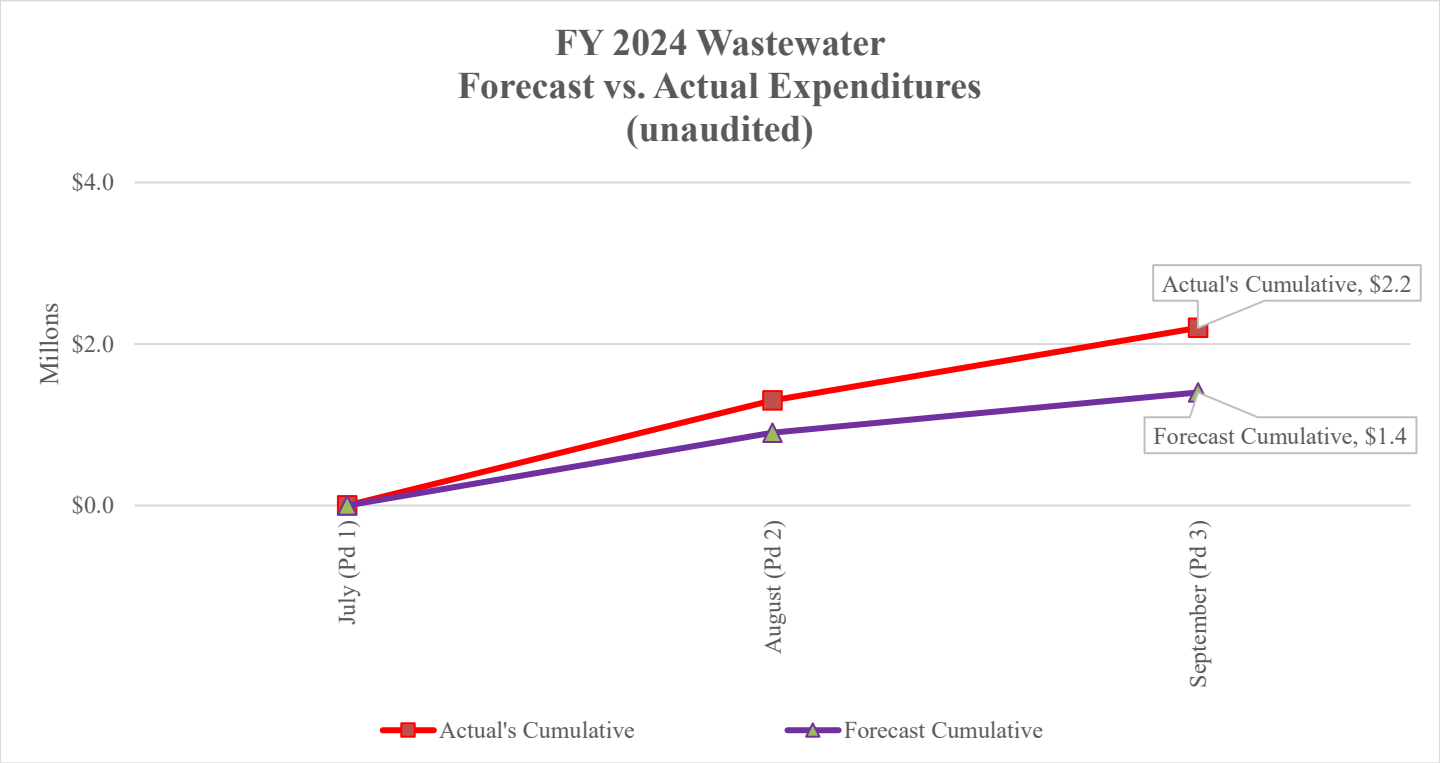
The Public Utilities Department hereby submits the FY2024 CIP updates for the period of July 1, 2023 through September 30, 2023.

The report includes the following:

- Forecast versus actual expenditures report
- Projects expenditure updates

FORECAST VERSUS ACTUAL EXPENDITURES UPDATES



WASTEWATER PROJECTS
FY 2024 - 1st Quarter (July 1, 2023 to September 30, 2023)

