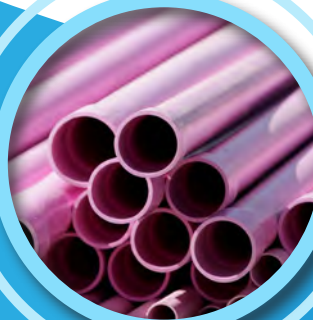


2023-2024

OPERATING BUDGET



WEST BASIN MUNICIPAL WATER DISTRICT

17140 S. AVALON BLVD., CARSON, CA 90746

WESTBASIN.ORG





West Basin Municipal Water District

Fiscal Year 2023-24 Budget

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GOVERNMENT FINANCE OFFICERS ASSOCIATION

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Budget Presentation
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**West Basin Municipal Water District
California**

For the Fiscal Year Beginning

July 01, 2022

Christopher P. Morill

Executive Director

*California Society of Municipal
Finance Officers*

Certificate of Award

***Operating Budget Excellence Award
Fiscal Year 2022-2023***

Presented to the

West Basin Municipal Water District

For meeting the criteria established to achieve the CSMFO Excellence Award in Budgeting.

February 10, 2023



Scott Catlett

Scott Catlett
2022 CSMFO President

James Russell-Field

James Russell-Field, Chair
Recognition Committee

Dedicated Excellence in Municipal Financial Reporting



GENERAL MANAGER'S MESSAGE





General Manager's Message

June 26, 2023

To the Honorable Board of Directors and Customers of West Basin Municipal Water District:

It is my pleasure to present West Basin Municipal Water District's (West Basin) budget for the Fiscal Year (FY) beginning July 1, 2023 and ending June 30, 2024 (FY 2023-24). Each year, staff carefully considers key drivers in its budget development process to ensure the District's mission, priorities set by our Board of Directors (Board), strategic goals, and commitments are supported through the appropriate setting of rates and charges.

This message articulates the priorities and challenges facing West Basin in the coming fiscal years and describes the short-term factors that influenced the strategic decisions made during the development of the FY 2023-24 budget. This message also provides a summary of FY 2023-24 revenues and expenditures, the resulting financial position, and the major changes in this budget compared to the FY 2022-23 budget.

Developing a budget is an important component in West Basin's financial planning process. Each fiscal year, there are multiple challenges and objectives that need to be considered and communicated to interested parties, including bond holders, credit rating agencies, customers, and the public. For the development of the FY 2023-24 budget, West Basin staff presented its proposed budget in a series of in-person and publicly-hosted virtual workshops to the Board of Directors (Board).

The total revenue for the FY 2023-24 budget is \$244.1 million, and reflects an increase of \$8.2 million (3.5%) from the prior fiscal year. The sale of recycled water and external funding are the two largest contributors to higher budgeted revenues, which are partially offset by a reduction in imported water revenues.

Although the budget for recycled water sales is relatively flat at 33,032 Acre Feet (AF) for FY 2023-24 as compared to 32,643 AF for FY 2022-23, West Basin adopted recycled water rates to increase according to customer agreements, or to align more closely to the unit cost to produce recycled water, depending on the type of recycled water. The result is an increase of \$3.6 million in operating revenue.

Other revenues include approximately \$7.3 million in customer and capital grant funding for capital improvement projects, and another \$1 million for estimated external contributions for certain technical planning projects.

The Metropolitan Water District of Southern California (MWD) adopted a two-year budget on April 12, 2022 for calendar years (CY) 2023 and 2024. MWD's adopted rates become effective on January 1 of each CY and are passed through to West Basin's customers. The combination of a MWD Tier 1 imported water rate adjustment of \$47/AF, an effective increase in the MWD Readiness-to-Serve (RTS) rate of \$25/AF, and a 7% or \$18/AF increase by West Basin to its Reliability Service Charge (RSC), results in a \$2.9 million decrease in budgeted imported water revenues. More information regarding the MWD Tier 1 rate adjustment and West Basin's RSC is included in the operating expenses summarized below.



The budgeted total operating expense for FY 2023-24 is \$244.1 million, representing an increase of \$8.2 million from the prior fiscal year. An expected change in future revenue streams due to reduced demand of imported water and the eventual elimination of the standby charge, makes finding ways to streamline operations, create efficiencies, and reduce or maintain costs critical elements in the budget process. Although costs were reviewed and evaluated to reduce, eliminate, or delay proposed expenditures during the FY 2023-24 budget process, budgeted expenditures increased to meet the Board's strategic goals and commitments to our customers. One of the most significant increases in expenditures is in the costs to produce recycled water for \$5.3 million.

The Recycled Water Operations program was especially impacted by unavoidable cost increases. Chemical cost is budgeted to increase by \$135/ AF, or a \$4.4 million dollar increase in FY 2023-24. Utilities, which includes the cost of electricity, have also seen an increase of approximately \$15/AF.

The Technical Planning program provides strategic, long-term planning of projects in support of West Basin's mission, and Water for Tomorrow program goals of: protecting existing water supply; diversifying and augmenting the supply portfolio; and innovating to prepare for the future. The FY 2023-24 Technical Planning program budget includes expenditures of \$5.2 million, a \$0.7 million increase from FY 2022-23, for projects that re-envision water recycling as a regional water supply and reducing the region's reliance on imported water.

Progress Toward Our Strategic Business Plan Goals and Commitments

Updated and adopted in FY 2017-18, the Strategic Business Plan (Plan) provides for a five-year planning horizon. The update of this Plan reaffirmed the vision, mission, value statements, and the five goals that set the framework for the strategies and objectives of West Basin. The FY 2023-24 Overhead program budget includes funds to update the Plan. However, the FY 2023-24 budget was developed and formulated on the goals and commitments established in the current Plan. Highlighted below are a few accomplishments that provided additional value during FY 2022-23 and shaped the District's objectives for FY 2023-24. For a more complete listing of the accomplishments, see budget Section 7.

Water Supply Reliability

- Implemented the pilot phase of the Grass Replacement + program providing 20 free residential landscape design packages, free drought-tolerant trees, and a \$5 per square foot rebate incentive.
- Implemented Water Shortage Contingency Plan shortage response actions, including communication protocols, as a result of West Basin's Level 3 Shortage declaration.

Sound Financial and Resource Management

- Secured auctioned assets at minimal cost.
- Allocated \$270,000 from Metropolitan for locally administered programs.
- Customized Computerized Maintenance Management System (CMMS) structure audit implemented.



Water Quality

- Monitored water quality to ensure compliance and contractual requirements were met.
- Completed special studies per regulatory requirements for ocean discharge.

Customer Service

- Changed solicitation process to post all solicitations over \$10,000 on the e-procurement system.
- Utilized various owned media channels to enhance program awareness and participation.

Environmental Stewardship

- Partnered with the Palos Verdes Peninsula Land Conservancy and distributed over 700 California native plants.
- Procured more environmentally conscious promotional items given out during outreach events.

Key Factors Impacting the FY 2023-24 Budget

The development of the budget incorporates a multitude of considerations, including but not limited to determining reasonable and realistic water sales assumptions, calculating the amount and source of funding for capital projects, and incorporating appropriate staffing resources for successful program delivery. Each consideration is carefully evaluated to ensure that we are focused on and capable of fulfilling our mission to provide a safe and reliable supply of high-quality water to the communities we serve, in a cost-effective manner.

Water Sales Assumptions

About 87% of our revenues are generated from volumetric sales (potable water accounts for 68%, and recycled water 19%). As such, much attention is given to determining sales assumptions. Hydrologic conditions directly impact water demand, but are difficult to predict, making forecasting more challenging. Therefore, updated customer agency input regarding overall water management strategies and trends (e.g., groundwater extractions, imported and recycled water usage) is beneficial to developing accurate sales figures. Staff also reviewed its current capital improvement projects to incorporate appropriate assumptions for changes to recycled water sales and corresponding adjustments in imported water sales as it relates to construction of new infrastructure, expansion, and rehabilitation and replacement (R&R), to existing customers.

Imported retail water sales vary based on hydrologic conditions, overall water demand, availability and utilization of local supplies (groundwater and recycled water), and the availability of imported water. During the FY 2022-23 budget development process, West Basin anticipated lower than average sales as a result of drought messaging, below average precipitation, and above normal temperatures in California. After an extraordinarily wet winter (in late December 2022 through April 2023), significant levels of rain and snowpack, and various drought restrictions mandated by Governor Gavin Newsom, imported water sales were well below budget. For FY 2023-24, retail imported water sales are not anticipated to return



to previous levels, as many residents responded to the call for conservation and took advantage of grass removal incentives and other water efficiency programs. As a result, imported retail sales are budgeted at 95,000 AF. West Basin currently serves recycled water to more than 400 metered connections. Compared to the FY 2022-23 budget of 32,643 AF, staff anticipates relatively flat recycled water sales of 33,032 AF in FY 2023-24. Expected recycled water sales are comprised of approximately 26% for the seawater barrier, 58% for industrial use by local refineries, and 16% for irrigation use at parks, golf courses, schools, street medians and other public green spaces.

Recycled Water Operations

The Recycled Water Operations budget includes funds to administer, operate, and maintain all recycled water facilities, regulatory efforts, and the development of additional customers. West Basin started delivering recycled water in 1995 and has continued to expand its facilities to increase this local resource. Although West Basin expects to sell about the same amount of recycled water, the cost to produce recycled water will increase by approximately \$5.3 million compared to the FY 2022-23 budget. The Recycled Water Operations program is also facing unavoidable cost increases. Anticipated chemical cost is budgeted to increase by \$4.4 million. Staff has been updating the Board regularly on the raw material shortages, supply chain issues, and inability of vendors to forecast throughout this past year. Many existing vendors have sought adjustments to cost in the past two years or declared force majeure.

Funding for Capital Projects

West Basin's Capital Improvement Program (CIP) projects can be divided into three major components: 1) New Infrastructure Projects that includes the planning, design, and construction of new treatment plant improvements, as well extensions to the recycled water distribution system; 2) Rehabilitation & Replacement, sometimes referred to as Refurbishment & Replacement (R&R) Projects; and 3) Other Projects.

Beginning in FY 2019-20 West Basin took an active approach to rehabilitate and replace critical assets and aging infrastructure that provides recycled water to our customers. The increased focus on R&R projects continues in FY 2023-24 to enhance recycled water processes, provide more reliability to customers, and achieve cost savings through an improved, efficient operation. The budget includes \$19.0 million for identified R&R projects.

New infrastructure and customer development pipelines are predominantly comprised of two construction projects totaling \$18.8 million. The first completes the expansion at West Basin's Juanita Millender-McDonald Carson Regional Water Reclamation Plant. This CIP project includes installation of a 5.88 MGD custom engineered microfiltration (CMF) system and improves reliability and redundancy. The second project requires West Basin to construct a nearly four-mile recycled water pipeline with six connections in the City of Torrance and Palos Verdes Estates.

All planned capital expenditures for FY 2023-24 are anticipated to be approximately \$38.8 million, with more than \$114.3 million in planned expenditures for the next four fiscal years. Approximately 85% of the future projects are R&R projects. In addition, West Basin has been able to secure approximately \$4.6 million in grants, \$3.9 million in state loans, and another \$7.1 million in customer contributions to help defray the costs of new infrastructure and shared facilities.



After utilizing grants and external contributions, staff anticipates using multiple avenues to fund construction, including the use of Pay-As-You-Go (PAYGO) funds, designated funds (reserves), and the utilization of a low-cost loan through the State of California's Revolving Loan Program. West Basin has already been successful with external funding and will continue to seek grants and other contributions to offset the cost of future CIP projects.

Conclusion

The FY 2023-24 budget supports the achievement of key financial metrics, strategic business plan goals, ongoing program activities, key business decisions and long-term commitments to ensure that West Basin delivers safe and reliable water to the communities served. A significant component of the budget is dedicated to local water supply and investment in replacing aging recycled water infrastructure to ensure that our customers receive the quantity, quality, and reliability of this drought-resilient resource. West Basin will continue to work with its customers and other stakeholders to ensure that rate adjustments are mitigated to the greatest extent possible while continuing to ensure a safe and reliable water supply.

I am confident that through sound financial management and cost containment measures included in this budget, West Basin will achieve continued success in delivering safe, high-quality, and reliable water supplies to the communities we serve in a fiscally responsible manner.

I would like to thank the Board, West Basin staff, our customers, and other stakeholders for their efforts and contributions in the preparation of the FY 2023-24 budget.

Respectfully,

A handwritten signature in blue ink, appearing to read "Edward J. Caldwell".

Edward J. Caldwell
General Manager





**ABOUT WEST BASIN
MUNICIPAL WATER DISTRICT**





About West Basin Municipal Water District

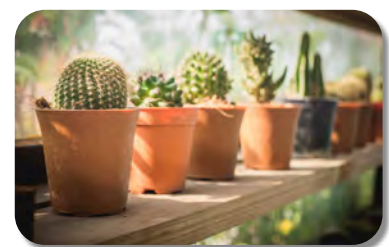
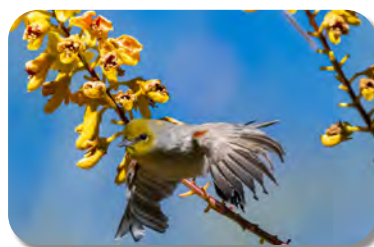
West Basin Municipal Water District (West Basin), an innovative and award-winning public agency, is a special district of the State of California that provides imported drinking water, produces recycled water, and provides water-use efficiency and water education programs to approximately 885,000 residents within a 185-square mile service area. Located in the heart of Southern California's coastal plain, its service area has a Mediterranean climate, characterized by warm, dry summers and wet, cool winters with moderate precipitation.

West Basin is governed by a board of five directors who are elected by the public in alternating four-year terms. West Basin is a member agency of the Metropolitan Water District of Southern California (MWD), a cooperative of twenty-six member agencies including cities and water agencies. West Basin sells the imported water it purchases from MWD to cities, water agencies, and private water companies in Los Angeles County.

Recycled water is the cornerstone of West Basin's efforts to increase water reliability by augmenting local supplies. The District's Edward C. Little Water Recycling Facility in El Segundo, California and its satellite plants are the only facility network in the world that produces five different types of customer-specific recycled water. The system produces quality water for irrigation, industrial cooling towers, high and low pressure boiler feeds, and seawater barrier water for protection and groundwater replenishment. The purified recycled water that West Basin produces for the Water Replenishment District (WRD) is injected into the West Coast seawater barrier and ultimately supplements the groundwater basin. West Basin provides recycled water through more than 450 connections to industrial, commercial and public facilities in the service area and region.

Southern California's imported water supply from Northern California and the Colorado River is becoming less certain especially during times of drought. West Basin's approach to addressing the service area's water future is captured in the Water for Tomorrow Program. Water for Tomorrow brings new emphasis to West Basin's commitment to protecting, securing, and diversifying its water supply while continuing its history of innovation and industry leadership. This includes reducing dependence while increasing reliability of our imported water supply, expanding conservation efforts, maximizing water recycling, and supporting groundwater augmentation and stormwater recapture.

West Basin continues to invest in staff, operations and programs to maintain high standards within our workforce and reach out to the community through conservation programs, education, community partnerships, small and local business opportunities, new diversity, equity and inclusion endeavors, and other programs focused on providing value to our service area.





Board of Directors



Harold C. Williams
Treasurer

Division 1: Carson, Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates, and the unincorporated Los Angeles County areas of Rancho Dominguez



Gloria D. Gray
Secretary

Division 2: Inglewood, portions of the cities of Gardena and Hawthorne, and the unincorporated Los Angeles County areas of Ladera Heights, View Park-Windsor Hills, West Athens, and Westmont



Desi Alvarez
Vice President

Division 3: Hermosa Beach, Lomita, Manhattan Beach, Redondo Beach, a portion of the city of Torrance, and the unincorporated Los Angeles County area of West Carson



Scott Houston
President

Division 4: Culver City, El Segundo, Malibu, West Hollywood, a portion of the city of Hawthorne, and the unincorporated Los Angeles County areas of Del Aire, Marina del Rey, Topanga, and Wiseburn



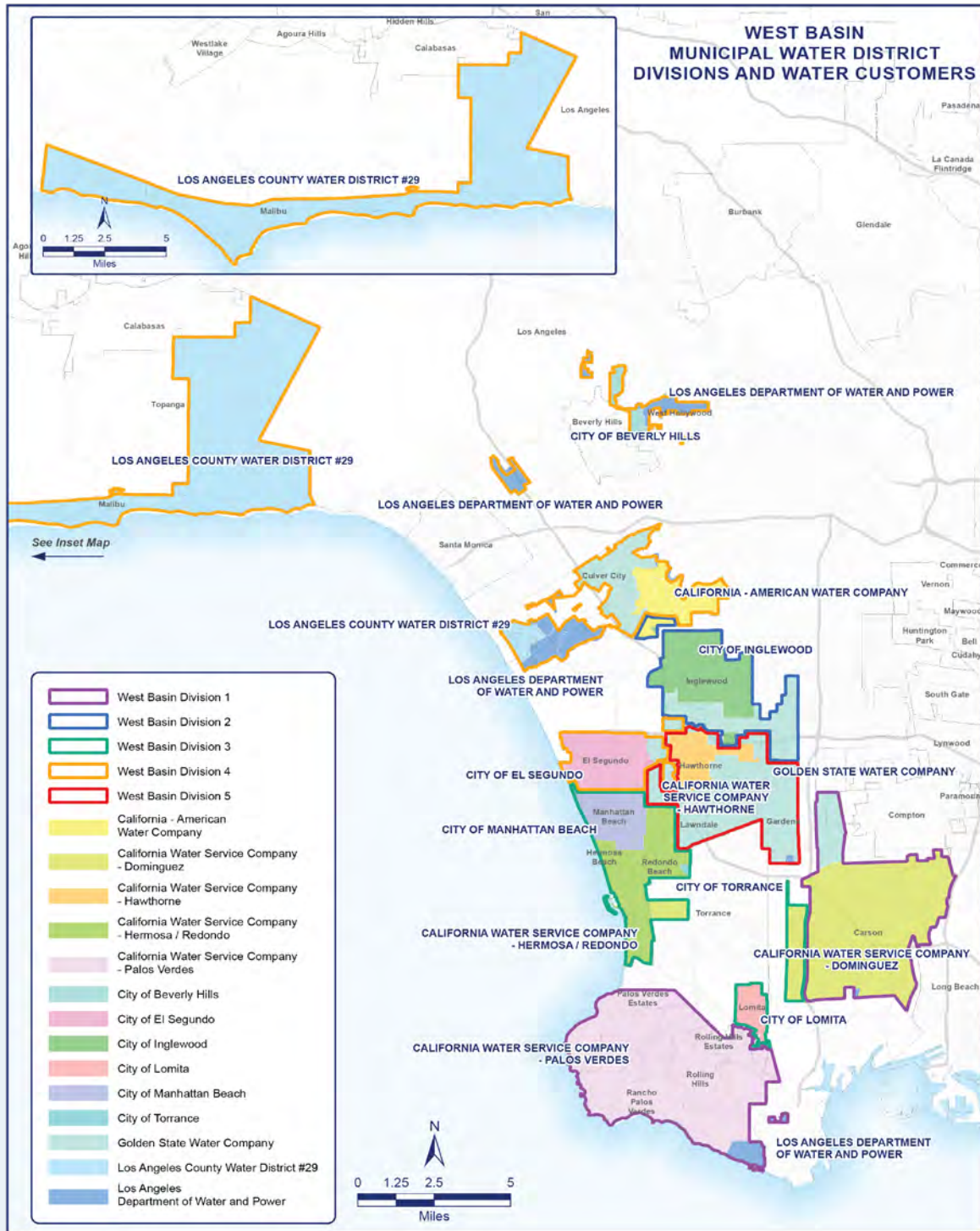
Donald L. Dear
Immediate Past President

Division 5: Lawndale, portions of the cities of Gardena and Hawthorne, and the unincorporated Los Angeles County areas of El Camino Village and Lennox



Service Area

West Basin Municipal Water District serves a diverse population in 17 cities and parts of unincorporated coastal Los Angeles County.





District Statistics

Formed	December 17, 1947
Estimated Population	885,000
Area Served	17 cities and unincorporated areas of Los Angeles County within 185-square miles
Water Portfolio	Potable and Recycled
Average Residential Parcel Size	9,240 square feet
Average Median Income	\$92,454 - Service area
Lowest Median Income	\$26,683 - Westmont
Highest Median Income	Over \$250,000 - Rolling Hills

Current and Projected Demographics

DEMOGRAPHICS	2020	2025	2030	2035	2040	2045
Population	841,550	869,252	880,718	893,089	902,163	913,615
Occupied Housing Units	293,945	310,141	315,746	321,467	325,386	330,280
Single-Family		175,977	177,601	179,092	180,248	181,479
Multi-Family		134,165	138,145	142,375	145,138	148,801
Persons per Household		2.77	2.76	2.75	2.74	2.74
Urban Employment	402,534	435,002	441,195	447,647	457,457	465,331

Source: Metropolitan Water District of Southern California 2020 UWMP



Los Angeles County Average Temperature

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (°F)	65.2	65.3	65.3	67.4	69.1	71.9	75.1	76.3	76.0	73.6	70.2	65.9	70.1
Average Min. Temperature (°F)	47.5	48.9	50.5	53.0	56.4	59.7	62.9	63.8	62.6	58.5	52.3	47.9	55.3
Average Total Precipitation (in)	2.65	2.67	1.85	0.77	0.17	0.05	0.02	0.07	0.16	0.39	1.40	1.82	12.02
Evapotranspiration (in)	2.34	2.91	3.34	4.06	5.96	5.26	6.62	6.31	4.66	3.51	2.44	2.22	44.38

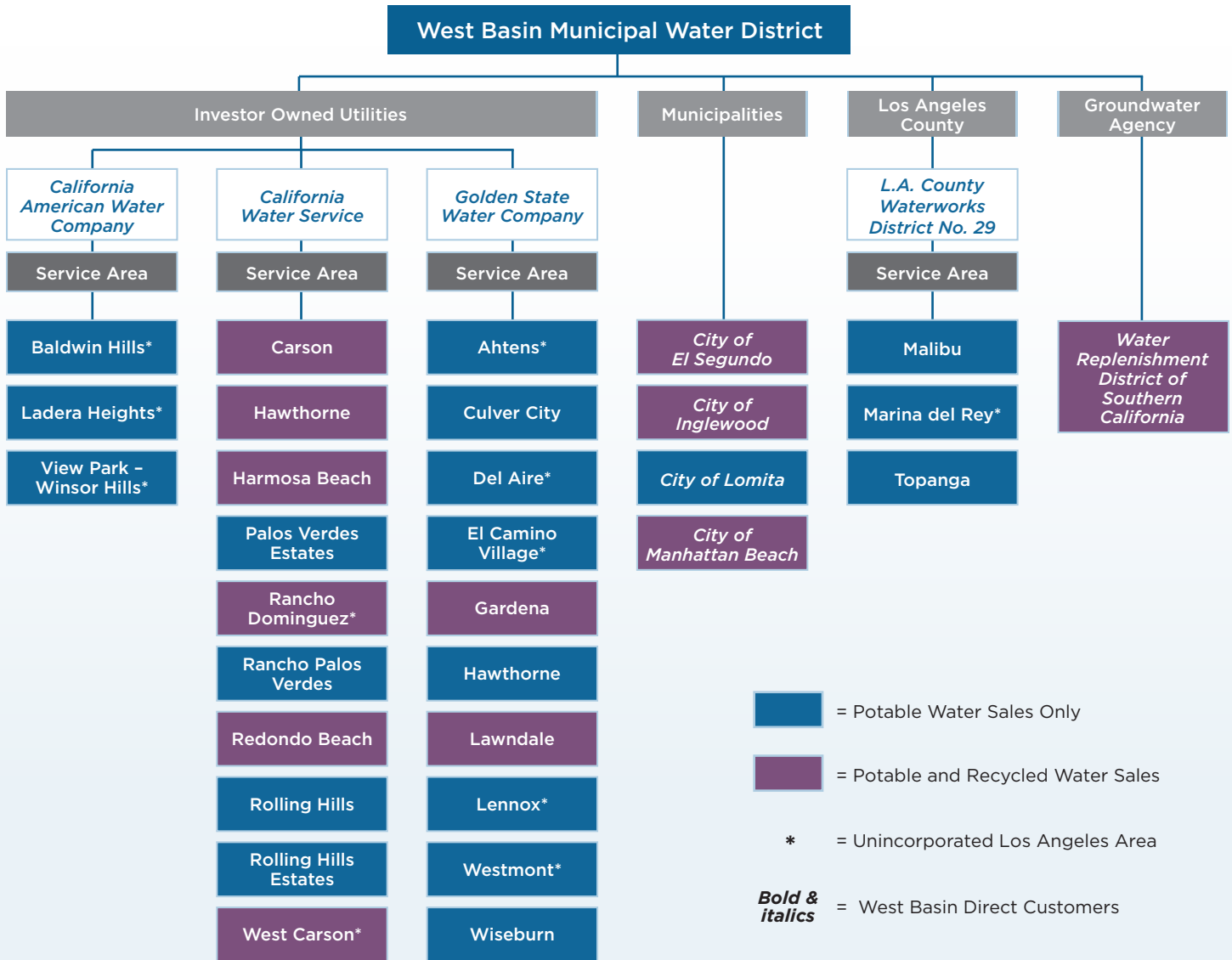
Notes: Temperature and precipitation data from Monthly Climate Summary for Los Angeles International Airport (LAX), January 1936 to June 2016. Western Regional Climate Center. <http://www.wrcc.dri.edu/>. Evapotranspiration data from CIMIS Daily Average Evapotranspiration Report for Long Beach Station 174. (California Department of Water Resources, 2020).

Source: West Basin Municipal Water District 2020 Urban Water Management Plan.

Ten Largest Employers Within West Basin Service Area

Employer	Number of Employees
Boeing Satellite Systems Inc.	12,005
Northrop Grumman Corporation	11,983
Space Exploration Technologies	6,094
Raytheon Company	6,000
Sony Pictures Entertainment	6,000
Aerospace Corporation	2,180
Mattel, Inc.	1,545
Amazon Fulfillment Center	1,500
Palos Verdes Unified School District	1,388
Chevron Products Company/USA Inc.	1,187

Source: West Basin Finance Department



Types of Recycled Water Produced by West Basin



Irrigation Water

Tertiary treated water filtered and disinfected for industrial and irrigation use.



Cooling Tower Water

Ammonia removed for industrial cooling tower use.



Low-Pressure Boiler Feed Water

Membrane filtration and reverse osmosis treatment



High-Pressure Boiler Feed Water

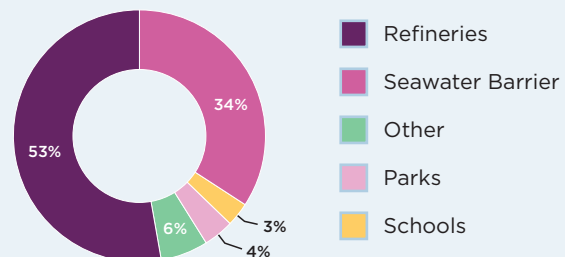
Membrane filtration and two passes through reverse osmosis membranes.



Groundwater Replenishment Water

Membrane filtration, reverse osmosis membrane treatment and disinfection for use in groundwater replenishment and as a barrier against seawater intrusion.

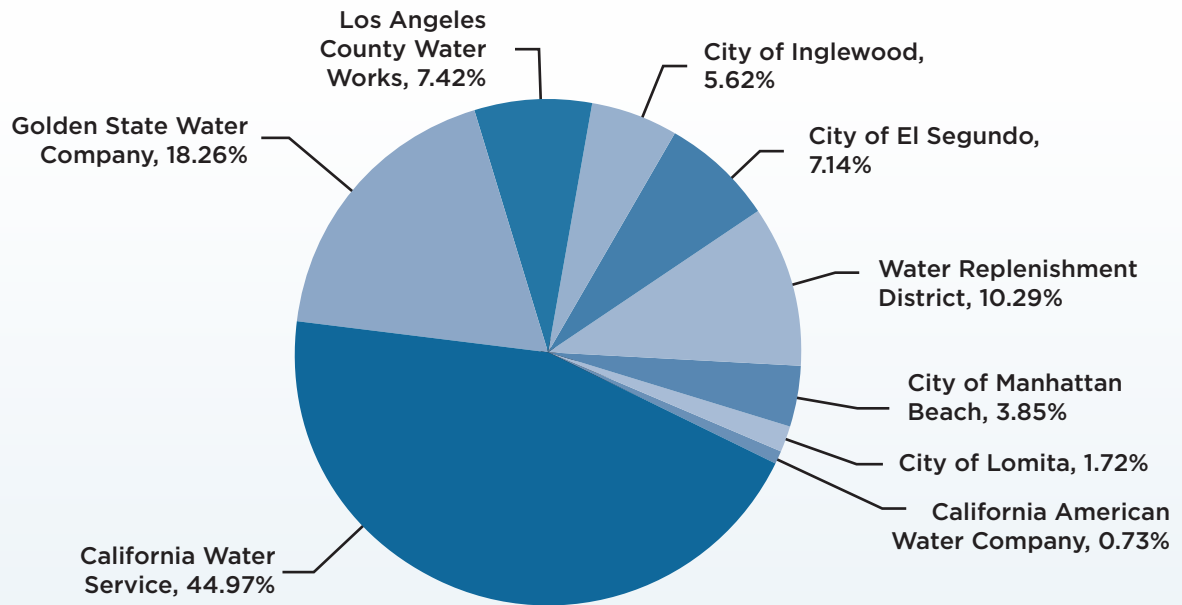
Recycled Water Portfolio





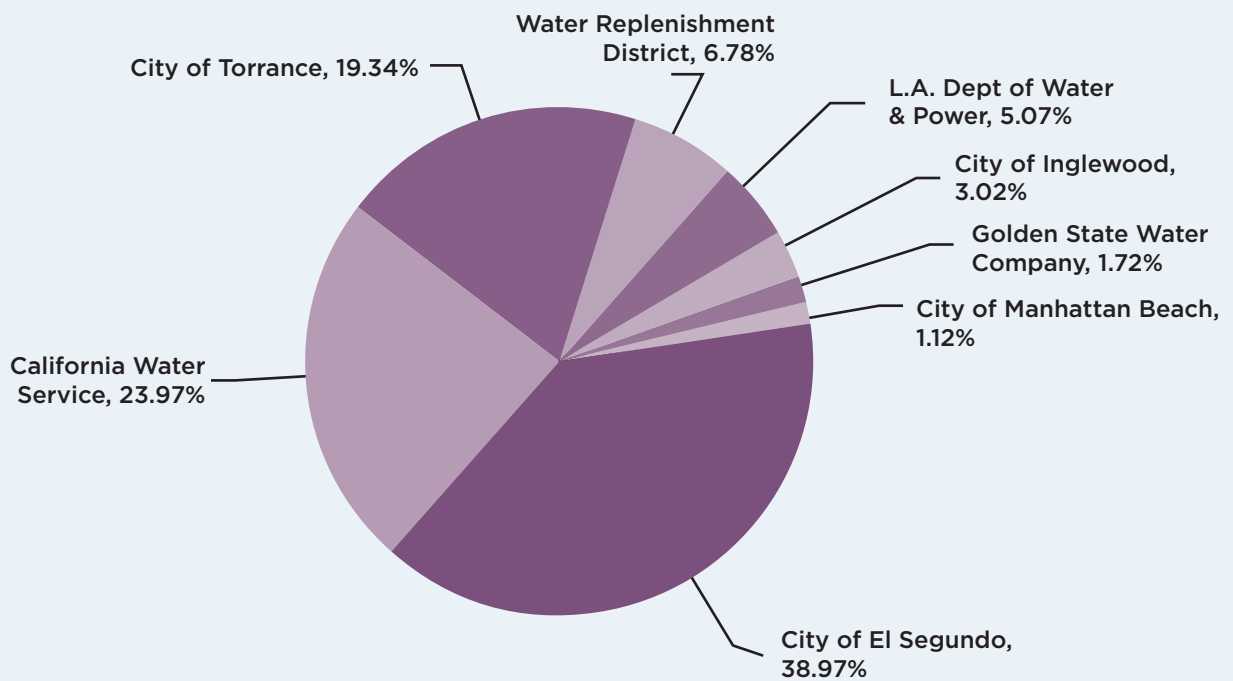
Potable Water Customer Sales Distribution

FY 2021-2022



Recycled Water Customer Sales Distribution

FY 2021-2022





History

As early as 1918, the levels in local groundwater basins were dropping so low that salt water from the ocean was seeping in and contaminating groundwater. Lawns in coastal Los Angeles were dying from salty water, and well water was so salty it was often undrinkable. In the 1940s, studies showed that the local groundwater aquifer was being depleted at a much faster rate than it was being recharged or refilled.



At that time, one solution was to supply the region with imported water through Metropolitan. In 1947, West Basin was formed by a vote of the people to serve as a wholesale agency to distribute imported water throughout its service area. In 1948, West Basin became a member agency of MWD, an agency that imports water from the Colorado River, and later would also import water from Northern California. For the next several decades, West Basin served its customer agencies and communities solely as a wholesale provider of imported water.

As a result of the extreme drought of the late 1980s and early 1990s, West Basin leaders decided to diversify the agency's water portfolio to include water use efficiency and water reuse to provide a more reliable supply of water for future generations.

Early efforts included building the world's only water recycling facility that would convert treated sewer water into five different types of high-quality recycled water suitable for groundwater recharge, irrigation, municipal, industrial and commercial uses.





Edward C. Little Water Recycling Facility



The benefits generated by the water recycling program include more affordable water rates for customers, a reliable, locally-controlled supply of recycled water, reduced energy use by importing less water from hundreds of miles away, reduced wastewater and biosolids discharged to the ocean, and use of recycled water as a sustainable resource. The drought of the early 1990s also increased awareness about water conservation and resulted in West Basin's addition of conservation as a new water supply alternative. West Basin currently offers free programs, classes, and events for residents and businesses to learn how to

reduce their consumption of water and maximize water use efficiency indoors and outdoors.

Today, West Basin is a water industry leader who hosts visitors from around the globe. West Basin is focused on providing value to its customers and achieving water reliability for the service area through a diverse supply of water that includes imported, recycled, and conserved water. All West Basin departments contribute to the agency's efforts to meet the goals and objectives of the Strategic Business Plan.





FINANCIAL OVERVIEW & SUMMARY





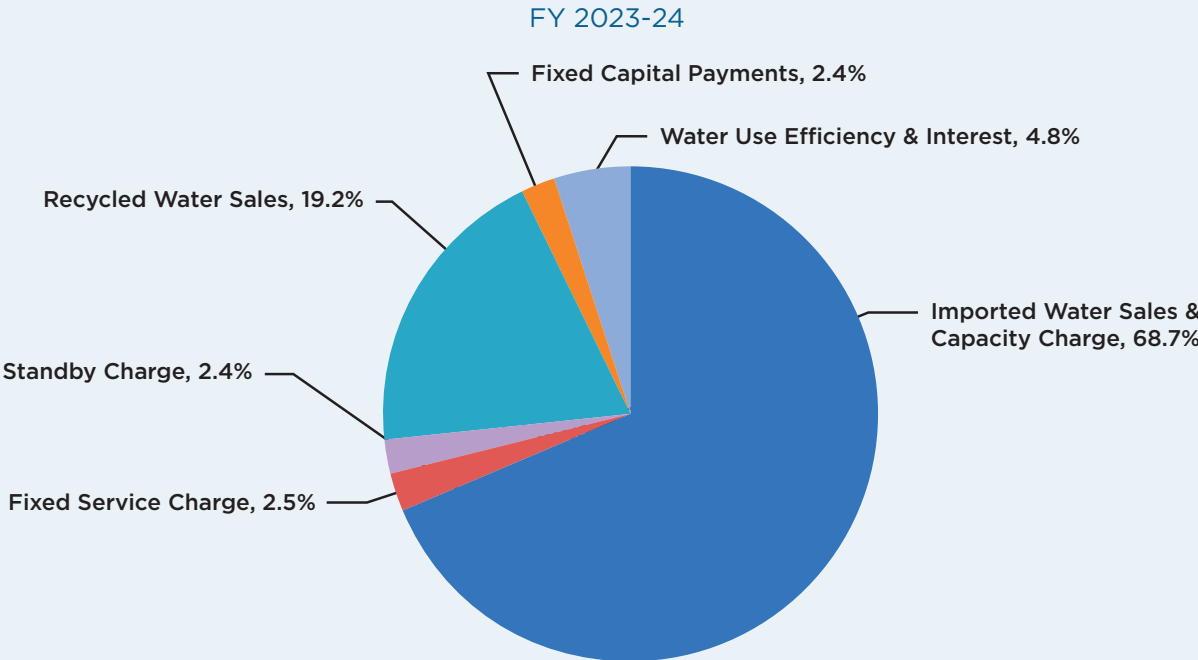
Financial Overview & Summary

Each fiscal year West Basin prepares a budget based on the priorities, goals, and objectives set by its Board of Directors. When preparing the budget, staff considers many factors including water sales assumptions, rates and charges, salaries and benefits, debt service, program expenses, and capital expenditures. All of these factors are considered in the FY 2023-24 budget, and discussed in detail in the following sections of this document. This section provides the overview and highlights of the FY 2023-24 budget.

Financial Highlights for FY 2023-24

For FY 2023-24 West Basin’s budget is \$244.1 million, and is \$8.2 million or 3.5% higher than the FY 2022-23 budget. There are several factors that affected the FY 2023-24 budget. West Basin worked with its retailers to plan the water needs for their customers and has budgeted slightly more conservatively in FY 2023-24 to reduce its “normal” imported retail sales from 103,200 AF to 95,000 AF. In 2022, with the approval of the Board, staff amended its chemical contract agreements to reflect the price increases due to national shortages and demands. Metropolitan increased their Tier 1 imported water rate by \$47/AF and the effective adjustment in the Readiness-to-Serve (RTS) increased \$25/AF. In spite of these two pass-through charges, along with West Basin’s increase of \$18/AF in its Reliability Service Charge (RSC), the budgeted imported water revenues will decrease by \$2.8 million due to the expected lower water sales. More information can be found in Source of Revenue section.

Source of Funds



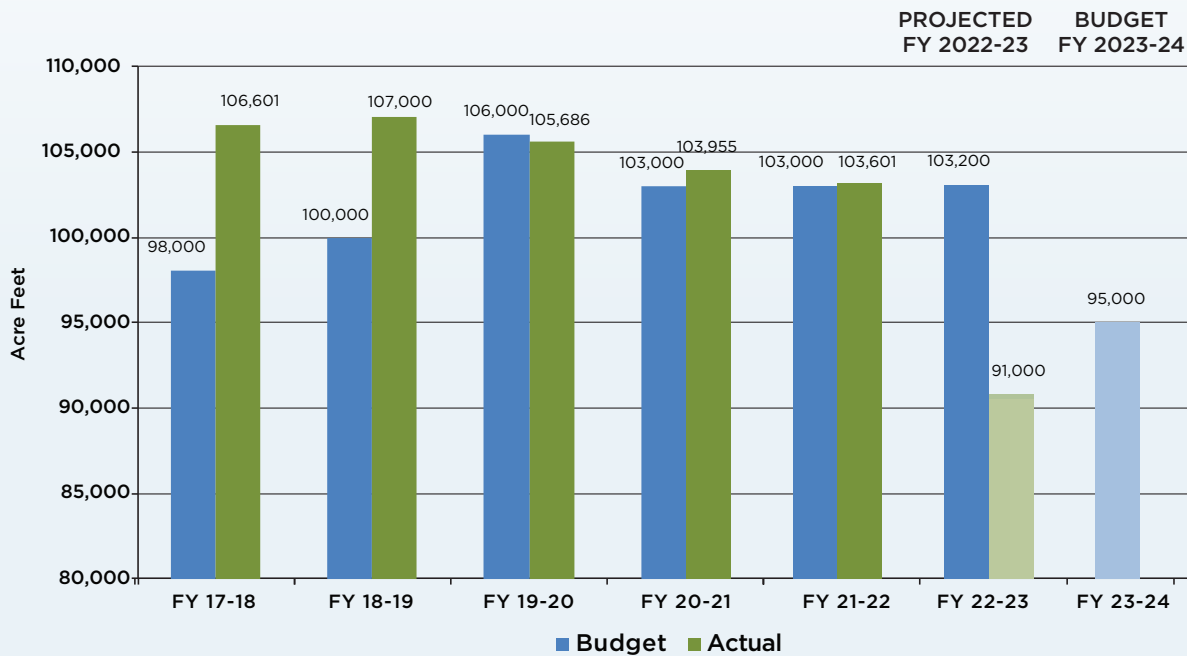
Total: \$244,122,235



As imported water sales represent more than two-thirds of West Basin’s source of funds, significant attention is given to our water sales assumptions. Imported water sales are largely affected by hydrological conditions and may impact outdoor water use the most, as the annual water use ranges from approximately 18% to 56% by customer agency for outdoors usage. In general, the larger the residential lot size, the higher the proportion of outdoor water use. Also, West Basin’s retail imported water sales have fluctuated over the last decade due to droughts, climate change, and as customer agencies conservation measures meet state-mandated targets. Although West Basin does not sell groundwater, a number of its customer agencies have access to this alternate source of water thereby necessitating dialogue with our customer agencies to understand their anticipated usage of groundwater and imported water. Shown below is our recent history of actual and budget retail water sales showing the volatility of imported water sales.

Imported Retail Water Sales

FY 2017-18 thru FY 2023-24

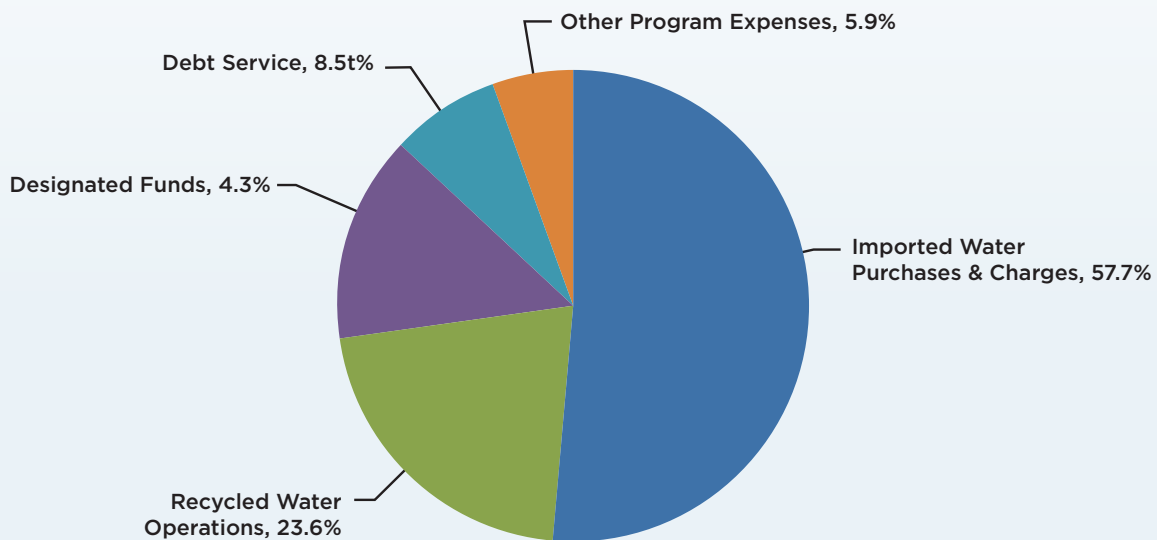




Similar to the revenues, operating expenses for FY 2023-24 are budgeted at \$244.1 million and is \$8.2 million higher than the FY 2022-23 operating expenses. With an expected increase in MWD rates and charges, finding ways to streamline operations, create efficiencies, and reduce costs were critical elements in decreasing the total operating expenditures. All costs were reviewed and evaluated to reduce, eliminate, or delay proposed expenditures, where possible. One of the most significant increases in expenditures is the increase in the Recycled Water Operations budget of \$4.2 million. West Basin continued to experience double digit increases in its cost of chemicals in FY 2022-23 as a result of unprecedented supply chain constrictions, raw material increases and increases in the freight cost. It is expected chemical cost will stabilize in FY 2023-24. In addition to higher chemical cost, cost of electricity is also rising. All of West Basin program expenses are further described in Use of Funds section.

Use of Funds

FY 2023-24



Total: \$244,122,235



Staffing and Program Budgets

West Basin focuses on making appropriate decisions regarding department personnel requirements and reallocates work responsibilities that will best meet the needs of the organization. To better understand the staffing needs, West Basin tracks its personnel time by level of effort toward its various capital and operating programs. See the table under “Use of Funds—Personnel Staffing by Program: Full Time Equivalent (FTE)”.

In the FY 2023-24 Budget, the number of approved positions will increase to fifty-two (52) full-time employees from fifty in the FY 2022-23 budget. Two additional staff were added to assist with achieving the mission of the Board and outreach efforts.

Budget	FY 2022-23	FY 2023-24
Total Positions	56	59
Full-time regular	50	52
Full-time limited	0	0
Part-time	0	0
Interns	6	7





Strategic Business Plan

Originally published in January 2008 and most recently updated and adopted on August 28, 2017, West Basin's Strategic Business Plan (Plan) provides for a five-year planning horizon (and beyond). The update of this Plan reaffirmed West Basin's vision, mission, and value statements, including the five goals that set the framework for the strategies and objectives. Since the last update, the District acknowledges that the landscape has changed both in terms of the nature and scope of local supply projects in the region but also the financial revenue streams to support the mission and goals of the District. West Basin has included funds in the FY 2023-24 Overhead program budget for a consultant to assist in the review and update of the Strategic Business Plan.

The Plan is implemented and tracked through the annual budget process and provides continuous direction for each year's planning, budgeting, implementation, evaluation and reporting. It also sets the overall policy direction and strategic priorities established by the Board, and whether staff and financial resources need to be realigned to achieve strategic objectives.

Based on the following five goals, West Basin develops the strategies, programs, and activities necessary to effectively implement the Board's directions.

Water Supply Reliability

West Basin is committed to innovative planning and investments to provide water reliability.

- | | |
|--------------------|-----------------------------------------------------------------------|
| Strategy 1: | Prepare and periodically update water supply plans. |
| Strategy 2: | Increase supply diversification by promoting conservation. |
| Strategy 3: | Increase supply diversification by promoting groundwater development. |
| Strategy 4: | Increase supply diversification by promoting water recycling. |
| Strategy 5: | Investigate ocean water desalination as a supply opportunity. |
| Strategy 6: | Effectively manage West Basin's imported supplies. |



Sound Financial and Resource Management

West Basin is committed to best practices in capital asset management, financial management, human resources management, and internal controls.

Strategy 1:	Provide effective overall capital facility asset management through the application of industry best-practices.
Strategy 2:	Maintain facilities to manage and minimize risk of failure and liability exposure.
Strategy 3:	Develop partnerships with public and private entities to facilitate capital asset development and implementation.
Strategy 4:	Maintain or improve current bond ratings.
Strategy 5:	Develop a formal Long-Range Financial Plan.
Strategy 6:	Operate cost-efficiently and effectively, with robust internal controls.
Strategy 7:	Ensure cost-effective recycled water operations through proactive contract management.
Strategy 8:	Recruit and hire qualified candidates to fill all West Basin positions.
Strategy 9:	Manage and reward performance.
Strategy 10:	Develop a formal plan for workforce retention, training and succession planning.
Strategy 11:	Ensure annual Board evaluation of the General Manager.

Water Quality

West Basin is committed to providing safe, high-quality water by meeting current and anticipated water quality requirements.

Strategy 1:	Achieve and maintain recycled water client satisfaction.
Strategy 2:	Increase control over source water quality.
Strategy 3:	Meet permit and contractual water quality requirements.



Customer Service

West Basin is committed to providing value by understanding and meeting the water needs of our recycled water clients and the cities, water utilities, and communities we serve.

- | | |
|--------------------|--------------------------------------------------------------------|
| Strategy 1: | Build community trust. |
| Strategy 2: | Ensure recycled water client and customer agency satisfaction. |
| Strategy 3: | Support the Board in maintaining the strategic business plan. |
| Strategy 4: | Promote outreach and education programs. |
| Strategy 5: | Engage small and/or local business in the procurement of services. |

Environmental Stewardship

West Basin is committed to sustainable and environmentally-friendly policies, projects, programs, and practices.

- | | |
|--------------------|-------------------------------------------------------------------------------|
| Strategy 1: | Ensure social and environmental factors are considered in decision-making. |
| Strategy 2: | Continue to gain environmental community support for West Basin programs. |
| Strategy 3: | Implement and maintain environmental permits. |
| Strategy 4: | Proactively work with environmental regulators to ensure compliance. |
| Strategy 5: | Engage and inform neighbors in areas where the District maintains facilities. |

Within the Operating Program Expenses section, West Basin has identified FY 2022-23 accomplishments and FY 2023-24 strategies identified above.



Long-Range Financial Plan

Over the years, West Basin has focused on taking proactive steps to manage its financial health to ensure the operating and capital requirements are being met both in the short term and long term. Those steps include adopting an annual operating budget, creating a 5-year financial forecast, developing financial policies, setting a target debt coverage, and managing its long-term unfunded liabilities.

In reviewing the financial forecast, staff identified the need to develop a comprehensive long-range financial plan (LRFP). In 2019, staff presented to the Board the components of the LRFP include strategic planning, financial policies, financing and economic conditions, operating costs, capital program, demand forecast, and revenue rates and charges.

In addition to presenting the components of the LRFP to the Board, staff reviewed the reasons why a LRFP is performed, the benefits gained, and its usefulness for communicating West Basin’s long-term direction with stakeholders. It was also stressed that the process of planning will include input from all West Basin departments as it is a collaborative process. The LRFP is future focused and helps West Basin identify risks and strategies to address those risks as well as to stress test the strategies that assist with building a case for action. The diagram below illustrates the comprehensive process of long-range financial planning.



West Basin continues to strive to meet its mission of delivering safe and reliable water, staff has developed long term planning tools including meeting the goals and objectives set in the Strategic Business Plan, developing capital master plans, and developing more local resources through increasing its efforts in water recycling, and expanding its water use efficiency programs. Each of these individual efforts requires West Basin to be strategic and collaborative in order to develop a long-term plan to ensure West Basin’s goals are met in a fiscally sustainable and responsible way. Updates to the Plan will evaluate our strategies, objectives, confirm level of service, and determine performance indicators.



In order to address these issues staff continues to work with its municipal advisor to review the target debt coverage and other financial metrics, the rating agency's approach to credit, the current assessment of West Basin's credit ratings, and discuss the impact of higher ratings to reduce long-term financing costs.

Another component of the LRFP is the development of the Recycled Water Master Plan (RWMP). The Master Plan focuses on identifying potential recycled water demands, assessing existing and future system evaluations, evaluating opportunities to optimize system reliability, redundancy, and operability, and presenting alternative roadmaps for maximizing recycled water use. The RWMP provides West Basin with a 20-year outlook and roadmap to maintain and expand its facilities. The RWMP provide a strategy to implement future capital facilities and identify corresponding operational impacts to West Basin. In addition, the costs and potential savings from future capital projects need to be considered in long-range financial planning due to the impacts from future debt financing and availability of PAYGO funds. The RWMP evaluates recycled water service opportunities, identifies potential required capital facilities to meet West Basin's objectives, and develops implementation schedules, costs, and priorities. With West Basin's aging infrastructure, the RWMP evaluated the current condition of existing equipment and systems and developed a schedule of needed rehabilitation or replacements in order to achieve quality and maintain capacity with the goal of extending the useful life of existing critical assets.

To effectively prioritize, sequence, and plan for near-term capital projects, a more detailed 5-year forecast of CIP expenditures is developed, and updated annually as part of West Basin's budgeting process. However, with the Board's renewed focus on evaluating its contributions to the regional approach to address the availability of local supply of water and to collaborate with its regional partners, an in-depth review of the 5-year CIP forecast occurred during the FY 2023-24 budget development.



To address the demand forecast component of the LRFP, West Basin developed its 2020 Urban Water Management Plan (UWMP) to provide an updated and detailed summary of the current and future water supplies and demands in its service area. The 2020 UWMP evaluates West Basin's water resource needs, provide detailed water supply planning projections over a 25-year planning horizon, and identify water supplies that are needed to meet existing and future demands.

To provide strategic planning of capital improvements projects and programs the support West Basin's goals, the Technical Planning Budget focuses on the delivery of technical and strategic studies associated with the District's recycled water systems, and the District's overall water portfolio. These studies may vary from year to year and can have an important impact on the overall long-term financial plan.

To further its long-range financial planning, staff plans to rebuild its financial model to incorporate future capital and operating costs and future sales assumptions. In addition, the model will have added flexibility to update for its financial policies and when new master plans are developed and approved, and perform sensitivity analysis to determine the biggest drivers of potential water rate increases thereby eliminating any surprises in future years. This allows management time to determine other options or avenues to accomplish its strategic goals and do so in a fiscally responsible and thoughtful manner.



Five-Year Forecast

While West Basin currently maintains a five-year forecast to provide a near-term outlook of the anticipated revenues and expenditures, a more robust financial model is planned to replace the existing outdated model to incorporate the decisions resulting from a comprehensive LRFP. Just as it is important to understand the assumptions for the current year to develop the budget and associated water rates and charges, West Basin is cognizant that the decisions made today could have a long-term impact. West Basin wants to be proactive and responsive to predictable rate increases and program activity that provides value to its customers. In addition, West Basin staff also understands that there may be future commitments or changes in its revenue streams that should be considered in the development of its annual budget. With the use of its Five-Year Forecast, West Basin is able to monitor anticipated rate increases, understand the fiscal impact of future projects, and provide a clear picture when circumstances change.

Impact of Planned Capital Improvement Projects

The financial impact from planned capital improvements projects have been incorporated into the five-year projected operating results table either through draws from the Commercial Paper Program, PAYGO, or anticipated long-term financing. For FY 2023-24, the chart below demonstrates the projected funding for the CIP budget.

Funding Sources	FY 2023-24 (In millions)
External Funding	
Customer Contributions	\$4.2
Grants	4.1
Refinery Contributions	3.2
State Revolving Fund-Low Interest Loan	3.9
PAYGO Funding	3.2
Use of Reserves	20.2
Total CIP Funding	\$38.8

Anticipated CIP expenditures over the next five fiscal years are estimated to total more than \$145.6 million. Staff will continue to seek grants, customer contributions, and if available, low interest loans to off-set the cost of future CIP expenditures. However, in the five-year projected operating results table, staff has assumed the use of its Commercial Paper Program in FY's 2024-25 through FY 2027-28.

In addition, operating expenses, including recycled water operations, reflect the changes in expenses based on the volume or acre-feet, cost per acre-foot, including both variable and fixed costs, and timing of new sales. More detailed information regarding capital improvement projects and their related cost and benefits is reflected in the Supplemental Information section.