NOTES:
- Wastewater projects are separated into Muni and Metro

Note: BO/BU = Beneficial Occupancy/Beneficial Use

WASTEWATER PROJECTS								Design Phase		Construction Phase		
WBS	Project Name	Status	Estimated Total Project Cost	Project to Date Expenditures FY24, Pd 3	Encumbrance at FY24, Pd 3	Project Balance (Revised Proj Cost less Expenditures less Encumbrances)	% Spent (Expenditures /Revised Project Cost)	Design Start	Design Finish	Baseline BO/BU	Current BO/BU	BO/BU Variance
	LARGE SEWER PUMP STATIONS - METRO											
S00312	**PS2 Power Reliability & Surge Protection** Improve power reliability and provide standby power at the pump station, thus protecting against surges during outages and ultimately preventing sewage spills.	Construction	$76,100,800	$68,367,164	$4,900,453	$2,833,183	89.84%	2/1/2011	9/20/2016	10/20/2021	12/31/2024	1168
	OTHER - METRO											
B20001	**STORM WATER DIVERSION AT THE PLWTP** Divert storm water discharge to comply with the Consent Decree to reduce pollutants in the storm water discharges at the Point Loma Wastewater Treatment Plant.	Design	$12,922,725	$1,696,220	$286,744	$10,939,760	13.13%	11/7/2019	10/1/2024	12/30/2022	6/18/2026	1266
B20002	**STORM WATER DIVERSION AT THE SBWRP** Divert storm water discharge to comply with the Consent Decree to reduce pollutants in the storm water discharges at the South Bay Water Reclamation Plant.	Construction	$5,796,442	$1,715,893	$2,907,201	$1,173,348	29.60%	11/1/2019	4/15/2022	9/30/2022	5/1/2024	579
B19197	**STORM DRAIN DIVERSION AT THE MBC** Divert storm water discharge to comply with the Consent Decree to reduce pollutants in the storm water discharges at the Metro Biosolids Center.	Construction	$9,164,552	$2,849,503	$2,895,523	$3,419,526	31.09%	10/1/2019	5/25/2022	11/30/2022	12/31/2024	762
S00319	**EMT&S Boat Dock Esplanade** Construct one (1) acre esplanade between the existing EMTS building and channel.	Bid / Award	$3,400,851	$908,597	$62,961	$2,429,293	26.72%	10/1/2018	10/31/2023	3/25/2022	5/1/2025	1133
	SEWER TREATMENT PLANTS - METRO											
B20137	**PLWTP Scum Injection Concentrators Improvements** Remove existing scum concentrators and replace with scum screens, a decanter and associated piping so that the scum can be injected into the digesters.	Design	$3,357,302	$307,483	$475,395	$2,574,424	9.16%	8/13/2020	5/20/2024	4/19/2024	2/9/2026	661
B20121	**Metro Biosolids Ctr Gas Detection Syst Replacement** Replace the existing gas sensors with the most up-to-date gas sensors and ensure compatibility with the existing system.	Construction	$5,691,771	$880,136	$3,940,035	$871,600	15.46%	8/13/2020	3/28/2023	12/29/2023	8/9/2024	224
B19066	**SBWRP Variable Frequency Drive Repl** Remove and replace two 600 HP Variable Frequency Drive and one 200 HP Variable Frequency Drive at the South Bay Wastewater Treatment Plant.	Construction	$1,359,792	$947,870	$76,596	$335,326	69.71%	1/29/2020	4/2/2020	8/31/2020	7/29/2023	1062
B20122	**SBWRP Reverse Osmosis System** Remove two existing trailer mounted Electrodialysis Reversal (EDR) units and replace the entire EDR system with a two new slab mounted Reverse Osmosis Units.	Design	$10,700,000	$1,119,070	$690,636	$8,890,293	10.46%	9/18/2020	8/30/2024	12/17/2024	6/30/2026	560
B20148	**NCWRP - Chiller Replacement** Replace three (3) chillers and two (2) cooling towers, including the integration into the Distributed Controls System (DCS) at North City Water Reclamation Plant. This project also includes the installation of 65 Linear Feet (LF) of 12-inch Ductile Iron (DI) pipe and 35 LF of 16-inch DI pipe.	Design	$3,705,121	$414,586	$361,027	$2,929,508	11.19%	9/1/2020	3/5/2024	9/30/2022	5/5/2025	948

ATTACHMENT 13

INDUSTRIAL WASTEWATER CONTROL COMMITTEE

METRO TAC AGENDA ITEM 13: METRO TAC PRETREATMENT WORKGROUP MEMBERS		
Agency	**Past Representative(s)**	**Current Representative(s)**
Chula Vista	Beth Gentry - Chair	Michael Benoza ?
Coronado	Leon Firsht	Leon Firsht
El Cajon	Blake Behringer	Blake Behringer
	Mike James	Mike James
	Yazmin Arellano	Yazmin Arellano ?
La Mesa	Hamed Hashemian	Joe Kuhn
	Joe Kuhn	
Lemon Grove	Izzy Murguia	Izzy Murguia
Padre Dam	Mark Niemiec	Peejay Tubongbauna
	Paul Clarke	Paul Clarke
Poway	Elisa Marrone	Alisa Nichols
SD County	Peejay Tubongbanua	NONE
City of SD	Joy Newman	Lisa Celaya ?

Action Required:

1. Update Workgroup membership for 2024.
2. Update Metro TAC representatives for 2024. Please send First and Alternate to Board Secretary @ lorimetrojpa@gmail.com.