West Basin Municipal Water District Projected Operating Results

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
REVENUES						
Water Sales	165,177,298	170,661,335	163,808,741	174,086,161	183,346,192	193,119,305
Capacity Charge	2,378,620	2,446,000	2,470,580	2,470,580	2,470,580	2,470,580
Fixed Service Charge	6,185,899	6,371,476	6,562,620	6,759,499	6,962,284	7,171,152
Recycled Water Project Revenues						
Recycled Water Sales	46,676,644	50,370,946	60,363,111	63,381,201	66,556,568	69,892,531
TORC O&M Rebate	182,000	0	0	0	0	0
MET LRP Rebate	7,500	7,500	318,750	318,750	318,750	318,750
Fixed Revenue Charges	5,848,924	3,625,504	2,211,204	2,211,204	552,801	0
Standby Charges	5,879,000	5,751,000	7,631,947	7,631,947	7,631,947	7,631,947
Other Revenues						
Interest Earnings/Other	11,225,750	2,800,000	2,700,000	2,200,000	2,200,000	1,200,000
Water Use Efficiency Incentives	560,600	560,600	560,600	560,600	560,600	560,600
Total Revenues	\$244,122,235	\$242,594,362	\$246,627,553	\$259,619,942	\$270,599,722	\$282,364,866
EXPENSES						
Water Purchases/RTS from MET	138,500,220	140,910,327	135,183,852	142,526,889	150,310,155	158,533,652
Capacity Charge	2,378,380	2,443,840	2,443,840	2,443,840	2,443,840	2,443,840
Program Expenses						
Recycled Operations	57,519,100	59,478,179	62,901,564	64,788,610	66,732,269	68,734,237
Technical Planning	5,215,398	3,971,860	4,091,016	4,213,746	4,340,159	4,470,363
Water Policy & Resource Develop	1,326,106	1,365,889	1,406,866	1,449,072	1,492,544	1,537,320
Public Information & Education	4,859,793	5,005,587	5,155,754	5,310,427	5,469,740	5,633,832
Water Use Efficiency	2,850,455	2,935,969	3,024,048	3,114,769	3,208,212	3,304,459
Purveyor Water Quality Moni-	60,502	62,015	63,565	65,154	66,783	68,452
Designated Funds/Other						
2016A	10,297,000	10,285,250	10,278,500	10,270,875	10,256,750	10,250,250
2021A	6,924,350	6,909,225	9,679,225	6,628,100	4,525,475	4,524,225
2022A	3,581,750	3,577,750	974,250	3,792,000	5,963,125	5,953,375
State loan (PV)	-	129,839	209,908	209,908	209,908	209,908
State loan (Phase II)	-	681,101	681,101	681,101	681,101	681,101
Subordinate Debt- 2021 Commercial Paper	100,800	393,675	362,986	224,841	100,800	100,800
Total Expenses	\$244,122,235	\$242,594,362	\$246,627,553	\$259,619,942	\$270,599,722	\$282,364,866
Coverage - All Debt	1.50	1.20	1.46	1.64	1.68	1.73



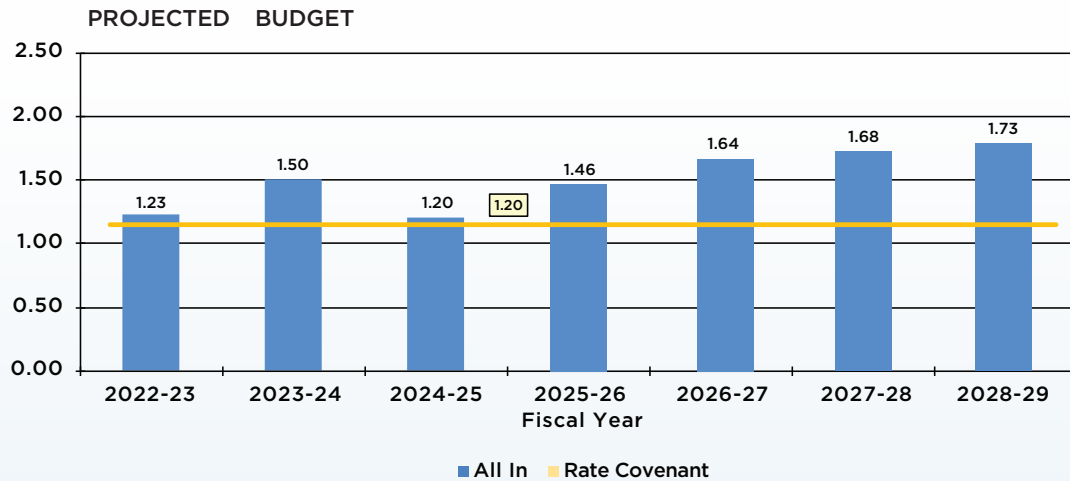
West Basin Municipal Water District Assumptions

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
COST (SALES PRICE) OF WATER (\$/						
Metropolitan Imported - Tier 1 (Jul)	1,104	1,143	1,200	1,260	1,310	1,349
Metropolitan Treated NonInt - Tier 2 (Jul)	1,146	1,185	1,239	1,299	1,349	1,388
Metropolitan Imported - Tier 1 (Jan)	1,143	1,200	1,260	1,310	1,349	1,389
Metropolitan Treated NonInt - Tier 2 (Jan)	1,185	1,239	1,299	1,349	1,388	1,428
Metropolitan RTS Commodity Charge (Jul)	100	100	106	106	106	106
Metropolitan RTS Commodity Charge (Jan)	100	106	106	106	106	106
Metropolitan Seawater Barrier - Tier 1 (Jul)	1,104	1,143	1,200	1,260	1,310	1,349
Metropolitan Seawater Barrier - Tier 2 (Jul)	1,146	1,185	1,239	1,299	1,349	1,388
Metropolitan Seawater Barrier - Tier 1 (Jan)	1,143	1,200	1,260	1,310	1,349	1,389
Metropolitan Seawater Barrier - Tier 2 (Jan)	1,185	1,239	1,299	1,349	1,388	1,428
Disinfected Ter. Within WB	1,282	1,360	1,448	1,530	1,603	1,679
Disinfected Ter. - LADWP	1,324	1,402	1,490	1,572	1,645	1,721
Disinfected Ter. - Torrance	1,323	1,402	1,490	1,572	1,645	1,721
Nitrified - Torrance	1,065	1,097	1,130	1,164	1,199	1,235
Barrier - Recycled Water	1,104	1,137	1,171	1,206	1,242	1,279
LPBF - Recycled Water	817	842	867	893	920	947
LPBF - Recycled Water (2)	1,522	1,600	1,689	1,770	1,843	1,920
HPBF - Recycled Water	933	961	990	1,020	1,050	1,082
Nitrified - Recycled Water	1,274	1,352	1,441	1,522	1,595	1,672
Reliability Service Charge	245	258	284	312	343	377
Metropolitan LRP Rebate	250	250	250	250	250	250
Metropolitan LRP Rebate - New Rate	-	-	340	340	340	340
Desalted Water (Jul)	1,204	1,243	1,306	1,366	1,416	1,455
Desalted Water (Jan)	1,243	1,306	1,366	1,416	1,455	1,495
Capacity Charge - Metropolitan	10,700	12,200	12,200	12,200	12,200	12,200
Capacity Charge - Metropolitan (Jan)	12,200	12,200	12,200	12,200	12,200	12,200
Capacity Charge-Cust	9,050	10,025	10,200	10,020	10,200	10,200
SALES VOLUME (afy)						
Non Interruptible (Jul)	49,400	48,176	44,900	44,900	44,900	44,900
Non Interruptible (Jan)	45,600	44,470	41,446	41,446	41,446	41,446
Non-Interruptible (Retail)	95,000	92,646	86,346	86,346	86,346	86,346
Seawater Barrier (Jul)	1,040	1,500	-	-	-	-
Seawater Barrier (Jan)	960	-	-	-	-	-
Seawater Barrier (Dominguez Gap)	2,000	1,500	-	-	-	-
Seawater Barrier (Jul)	2,600	2,132	884	884	884	884
Seawater Barrier (Jan)	2,400	1,968	816	816	816	816
Seawater Barrier (West Coast)	5,000	4,100	1,700	1,700	1,700	1,700
Recycled Water	33,032	33,886	38,186	38,186	38,186	38,186
Disinfected Ter. - Within WB	7,300	5,400	7,300	7,300	7,300	7,300
Outside Service Area - LADWP	970	970	970	970	970	970
Outside Service Area - Torrance	2,817	2,840	2,840	2,840	2,840	2,840
Nitrified - Torrance	2,700	2,700	2,700	2,700	2,700	2,700
Barrier	10,000	11,400	13,800	13,800	13,800	13,800
LPBF	1,700	1,800	1,800	1,800	1,800	1,800
LPBF (2)	4,195	5,426	5,426	5,426	5,426	5,426
HPBF	2,400	2,400	2,400	2,400	2,400	2,400
Nitrified - Recycled Water	950	950	950	950	950	950
Capacity Charge (In cfs) - MET	218.2	218.2	218.2	218.2	218.2	218.2
Capacity Charge (In cfs) - MET (Jan)	218.2	218.2	218.2	218.2	218.2	218.2
Capacity Charge (In cfs) - Cust	255.7	252.1	252.1	252.1	252.1	252.1
Capacity Charge (In cfs) - Cust (Jan)	252.1	252.1	252.1	252.1	252.1	252.1
FIXED PAYMENTS						
Marathon	2,136,000	1,246,000				
TRWRF NH3	229,510					
TRWRF BF (phase 2)	262,410					
Chevron Nitrification	1,009,800	168,300				
Chevron Boiler Feed	2,211,204	2,211,204	2,211,204	2,211,204	552,801	
TOTAL FIXED PAYMENTS	\$5,848,924	\$3,625,504	\$2,211,204	\$2,211,204	\$552,801	\$-



Debt Coverage Projected, Current Budget and 5-year Projection

FY 2022-23 thru FY 2028-29



Although West Basin’s debt covenants’ require a debt coverage ratio of 1.20, West Basin targets a higher appropriate rate to maintain West Basin’s excellent credit ratings of Aa2 and AA- with Moody’s and S&P Global rating agencies, respectively.

Historical Service Debt Coverage Comparison with Other Water Agencies

FY 2015-16 thru FY 2021-22

Name of Agency	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Central Basin MWD (1)	1.20	0.77	1.00	1.29	-	-	-
Calleguas MWD	1.42	1.93	2.12	2.06	1.84	2.29	3.44
Eastern MWD	2.80	2.50	2.70	3.50	3.60	3.60	3.70
Las Virgenes MWD (2)	2.61	2.90	2.69	2.60	N/A	11.57	12.75
Inland Empire Utilities Agency	3.42	3.67	4.35	4.35	4.49	5.18	7.30
San Diego County Water Authority	1.50	1.50	1.50	1.56	1.56	1.92	1.83
West Basin MWD	1.84	2.27	2.31	2.07	1.89	1.84	1.47
Western MWD	3.40	4.38	5.64	5.31	6.10	5.11	3.04

(1) FY’s 2019-20, 2020-2021 and 2021-22 Information was unavailable

(2) Outstanding bonds were paid in full in FY 2019-20.



Fund Balance (Designated Funds)

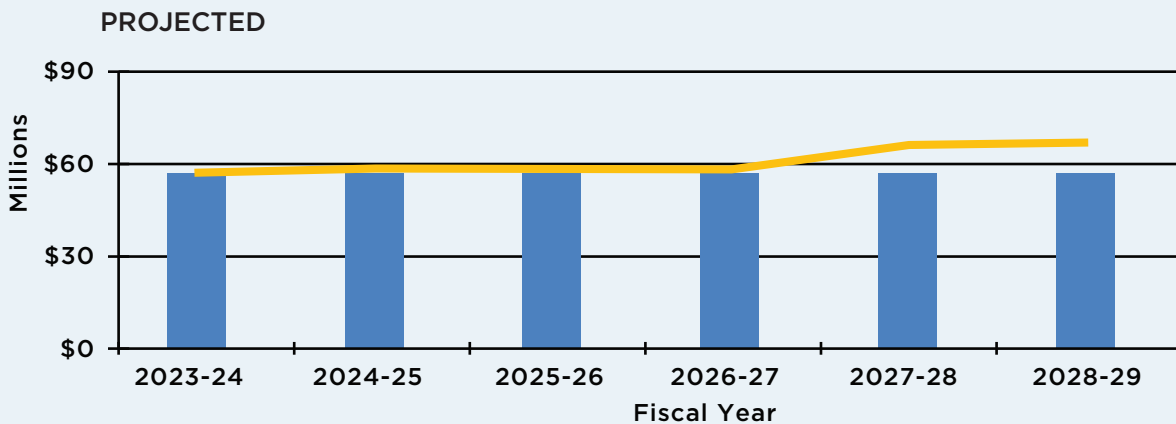
West Basin maintains two major types of funds, both restricted and unrestricted. Restricted funds consist of custodial accounts and bond reserves; the latter is subject to the conditions of the respective bond financing documents. The unrestricted reserves may be designated by the Board of Directors.

Designated Funds are a strong indicator of an agency’s financial health. West Basin’s Designated Funds Policy is sometimes referred to as a reserve policy and was designed to ensure West Basin has adequate funds to protect its financial health and the furtherance of West Basin’s mission. The policy does not specifically state a target amount but staff has established an internal target approach to fund West Basin’s Designated Funds. The policy allows for the fluidity of a target and will change each year based on the anticipated expenditures. The target amounts are based on West Basin’s experience, the current operating budget and capital improvement program. The sum of all the core components provide an overall target amount that serves as a trigger for the Board of Directors to consider options when funding levels fall near or below the overall target. If reserve levels exceed the minimum, the Board may consider options such as retiring outstanding debt or reducing future debt by considering funding certain capital projects with cash. Annually, staff calculates the overall target to ensure the Board approved Designated Funds policy is met.

The chart below shows the budgeted designated fund levels from FY 2022-23 (projected) through FY 2028-29.

Budgeted Designated Funds

FY 2023-24 thru FY 2028-29





Below are the revenues and expenses for FY 2023-24 through FY 2028-29.

Designated Funds Cash Flow (In 000's)

Fiscal Year	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Description	Projected	Budget	Budget	Budget	Budget	Budget
Designated Funds (Beg Bal)	\$70,000	\$57,129	\$57,129	\$57,129	\$57,128	\$57,128
Imported Water Revenue	173,743	179,479	172,842	183,316	192,779	202,761
Recycled Water Revenue	58,594	59,755	70,525	73,543	75,060	77,843
Other Revenues	11,786	3,361	3,261	2,761	2,761	1,761
Total Revenues	244,123	242,595	246,628	259,620	270,600	282,365
Water Purchases	140,879	143,354	137,628	144,971	152,754	160,977
Program Expenses	71,831	72,820	76,643	78,942	81,310	83,749
Net Debt Service	20,904	21,977	22,186	21,807	21,737	21,720
PAYGO/Draw on Reserves	23,380	4,444	10,171	13,901	14,799	15,919
Total Expenses	256,994	242,595	246,628	259,621	270,600	282,365
Designated Funds (End Bal)	\$57,129	\$57,129	\$57,129	\$57,128	\$57,128	\$57,128



Summary of Financial Policies

West Basin's Board of Directors has approved a number of financial policies to effectively manage the agency. All financial policies and non-financial policies are maintained by West Basin through its Administrative Code and are reviewed periodically to ensure compliance with legal statutes and incorporate other considerations. All recommendations for new or revised policies are brought to the Board of Directors for consideration and/or adoption and require a Board resolution to record the change.

In order to stay in compliance with each of its financial policies, staff performs periodic reviews, prepares quarterly reports, and has its policies reviewed by the independent external auditors. Each of the financial policies supports the assumptions within our Long-Range Financial Plan.

The following West Basin Board policies were considered and re-approved in January 2023:

- Investment Policy with addition of title for Local Government Investment Pools, added and removed definitions within the policy.
- The Swap Policy was terminated from the Financial Policies.
- The Small and Community Bank Investment Program Policy was updated to reduce the amount the District may invest in one bank, removed interest rate requirements, and added language to require staff to present to the board all community involvements in the past 12 months.
- The Disclosure Procedure Policy was reviewed by Bond Counsel and its language was added for best practice or removed due to redundancy.

West Basin has adhered to all of its policies and are in compliance.

Listed below is a summary of the key financial policies that the Board and staff must comply with when conducting business of the district. A copy of West Basin's Administrative Code that reflects these financial policies can be found on the District's website. Part 4 of the Administrative Code provides the detailed sections of each financial policy.

Annual Operating Budget Policies

- Annual budget is prepared under the direction of the General Manager.
- The budget is developed using the direction given by the Board of Directors through the Strategic Business Plan.
- A draft budget is to be presented to the Board within sixty days of the new fiscal year.
- The Board shall adopt a budget prior to commencing the next fiscal year.
- The General Manager will submit quarterly operating budget versus actual reports with explanation of significant variances.
- Adjustments to the Budget must be approved by the Board of Directors.



Investment Policy

- Funds will be invested in compliance with the provisions of the California Government Code Section 53601 and other applicable statutes and may be more restrictive than the Code.
- Safety of principal, liquidity and return on investment, in that order, are the criteria in which the Treasurer shall invest.
- Investments shall be diversified and to the extent possible, and match its investments with cash flow requirements.
- Annual appointment of Treasurer is required and may be a staff person.
- The Treasurer shall submit a monthly report to the Secretary of the Board of Directors indicating investment by fund, institution, date of maturity, amount of deposit, and shall provide the current market value of all securities with a maturity of more than 12 months, rates of interest, and expected yield to maturity.
- May engage services of an external manager to assist staff in the management of the investment portfolio, and assist in trade execution.

Designated Funds Policy

- Designated and undesignated funds can be used for any lawful purpose at the discretion of the Board of Directors.
- Policy will be reviewed annually to insure designated funds achieve an appropriate overall minimum target balance.
- Operating Liquidity Fund is for short-term or immediate purposes such as unplanned activities.
- Operating Contingency Fund provides protection against unforeseen expenses that cause actual expenses to exceed the budget.
- Capital Contingency Fund provides for unexpected cost increases/unanticipated capital projects.
- Rehabilitation & Replacement (R&R) Fund provides immediate resource for ongoing R&R of the system that is in excess of the amount included in the annual operating budget.
- Standby Charge Defeasance Fund is to repay outstanding debt that could eliminate the annual Standby Charge.
- System Expansion Fund provides for cash financing for future large-scale capital projects.
- Rate Stabilization Fund provides a resource to manage the level of water sales fluctuations from year-to-year.



Procurement Policy

- Covers the purchase of professional and non-professional services as well as supplies, goods and equipment.
- A competitive process ensures that purchases are made at the lowest possible cost commensurate with acceptable quality.
- Provides for a local business enterprise incentive to encourage local business to bid on West Basin's procurement opportunities.
- Thresholds are established to determine if single source (<\$10,000), informal process (\$10,000-\$50,000) or a formal process (>\$50,000) should be followed.
- Critical repairs acquisitions are subject to the informal solicitation process and shall not exceed \$250,000 per each critical repair or critical acquisition.
- Cooperative agreements are allowed.

Capitalization Policy

- Provides guidance for the capitalization and depreciation of assets to comply with the requirements of Governmental Accounting Standard Board Statement 34.
- Purchased or constructed assets will be reported at historical cost.
- Estimated useful life of an asset is determined using the Internal Revenue Tax Law requirements, general guidelines obtained from professional or industry organizations and information for comparable assets of other governments.
- Use the straight-line method with no salvage value for depreciating capital assets.

Accounting, Auditing and Financial Reporting

- The General Manager shall implement an accounting system meeting the financial reporting needs of the Board, and complies with generally accepted accounting practices.
- The General Manager shall review and pay all financial obligations as they become due and shall submit a monthly register of disbursements for ratification of the Board.
- The General Manager shall prepare and submit to the Board at the end of the fiscal year a comprehensive annual financial report on the finances of West Basin for the preceding year, keep the Board advised of the financial condition and future needs of West Basin, and make recommendations.
- West Basin will use widely recognized and Generally Accepted Accounting Principles (GAAP) and guidance issued by the Government Accounting Standards Board (GASB).
- West Basin will hire an independent accounting firm to perform annual audits in conformity with GAAP.



Debt Management

- Capital programs can be funded by debt.
- Long-term debt will not be used for operating and maintenance costs.
- Will maintain a debt coverage ratio consistent or greater than the legal or contractual requirements.
- Obtain the lowest cost of debt possible with the current ratings.
- Final maturity of the debt will not exceed the useful life of the assets being financed.
- Current refundings shall target to produce net present value savings of at least 3% of the refunded par amount. The target for advance refundings is at least 5% of the refunded par amount of each maturity being refunded.
- Quarterly reporting will be made to the Board of Directors that addresses current debt portfolio, variable rate exposure, remarketing experience and other considerations.

Rates and Charges

- The rates, fees and charges will recoup the amounts paid for water, the cost of operations and maintenance expenses, and an amount necessary for reasonable designated funds.
- The revenue produced by the rates, fees and charges will be used to provide service to existing customers.
- Rates and charges will be reviewed annually and the Board of Directors will adopt a resolution fixing the rates and charges for the following fiscal year.

Human Resources Management

- Determine staffing levels consistent with budgetary authority, available resources, and operating needs.
- The General Manager can modify positions and organizational structure to accomplish work within the budget approved by the Board of Directors for that fiscal year.
- The General Manager shall develop an employee performance evaluation plan to assess employee performance in accomplishing West Basin business.
- Salary ranges for positions shall be reviewed on an annual basis via a salary survey.
- West Basin will provide suitable training for staff.

Risk Management

- West Basin will procure insurance for risk of loss involving a combination of property damage and third party claims.
- To the extent practicable, West Basin shall transfer risks to third parties through appropriate contractual provisions.



Balanced Budget

- The budget should be balanced with the current revenues equal to or greater than current expenses.

Standby Charge Policy

- The Standby Charge is considered annually for adoption by the Board.
- The Chief Financial Officer is the designated administrator and has day-to-day responsibility for managing and monitoring.
- Standby Charge proceedings follow California Government Code Section 54984.
- The Board may consider eliminating the Standby Charge if it determines that the original estimate of 70,000 to 100,000 AFY will be or has been met and all associated debt to meet those deliveries has been paid.
- Staff will provide an annual report to include the Surplus Net Revenue, an account summary of the Standby Charge Defeasance Fund, and an analysis comparing the balance of the Standby Charge Defeasance Fund to the remaining principal and any accrued interest or prepayment penalties.

Disclosure Policy

- Potential investors in obligations must be provided with all “material” information relating to offered obligation.
- When obligations are issued, the two central disclosure documents which are prepared are a preliminary official statement (“POS”) and a final official statement (“OS”).
- The Chief Financial Officer and other relevant staff are responsible for reviewing and preparing or updating certain portions of the District Section of the OS.
- All participants in the disclosure process are separately responsible for reviewing the entire OS.
- The Executive Manager of Finance shall schedule one or more meetings of the financing team and the underwriter of the obligation and the underwriter’s counsel to discuss the OS and the District Section.
- The POS shall be provided to the Board of Directors in advance of approval to afford the Board of Directors an opportunity to review the POS, ask questions and make comments.
- Periodic training for the staff involved in the preparation of the OS shall be coordinated by the Executive Manager of Finance.
- The District must comply with the specific requirements of each Continuing Disclosure Certificate.
- The Executive Manager of Finance shall be responsible for preparing and filling the annual reports and material event notices.



Performance Metrics

Performance metrics is defined as a measure of an organization's activities and performance, and support a range of stakeholder needs from customers to the Board of Directors and employees. While they are traditionally financed based and focus on the performance of the organization, metrics can also focus on performance against customer requirements, effective use of resources, and adherence to policy and reporting requirements.

West Basin continues to explore and identify key performance metrics that provide meaningful information that the Board of Directors and staff can use to measure the success of the programs, services and related resources that are funded and within the budget. In addition, staff has provided the accomplishments and strategies under the Operating Program Expenses and CIP section to reflect how the use of funds will benefit the agency. Furthermore, the performance metrics are reflected with each program budget in Section 7.



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BUDGET PROCESS & TIMELINE





Budget Process and Timeline

Public agencies develop budgets as a performance tool to measure accountability to their stakeholders. For West Basin, the budget is developed based on meeting the priorities, goals, and objectives established by the Board of Directors through its strategic business plan. The strategic business plan provides direction for planning, budgeting, implementation, evaluation, and reporting. The Plan is a “living” document in that it does not have a termination date, but it is constantly changing and evolving as the needs of West Basin change and evolve.

The budget process for West Basin is designed to produce a document that is:

- A policy document that provides the rationale for the budget;
- A communications tool that effectively communicates how the budget helps implement the long-range goals and strategies;
- An operational guide representing the efforts to control operations and measure performance; and
- A long-term financial plan to guide West Basin’s allocation of resources

KEY BUDGET DRIVERS & OTHER CONSIDERATIONS	Addressed
Funding future capital improvement projects	✓
Impact of water demand variability	✓
Level of investment in conservation	✓
Consider a long-term rate management strategy	✓
Understanding staffing resources for program delivery & succession planning	✓

The budget is available for interested parties, such as bond holders, credit rating agencies and its customers for review. It contains a wide variety of information on West Basin’s short- and long-term strategic planning and financial policies, as well as the current and future fiscal stability. The budget further demonstrates West Basin’s commitment to fiscal responsibility and transparency of its operations. The budget shows how the agency will invest its revenues - derived from user fees and fixed revenue sources- to support its mission and programs. The General Manager communicates the goals and the current year’s budget objectives to the managers to ensure the budget includes the financial requirements necessary to achieve these goals and objectives. To ensure completion, the strategic goals are also incorporated into individual staff’s performance and monthly board memos to reflect the commitment to meet the Board’s directives.



As a good business practice, West Basin prepares, adopts, monitors, and reports budgeted information to the Board of Directors on a quarterly basis.

The Board adopts the annual operating budget by June 30th of each year. The budget can be adopted in one of three ways: 1) by motion, 2) by resolution, or 3) by ordinance. Historically, West Basin has adopted its budget by motion and will continue to adopt the budget in this manner due to the rule of “equal dignity”. The rule of “equal dignity” requires an entity that takes action by motion, resolution, or ordinance to use the same method for any subsequent action.

Budget Basis

West Basin is an independent special district of the State of California and operates as a single enterprise fund. An independent special district operates under a locally elected, independent Board of Directors. It is “independent” from other governments and is directly accountable to the people it serves. Because West Basin does not rely on public funds to operate and is independent from other governments, it adopts a flexible operating budget which is communicated to its customers and approved by its Board of Directors. The enterprise fund is an accounting entity with a self-balancing set of accounts established to record the financial position and results that pertain to a specific activity. The activities of the enterprise fund closely resemble those of businesses and are substantially financed by revenue derived from user charges.

With accrual basis accounting, an entity records all transactions when they occur regardless of when cash is received from a customer or paid to a vendor. Revenues are recognized when earned and expenses are recognized when incurred. Cash-basis accounting is an example of another basis of accounting. With cash-basis accounting, an entity records all transactions when cash actually changes hands, in other words, when a cash payment is received from a customer or paid out to a vendor.

The budget for West Basin is kept on an accrual basis, with the exception of its annual debt service. Debt service is shown on a cash basis to replicate how rating agencies view and calculate West Basin’s debt coverage ratio. West Basin also maintains its financial records on an accrual basis. Both the budget and actual transactions are recorded based on a program activity focus. Personnel may work across departments to assist in matters that support the programmatic efforts. By focusing on program activities and not department activities, West Basin has been able to maintain a small and efficient staff.



Budget Timeline for Fiscal Year 2023-24

Date	Key Activities
January 12, 2023	Submit Budget Questionnaires
January 12, 2023	Submit staff labor allocation
January 27, 2023	Sales projections (AF) due for both Potable and Recycled Water
February 16, 2023	Submit proposed FY 2023-24 operating program budget
February 18, 2023	Submit FY 2022-23 year-end operating program projections
February 23, 2022	Submit a proposed 5-Year capital budget
March 1, 2023	Submit operating program text
March 15, 2023	Budget Workshop - Budget Overview
April 12, 2023	Board Budget Workshop - Operating Expenses and Staffing Overview
May 3, 2023	Board Workshop - Program and Capital Budget Workshop
May 24, 2023	Board Workshop - Budget Overview & Long-Range Financial Planning
June 6, 2023	Customer Agency Workshop
June 21, 2023	Finance Committee - Present final rates/charges and budget document
June 26, 2023	Board Meeting - Adopt rates/charges and budget



Budget Process

January

Department managers review staffing levels, submit justifications for any new positions and submit staff labor allocations. The Executive Team reviews position requests and a decision is made on which position(s) would be included in the proposed budget. Water sales projections are discussed by the department managers to aid in the development of water sales assumptions for both imported and recycled water sales. Program Managers review their current budget versus actual reports.

February

Program managers submit their proposed operating budget for FY 2023-24 and their year-end projections for FY 2022-23. Engineering team meets with budget staff to review and gain an understanding of the 5-Year capital budget projects and funding.

March

Budget staff updates its five-year projected operating model with the proposed operating and CIP budgets, along with water sales projections and current debt service. The budget team will present the first budget workshop to discuss the overview of the FY 2023-24 budget drivers, anticipated revenues, expenses, and 5-year forecast with the Board. In addition, budget staff presents a sensitivity analysis for FY 2023-24 and the next four years beyond. At this time, Board members may give direction or request changes or additional information to the draft expense budget. Program managers and budget staff submit budget text to explain and support program costs, water rates and charges, and other budgetary assumptions.

April

Staff hosts a second workshop to discuss follow-up items from the previous workshop and the proposed expense and proposed staffing.

May

Staff hosts the third and fourth workshops, and any changes requested by the Board and/or General Manager are incorporated and recapped.

June

West Basin conducts a customer agency workshop to discuss its goals, the proposed budget, and water rates. Staff presents final rates/charges and budget document. The Board of Directors adopts the annual water rates, charges, and annual standby charge. The Board of Directors motions to adopt the operating budget for the next fiscal year beginning July 1. Any changes requested by the Board and/or the General Manager are incorporated into the draft proposed budget, which is then presented at the Finance and Administration Committee.



Budget Review

West Basin's budget monitoring process begins shortly after the budget is adopted. Each month the program managers receive a budget versus actual report to review and assist them in monitoring costs. On a quarterly basis, the Finance Department develops an executive level budget versus actual report and presents it to the Board of Directors. In addition, other financial reports are presented monthly to keep the Board of Directors informed of water sales, recycled water operations, general expenditures, and cash position.

Amendments to the Budget

The budget is amended when expenditures are anticipated to significantly exceed estimates. Budget amendments can also occur for expenditures seen as appropriate charges but were not anticipated in the budget process. Any amendments adding to the original budget are brought to the Board of Directors through staff reports at the appropriate committee meeting. The Staff is to describe why, how much, and what program budget requires an amendment to the original budget. These approvals are discussed at both the appropriate committee and Board meetings and require a majority vote of the Board of Directors to be incorporated. Upon approval, staff updates the budget and financial system to reflect the approved change.



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SOURCE OF REVENUE



Source of Revenue

West Basin's revenue is derived from water sales and charges, fixed revenues, water use efficiency income and interest income. The two primary sources are imported and recycled water sold to its customer agencies. Imported sales represent 68% and recycling sales represent 19% of all revenue sources. Total budgeted revenues for Fiscal Year (FY) 2023-24 are \$244,122,235.





Revenue Highlights

West Basin is a wholesale water agency who purchases imported water from Metropolitan Water District of Southern California (MWD) to supplement local supplies for retail use (municipal, commercial, and domestic) and groundwater replenishment uses. In the early 1990's West Basin began diversifying its water portfolio through a pilot program on brackish groundwater and investing in a recycled water system consisting of treatment facilities and distribution pipelines. The intended users of the recycled water are for industrial, commercial, and landscape irrigation sites. Today more than 400 customer meters have been installed throughout the southwestern portion of Los Angeles County that benefit from this local resource. To fund the construction of the recycled water facilities and pipelines, West Basin issued long-term debt and obtained funding from a variety of sources including a standby charge, federal and state grants, fixed capital revenue charges, and establishing commodity rates.

In previous years, West Basin would receive approximately 10% of its revenues from fixed revenue sources, including but not limited to the fixed service charge, fixed capital revenue charges, and the standby charge. The fixed capital revenue charges are determined by agreements, and both the fixed service charge and standby charge are approved by resolution. West Basin is working with its existing customer to renew its agreement which will have an impact to its revenue and expenses.

On May 22, 2023 through Resolution 05-23-1194, the annual standby charge was adopted. West Basin also establishes its water rates and charges through a resolution through with Board approval. Resolution 06-23-1195 was adopted on June 26, 2023 meeting and includes rates for the following services:

- Two price tiers for imported water service;
- Capacity Charge;
- Fixed Service Charge;
- Recycled water rates for each class of service.

Although Resolution 06-23-1195 reflects imported water rates for two tiers, Tier 2 pricing is not anticipated for West Basin customers.

The acre-foot (AF) assumption for water deliveries is reviewed annually and is a key driver to the operating budget. Budgeted sales are based upon a review of historic water sales, discussions with customers about their intended overall water management strategies and trends (groundwater extractions and imported and recycled water usage), and a review of potential new recycled water sales from completed capital projects that would replace imported water as well as capital projects within West Basin's service area that may increase groundwater usage. In March 2023, Governor Newsom eased drought restrictions and ended its 15% conservation target. However, due to the drought messaging and restrictions, it is expected residential water consumption would not return to previous levels. In addition, the shutdown of MWD's pipeline in September 2022 also impacted actual deliveries during FY 2022-23. Retail imported water sales are anticipated to be 91,000 AF in FY 2022-23 from actual retail imported water sales of 103,601 AF in FY 2021-22.

To respond to the call for conservations, many residents within the West Basin service area took advantage of the grass removal incentives West Basin and MWD have offered in the past two years. As a result, West Basin budgeted its imported retail sales for FY 2023-24 at 95,000 AF.



Imported water sales to both of the barriers (West Coast and Dominguez Gap) is anticipated to be 7,000 AF in FY 2023-24, which is higher than the budget in FY 2022-23 of 6,700 AF. To understand the variability in sales and to better budget for next fiscal year's sales to the barriers, West Basin received input from its customer, Water Replenishment District (WRD), and the County of Los Angeles. The West Coast Basin Barrier (Barrier) has historically been replenished with a mix of recycled and imported water purchased from West Basin to prevent seawater intrusion. West Basin strives to deliver as much recycled water to the Barrier but prior years' experience has shown that about 80% of the source replenishment water is actually from recycled water and 20% from imported water. In discussions with both the County of Los Angeles (who manages both the West Coast and Dominguez Gap Barriers) and WRD (who manages the local groundwater resources in southern Los Angeles County), West Basin was informed of planned Barrier injection into the wells in FY 2023-24. Based on the information provided, and discussion with West Basin operation's staff, West Basin has set the budget to 10,000 AF in recycled water and 5,000 AF of imported water for replenishment demand in FY 2023-24.

As a result of the settlement agreement approved by Los Angeles Superior Court, the standby charge instructions are to wind down the standby charge over an eight-year period. West Basin has budgeted a decrease in FY 2023-24 from FY 2022-23 of approximately \$300,000, or approximately \$5.9 million in revenues from the standby charge program.

Summarized below are the actual and projected revenues for the past three years along with comparative budgets (FY 2022-23 & FY 2023-24) to see the trend of various revenue sources.

Revenues	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
Description	Actual	Actual	Projected	Budget	Budget
Imported Water Sales	\$154,521,456	\$165,981,362	\$148,566,513	\$168,034,312	\$165,177,298
Fixed Service Charge	7,459,131	6,572,328	6,312,275	6,312,275	6,185,899
Capacity Charge	2,023,801	2,425,512	2,448,604	2,448,604	2,378,620
Recycled Water / LRP	38,645,372	29,623,623	38,942,200	43,273,892	46,866,144
Fixed Capital Charge	12,109,530	8,455,418	11,969,291	8,308,524	5,848,924
Desalter Water	427,455	0	0	0	0
General Fund Interest	984,326	368,857	1,773,873	1,020,000	2,850,000
Standby Charge	10,051,886	10,009,110	6,179,217	6,179,217	5,879,000
Conservation Income	344,166	541,386	270,000	270,000	560,600
Other Income	158,991	2,563,667	545,587	45,000	8,375,750
Total Revenues	\$226,726,114	\$226,541,263	\$217,007,560	\$235,891,824	\$244,122,235



Water Rates and Charges

West Basin rates and charges are made up from both variable and fixed components, with both types of charges effective either on a calendar (January 1st) or fiscal year (July 1st) basis. The chart below provides the basis and timing of the rates and charges.

WB Imported Tier I Commodity Rate (Three Components = One Rate)	Basis	Effective Rate Change
WB Reliability Service Charge (RSC)	Per Acre-Foot (AF)	July 1, 2023
Metropolitan Imported Tier I Rate (Pass-Thru)	Per Acre-Foot (AF)	January 1, 2024
Metropolitan Readiness to Serve (RTS)	Per Acre-Foot (AF)	January 1, 2024

Fixed Charges	Basis	Effective Rate Change
WB Fixed Service Charge	Annual Calculation based on 3-Year Historic Sales	July 1, 2023
Metropolitan Capacity Charge (Pass-Thru)	Annual Calculation based on peaking cfs flow rate	January 1, 2024

Imported Water Revenues

Historically, West Basin’s imported water rate is comprised of three components:

1. MWDs Commodity Rate;
2. MWD’s Readiness-to-Serve Charge (RTS); and
3. West Basin’s Reliability Service Charge (RSC)

The Board approved a pass-through of MWD’s increase in the Tier I rate and the RTS, and a one-year rate increase on its RSC of \$18/AF for FY 2023-24 at the Board meeting on June 26, 2023 per resolution 06-23-1195. In addition to the adjustments to the commodity rate, the Board approved the pass-through of MWD’s Capacity Charge and a decrease to its Fixed Service Charge. Based on AF assumptions and the rates for the fiscal year described below, West Basin is budgeting \$165.2 million in imported water sales and reducing its Fixed Service Charge to \$6.2 million from \$6.3 million.

MWD Commodity Rate

On April 12, 2022 Metropolitan’s Board of Directors voted to increase their imported commodity rate for Calendar Year (CY) 2023 and 2024 by \$66/AF or 5.8% and \$47/AF or 3.9%, respectively both effective on January 1 of each year. West Basin will pass through the Metropolitan Tier 1 commodity rate of \$1,256/AF beginning January 1, 2024.



Readiness-to-Serve Charge

Metropolitan’s Board of Directors also approved in April 2022 an overall RTS collection of \$154 million in CY 2023 and \$167 million in CY 2024 from its 26-member agencies, with rate changes effective January 1 of each FY. The amount collected is allocated to each of its customers based on each agency’s respective percentage to the total on the 10-year rolling average of firm sales. The 10-year rolling average is based on a CY (January to December).

West Basin collects this revenue on its own rates instead of a Metropolitan standby charge, as such, West Basin converts the Metropolitan’s RTS fixed charge to a dollar amount per AF and is one component of West Basin’s imported water rate. This component of West Basin’s imported water rate is determined by dividing West Basin’s share of Metropolitan’s RTS fixed charge by the budgeted imported water sales (not including the imported water sales to WRD for injection into the West Coast Barrier), for a rate of \$146/AF, effective January 1, 2024. This is a \$25/AF increase above the current charge of \$121/AF in calendar year 2023.

	Calendar Year 2023	Calendar Year 2024
MWD Calendar Year Collection	\$154M	\$167M
West Basin’s Allocation of MWD’s Total Collection (Based on 10-year rolling average)	8.01%	8.04%
West Basin’s Allocated Share (6-month increments) July - December 2023 January - June 2024	\$6,167,700	\$6,713,400

Reliability Service Charge

When determining the RSC, West Basin considers both the current year and the five-year forecast in striving to achieve appropriate target levels. Subsequent to the phase-in of the FSC, the RSC has increased to reflect the cost increases required to maintain service to our customers in order to provide a safe and reliable supply of high-quality water. The FY 2023-24 budget reflects an \$18/AF increase in the RSC from \$257/AF to \$275/AF. In FY’s 2018-19, 2019-20 and 2020-21, the RSC did not increase while West Basin phased-in the Fixed Service Charge (FSC). With the full FSC in place, the RSC was increased by \$8/AF in FY 2021-22. However, the FY 2023-24 budget reflects the cost increases required to maintain service to our customers and thereby necessitates a \$18/AF increase in the RSC.

Rates Components	Today	Effective July 1, 2023 (July-December 2023)	Effective January 1, 2024 (January-June 2024)	Annual Rate Adjustment
Metropolitan Imported Water Tier I Rate	\$1,209	\$1,209	\$1,256	\$47
Metropolitan Readiness to Serve (RTS)	\$121	\$121	\$146	\$25
West Basin Reliability Service Charge (RSC)	\$257	\$275	\$275	\$18
Total West Basin Tier I Commodity Rate	\$1,587	\$1,605	\$1,677	\$90



Imported Retail Sales

Imported retail water sales vary based on hydrologic conditions, water demand and on the available water supply. As the chart below shows, consumer usage of imported water since the end of the last drought in FY 2016-17 has not returned to pre-drought levels. With the Governor’s recent calling for steps to drive water conservation, West Basin is projecting sales to be at 91,000 AF, a drop of 12,601 AF from the previous fiscal year actual sales of 103,601 AF. Based on discussions with customer agencies and their input regarding overall water management strategies and trends, and due to the uncertainty of consumer use and hydrology, West Basin is budgeting for retail sales at 95,000 AF in FY 2023-24.

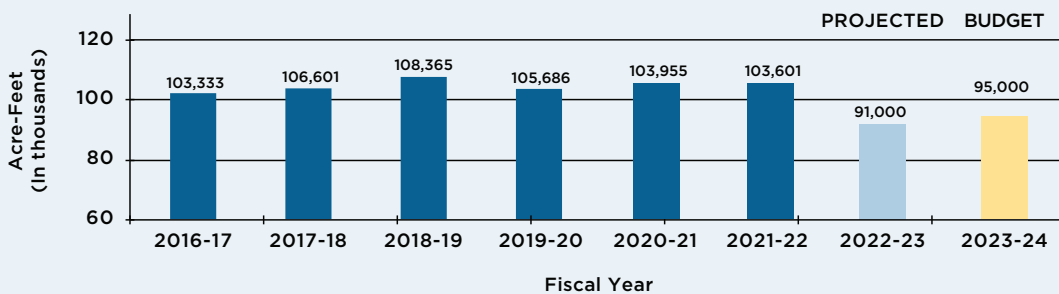
Although West Basin is not the supplier of groundwater, the amount of groundwater use in West Basin’s service area can create a downward impact on its imported retail sales. The table below shows the rebound in groundwater use beginning in FY 2018-19 and continuing and projected through FY 2022-23. The rebound in groundwater use projected in FY 2022-23 has been incorporated in the budget for imported retail sales.

Groundwater Pumping History FY 2018-19 thru FY 2022-23

Fiscal Year	Groundwater AFY
FY 2018-19	19,776
FY 2019-20	20,556
FY 2020-21	24,937
FY 2021-22	24,713
FY 2022-23 (1)	26,600

(1) Estimated based on actual groundwater extraction through April 30, 2023.

Retail Sales FY 2016-17-FY 2023-24



Imported Barrier Sales

The West Coast Basin Barrier (Barrier) has historically been replenished with a mix of recycled and imported water to prevent seawater intrusion. West Basin’s goal is to deliver 100% recycled water to the Barrier but prior years’ experience has shown that about 80% of the source replenishment water is actually from recycled water and 20% from imported water. Due varying quality of source water, West Basin anticipated 7,071 AF in recycled water, with 4,800 AF of imported water for FY 2022-23. In recent discussions with both the County of Los Angeles (who manages both the West Coast and Dominguez Gap Barriers) and WRD (who manages the local groundwater resources in southern Los Angeles County), West Basin was informed of planned Barrier injection into the wells in FY 2023-24. Based on the information provided, and discussion with West Basin operation’s staff, West Basin has set the budget to



5,000 AF of imported water for replenishment demand and 10,000 AF of recycled water in FY 2023-24.

The City of Los Angeles is the local provider of recycled water to the Dominguez Gap Barrier. However, due to operational issues, the City has been unable to meet the Dominguez Gap Barrier’s total demand, resulting in West Basin supplying the shortfall with imported water. In consultation with WRD and review of current deliveries, West Basin has maintained the budget for imported barrier sales relatively flat for FY 2023-24 at 2,000 AF.



An AF is equivalent to 325,900 gallons of water that meets the need of two average families, in and around the home, for one year. An AF is equal to the amount needed to fill a football field one foot deep in water.

Fixed Service Charge

Historically, West Basin relied heavily on variable water sales for the majority of its imported water revenue. However, during periods of reduced sales due to drought, West Basin’s revenues can decline significantly. To provide a reliable and stable revenue source making West Basin less vulnerable to demand fluctuations and allow for more rate stability for its customers West Basin’s Board moved towards incorporating a fixed charge.

A Fixed Service Charge was introduced in FY 2018-19 as a result of a study performed to explore rate structure alternatives with the objective of maintaining revenues and promoting rate stability. To alleviate the potential for rate increases to its customers, West Basin chose to implement the Fixed Revenue Charge over 3-years while keeping its Reliability Service Charge flat (this charge is a variable rate charged on a per AF basis) during the same 3-year period. Per the study performed by an independent third-party, the basis of the Fixed Service Charge is the sum of the budgets for the Public Information & Education and Water Policy & Resource Development programs.

The Fixed Service Charge will decrease from \$6,312,275 in FY 2022-23 to \$6,185,899 in FY 2023-24, beginning July 1, 2023. While determined on an annual basis, West Basin charges its customers on an on a monthly basis.

Fixed Service Charge

FY 2023-24

Customer Agencies	3-Year Ave Deliveries (AF)	Annual Charge	Monthly Charge
California American Water Co.	1,181	\$77,198	\$6,433
California Water Service - Dominguez	22,423	1,299,567	108,297
California Water Service - Hawthorne	3,335	175,016	14,585
California Water Service - Hermosa	10,028	589,007	49,084
California Water Service - Palos Verdes	17,719	972,244	81,020
City of El Segundo	6,695	359,869	29,989
City of Inglewood	6,070	360,783	30,065
City of Lomita	2,028	105,113	8,759
City of Manhattan Beach	4,635	262,439	21,870
Golden State Water	21,907	1,279,980	106,665
L.A. Co. Water Works District No. 29	8,393	457,541	38,128
WRD - Dominguez Gap Barrier	3,310	247,142	20,595
TOTAL	107,724	\$6,185,899	\$515,490



Capacity Charge

Metropolitan developed the Capacity Charge to recover its costs in providing distribution capacity use during peak summer demands. The aim of this charge is to encourage customer agencies to reduce peak day demands during the summer months (May 1 thru September 30) and shift usage to the winter months (October 1 thru April 30), which will result in a more efficient utilization of Metropolitan’s existing infrastructure and defers capacity expansion costs. As this is a Metropolitan charge, West Basin passes-through this charge to its customers.

West Basin’s combined cubic feet per second (cfs) peak amount from its customers is 255.7 cfs for CY 2023 and decreased to 252.2 cfs for CY 2024 and is calculated on each customer’s highest overall peak level during the past three (3) years.

West Basin models Metropolitan’s methodology to calculate its peak charges to its customer agencies by multiplying each purveyor’s highest daily average usage (per cfs) for the past three summer periods by the Capacity Charge Rate. The timing of the rate change is structured to coincide with Metropolitan and is calculated to collect the amount West Basin is to pay. West Basin is able to pass through a lower rate per cfs and establish a more equitable distribution of Metropolitan’s charge as the agency’s highest peak may be different from the individual customer’s highest peak.

West Basin will increase its current Capacity Charge Rate from \$9,135/cfs to \$9,605/cfs on January 1, 2024, with anticipated revenues of \$2,378,620 during FY 2023-24 to pass through the higher Metropolitan cost.

The tables below show the peak cfs for CY’s 2023 and 2024 by customer agency.

Capacity Charge

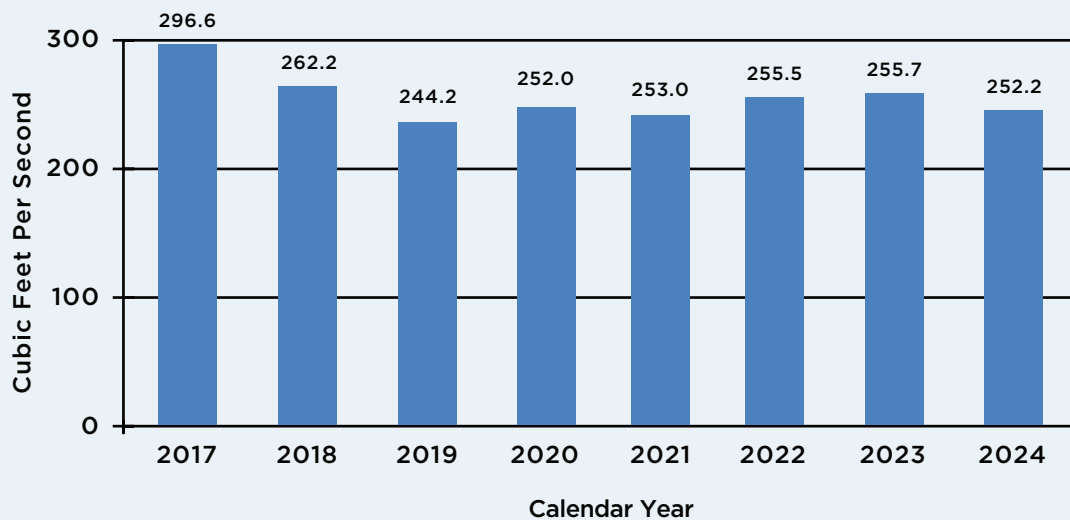
Effective 1/1/23 to 12/31/23				
West Basin Customers	Calendar Year			3-YEAR PEAK
	2019	2020	2021	
California American Water Co.	5.0	4.8	4.1	5.0
Cal Water - Dominguez	43.5	44.2	40.3	44.2
Cal Water - Hawthorne	6.2	6.4	6.6	6.6
Cal Water - Hermosa Redondo	19.2	19.7	16.5	19.7
Cal Water - Palos Verdes	40.4	44.8	38.9	44.8
LA County Waterworks No. 29	14.7	15.8	16.7	16.7
City of El Segundo	12.3	8.5	14.0	14.0
City of Inglewood	11.8	12.0	11.9	12.0
City of Lomita	3.5	3.8	3.4	3.8
City of Manhattan Beach	8.1	8.4	8.1	8.4
Golden State Water Co.	44.5	40.9	35.2	44.5
Water Replenishment District	26.0	12.8	36.1	36.1
			TOTAL	255.7



Effective 1/1/24 to 12/31/24				
West Basin Customers	Calendar Year			3-YEAR PEAK
	2020	2021	2022	
California American Water Co.	4.8	4.1	2.9	4.8
Cal Water - Dominguez	44.2	40.3	42.8	44.2
Cal Water - Hawthorne	6.4	6.6	6.8	6.8
Cal Water - Hermosa Redondo	19.7	16.5	17.7	19.7
Cal Water - Palos Verdes	44.8	38.9	32.4	44.8
LA County Waterworks No. 29	15.8	16.7	14.8	16.7
City of El Segundo	8.5	14.0	12.1	14.0
City of Inglewood	12.0	11.9	11.2	12.0
City of Lomita	3.8	3.4	3.7	3.8
City of Manhattan Beach	8.4	8.1	7.4	8.4
Golden State Water Co.	40.9	35.2	35.7	40.9
Water Replenishment District	12.8	36.1	10.4	36.1
			TOTAL	252.2

The chart below shows the collective annual peak for West Basin's customers from CY 2017 through CY 2024.

Capacity Charge FY 2017-24





Recycled Water and Fixed Revenue Charges

By resolution 06-22-1163, West Basin adopted its recycled water rates to increase according to customer agreements, or to align more closely to the unit cost to produce recycled water, depending on the type of recycled water. Historically revenues from recycled water sales consisted of commodity charges and incentive payments from Metropolitan’s Local Resources Program (LRP). The LRP provided a \$250/AF rebate for each AF of recycled water produced and sold, helping West Basin and its customers to develop and utilize recycled water as much as possible thereby decreasing the reliance on imported water. The first LRP agreement West Basin entered with Metropolitan expired March 2020 and made up the majority of the LRP received. A second LRP agreement was entered into in June 2012 and will expire in 2037. The second LRP agreement is anticipated to generate \$7,500 of revenue in FY 2023-24 based on the estimated sales to its customer, NRG. Should the recycled water sales to the West Coast Barrier exceed 12,555 AF, West Basin would be eligible for the \$250 per AF. West Basin also receives a reimbursement of certain operating costs from one of its refinery customers which is set to expire on August 31, 2023. This agreement stipulates the charge increases annually by the lesser of West Basin actual increase in cost of operations and maintenance or the increase in CPI. The amount in total recycled water revenue including the LRP is \$46,866,144 for FY 2023-24.

Recycled Water Rates (Effective July 1, 2023)			
Volume (AF/Month)	WBMWD Service Area	Outside Service Area	Designer Recycled Water
0-25	\$1,649/AF	\$1,691/AF	West Coast Barrier Nitrified Low Pressure Boiler Feed High Pressure Boiler Feed Established by Agreement
25-50	\$1,639/AF	\$1,681/AF	
50-100	\$1,629/AF	\$1,671/AF	
100-200	\$1,619/AF	\$1,661/AF	
200+	\$1,609/AF	\$1,651/AF	

In addition, West Basin has established agreements with the refineries to pay for a portion of the capital cost to produce recycled water and anticipates receiving approximately \$5.8 million in fixed capital revenue charges. The recycled water agreements include Marathon, Chevron, and Torrance Refining Co.

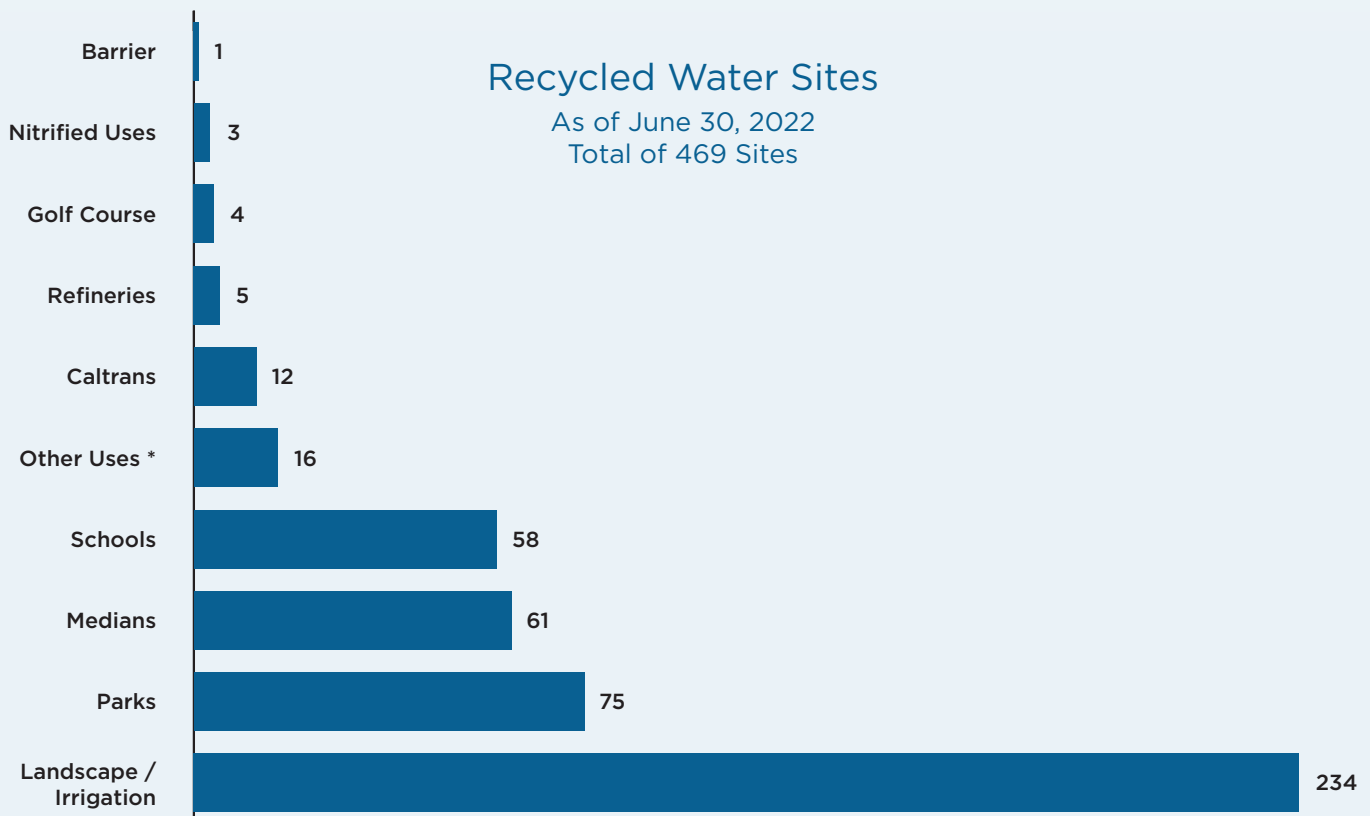
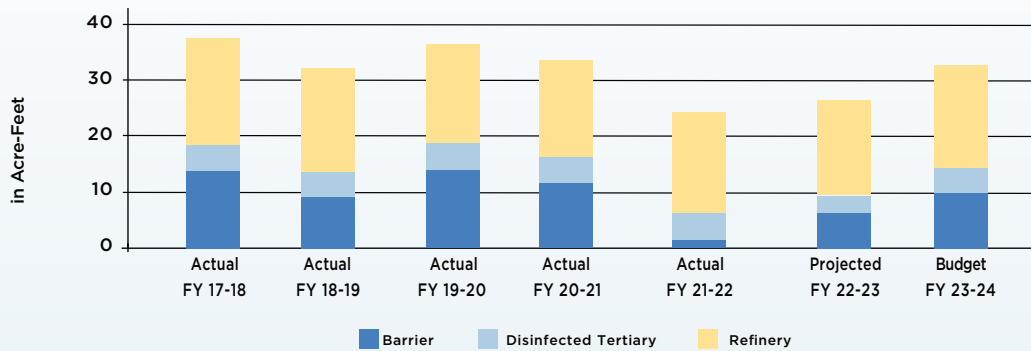
Name	Monthly Amount	Annual Amount	Termination Date
Chevron – Nitrified	\$84,150	\$1,009,800	8/31/24
Chevron – Boiler Feed	\$184,267	\$2,211,204	9/30/27
Marathon – Nitrified and Boiler Feed	\$178,000	\$2,136,000	1/31/25
Torrance Refining – Nitrified	\$114,755	\$229,510	8/31/23
Torrance Refining – Boiler Feed	\$131,205	\$262,410	8/31/23
TOTALS	\$692,377	\$5,848,924	



The table below shows the future anticipated Fixed Revenue Charges assuming there are no new agreements.

FY 24	FY 25	FY 26	FY 27	FY 28
\$5,848,924	\$3,625,504	\$2,211,204	\$2,211,204	\$552,801

West Basin currently serves recycled water to more than 450 meters with sales projected at 28,024 AF in FY 2022-23 compared to the budget of 32,643 AF. For FY 2023-24, West Basin budgeted 33,032 AF in recycled water sales. The FY 2023-24 recycled water budget of 33,032 AF considers how CIP projects will affect sales. Expected recycled water sales are approximately 56% to the refineries, 30% to the WRD for the Barrier, and the remaining 14% will be used in parks, golf courses, schools and street medians.



* Includes cemetery, college, construction, draining and multi-industrial use.



Other Sources of Revenue

Standby Charge

In 2017 a class action lawsuit was filed contesting the validity of the standby charge. On April 1, 2022 the Los Angeles County Superior Court finally approved a settlement of the suit, which will result in a phased reduction and eventual elimination of the standby charge, summarized as follows.

For properties within the West Basin service area, except for West Hollywood, property owners will experience an immediate reduction in their Standby Charge of no less than 30%; for the next two years, the Standby Charge will be reduced by no less than 40%; and for the subsequent five years, the Standby Charge will be reduced by no less than 20%. For these property owners, the Standby Charge will terminate no later than June 30, 2030. In West Hollywood, the diminution and elimination occur even more quickly: West Hollywood property owners will experience an immediate 40% reduction in their Standby Charge, followed by a 60% reduction for the subsequent year. The Standby Charge will be eliminated for West Hollywood property owners no later than June 30, 2024. Based on the terms of the settlement agreement West Basin has budgeted its standby charge revenue for FY 2023-24 at \$5.9 million.

The Board conducted a public hearing on May 22, 2023, to receive written and verbal comments from property owners, public agencies and other interested parties and none were received. After careful consideration the Board voted to adopt the annual Standby Charge (Resolution 05-23-1194) at its May 22, 2023 meeting.

The tables below are an excerpt from the engineer’s report that specifies the anticipated number of units included in the Standby Charge Program in FY 2023-24 broken out between Outside West Hollywood and West Hollywood only.

Outside West Hollywood

	Parcels =< 1 Acre	Acres >1 Acre	MFR Units
Residential			
Single Family, Duplex	139,367	14,789	
Muti-Family			168,375
Low-use	3	178	
Non-Residential			
Non-residential	11,544	14,884	
Low-use	7	20	
TOTAL	150,921	29,871	168,375



West Hollywood Only

	Parcels =< 1 Acre	Acres >1 Acre	MFR Units
Residential			
Single Family, Duplex	1,554	0	
Muti-Family			25,560
Low-use	0	0	
Non-Residential			
Non-residential	976	62	
Low-use	0	0	
TOTAL	2,530	62	25,560

Water Use Efficiency Income

West Basin continues to participate in the Metropolitan Member Agency Administered (MAA) funding program, whereby West Basin is allocated an amount each year to utilize for developing water use efficiency programs that deliver both conservation devices and education to West Basin’s service area.

For FY 2023-24, West Basin will continue to receive MAA funding, and has estimated the total conservation income at \$260,600.

In addition, West Basin has secured an additional \$300,000 through DWR for various Water Use Efficiency programs. There is one pending grant which not included in revenue or expenses for FY 2023-24.

Interest Income

West Basin has adopted an investment policy in accordance with California Government Code 53600 et. seq. and has utilized an investment manager to actively manage its portfolio, keep West Basin apprised of current market conditions, review West Basin’s investment policy and procedures, and implement changes to ensure West Basin’s key objectives of safety, liquidity and yield are met.

The projected interest income earned on its general fund portfolio is included in the budget and is estimated based on discussion with its investment manager. The general fund interest income for FY 2023-24 is expected to be approximately \$2.85 million.





USE OF FUNDS





Use of Funds

West Basin maintains a single enterprise fund which is divided into four major types of expenses: water purchases (including the MWD’s Readiness-to-Serve Charge), MWD’s Capacity Charge, debt service, and program expenses. A balanced budget is maintained between sources of revenues and uses of funds by placing the difference generated into West Basin’s Designated Funds. Summarized below are the actual and projected expenses for the past three years along with comparative budgets to illustrate the trend of the various expenses.

Expenditures	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
Description	Actual	Actual	Projected	Budget	Budget
Imported Water Purchases / RTS	\$129,088,278	\$140,297,928	\$128,763,920	\$140,739,032	\$138,500,220
Capacity Charge	2,023,690	2,425,110	2,448,440	2,448,440	2,378,380
Debt Service	23,440,981	22,134,981	21,117,663	21,215,387	20,903,900
Water Recycling Operations	38,031,146	42,718,114	46,452,986	52,268,624	57,519,100
Desalter Operations	934,359	168,632	-	-	-
Water Policy	1,821,242	1,456,878	1,726,729	1,687,418	1,326,106
Public Information	3,758,544	2,549,856	3,752,239	4,633,057	4,859,793
Water Use Efficiency	2,087,520	1,625,758	2,049,294	2,395,957	2,850,455
Water Quality Monitoring	25,065	21,596	36,008	50,125	60,502
Technical Planning	1,977,879	2,598,495	527,028	4,507,747	5,215,398
Designated Funds	23,537,411	10,843,915	10,133,253	5,946,037	10,508,381
Total Expenditures	\$226,726,114	\$226,541,263	\$217,007,560	\$235,891,824	\$244,122,235

Expense Highlights

Overall expenditures are budgeted to increase by approximately \$8.2 million in FY 2023-24 as compared to FY 2022-23. The increased expenditures are primarily due to the increase in the cost of water recycling operation. The current constraint in the supply chain of goods has driven up the cost of goods for items such as chemicals that are used in the water recycling process. In addition, the cost of electricity to run the treatment facility and produce recycled water has increased significantly over the last year. Over the last two years, West Basin experienced multiple price increases in electricity from 10% to 16%. West Basin does expect to have less designated funds than in the past to support its CIP program. See “Capital Improvement Program” in section 8 for further explanation.



Water Purchases and Charges

Imported Water Purchase

Imported Retail

West Basin purchases Tier 1 treated imported water solely from MWD and those purchases tie directly to its sale of imported water. West Basin’s retail imported water sales have fluctuated over the last decade due to droughts, and climate change, and as customer agencies’ conservation measures meet state-mandated targets. In March 2023, Governor Newsom eased drought restrictions and ended its 15% conservation target. However, due to the drought messaging and restrictions from 2022, it is expected residential water consumption would not return to previous levels by the end of FY 2022-203. In addition, the shutdown of MWD’s pipeline in September 2022 contributed to anticipated retail imported water sales to be estimated at 91,000 AF in 2022-23 from actual retail imported water sales of 103,601 AF in FY 2021-22.

Many residents within the West Basin service area took advantage of the grass removal incentives and other conservation programs West Basin and MWD have offered in the past two years which have permanently reduced future retail water sales; however, historical trends have shown that a rebound is normal after a drought. As a result, West Basin budgeted its imported retail sales to 95,000 AF. West Basin does not anticipate any imported Tier 2 water sales

Imported Barrier

Through WRD, West Basin provides imported water to inject into the Dominguez Gap Barrier and the West Coast Basin Barrier (Barrier) with the goal of injecting 100% recycled water into the Barrier cannot be met. Imported water sales to both barriers are expected to increase slightly from 6,700 in FY 2022-23 to 7,000 AF in FY 2023-24 due to an anticipated decrease in the injection of recycled water into the West Coast Basin Barrier.

West Basin works closely with WRD to budget for the Dominguez Gap Barrier which receives recycled water from LADWP. With less downtime planned by LADWP at the Dominguez Gap for refurbishment, staff anticipates more recycled water to be injected, therefore has budgeted less AF to be sold in the new fiscal year.

The table below shows a comparison of budgeted imported barrier purchases for the Dominguez Gap and West Coast Barriers.

	Dominguez Gap		West Coast Barrier	
	FY 2022-23	FY 2023-24	FY 2022-23	FY 2023-24
Imported	2,800	2,000	3,900	5,000



MWD Non-Interruptible Commodity Rate

As mentioned earlier, West Basin purchases all of its imported water from MWD. On April 12, 2022, the MWD Board approved its biennial budget and water rates. Although the overall average rate increase adopted by Metropolitan was 5.0% for CY 2024, the imported water commodity rate for Tier 1 effectively increased 3.9%, or \$47 per AF effective January 1, 2024. The commodity rate is one part of several direct pass-through costs (see discussion of MWD’s Readiness-to-Serve Charge and Capacity Charge below) to West Basin’s customers. The components of Metropolitan’s non-interruptible commodity rate and their cost per AF are shown below.

Metropolitan Non-Interruptible Commodity Rate

Effective Dates	1/1/23	1/1/24
Supply Rate Tier 1	\$321	\$332
Supply Rate Tier 2	\$530	\$531
System Access Rate	\$368	\$389
Water Stewardship Rate	\$0	\$0
Treatment Rate	\$354	\$353
Power Rate	\$166	\$182
Total Tier 1	\$1,209	\$1,256
Total Tier 2	\$1,418	\$1,455

MWD’s Readiness-to-Serve (RTS) Charge

The RTS is a fixed charge that Metropolitan charges its member agencies to recover the cost of the portion of their system conveyance that is on standby to provide emergency service and operational flexibility. The cost of providing standby service also covers the distribution and system storage capacity and is allocated to the RTS charge. Many of Metropolitan’s member agencies elect to have their RTS share collected by Metropolitan; however, West Basin’s RTS share is a pass-thru to its customers, the collection of which is explained more thoroughly in the “Sources of Revenue” section.

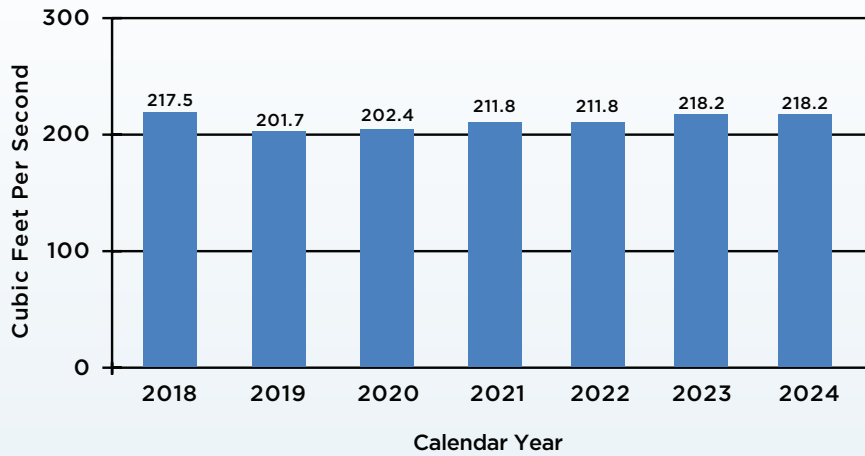
MWD’s Board of Directors approved in April 2023 an overall RTS collection of \$167 million in CY 2024, an increase of \$13 million from CY 2023, from its 26-member agencies. The rate change is effective January 1 of each FY. The estimated charge is allocated to each of its customers based on each agency’s respective percentage to the total on the 10-year rolling average of firm sales. The 10-year rolling average is based on a CY (January to December).

Overall, West Basin estimates water purchases and RTS expenditures to be \$138,500,220.



Capacity Charge

MWD charges its member agencies a Capacity Charge to recover the cost of providing peak water service capacity within its distribution system and this charge can increase as more capital costs are allocated to peak system use. West Basin’s overall cfs peak flow is reflected in the table below for CY 2018 through CY 2024.



Effective January 1, 2024, MWD will increase its Capacity Charge from \$10,600 per cfs to \$11,200 per cfs, however, West Basin’s peak flow remains at 218.2 in CY 2024. The total cost for West Basin in FY 2023-24 Capacity Charge is \$2,378,380 or a modest decrease of \$70,060 from FY 2022-23.

West Basin passes through this charge to its customer agencies using the same methodology Metropolitan uses to calculate their member agencies’ share. See the “Sources of Revenue” section for further explanation.



Debt Service

In the early 1990s, West Basin's Board of Directors had the vision to drought-proof its service area by constructing treatment facilities and distribution pipelines to bring recycled water to industrial, commercial, and irrigation sites that were using imported potable water. By selling recycled water to these customers, West Basin reduced its reliance on imported water. The importance of local control on water availability is even more important today as we continue to face higher costs and uncertain availability for the delivery of this scarce resource due to droughts and climate change. In order to fund the construction of the treatment facilities and distribution pipelines for the recycled water system, West Basin obtained federal and state grants invested its own cash, and also issued debt.

West Basin does not have a legal debt limit due to its ability to raise its water rates and charges but does have debt coverage requirements stated within the Installment Purchase Agreement associated with each debt issuance.

West Basin works in collaboration with its financial team of municipal advisors, bond counsel, trustees, and other related parties to identify, and evaluate potential new construction funding requirements or refunding opportunities. In addition, West Basin reviews its debt structure to ensure an overall level of debt structure is maintained and aligns with the expected service life of the capital assets.

Since the early 1990s, West Basin has received more than \$450 million in construction proceeds through fixed and variable debt issuances using a variety of debt instruments including certificates of participation, revenue bonds, state loans, and commercial paper. West Basin monitors its debt portfolio and takes advantage of favorable market conditions to reduce water rates whenever possible through appropriate refunding opportunities.



As of June 30, 2023, West Basin has approximately \$186.7 million in long-term debt outstanding with the following outstanding debt obligations:

Current Outstanding Long-Term Debt

Series Name	2016A	2021A	2022A
Original Amount	\$ 112,875,000	\$ 74,900,000	\$ 24,445,000
Type of Debt	Refunding Revenue Bonds	Refunding Revenue Bonds	Refunding Revenue Bonds
Purpose	Refunding	Refunding	Refunding
Interest Range	2.0% - 5.0%	4.0% - 5.0%	5.00%
Issue Date	2016	2021	2022
Final Maturity	2036	2041	2029
Current Rating	AA- and Aa2	AA- and Aa2	AA- and Aa2
Annual DS Pmt	\$10.3 Million	\$6.9 Million	\$3.6 Million
2024 Principal	\$5.9 Million	\$3.5 Million	\$2.4 Million
2024 Interest	\$4.4 Million	\$3.4 Million	\$1.2 Million
Lien	Senior	Senior	Senior

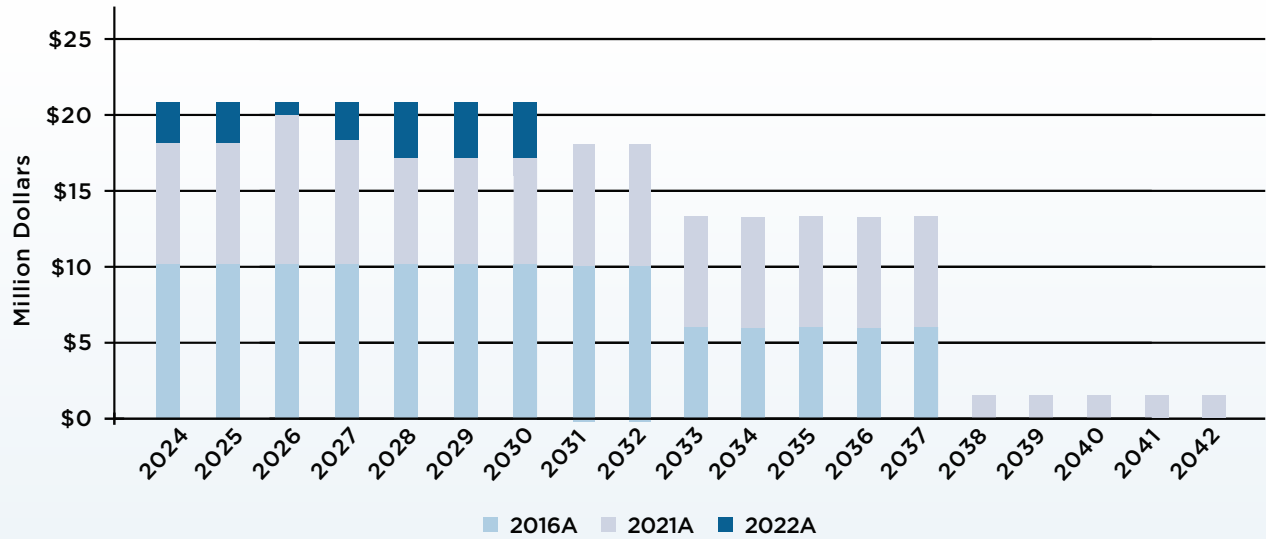
In October of 2018, West Basin initiated a Commercial Paper (CP) program with an authorization limit of \$30 million, included at a subordinate debt level. The CP program is an essential tool for West Basin to have available to fund its capital improvement program when other funding sources (PAYGO or external funding) are not available. Commercial paper can be issued as needed to finance projects and can either be repaid or issued as long-term debt whichever is deemed more appropriate for the long-term financial planning. As of June 2023, there is \$0 of CP outstanding. For FY 2023-24, the annual cost is estimated at \$100k and West Basin does not anticipate drawing from the CP line.

For FY 2023-24, total debt service is budgeted at \$20,903,900.



The graph below shows West Basin's projected debt profile through FY 2041-42, excluding the CP program.

Aggregate Debt Service - Cash Basis FY 2023-24 thru FY 2041-42





Debt Service Payment Schedule

(Cash Basis)

FY 2023-24 thru FY 2041-42

Refunding Revenue Bonds

FY	Principal	Interest	Total
2024	11,830,000	8,973,100	20,803,100
2025	12,405,000	8,367,225	20,772,225
2026	13,205,000	7,726,975	20,931,975
2027	13,635,000	7,055,975	20,690,975
2028	14,390,000	6,355,350	20,745,350
2029	15,110,000	5,617,850	20,727,850
2030	15,865,000	4,843,475	20,708,475
2031	13,230,000	4,116,100	17,346,100
2032	13,890,000	3,438,100	17,328,100
2033	10,200,000	2,835,850	13,035,850
2034	10,720,000	2,312,850	13,032,850
2035	11,260,000	1,763,350	13,023,350
2036	11,830,000	1,186,100	13,016,100
2037	12,435,000	579,475	13,014,475
2038	1,240,000	243,800	1,483,800
2039	1,290,000	193,200	1,483,200
2040	1,340,000	140,600	1,480,600
2041	1,395,000	85,900	1,480,900
2042	1,450,000	29,000	1,479,000
Total	\$195,775,000	\$75,328,944	\$271,103,944

Over the next five years, West Basin anticipates several capital projects that will require the issuance of a state loan, utilization of a state grant, and drawing on its commercial paper line, in addition to expending PAYGO and reserve funds.

A capital grant has been awarded to West Basin for approximately \$8 million and a loan from the State Revolving Fund (SRF) to finance the JMMCRWRP Expansion capital project that qualified under SRF’s Water Recycling Funding Program. The anticipated annual SRF loan payment is based on approximately \$15 million in construction proceeds with a 1% interest rate for a 25-year term. A contribution of \$4 million is also expected from the retail water purveyor to support the construction of the project.

Similar to the JMMCRWRP Expansion, West Basin has committed to constructing a 3.5-mile distribution pipeline to deliver approximately 240 AF of recycled water through the cities of Torrance and Palos Verdes



Estates. This project has been awarded 2 grants totaling approximately \$4.1 million, one through DWR Prop 84 with the second grant through Prop 68. West Basin was also able to secure state loans for \$3.9 million, and customer contributions of \$3 million.

The following table shows the ratio for the last 10-years of the total capital assets compared to the debt outstanding. In due course, West Basin has been able to leverage less due to its investment into its capital assets using its PAYGO funding.

Outstanding Debt to Capital Assets

(Accrual Basis)
FY 2012-13 thru FY 2021-22

Fiscal Year Ended June 30	Total Debt				Capital Assets			Total Capital Assets	Total Debt/ Capital Assets Ratio
	Certificates of Participation & Revenue Bonds	CP	Leases	Total LT Debt	Capitalized Assets	Construction-in-Progress	Leased Asset		
2013	\$338,686			\$338,686	\$527,816	\$135,530		\$663,346	0.51
2014	329,755			329,755	590,272	63,152		653,424	0.50
2015	312,682			312,682	590,732	75,144		665,876	0.47
2016	295,831			295,831	599,282	79,015		678,297	0.44
2017	292,377			292,377	611,438	88,061		699,499	0.42
2018	279,300			279,300	611,756	109,785		721,541	0.39
2019	265,972			265,972	617,574	132,592		750,166	0.35
2020	252,232	10,000		262,232	684,791	74,983		759,774	0.35
2021	255,419			255,419	692,320	82,130		774,450	0.33
2022	239,362		964	240,326	698,678	34,532	956	734,166	0.33



Covenants

Although West Basin does not have a legal debt limit due to its ability to raise its water rates and charges, it does have debt coverage requirements stated within the Installment Purchase Agreements associated with each debt issuance. Per these financing documents, the legal debt coverage requirement is 1.20 for both our senior and subordinate liens. This covenant is monitored not only by West Basin but also by both investors and rating agencies. To meet this covenant, West Basin has set internal targeted debt coverage goals for its budget at a rate higher than legally required for both liens.

Detailed below is the anticipated debt coverage for the current and future FY budgets.

Bond Debt Coverage Ratios

(in 000's – except coverage)

Bond Coverage Ratios	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Revenues	\$244,122	\$242,594	\$246,628	\$259,620	\$270,599	\$282,365
O&M	212,710	216,174	214,271	223,913	234,064	244,726
Net Revenues to pay senior debt	31,702	26,420	32,357	35,707	36,535	37,639
Total Senior Debt	20,803	21,583	21,823	21,582	21,636	21,619
Net Revenues to pay subordinate debt	10,899	4,837	10,534	14,125	14,899	16,020
Total Subordinate Debt	101	394	363	225	101	101
All-In Coverage	1.50	1.20	1.46	1.64	1.68	1.73
Remaining Net Revenue	\$10,508	\$4,443	\$10,171	\$13,901	\$14,798	\$15,919

Operating Program Expenses

West Basin organizes and tracks its operating expenses through the following functional budget categories: Overhead Program Costs, Water Recycling Operations, C. Marvin Brewer Desalter Operations, Technical Planning, Water Policy, and Resource Development, Public Information, Water Use Efficiency, and Purveyor Water Quality Monitoring Program. The Overhead Program costs are allocated to the other operating program budgets.

Cost accounting is defined as the process of tracking, recording, and analyzing costs associated with the products or activities of an organization. As a single enterprise fund, each program budget has direct charges that represent the specific efforts for consultants, suppliers, utilities, or other appropriate charges in addition to payroll and allocated costs. Each operating program is described in further detail under the “Operating Program Expenses” section.



Water is Life Art Contest.



Salaries and Benefits

West Basin has a unique business model with a small workforce of 52 full-time budgeted positions, plus seven interns, working to accomplish its many critical goals and objectives. Staff is comprised of various high-level project managers who oversee the work of consultants in the field, which allows for flexibility to implement new programs as they arise or modify existing programs when staff needs change.

The following is included in West Basin's benefits package:

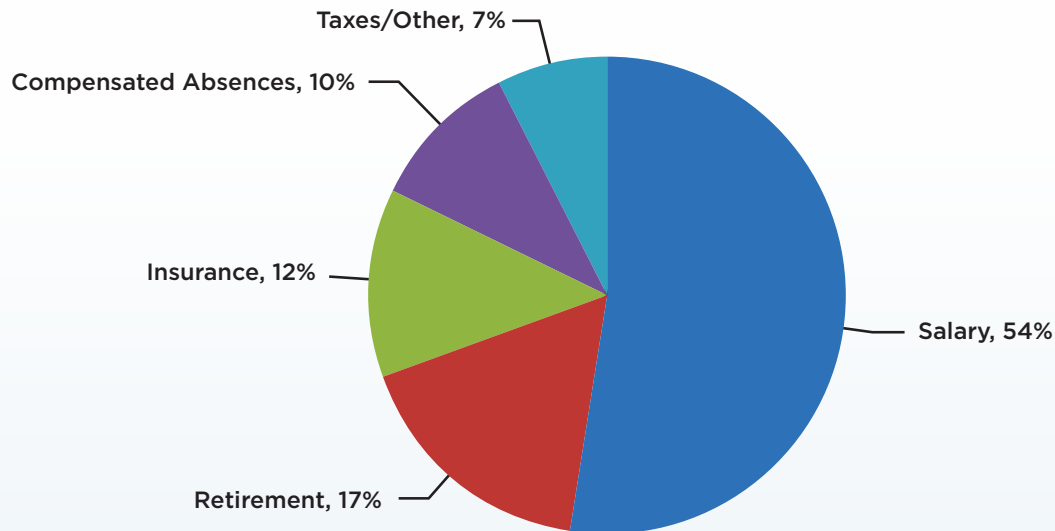
- Retirement - Classic - CalPERS 3% at 60 and Social Security (1).
- Retirement - Tier 2 - CalPERS 2% at 62 and Social Security (2).
- Health Insurance - Paid family coverage with expense reimbursement.
- Disability Insurance - Paid short term and long term insurance plans.
- Life Insurance - Up to \$150,000 based upon salary.
- Vacation - 10-20 days accrued annually, with credit for prior public service.
- Holidays - 14 paid holidays annually.
- Sick Leave - 12 days accrued annually.
- Employee Development - \$9,000 per fiscal year for job-related coursework.
- Deferred Compensation - CalPERS 457 Deferred Compensation Plan (employee contributes; no agency match).
- Supplemental Income Plan Loan - Made from employee's own CalPERS 457 Deferred Compensation Plan
- State Disability Insurance (employee paid)
- Fully paid Employee Assistance Program.

(1) An employee who was employed by West Basin prior to January 1, 2013, is a "Classic" member of CalPERS or was hired by West Basin after January 1, 2013, but was employed with an agency with CalPERS reciprocity, or who have less than a six-month break in service between employment in a CalPERS (or reciprocal) agency and employment with West Basin, will be enrolled in the 3% @ 60 benefit formula with Social Security.

(2) An employee is considered a "Tier 2" member if they become a new member of CalPERS for the first time on or after January 1, 2013 (and who was not a member of another California public retirement system prior to that date) will be enrolled in the CalPERS 2% @ 62 benefit formula (with Social Security) in accordance with the Public Employees' Pension Reform Act of 2013 (PEPRA). New members will be required to pay at least 50% of the normal retirement cost.



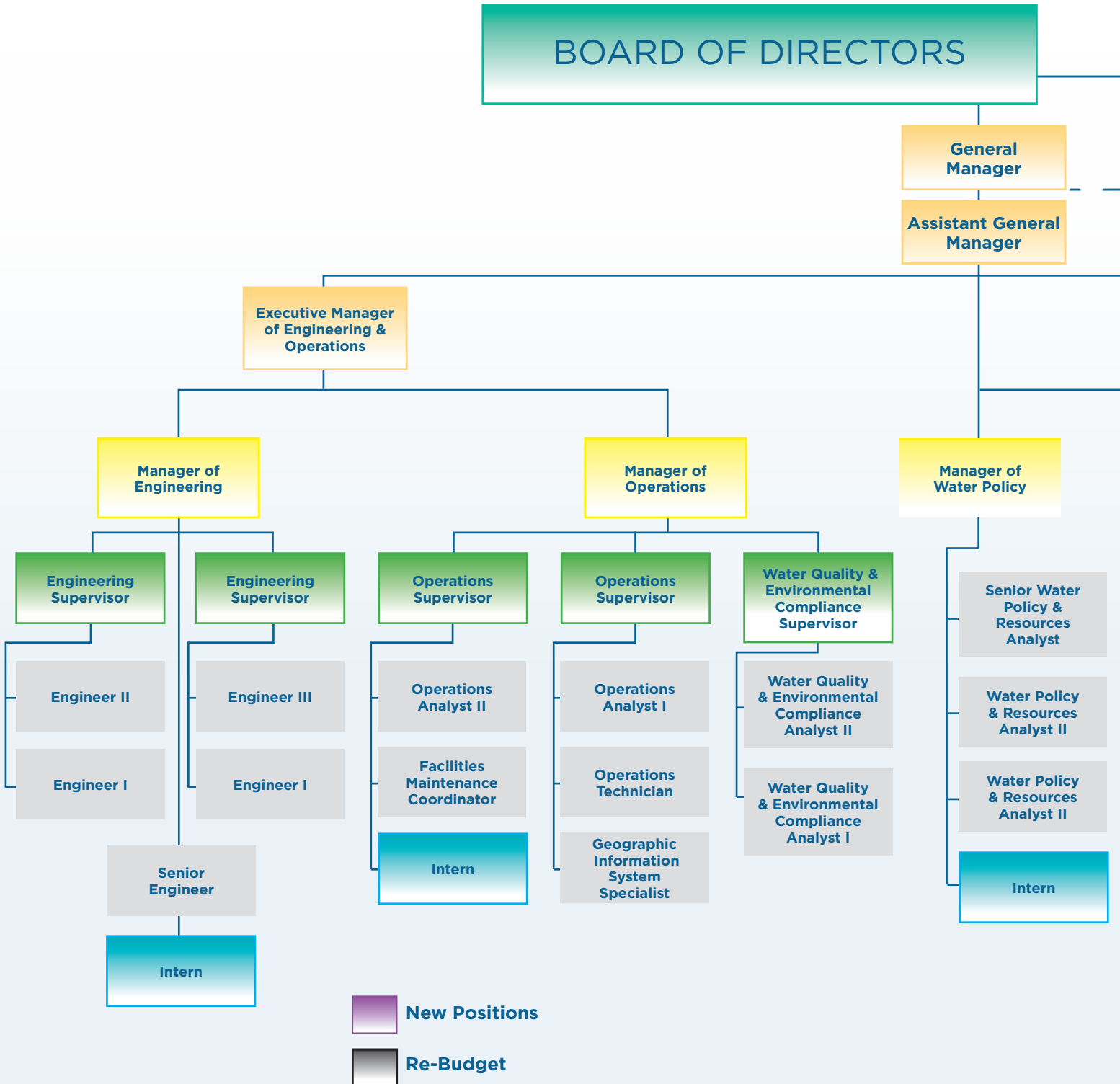
Salary and Benefits

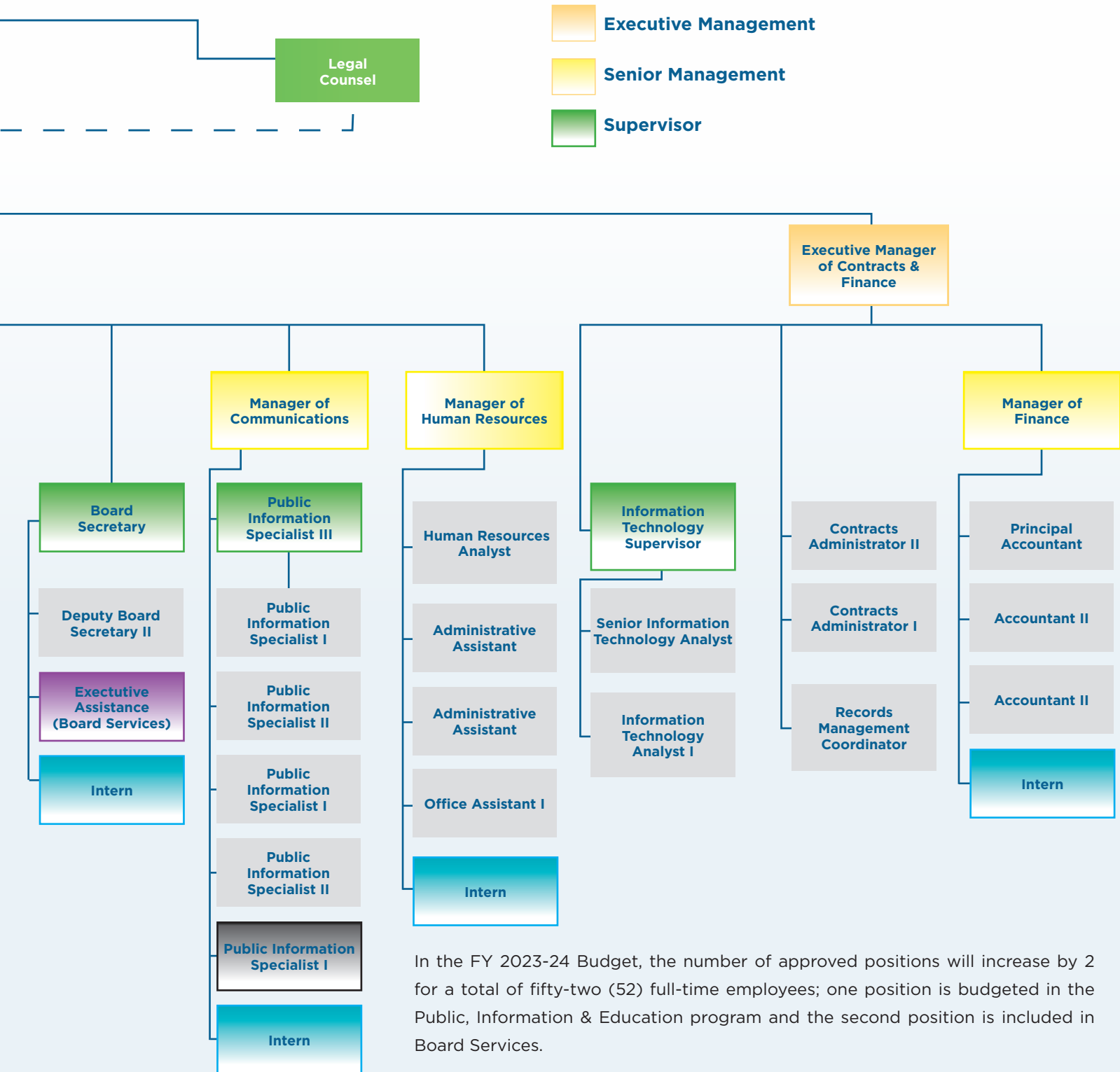


West Basin's benefits package and total payroll comprise 4.3% of its total FY 2023-24 operating budget. The types of benefits included are consistent with the prior year's budget and reflect an anticipated 5.6% average increase in health insurance and a 3.0% increase in dental insurance. West Basin's pension costs for "Classic" CalPERS members are 18.24%. Pension costs for "Tier 2" CalPERS members are 8.25%. The estimated Other Post-Employment Benefits (OPEB) contribution for FY 2023-24 will be approximately \$401,000. West Basin participates in the California Employers Benefit Retirement Trust which allows West Basin to calculate its liability based on the assumed interest rate of 6.2%.

Current employment expense forecasts do not include a Cost-of-Living Adjustment increase. Instead, West Basin utilizes a performance-based merit pay system, wherein the amount of merit pay is determined by the employee's performance appraisal rating and position in the salary range. To sustain competitiveness on an annual basis, West Basin considers the regional Consumer Price Index (CPI), and the average salary range increases of survey agencies. Based on these factors, West Basin has included a 7.5% merit increase in the FY 2023-24 budget.

The organizational chart shows the budgeted full-time positions for West Basin.





In the FY 2023-24 Budget, the number of approved positions will increase by 2 for a total of fifty-two (52) full-time employees; one position is budgeted in the Public, Information & Education program and the second position is included in Board Services.

West Basin restarted its internship program in FY 2021-22 after a year hiatus due to the COVID-19 pandemic. The internship program provides opportunities for growth and exposure for students attending local colleges. West Basin has budgeted seven interns in FY 2023-24 to support the various departments.



Following is a table showing the headcount by the department that includes the full-time and limited-term (no limited-term position included in FY 2023-24). The intern positions are not reflected in the table.

Summary of Personnel Head Count by Department

(Not including interns)

Position	FY 2021-22 Actual	FY 2022-23 Projected	FY 2022-23 Approved Positions	FY 2023-24	FY 2022-23 Change from
Office of the General Manager	3	2	3	4	1
Administrative Board Services	10	10	10	11	1
Engineering	8	8	8	8	0
Finance	6	6	6	6	0
Human Resources	2	2	2	2	0
Operations	8	10	10	10	0
Public Information & Education	6	6	6	7	1
Water Policy and Resource Development	5	5	5	4	(1)
Total	51	48	50	52	2

*Indirect labor costs are not allocated to Capital Projects per West Basin's Capitalization Policy

Personnel Staffing by Program

West Basin's budget tracks and reports all its costs by program; it also allocates its personnel labor to its various programs. The table below compares FY 2020-21 and FY 2021-22 actuals to FY 2022-23 projected and FY 2022-23 and FY 2023-24 budget. In FY 2023-24 the difference between the budget FTE table and the Summary of Personnel Head Count by Department is due to West Basin's plan to recruit two of its positions to start later in the fiscal year.

Each program budget demonstrates the projected level of effort for the current year for staff labor. As a result, the individual program labor cost may fluctuate from year-to-year. In addition, it will vary from the Summary of Personnel Head Count by Department as this summary indicates the number of staff assigned to each department. Indirect labor represents the support services and is allocated based on the percentage of direct payroll dollars allocated to each operating program (indirect labor is not allocated to capital projects per its Capitalization Policy). The table below includes both direct and indirect labor.



Full-Time Equivalent (FTE) by Program

(Not including interns)

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Budget	Budget
Recycling Operations	17.79	17.24	16.66	17.26	17.30
Desalter Operations	0.43	0.06	0.01	0.00	0.00
Water Policy/Resource Development	4.15	5.08	4.69	3.77	2.95
Public Information	13.35	12.42	11.16	13.26	14.75
Water Use Efficiency	4.43	4.60	4.49	4.21	4.58
Purveyor WQ Monitoring	0.08	0.12	0.11	0.16	0.19
Technical Planning	2.93	1.12	1.37	3.08	5.76
Capital Projects*	6.31	8.20	7.43	7.76	5.72
Total FTE	49.47	48.84	45.92	49.50	51.25

Capital Improvement Program

West Basin continues to strive for the highest levels of Water Supply Reliability, Water Quality, Customer Service, Sound Financial and Resource Management while always keeping Environmental Stewardship at the forefront of our efforts. Our Capital Improvement Program leads the way in these efforts to increase productivity, and accessibility and continue to provide high-quality recycled water to our customers. West Basin strives to expand its recycled water program by seeking new customers to augment the need for potable water in its region. These efforts are described in greater detail within the “Appendix Section” on the Capital Improvement Program.

Before any capital project is initiated, staff presents the project to the Board of Directors for approval and direction. Capital projects begin with feasibility studies and design estimates followed by construction contracts. Between the feasibility studies and completion of construction, progress reports are presented to the Board of Directors periodically. West Basin may fund its projects through its PAYGO Designated Fund, reserves, grants/partnerships, its CP Program, and/or bond proceeds.

Anticipated capital improvement expenditures for FY 2023-24 are approximately \$38.8 million.





OPERATING PROGRAM EXPENSES



Operating Program Expenses

Development of the operating program budget is a result of developing strategies to meet the goals and objectives established by the Plan. The strategies noted under each program support the overall Plan and commitment statements of West Basin.

The FY 2023-24 Operating Program consists of the following:

Allocated Programs	Page Number
Overhead Program Costs	95
Operating Programs	
Water Recycling Operations	105
Technical Planning	113
Water Policy and Resource Development	118
Public Information & Education	123
Water Efficiency Use	127
Purveyor Water Quality Monitoring	135

Each program budget is developed to achieve the goals and objectives of the Plan and commitment statements that have been described previously in the “Financial Overview and Summary” section and are summarized below. Each objective is short-term oriented and anticipated to be completed in FY 2023-24 and each program budget reflects only the Plan goals and commitment statements that are relevant and qualitative.





Overhead Program Costs

The Overhead Program includes the cost to support the Administrative Services, Board Services, Finance and Contracts, Human Resources departments and the general operations and maintenance of the Donald L. Dear building. These expenses support the function of each program and are proportionally allocated to all of the other West Basin operating programs and identified as “Overhead Allocation”. Overhead costs are not allocated to the Capital Improvement program. Direct labor hours are used as the primary basis for allocating these expenses to each operating program and provide management with a better understanding of the overall resources required to support these programs.

No labor is allocated to the Overhead Program as the personnel costs are classified as indirect labor. These costs are allocated to the various operating program budgets as a percentage of dollars based on the program direct labor to the total direct labor.

Operating Budget

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Budget	Budget
Administrative	\$2,630,806	\$2,146,172	\$2,355,055	\$2,391,320	\$2,766,300
Board Services	1,069,652	456,730	1,002,168	1,261,800	654,000
Building	450,726	420,011	388,800	403,800	407,400
Finance & Contracts	598,542	481,269	259,365	245,300	247,200
Human Resources	116,544	86,623	145,186	139,410	235,000
Total Overhead	\$ 4,866,270	\$3,590,805	\$4,150,574	\$4,441,630	\$4,309,900

The individual department budgets that comprise the Overhead Budget are shown below by account category, along with the objectives included in the FY 2023-24 budget.

Administration Services

The Administration Department oversees the District’s general business operations including technology, records management and includes the District’s membership and sponsorships.

	Budget FY 2022-23	Budget FY 2023-24
Professional Services	\$ 709,245	\$ 385,000
Software License	360,000	819,700
Legal Services	75,000	360,000
LAFCO Share	78,300	80,000
Office Administration	661,900	901,600
Memberships	160,175	165,000
Sponsorships	55,000	55,000
Total	\$ 2,391,320	\$ 2,766,300



FY 2023-24 Budget Assumptions

- Professional services include an update of strategic plan, technology support, and conducting manager planning session with new general manager
- Legal costs represent district general counsel services
- Office administration costs include office and technology supplies, insurance, employee travel, equipment lease, courier and other office costs
- Continued professional and community engagement through membership and sponsorship Involvement

Increase in the FY 2023-24 Administration budget as compared to FY 2022-23 is due to anticipated temporary labor support needed for IT initiatives and records management. In addition, a number of new software licenses will be required in FY 2023-24.

Board Services

The costs included in the Board Service budget are the direct costs to support the Board of Directors including per diem, health insurance, conference, travel, and election cost.

	Budget FY 2022-23	Budget FY 2023-24
Director Costs	\$ 519,200	\$ 480,000
Professional Services	30,000	30,000
Office Administration	37,600	69,000
Sponsorships (Director)	75,000	75,000
Election Costs	600,000	-
Total	\$ 1,261,800	\$ 654,000

FY 2023-24 Budget Assumptions

- Director costs include per diem, allowances, travel and health coverage
- Update bi-annual PARS actuarial report (reimbursed by trust)

Reduction in the Board Services FY 2023-24 budget is due to bi-annual election cost in FY 2022-23 and again in FY 2024-25 as each Board of Director is elected to serve a 4-year term with elections occurring in even years only.



Donald L. Dear Building

The Donald L. Dear Building (Building) budget includes the cost to operate, repair, and maintain all equipment and assets located within the building and surrounding parking lot.

	Budget FY 2022-23	Budget FY 2023-24
Utilities	\$ 168,800	\$ 159,300
Facility Maintenance	69,000	85,000
Non-Professional Services	165,500	162,500
Office Administration	500	600
Total	\$ 403,800	\$ 407,400

FY 2023-24 Budget Assumptions

- Non-professional services include security services, janitorial and landscape services
- Increase in utility costs is due to staff returning to the office after COVID restrictions were lifted.

Finance and Contracts

The Finance and Contracts team supervises the inflow and outflow of funds to ensure there are minimal disruptions to its operations and provides timely and critical information/reports to leadership for effective management of the District. They are also responsible for the procurement of goods and services and oversee the small and local business program.

	Budget FY 2022-23	Budget FY 2023-24
Professional Services	\$ 197,500	\$ 186,640
Legal (Bond Counsel)	15,000	25,000
Office Administration	32,800	35,560
Total	\$ 245,300	\$ 247,200

FY 2023-24 Budget Assumptions

- Work with Bond Counsel to review new recycled water agreements. Update long-term financial model to reflect updated business decisions from strategic plan
- Analyze vendor spend on subcontract Level to increase small and local businesses
- Implement new e-procurement system



Human Resources

Human Resources includes activity cost to recruit, screen and hire new employees, evaluate salaries and benefits, as well as the costs to support employee training and development. In addition, the department is responsible for the oversight of risk management and safety of the District facilities.

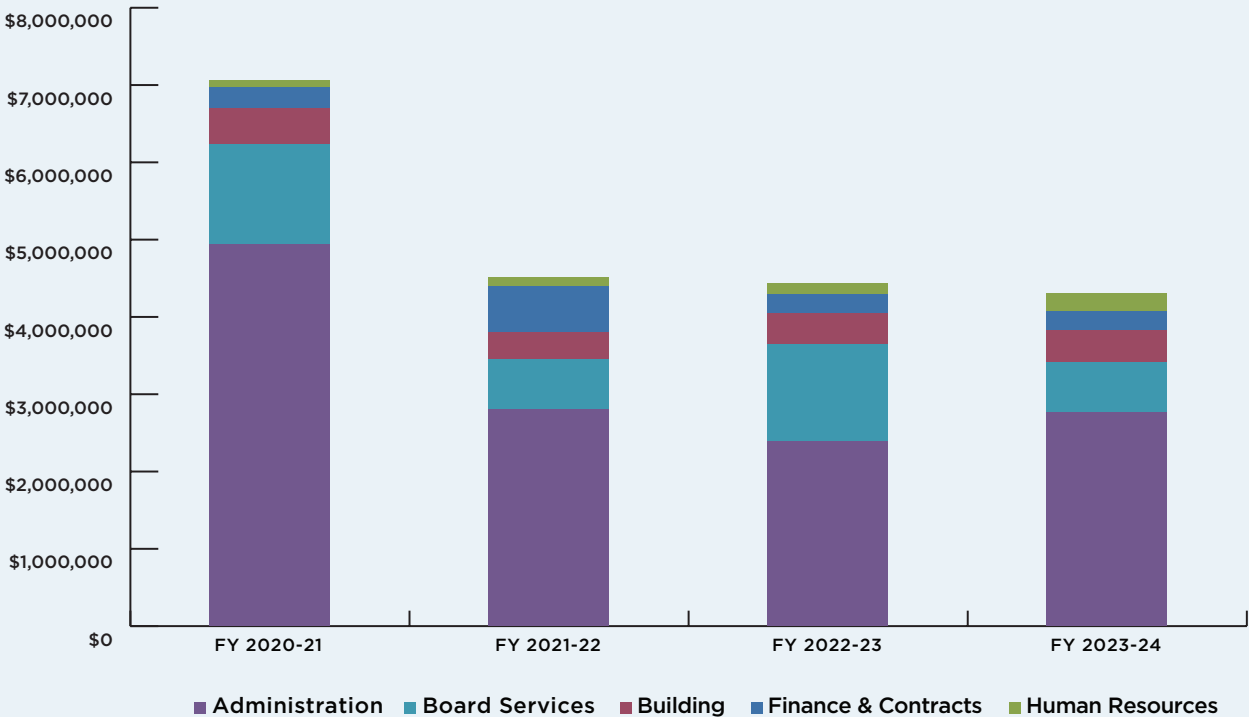
	Budget FY 2022-23	Budget FY 2023-24
Professional Services	\$ 64,260	\$ 188,250
Legal Services	10,000	40,000
Advertising	10,000	20,000
Office Administration	55,150	76,750
Total	\$ 139,410	\$ 325,000

FY 2023-24 Budget Assumptions

- Expand efforts towards Diversity Equity Inclusion
- Evaluate Service Delivery for Safety and Risk Management Support
- Focus on Essential Employment Development Training

The following graph shows the variability of the Overhead program budget from FY 2020-21 through FY 2023-24.

Overhead Budget Trend



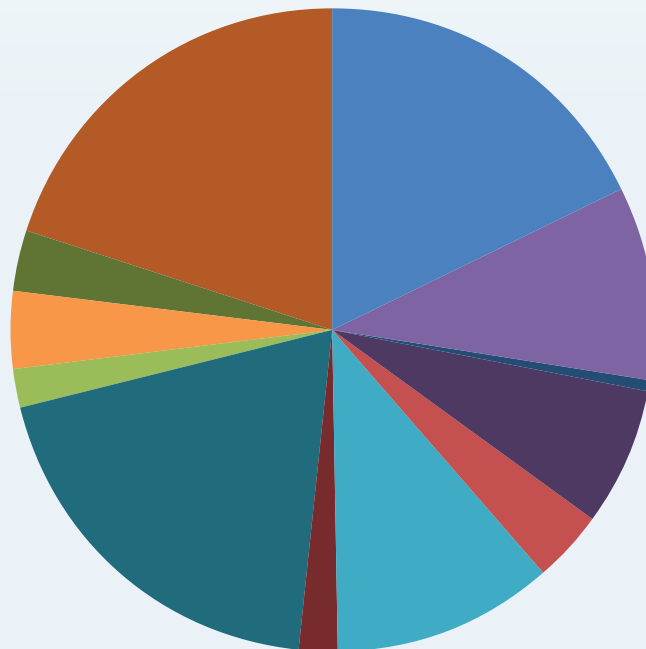


The Overhead program costs are allocated to the District’s operating programs based on direct labor hours. The following table shows the amount allocated in the FY 2023-24 budget to each of the operating program budgets.

FY 2023-24 Overhead Allocation	
Recycled Water Operations	\$1,615,466
Public Information and Education	1,399,267
Water Use Efficiency / Conservation	468,448
Technical Planning	511,991
Water Policy and Resources Devel-	296,096
Water Quality Monitoring Program	18,633
Total Overhead Costs	\$4,309,900

The following pie chart shows the breakdown by account for the FY 2023-24 Overhead budget.

Fiscal Year 2023-24 by Account



- Professional Services
- Legal Services
- Advertising
- Non-Professional Services
- Utilities
- Director Costs
- Facility Maintenance
- Office Administration
- LAFCO
- Memberships
- Sponsorships
- Software Licenses



Strategic Goals and Objectives

Sound Financial & Resource Management

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 2.1 - Provide effective overall capital facility asset management through the application of industry best-practices</p>	<ul style="list-style-type: none"> ✓ Participated in the annual ACWA JPIA Risk Assessment of West Basin’s treatment plant, headquarters building, and other outlying West Basin facilities. ✓ Conducted a variety of ACWA JPIA required inspections of the Treatment Plant and other outlying West Basin facilities. ✓ Completed a Request for Proposal and hired consultant to begin an external cost of service study. 	<ul style="list-style-type: none"> ▶ Participate in an in-person annual ACWA JPIA Risk Assessment Site Visit of West Basin’s treatment plant, headquarters building, and other outlying West Basin facilities. ▶ Conduct a variety of ACWA JPIA required inspections of the Treatment Plant and other outlying West Basin facilities. ▶ Conduct a cost-of-service study to determine the cost of providing the different services utilizing industry accepted practices for the classification and allocation of cost for potable and recycled water.
<p>Strategy 2.4 - Maintain or improve current bond ratings</p>	<ul style="list-style-type: none"> ✓ Completed Standard & Poor’s Operational Management Assessment Survey as part of their annual regulatory surveillance. 	<ul style="list-style-type: none"> ▶ Continue to provide appropriate updates to rating firms for ongoing monitoring. ▶ Annual Surveillance
<p>Strategy 2.5 - Develop a formal Long Range Financial Plan</p>	<ul style="list-style-type: none"> ✓ Updated five-year forecast to reflect the termination of the District’s swap, lower water sales forecast as a result of conservation efforts, and future anticipated debt service. 	<ul style="list-style-type: none"> ▶ Update five-year forecast to reflect changes in revenue streams, anticipated debt service, and changes in fixed revenue agreements. ▶ Update long-term financial model to reflect updated business decisions from business strategic plan.
<p>Strategy 2.6 - Operate cost-efficiently and effectively, with robust internal controls</p>	<ul style="list-style-type: none"> ✓ Developed Standard Operating Procedures for processing of chemical invoices to insure accurate and timely payment and avoid late charges or delay in future chemical deliveries. 	<ul style="list-style-type: none"> ▶ Collaborate with IT to implement an automated accounts payable system, a new water billing system, and an e-payables system to operate more efficiently and effectively.



Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 2.8 - Recruit and hire qualified candidates to fill all West Basin positions</p>	<ul style="list-style-type: none"> ✓ Completed and/or commenced the recruitment process for 12 positions. ✓ Submitted and presented updated Workforce Diversity Report to the Board that reflects the demographic breakdown by race and occupational category of West Basin’s full-time employees. 	<ul style="list-style-type: none"> ▶ Further collaborate with outside sources to develop effective DEIA program. ▶ Participate in college/university job fairs and other university sponsored events to boost student interest and diversity in recruitment efforts.
<p>Strategy 2.9 - Manage and reward performance</p>	<ul style="list-style-type: none"> ✓ Distributed annual Employee Benefit Statements to ensure employee awareness of their covered benefits. ✓ Secured Board approval of West Basin’s updated Salary Schedule in compliance with CalPERS regulations. 	<ul style="list-style-type: none"> ▶ Distribute, receive and record 100% Annual Employee Performance Evaluations for all employees. ▶ Distribute annual Employee Benefit Statements to ensure employee awareness of their covered benefits. ▶ Conduct salary survey to determine need to update West Basin’s Salary Schedule and secure Board approval of updated Schedule, as needed.
<p>Strategy 2.10 - Develop a formal plan for workforce retention, training, and succession planning</p>	<ul style="list-style-type: none"> ✓ Secured a range of employee professional development training courses for staff to attend including, but not limited to, Defensive Drivers Training, and management and supervisory leadership training. ✓ Conducted mandatory staff Safety Meetings in accordance with West Basin’s Injury/Illness Prevention Program to include, but not limited to safety measures in response to COVID-19 and mental wellness. 	<ul style="list-style-type: none"> ▶ Continually keep Executive Management Team and staff updated on Suggestion Box feedback and comments. In addition, address Suggestion Box feedback with staff to include potential resolutions. ▶ Secure Wellness Grant through ACWA JPIA to assist in West Basin’s health and wellness initiatives for its employees, in addition to securing available grants for future health and safety initiatives and needs.



Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
	<ul style="list-style-type: none"> ✓ Maintained employee Training and Tracking Log. ✓ Successfully secured a Wellness Grant through ACWA JPIA to assist in West Basin’s health and wellness initiatives for its employees. ✓ Secured Board resolution of applicable amendments made to the Human Resources Section of the Administrative Code. ✓ Continued building the efforts of the Diversity, Equity and Inclusion Committee/Team. ✓ Continually kept staff updated with regard to COVID-19 Mandates. ✓ Continually kept Executive Management Team and staff updated on Suggestion Box feedback and comments. In addition, addressed Suggestion Box feedback with staff to include potential resolutions. ✓ Conducted and completed CPR/AED Training for all staff. 	<ul style="list-style-type: none"> ▶ Continue efforts in the creation and implementation of the District’s Diversity, Equity and Inclusion Committee/ Team. Keep management abreast of the Team’s recommendations and discussions on a continuous basis. ▶ Continued review of the Human Resources Section and Director Benefits Section of the Administrative Code to ensure compliance with applicable laws and benefits administration. ▶ Conduct Sexual Harassment Training.

Customer Service

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 4.3 - Support the Board in maintaining a Strategic Business Plan</p>		<ul style="list-style-type: none"> ▶ Issue an RFP to hire a consultant to assist the Board in updating its Strategic Business Plan.
<p>Strategy 4.5 - Engage small and/or local businesses in the procurement of services</p>	<ul style="list-style-type: none"> ✓ Changed solicitation process by posting all solicitations over \$10k on the e-procurement system. ✓ Advertised on our website and social media accounts to broaden the vendor pool and increase small and local participation. 	<ul style="list-style-type: none"> ▶ Create a form and process to capture Small and Local Subcontractor spend. Create a strategy to better capture small business status. ▶ Consider opportunities to partner with local community business organizations to increase awareness of our projects.



Performance Metrics

Metric	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Target	Target
On time submission of annual bond disclosure	100%	100%	100%	100%	100%
Investment Benchmark – meet or exceed ICE BofA 1-3 Yr US Treasury Index	Met	Exceeded	Meet	Meet	Meet
Maintain AA credit rating from Moody’s and Standard & Poor’s	Aa2/AA-	Aa2/AA-	Aa2/AA-	Aa2/AA-	Aa2/AA-
Achieve internal all-in Debt Coverage target of 1.75	1.84	1.47	1.59	1.36	1.50
Have 100% submittal of Performance evaluations	100%	100%	100%	100%	100%
Conduct and Present on the Annual District Diversity Report	Met	Met	Met	Meet	Meet
Achieve Board directed goal for overall spend with Small and or Local Businesses	24%	16%	10%	10%	10%



Water Recycling Operations

West Basin purchases secondary effluent from the City of Los Angeles' Hyperion Treatment Plant and treats the secondary effluent at the Edward C. Little Water Recycling Facility (ECLWRF) to meet recycled water Title 22 water recycling requirements before distributing the recycled water to its customers and satellite treatment facilities. The satellite treatment plants provide additional treatment for customers that require specific water quality for their business processes. West Basin produces five separate types of recycled water at four water recycling facilities.

West Basin's Customer Specific Recycled Waters:

1. Disinfected Tertiary Recycled Water: Secondary treated wastewater that has been filtered and disinfected for industrial and irrigation uses.
2. Nitrified Recycled Water: Disinfected Tertiary Recycled Water that has been nitrified to remove ammonia for industrial cooling towers.
3. Barrier Recycled Water: Secondary treated wastewater pretreated by ozone and microfiltration, followed by reverse osmosis (RO) and disinfection (UV/peroxide treatment) for groundwater recharge.
4. Single Pass RO Water: Secondary treated wastewater pretreated by ozone and microfiltration, followed by one pass of RO treatment for low-pressure boiler feed water.
5. Double Pass RO Water: Secondary treated wastewater pretreated by ozone and microfiltration, followed by two passes of RO treatment for high-pressure boiler feed water.

The Recycled Water Operations budget includes funds to administer, operate, and maintain all of the recycled water facilities, regulatory efforts, and develop additional customers to use recycled water. West Basin started delivering recycled water in 1995 and continues to expand its facilities to increase this local resource. West Basin's recycled water system consists of:

- A pump station in the southwest corner of the Hyperion Treatment Plant to pump secondary effluent to the ECLWRF;
- The ECLWRF treats water for use in Chevron refinery's high-pressure and low-pressure boilers, the West Coast Basin Barrier (Barrier), and disinfected tertiary water for irrigation and other industrial uses;
- A satellite treatment plant in El Segundo to further treat disinfected tertiary water from the ECLWRF to produce nitrified water for Chevron refinery's cooling towers;
- A satellite treatment plant in Torrance to further treat disinfected tertiary water to produce nitrified water for the Torrance Refining Company's cooling towers and a separate satellite treatment plant to produce boiler feed water for the Torrance Refining Company;
- A satellite treatment plant in Carson referred to as the Juanita Millender-McDonald Carson Regional Water Reclamation Plant (JMMCRWRP) to further treat disinfected tertiary water from the ECLWRF to produce nitrified water for Marathon's cooling towers and produce boiler feed water for Marathon;
- Three disinfection stations to boost the level of chlorine disinfectant within the recycled water distribution system;
- Two booster pump stations to elevate service pressures to customers in the cities of Torrance and Carson; and
- Over 100 miles of pipelines to deliver recycled water to our customers.



West Basin contracts with a third-party operator to operate and maintain the treatment facilities and a second third-party operator to operate and maintain the distribution system. West Basin staff manages the program, administers the operations and maintenance agreements, and oversees compliance with the various permits West Basin holds to enable it to sell recycled water.

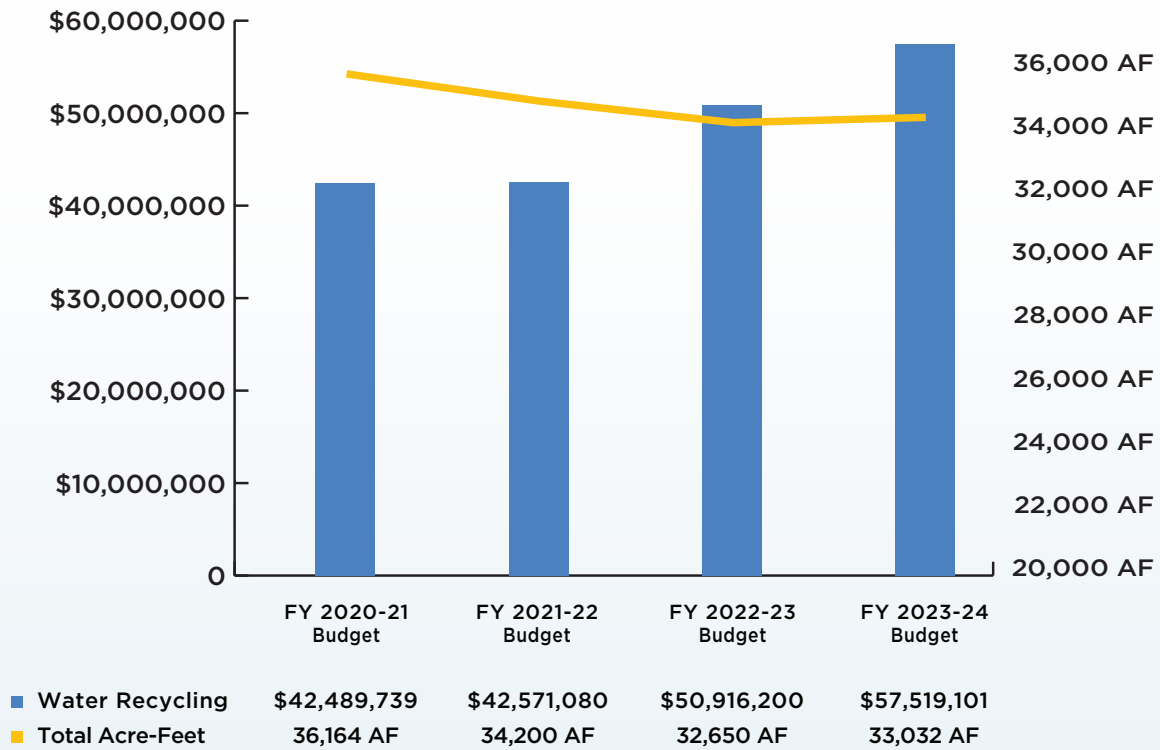
Operating Budget

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Budget	Budget
Labor and Benefits	\$3,248,736	\$1,796,437	\$3,350,000	\$3,472,956	\$3,644,630
Overhead Allocation	2,005,437	1,543,692	1,780,000	1,787,464	1,615,466
Chemicals	8,919,640	9,805,815	15,000,000	16,141,034	20,584,775
Consultants	445,976	327,225	400,000	605,105	677,105
Contract Operations	9,642,983	9,364,530	8,500,000	10,788,600	11,028,100
Facility Maintenance	3,438,014	3,479,331	4,000,000	4,404,865	4,562,815
Lab Services	567,261	726,349	590,000	639,603	680,193
Office Administration	296,881	566,678	375,986	306,082	370,861
Permits/Treatment Surcharge	221,283	162,019	250,000	259,088	220,606
Secondary Effluent	300,596	169,886	240,000	348,900	352,850
Software Licenses	32,315	33,766	47,000	47,000	138,600
Solids Management	1,783,169	1,719,826	1,600,000	2,766,627	2,434,000
Utilities	8,128,743	14,062,348	10,320,000	10,701,300	11,209,100
Total Water Recycling	\$39,031,034	\$43,757,902	\$46,452,986	\$52,268,624	\$57,519,100
Total Acre-Feet	33,920 AF	23,517 AF	28,950 AF	32,650 AF	33,032 AF
Operating & Maintenance Reimbursement (1)	(999,888)	(\$1,039,788)			
Water Recycling with O&M Reimbursement	38,031,146	42,718,114			

(1) In FY 2022-23, West Basin shows the Operating & Maintenance Reimbursement in the Revenue section



Water Recycling Operations Budget Trend

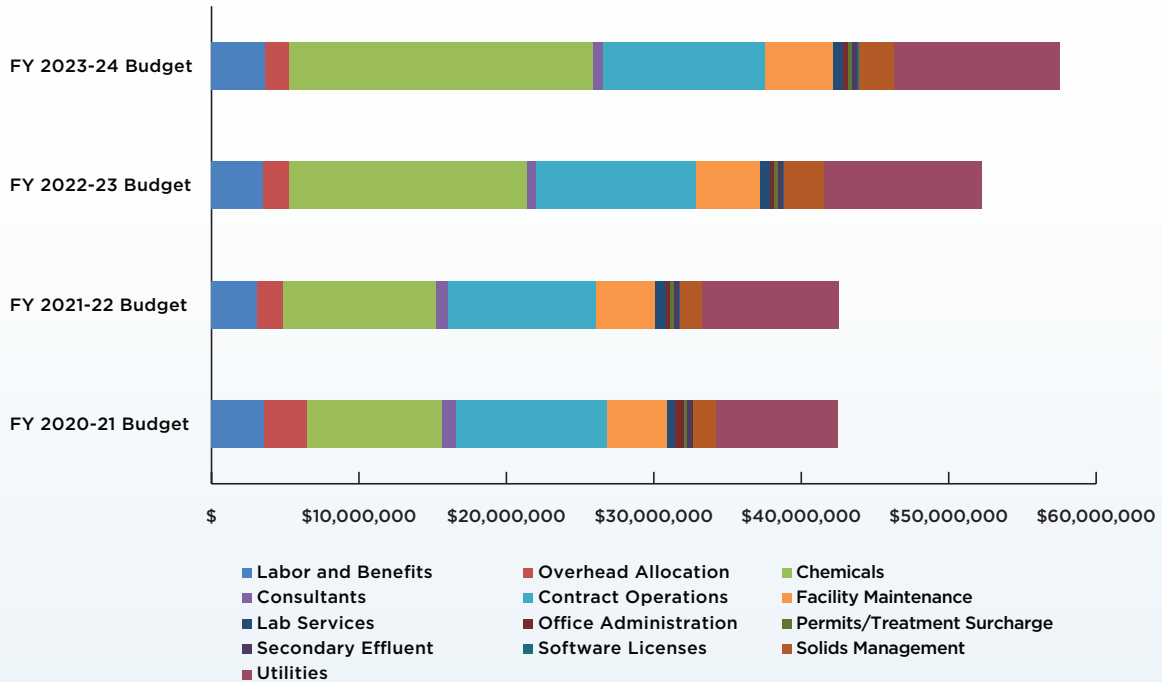


The Operations Department which is responsible for the operations of the ECLWRF projected less recycled water sales in FY 2023-24. Historically, sales to the local refineries have made up the largest percentage of West Basin’s recycled water sales. To project the demands from the refineries, staff used the average sales for the 3 previous years and adjusted the amount for refinery planned turnarounds and construction that reduce demand. Staff also works closely with LA County and WRD to anticipate the recycled water injection target for the West Coast Barrier. As noted in the chart above, West Basin expects to sell more recycled water and the cost to produce recycled water will increase by approximately \$5.2M as compared to the FY 2022-23 budget.

In addition to the impact from chronic poor influent source water quality, the aging infrastructure such as solids handling facilities, Title 22 filters, and microfiltration units, West Basin is requiring the use of more potable water supplements to meet contract requirements and even compliance standards, impacting the bottom line.

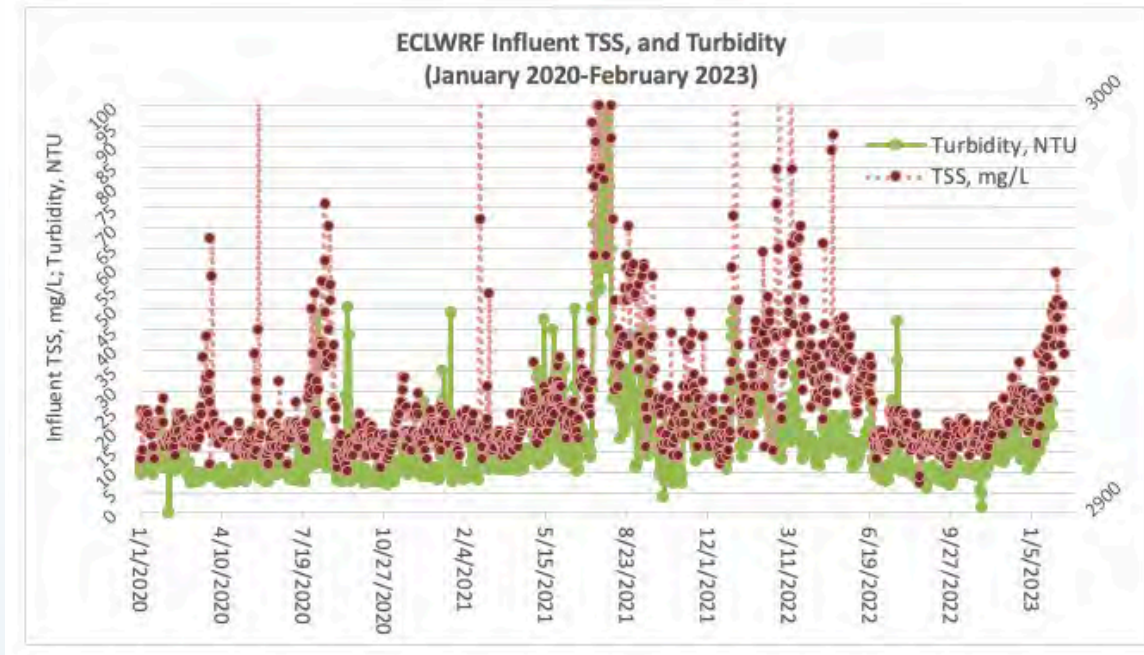


Water Recycling Budget Trend



As shown in the various tables in this section, chemical purchases are one of the key components contributing to the increase in the water recycling operations budget. Chemicals are used throughout the treatment process for recycled water. The chronic poor source influent water quality requires use of more chemicals particularly ferric chloride, chlorine and cleaning chemicals. The staff has been updating the Board regularly on the raw material shortages, supply chain issues, and inability of vendors to forecast past 6 months, which are all factors contributing to the significant increases in chemical budget in the new fiscal year. The following graph summarizes the increasing turbidity and total suspended solids coming into ECLWRF, especially since the July 2021 Hyperion Sewage Spill Event.

ECLWRF Influent TSS, and Turbidity (January 2020-February 2023)



Approximately one-fifth of the new fiscal year budget is allocated to utilities, with a large majority being allocated to electricity expenses. Over the last two years, West Basin experienced multiple price increases in electricity transmission and generation from 11% to 18%. As a result, West Basin sought out ways to maintain the cost to produce recycled water. In 2022, West Basin joined the Direct Access program, an electrical supply service option to purchase electricity attributed to generation from an Electronic Service Provider (ESP), instead of the assigned local provider. By participating in the Direct Access program, West Basin was able to procure electricity at a fixed generation rate for three years, with an estimated savings of \$2.3 million.



Strategic Goals and Objectives

Water Supply Reliability

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 1.4 - Increase supply diversification by promoting water recycling</p>	<ul style="list-style-type: none"> ✓ Met recycled water production demands without needed capital improvements. ✓ Provided support for retrofit design, plan review, and approvals to help customers connect to recycled water. 	<ul style="list-style-type: none"> ▶ Work with stakeholders to look at recycled water alternative sources. ▶ Work to maintain demand and water quality degradation due to lack of needed capital equipment and treatment plant.

Sound Financial & Resource Management

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 2.1 - Provide effective overall capital facility asset management through the application of industry best-practices</p>	<ul style="list-style-type: none"> ✓ Customized Computerized Maintenance Management System (CMMS) structure audit implemented. ✓ Began planning for criticality assessment of equipment; reviewed previous strategy and adopted new focus in conducting the assessment. 	<ul style="list-style-type: none"> ▶ Continue customization of the CMMS and audit of system to have proper equipment and parts on hand. ▶ Continue system optimization and find creative repairs for Processes equipment due ot capital cuts.
<p>Strategy 2.2 - Maintain facilities to manage and minimize the risk of failure and liability exposure</p>	<ul style="list-style-type: none"> ✓ Surveyed industry for strategies to manage supply chain shortages. ✓ Secured auctioned assets at minimal cost to repair systems damaged from upset. 	<ul style="list-style-type: none"> ▶ Present Level of Service for Recycled Water Analysis to Board. ▶ Complete analyses on rehabilitation recommendations and remaining asset values of refinery onsite assets.
<p>Strategy 2.6 - Operate cost-efficiently and effectively, with robust internal controls</p>	<ul style="list-style-type: none"> ✓ Utilized developed dashboards to track and analyze costs compared to the level of service while improving greater efficiency. ✓ Worked with other departments, agencies and vendors to create solutions for out-of-serviceable DCS. 	<ul style="list-style-type: none"> ▶ Continue to explore ways to meet water quality standards due to process train facilities wear and tear. ▶ Evaluate operations facility contract for best options in new contract.



Water Quality

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 3.1 - Achieve and maintain recycled water client satisfaction</p>	<ul style="list-style-type: none"> ☑ Supported existing customer water quality inquiries. 	<ul style="list-style-type: none"> ▶ Begin UCMR5 support for WB Purveyors.
<p>Strategy 3.3 - Meet permit and contractual water quality requirements</p>	<ul style="list-style-type: none"> ☑ Monitored water quality to ensure it met water quality compliance and contractual requirements. ☑ Completed all permit reporting on time. ☑ Maintained good relationships with regulators and industry groups to ensure we are aware of upcoming regulations and requirements. 	<ul style="list-style-type: none"> ▶ Update T22 Engineering Report and enroll in the new General Permit for Recycled Water. ▶ Evaluate optimization of laboratory services onsite required for compliance and process control particularly with current asset condition.

Customer Service

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 4.2 - Ensure recycled water client and customer agency satisfaction</p>	<ul style="list-style-type: none"> ☑ Promptly responded to recycled water customer issues and concerns. ☑ Assisted with new recycled water connections and modifications as needed. ☑ Conducted spot chlorination work in the distribution system as a result of variable influent source water quality. 	<ul style="list-style-type: none"> ▶ Promptly respond to recycled water customer issues and concerns. ▶ Assist with new recycled water connections and modifications as needed. ▶ Improve scheduled customer site inspection process, recycled water site communication, and recycled water user training. ▶ Help analysis for implementation of capital repairs that impact quality service to purveyors.



Performance Metrics

Metric	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Target	Target
Improve Recycled Water O&M Cost per Unit	\$1,151/AF	\$1,861/AF	\$1,605/AF	\$1,601/AF	\$1,741/AF
Meet all regulatory and environmental permit requirements	100%	100%	100%	100%	100%





Technical Planning

The Technical Planning program was formed to provide strategic long-term planning of projects, in support of West Basin’s mission, and its Water for Tomorrow program goals: Protecting the District’s existing water supply; Diversifying and augmenting the supply portfolio; and Innovating to prepare for the future. The Technical Planning program is responsible for the development of multi-disciplinary and complex evaluations, and the delivery of technical studies associated with the District’s water supply systems.

Fiscal Year 2023-24 Budget Objectives:

- Conduct multiple feasibility studies to explore the potential integration of West Basin’s recycled water system with emerging regional water reuse programs.
- Conduct a comprehensive analysis of the cost of service and rate study for all types of water delivered by West Basin.
- Contribute funds towards the Membrane bioreactor technology pilot study (MBR Pilot Study) at Hyperion Water Reclamation Plant, as part of a partnership with Los Angeles.
- Update the Emergency Response Plan to document required response emergencies including cyberterrorism, earthquakes, and leaks.
- Identify and prioritize bulk chemical storage tanks needing replacement before failures occur.

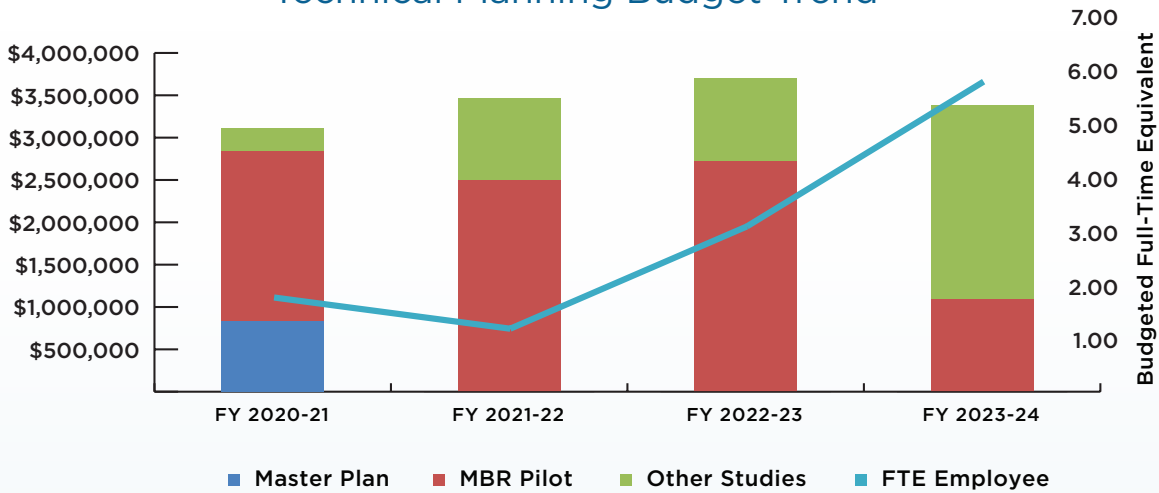
Operating Budget

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actuals	Actuals	Projected	Budget	Budget
Consultants	\$908,578	\$49,981	\$42,754	\$975,000	\$2,299,476
Project Share	33,334	2,313,095	-	2,725,024	1,086,905
Labor and Benefits	704,770	136,817	302,354	569,170	1,314,026
Overhead	331,196	98,600	181,920	238,553	511,991
Total Technical Planning	\$1,977,878	\$2,598,493	\$527,028	\$4,507,747	\$5,212,398

As mentioned, the Technical Planning program has five main objectives for FY 2023-24. In the table above, the technical planning program has broken out the Project Share for the MBR Pilot Study separate from the other four objectives to highlight West Basin’s contribution to the study. Additional staff time has been allocated to support these efforts.



Technical Planning Budget Trend



Technical Planning Projects

The Future of West Basin’s Recycled Water Program - Feasibility Studies

West Basin’s existing system is geographically positioned between the emerging water reuse programs that aim to greatly expand recycled water use in the region (Los Angeles’ Hyperion 2035/Operation Next, and MWD/LACSD’s Pure Water Southern California Programs. West Basin has infrastructure that can convey product water from these programs, and provide options for additional groundwater injection, and expedite groundwater replenishment in support of WRD’s WIN-4-ALL Program goals. To help define potential improvements to West Basin’s system, and determine the feasibility of integrating West Basin’s system with the regional programs, West Basin will need to conduct multiple feasibility studies:

- Regional Recycled Water Hydraulic Analysis*

A hydraulic analysis of West Basin’s recycled water distribution network will be conducted to evaluate system performance and identify phased system improvements associated with receiving treated water from (a) MWD’s Pure Water Southern California and (b) City of Los Angeles’ Operation NEXT programs.
- Pure Water SoCal Interconnection Pipeline Feasibility Study*

As part of the Pure Water Southern California program, MWD is proposing to construct a new 84 inch diameter pipeline to convey advanced treated recycled water (ATRW) from Los Angeles County’s Joint Water Pollution Control Plant to San Gabriel Canyon Spreading Grounds and other nearby facilities. In partnership with West Basin, a new turnout structure and pipeline would be constructed to deliver ATRW to West Basin’s recycled water distribution system.
- Existing Distribution Pipeline Condition / Rehab Assessment*

West Basin’s future recycled water program could include introduction of higher quality water into its existing distribution system for the purpose of expanding groundwater replenishment. An assessment is needed to determine whether existing pipelines will need to be cleaned and/or rehabilitated prior to the introduction of the advanced treated recycled water.

- *Backup Potable Water Connection Feasibility Study*

As part of the Pure Water Southern California program, MWD would deliver ATRW to West Basin's recycled water distribution system to meet (a) existing and future recycled water needs and (b) groundwater replenishment demands. In times of peak flow and source water supply interruptions, it will be necessary to supplement the system with potable water to maintain continuous customer service. This study will evaluate and compare potable water options at the source, along the distribution system, and/or at West Basin's treatment facilities to meet required demands.

- *JMMCRWRP Reconfiguration Feasibility Study*

The purpose of the feasibility study is to identify the opportunities and needs to reconfigure JMMCRWRP when introducing a new higher-quality source of water from MWD's Pure Water Southern California program and/or advanced treated water from Los Angeles' Operation Next Project.

- *West Coast Basin IPR Feasibility Study*

WRD is planning to expand groundwater replenishment in the West Coast Basin with installation of new injection wells. West Basin has a distribution system that could be used to convey the supply for these new injection wells. WRD and West Basin are partnering to prepare a feasibility study that will assess (a) needed improvements for West Basin's existing distribution system to inject additional ATRW to the groundwater basin and (b) the needed improvements for retail water agencies to boost groundwater extraction capability.

- *ECLWRF / CNTP Reconfiguration Feasibility Study*

This feasibility study will evaluate the potential reconfiguration of Edward C. Little Water Recycling Facility (ECLWRF) and the Chevron Nitrification Treatment Plant (CNTP), to support West Basin's future recycled water program. This program may result in ECLWRF receiving a different type of feed water and/or solely serving advanced treated recycled water (ATRW).

Cost of Service Study

West Basin is conducting a comprehensive cost of service analysis for all types of water produced. This study is vital to ensure all future costs would be equitably allocated to all recycled water customers. To analyze recycled water rates, the potential impacts of increased source water costs on each customer agency will be evaluated and used to develop new agreements with current customers.

Hyperion MBR Pilot Study

In 2018, West Basin entered into a three-way agreement with LADWP and LASAN to design/build a pilot MBR system. The goal is for the city to produce higher quality effluent water, which is the source water for West Basin's recycled water system.



Emergency Response Plan

West Basin is updating the existing Emergency Response Plan. The plan will document all the proper response for all types of incidents, natural or man-made, that could threaten life, property, or the environment.

Bulk Chemical Storage Condition Assessments

West Basin will conduct condition assessments on bulk chemical storage tanks at its multiple facilities. The assessments will help identify tanks nearing end of useful life and in need of replacement. Once identified, tank replacement projects will be prioritized and executed as part of West Basin's capital improvement program.



Strategic Goals and Objectives

Water Supply Reliability

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
Strategy 1.3 - Increase supply diversification by promoting groundwater development	<ul style="list-style-type: none"> ✔ Started early discussions with MWD and WRD on potential IPR locations (e.g., Torrance area) and volumes (e.g., 10,000 to 20,000 AFY) 	<ul style="list-style-type: none"> ▶ Conduct an IPR feasibility study to evaluate the potential utilization of West Basin’s existing system for additional replenishment.
Strategy 1.4 - Increase supply diversification by promoting water recycling	<ul style="list-style-type: none"> ✔ Started early discussions with City of Los Angeles and MWD on potential scope and phasing of West Basin’s Future Recycled Water Program. ✔ In partnership with MWD, initiated a hydraulic analysis to evaluate West Basin system performance under different recycled water supply scenarios from MWD’s Pure Water Southern California program. 	<ul style="list-style-type: none"> ▶ Conduct multiple feasibility studies to explore the integration of West Basin’s recycled water system to regional water reuse program, expediting the expansion of recycled water production, and promoting groundwater replenishment/ extraction.

Sound Financial Resource Management

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
Strategy 2.2 - Maintain facilities to manage and minimize risk of failure and liability exposure	<ul style="list-style-type: none"> ✔ Procured a consultant and began updating the West Basin Emergency Response Plan. 	<ul style="list-style-type: none"> ▶ Complete updates to the West Basin Emergency Response Plan.
Strategy 2.3 - Develop partnerships with public and private entities to facilitate capital asset development and implementation	<ul style="list-style-type: none"> ✔ Began discussions with refineries on near-term, priority capital projects. 	<ul style="list-style-type: none"> ▶ Negotiate recycled water agreements/ amendments with refinery customers, addressing funding needs for rehabilitation replacement projects.
Strategy 2.6 - Operate cost-efficiently and effectively, with robust internal controls	<ul style="list-style-type: none"> ✔ Procured a consultant and began preparing a comprehensive Cost of Service Study for all types of recycled water produced by West Basin. 	<ul style="list-style-type: none"> ▶ Complete Cost of Service Study.



Water Quality

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 3.2 - Increase control over source water quality</p>		<p>▶ Support the study and construction of a full-scale MBR facility to enhance source water quality to West Basin treatment facilities.</p>

Performance Metrics

Metric	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Target	Target
Renew recycled water supply agreement with Torrance Refinery	In progress	In progress	N/A	In progress	To execute
Secure stakeholder funding for multiple feasibility studies	N/A	N/A	N/A	N/A	To execute
Prepare multiple feasibility studies related to the Future of West Basin's Recycled Water Program	N/A	N/A	To initiate	To initiate	To complete
Support the City of Los Angeles with the Completion of the MBR Pilot Study	In progress	In progress	Completion	To complete	To complete
Prepare Emergency Response Plan	In progress	Completion	In progress	To complete	To complete
Prepare prioritized list of chemical tank replacements	In progress	Completion	N/A	N/A	N/A
Prepare Cost of Service Study	In progress	Substantially Complete	Complete	In progress	To implement



Water Policy and Resources Development (Water Policy)

The Water Policy and Resources Development budget supports various activities including, but not limited to, performing analyses and preparing reports related to long term water reliability and regional water demand; pursuing state and federal grants to ensure West Basin’s programs and projects are cost-effective; providing technical and other support to retail customer agencies; tracking and reporting on West Basin’s water supply portfolio; implementing local, state and federal legislative and regulatory advocacy efforts; implementing the district’s water bottle filling station grant program, and participating in industry organizations. In addition, this budget includes efforts to support Metropolitan’s activities to ensure local and industry-related water policies, programs, and projects are favorable to West Basin, its customer agencies, and service territory as well as the Southern California region. Lastly, this budget also includes actively participating in Integrated Regional Water Management planning on behalf of the West Basin service territory, and as a member of the Greater Los Angeles County planning area.

Fiscal Year 2023-24 Budget Objectives:

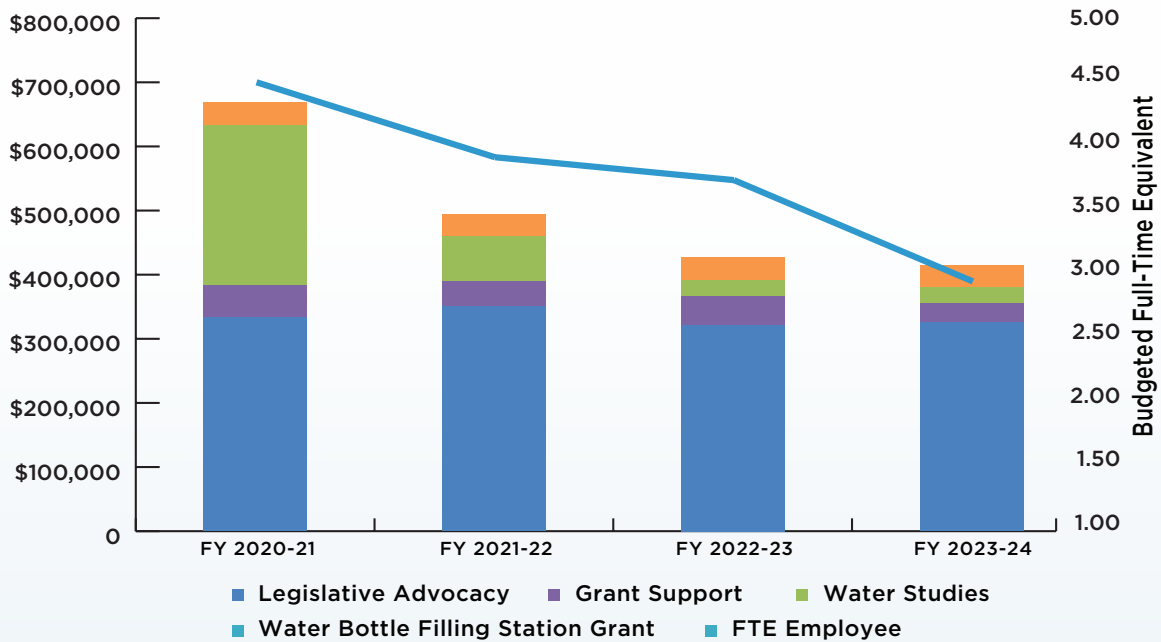
- Assist customer agencies with water use objective planning and implementation
- Work with customer agencies to educate CII customers about the state ban on irrigating non-functional turf areas
- Pursue funding opportunities to promote water conservation programs and conduct market research meant to support those programs
- Initiate Annual Water Supply and Demand Analysis Report
- Research and analyze legislative proposals with potential impact on West Basin
- Develop legislative outreach strategies in conjunction with state and federal advocacy teams to educate elected officials about West Basin’s role going forward in local supply reliability through groundwater replenishment using recycled water
- Provide local organizations, including municipalities and schools, with funding to install indoor and outdoor water bottle filling stations
- Produce Fiscal Year 2022-2023 Water Use Report that highlights the tremendous efforts of the region to reduce water use in response to ongoing drought conditions

Operating Budget

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Budget	Budget
Labor and Benefits	\$ 807,489	\$ 491,025	\$ 913,729	\$ 780,367	\$ 614,610
Overhead Allocation	467,840	477,172	434,000	480,651	296,096
Consultants	519,666	458,665	345,000	391,400	380,400
Water Bottle Filling Stations	23,000	29,000	32,000	35,000	35,000
Office Administration	3,247	1,014	2,000	-	-
Total Water Policy	\$ 1,821,242	\$1,456,876	\$ 1,726,729	\$ 1,687,418	\$ 1,326,106



Water Policy Budget Trend



West Basin staff will focus their efforts on five key areas in the upcoming fiscal year.

Staff is budgeting \$325,400 to maintain its active state and federal advocacy efforts, focusing on identifying funding opportunities, tracking and analyzing legislative proposals with potential impacts on West Basin, coordinating advocacy efforts, holding meetings with state and federal elected officials, and adopting official positions on priority legislation. This work is able to be accomplished in large part by coordinating with West Basin's state (Niemela Pappas Associates) and federal (Van Scoyoc Associates) advocacy teams, who work hard year-round to represent the best interests of the District.

Staff is budgeting a decrease from \$45,000 in FY 2022-23 to \$30,000 in FY 2023-24 to support costs associated with grant applications and grant-seeking efforts, which could benefit from the assistance of a grant consultant/expert.

In FY 2021-22, staff initiated development of a retail agency toolkit to support customer agency efforts to understand and comply with state water use objectives. The Water Policy department is budgeting \$10,000 to develop resources that can help customer agencies in their planning and implementation efforts for meeting upcoming water use objectives and CII performance measure requirements laid down by the state's regulatory bodies.

Since 2017, West Basin has budgeted \$35,000 each fiscal year for the Water Bottle Filing sponsorship program. This program helps to encourage the use of refillable reusable bottles, in an effort to reduce plastic waste. The funds will be available to public facilities within the service area to provide safe and reliable tap water.

Beginning in 2022, urban water retailers were required to develop and submit annual water supply and demand assessments on an annual basis. Staff is budgeting \$15,000 for consultant support that will be needed to develop the district's 2024 assessment, which will be due on or before July 1, 2024.



Strategic Goals and Objectives

Water Supply Reliability

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 1.1 - Prepare and periodically update water supply plans</p>	<ul style="list-style-type: none"> ✓ Provided monthly reports on retail imported water use and overall potable water production for customer agencies. ✓ Summarized and reported monthly water conservation data submitted by customer agencies to the State Water Resources Control Board. ✓ Implemented shortage response actions, including communication protocols, as a result of West Basin's Level 3 Shortage declaration. ✓ Successfully navigated major interruption to Metropolitan's Upper Feeder Pipeline; worked with customer agencies to reduce demand to extraordinary levels during the shutdown. 	<ul style="list-style-type: none"> ▶ Produce the 2022-2023 Water Use Report. ▶ Continue to track and analyze monthly water use data and trends as it relates to water conservation targets set by the state and local WSCP shortage levels. ▶ Evaluate Level 3 Shortage conditions in light of water supply conditions, Metropolitan actions, and state regulatory deadlines. ▶ Develop and submit Annual Water Supply and Demand Assessment.
<p>Strategy 1.3 - Increase supply diversification by promoting groundwater development</p>	<ul style="list-style-type: none"> ✓ Collaborated with the Water Replenishment District to share data and analysis on regional water demand, in order to identify opportunities to increase groundwater pumping while maintaining healthy groundwater basins through groundwater replenishment. ✓ Served as an active participant in monthly West Basin Water Association meetings to discuss basin issues with WRD and local groundwater pumping agencies. 	<ul style="list-style-type: none"> ▶ Conduct multiple feasibility studies to explore the integration of West Basin's recycled water system to regional water reuse program, expediting the expansion of recycled water production, and promoting groundwater replenishment/ extraction. ▶ Continue to collaborate with WRD on programs and projects of common interest that will expand groundwater pumping activities in the West Coast Basin. ▶ Promote regional benefits of groundwater through presentations before municipal, civic, and legislative bodies. Identify additional government and industrial stakeholders to further promote groundwater use.



Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 1.4 - Increase supply diversification by promoting water recycling</p>	<ul style="list-style-type: none"> ✓ Participated in 2023 National Groundwater Awareness Week ✓ Worked with retail pumpers to improve understanding of current pumping activities and to receive updates on current and upcoming groundwater-related projects ✓ Developed updated groundwater use and annual pumping allocation analysis to highlight available basin capacity and opportunities for customer agencies to increase pumping volumes in the future ✓ Engaged with water industry partners and legislative and regulatory advocacy groups to promote the adoption, use, and funding of recycled water. 	<ul style="list-style-type: none"> ▶ Continue to participate in various industry groundwater awareness events and initiatives. ▶ Continue to track and analyze groundwater pumping data and trends to support understanding of the region’s water supply portfolio and overall supply reliability ▶ Continue to engage and support water industry partners and legislative and regulatory advocacy groups to promote the adoption, use, and funding of recycled water.

Sound Financial & Resource Management

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 2.3 - Develop partnerships with public and private entities to facilitate capital asset development and implementation</p>	<ul style="list-style-type: none"> ✓ Maintained leadership role in the Los Angeles County Integrated Regional Management Program, including administration on behalf of the Region, and of its financial resources. ✓ Partnered with multiple community and civic organizations, as well as school districts to maximize utilization of available sponsorships for Water Bottle Filling Station installation projects. 	<ul style="list-style-type: none"> ▶ Continue leadership role in the Greater Los Angeles County Integrated Regional Water Management Program, including administration on behalf of the Region, and of its financial resources. ▶ Continue to partner with community and civic organizations, as well as school districts, to maximize the utilization of available sponsorship funds for Water Bottle Filling Station installation projects.



Sound Financial & Resource Management

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 2.6 - Operate cost-efficiently and effectively, with robust internal controls</p>	<ul style="list-style-type: none"> ✔ Supported efforts to apply for additional state and federal project funding for West Basin’s programs and projects, including low interest state revolving fund loans, increased state and bond funding for local water supply development, and specific project appropriations for conservation and construction projects. ✔ Applied for \$3.3 million in state funds that would allow the district to offer new and expanded water conservation programs, implement strategic outreach and education on non-functional turf in CII areas, and conduct valuable market research to support the above programs. ✔ Worked with state lobbyist and coalition partners to included recycled water, conservation, and groundwater funding amounts in state budget, water bond proposals, and infrastructure funding programs. 	<ul style="list-style-type: none"> ▶ Pursue additional state and federal project funding for West Basin’s programs and projects, including low interest state revolving fund loans, increased state and bond funding for local water supply development, and specific project appropriations for conservation and construction projects. ▶ Work with federal delegation, USBR, and US Army Corps to seek federal funding opportunities that are available following passage of the Infrastructure Investment and Jobs Act. ▶ Work with federal delegation to identify West Basin capital projects that could qualify for future congressionally-directed funding opportunities (i.e. - Earmarks). ▶ Continue to work with state advocacy team and coalition partners to include recycled water, conservation, and groundwater funding amounts in state budget, water bond proposals, and infrastructure funding programs.

Performance Metrics

Metric	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Target	Target
Disperse Budgeted Water Bottle Filling Stations Sponsorship Funds	66%	83%	91%	100%	100%



Public Information & Education

The District continues to share timely, accurate information about West Basin's water supplies and programs to drive participation and awareness. Additionally, public information and education efforts increase awareness of West Basin's mission and values.

Public Information

West Basin develops and implements a wide array of communication and outreach programs so that West Basin is considered a valuable utility among key stakeholders. Audiences include water retailers, cities, elected officials (city, county, state, and federal), educators, chambers of commerce, business leaders, and community and environmental groups. By offering free public programs such as water recycling facility tours, presentations, workshops, water-themed events, , as well as the marketing of water use efficiency programs, West Basin provides value to the service area.

Education

School education programs engage students, grades 3 through 12, in learning about water conservation, water use efficiency, water supplies, and environmental stewardship. These programs are offered to public and private school students in the service area. They include classroom presentations, field trips, water conservation kits, and an annual conservation-themed art contest.

Fiscal Year 2023-24 Budget Objectives:

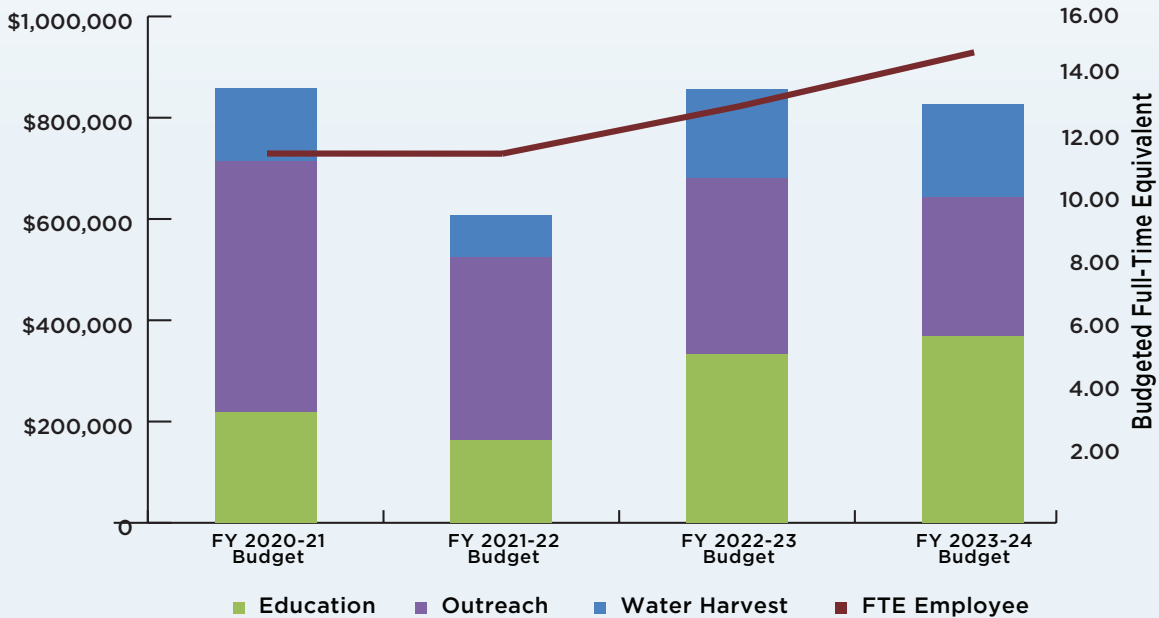
- Increase supply diversification and drought resiliency by promoting water use efficiency, conservation and public education programs and participation.
- Reevaluate community engagement strategies in a post-pandemic (hybrid and in-person) environment to build community trust and foster partnerships. Take into account: K12 and community college educators to forge trade, technical and operational pathways to water industry careers and workforce development; the environmental community as an ally to increasing conservation and recycling; and the consideration of increasing small and/or local business participation in District procurement and bid opportunities.
- Examine and evolve how the District is communicating about its current recycled water programs, investments and future endeavors.



Operating Budget

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Budget	Budget
Labor and Benefits	\$2,071,175	\$1,072,200	\$1,979,999	\$2,379,058	\$2,633,726
Overhead Allocation	1,504,268	1,123,369	1,133,143	1,397,449	1,399,267
Consultants	43,879	76,480	139,960	230,200	170,000
Advertising	67,269	71,623	100,575	174,000	130,500
Program Supplies	28,110	67,605	77,199	109,000	157,500
Sponsorship	3,500	9,000	9,000	20,500	18,500
Non-Professional Services	6,543	69,231	213,817	228,200	207,500
Office Administration	33,800	60,348	98,546	94,650	142,800
Total Public Information & Education	\$3,758,544	\$2,549,856	\$3,752,239	\$4,633,057	\$4,859,793

Public Information & Education Budget Trend





Strategic Goals and Objectives

Customer Service

Strategic Business Plan Goals	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 4.1 - Build Community Trust</p>	<ul style="list-style-type: none"> ☑ Consistently updated District communications platforms (e.g., website, social media, news) with timely, accurate information to keep the service area aware of District activities. 	<ul style="list-style-type: none"> ▶ Reevaluate and optimize community engagement operations and reporting.
<p>Strategy 4.4 - Promote outreach and education programs</p>	<ul style="list-style-type: none"> ☑ Maintained high-quality and quantity of public outreach and education programs in the virtual and in-person environment. ☑ Continued to provide quality K12 education programs, expanding reach with in-class programming and new partnerships. 	<ul style="list-style-type: none"> ▶ Pursue market research to fully understand, define and reach respective audiences/targets for the various water use efficiency programs. ▶ Reevaluate current/active partnerships and potential for new or expanded relationships.

Environmental Stewardship

Strategic Business Plan Goals	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 5.1 - Ensure social environmental factors are considered in decision-making</p>	<ul style="list-style-type: none"> ☑ Maintained virtual offerings as part of broader education and outreach programming considering the environmental benefits of online programming. ☑ Procured more environmentally conscious promotional items given out during outreach events. 	<ul style="list-style-type: none"> ▶ Continue to pursue eco-friendly promotional items. ▶ Ensure printing needs in line with demand..



Performance Metrics

The Public Information and Education program managers worked to reconstruct their performance metrics to give our stakeholders a better understanding of how this program serves the needs of the area.

Metric	FY 2022-23 Target	FY 2022-23 Actuals (Projected)	FY 2023-24 Target
Community Engagement:			
Scheduled Tours	N/A	N/A	4
Special Group Tours	N/A	N/A	18
Speakers Bureau Presentations	N/A	N/A	24
District Classes	N/A	N/A	5
District Events	N/A	N/A	3
Community Events	N/A	N/A	60
Communications:			
Social Media Followers	N/A	N/A	^10%
Press Releases/Web News	N/A	N/A	12
News Mentions/Coverage	N/A	N/A	500
Quarterly Newsletter	4	4	4
Website Users			^10%
K12 Education:			
ECLWRF School Tours/ Student #	90 / 5,400	90 / 5,400	90 / 5,400
Assembly Presentations/ Student #	30 / 1,800	30 / 1,800	24 / 1,800
Art Contest Class Presentations/ Student #	20 / 1,200	20/1,200	24 / 720
Art Contest Submissions	450	425	450



Water Use Efficiency

The Water Use Efficiency Program is an essential strategy for West Basin to reduce potable water demand, increase local water resiliency, and provide local programs that support its water retailers and cities. The program budget represents the staffing and direct costs to deliver devices, educate customers, and demonstrate water efficiency benefits to service area residents, businesses and public sites. West Basin's success in offering programs and services that support water-efficient lifestyles is obtained through collaboration with our customer water agencies, our cities, non-profit groups, joint power authorities, service groups, non-governmental organizations, vendors, community leaders, and other stakeholders.

West Basin utilizes guidance from the Urban Water Management Plan Water Efficiency Data Study, along with other data-driven reports, to identify opportunities for water efficiency programs. West Basin staff also applies for federal, state, and local grant funding opportunities to offset West Basin's costs and increase the cost-effectiveness of its programs. The funding partnerships that West Basin has developed with the federal, state, and local agencies help West Basin to provide greater value to rate payers in the West Basin service area.

West Basin continues to participate in the Metropolitan Water District (MWD) Member Agency Administered (MAA) funding program, whereby West Basin is allocated \$270,000 per year to utilize, or \$540,000 for a 2-year period for developing water use efficiency programs that deliver both conservation devices and education to West Basin's service area. In addition, West Basin currently has a pending state grant funding application, which if awarded, will aid in funding an additional Water Use Efficiency Program this fiscal year.

Fiscal Year 2023-24 Budget Objectives:

- Implement the Grass Replacement + program by providing a minimum of 30 free residential landscape design assistance packages, free drought-tolerant trees, and increased rebate incentives for residents in priority areas.
- Support and promote the Grass Replacement rebate to advance the adoption of drought-tolerant, climate-appropriate landscapes.
- Support Public Agency Grass Replacement projects by continuing to offer design assistance services for potential projects considered by city, school, and district staff.
- Administer 25 site assessments to support the commercial, institutional, and industrial (CII) sector to identify water-saving potential and distribute water savings devices and eligible rebates.
- Provide up to 1,500 free rain barrels to residents to conserve water and reduce storm water run-off.
- Implement Phase-2 of the residential program partnership with the Southern California Gas Company (SoCalGas) for under-represented communities. Retrofit up to 50 single-family homes through SoCalGas direct install program with free indoor and outdoor water efficiency devices.
- Implement the new IRWMP grant funded Drought Resiliency Water Conservation Program in partnership with the Las Virgenes Municipal Water District and the Los Angeles County Waterworks District #29. Program to provide various resources and outdoor landscape devices.
- Implement one Firescaping class in the Malibu/Topanga area and one in the Palos Verdes Peninsula area.



Operating Budget

	FY 2020-21	FY2 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Budget	Budget
Labor and Benefits	\$ 848,779	\$ 453,531	\$ 868,457	\$ 894,160	\$ 1,020,907
Overhead	499,708	405,730	414,857	521,497	468,448
Water Use Efficiency	739,033	766,497	765,980	980,300	1,361,100
Total Conservation	\$ 2,087,520	\$ 1,625,758	\$ 2,049,294	\$ 2,395,957	\$ 2,850,455

The increase in Fiscal Year 2023-2024 budget is due to the addition of a new Drought Resiliency Program of \$150,000 and increase of \$265,000 to the Grass Replacement Program.

All advertising efforts and the corresponding dollars related to the Water Use Efficiency program have been reflected in the Public Information and Education program budget in FY 2023-24.

During Fiscal Year 2023-2024, the California Department of Water Resources (DWR) and the State Water Control Board (SWRCB) will continue developing and implementing the regulations that will help meet the goals of Assembly Bill (AB) 1668 and Senate Bill (SB) 606, companion legislation to implement new statewide water use objectives for urban water suppliers. West Basin’s customer agencies will adopt the new legislative requirements and begin to report on their efforts. West Basin, as the wholesale water supplier, will help support these efforts.

West Basin has included funding to supplement MWD’s \$2 per square foot grass replacement rebate program by adding on an additional \$1 per square foot to this existing rebate. West Basin will continue a strong focus on the Public Agency Grass Replacement Rebate program which supports public agencies with landscape design assistance to help envision a new landscape and process rebate application materials.

The Grass Replacement + program will continue offering additional resources such as free residential design assistance, free drought-tolerant trees, and increased rebate incentives for residents in priority communities. In FY22/23, West Basin piloted a successful new partnership with SoCalGas to leverage their marketing and direct install function and provide residents with free indoor and outdoor water efficiency devices in the under-represented communities of West Basin’s service area. Priority communities in the West Basin service area are disproportionately affected by environmental pollution with consideration of socioeconomic, public health, and environmental hazard criteria as defined by the California Environmental Protection Agency (CalEPA) California Communities Environmental Health Screening Tool CalEnviroScreen 4.0 for both of these programs.

MWD continues to develop and provide water efficiency resources to its Member Agencies. As the Member Agency for the South Bay and North Santa Monica Areas, West Basin provides technical assistance and support to its retail water agencies through any additional resources offered by MWD.



External Funding

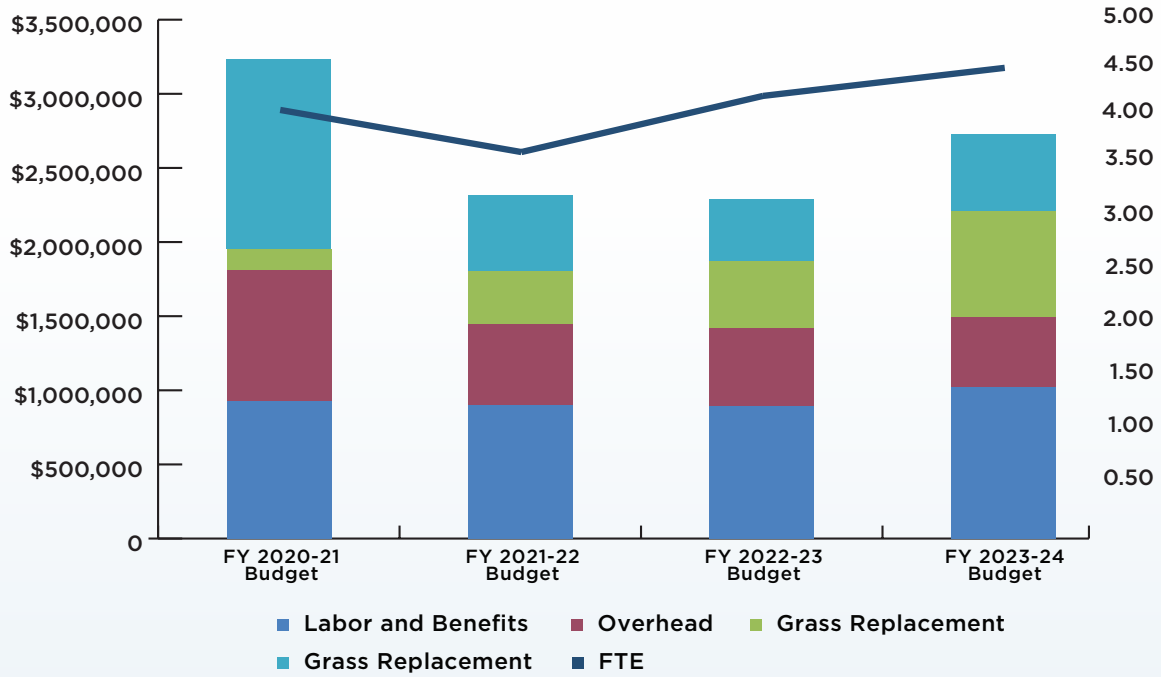
West Basin anticipates receiving a total of \$600,600 of external funding in FY 2023-24, of which \$560,000 is included in the Water Use Efficiency Program and \$60,000 is included in the Public Information & Education Program budget. West Basin participates in the Metropolitan Member Agency Administered, or (MAA) funding program, whereby West Basin is allocated funding by MWD and West Basin can apply for a total of \$270,000 per year, or \$540,000 for a 2-year period for developing and implementing water use efficiency programs that deliver both conservation devices and education to West Basin’s service area. In FY 2023-24, West Basin has allocated \$260,600 of the MWD MAA funding towards the Water Use Efficiency program. The table below shows the anticipated full utilization of the MWD MAA by program in FY 2023-24.

Program	MAA Funding
Rain Barrel	\$52,500
Grass Replacement +	\$120,000
SoCalGas Partnership	\$83,600
Firescaping Workshops	\$4,500
Water Harvest (1)	\$10,000
School Education (1)	\$30,000
Total Funding	\$300,600

(1) Included in the Public Information & Education Program budget.



Water Use Efficiency Budget Trend



In Fiscal Year 2023-2024, West Basin not only increased the program budget, but also allocated more of staff's time to assist with implementing the program.



Strategic Goals and Objectives

Water Supply Reliability

Strategic Business Plan Goals	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 1.2 - Increase supply diversification by promoting water use efficiency</p>	<ul style="list-style-type: none"> ✔ Distributed 1,500 rain barrels through 5 free rain barrel distribution events. Worked with local high schools and students to implement the events. ✔ Added an additional \$1 per square foot grass replacement rebate to Metropolitan’s \$2 per square foot rebate and managed the program activity across the service area. ✔ Implemented the pilot phase of the Grass Replacement + program providing 20 free residential landscape design packages, free drought-tolerant trees, and an increased \$5 per square foot rebate incentive. ✔ Launched and implemented a total of 6 West Basin Chats to help promote the grass replacement rebate program and broaden engagement opportunities with residents. 	<ul style="list-style-type: none"> ▶ Continue to implement and promote West Basin’s additional funding to the Grass Replacement rebate. ▶ Continue the Grass Replacement + Program. This program provides additional resources such as free residential design assistance, free drought-tolerant trees, and increased rebate incentives for residents in priority areas. ▶ Distribute 1,500 rain barrels to residents in West Basin service area. ▶ Launch the new SoCalGas Partnership Program. This is a new residential program for priority communities. West Basin will leverage the SoCalGas direct install program to provide residents with free indoor and outdoor water efficiency devices. ▶ Assist retail agencies with participating in MWD’s Municipal Leak Detection Program.

Sound Financial & Resource Management

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 2.6 - Operate cost-efficiently and effectively, with robust internal controls</p>	<ul style="list-style-type: none"> ✔ Allocated \$270,000 from Metropolitan for locally administered programs. Estimated to utilize to the full amount. 	<ul style="list-style-type: none"> ▶ Allocate \$260,600 from Metropolitan through the implementation of various water use efficiency programs, including SoCalGas Partnership, Rain Barrels, and Grass Replacement +. ▶ Seek federal, state, and local grant funding for new water efficiency programs.



Customer Service

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 4.4 - Promote outreach and education programs</p>	<ul style="list-style-type: none">✓ Implemented various water efficiency and outreach programs in partnership with our local cities and water retailers.✓ Represented West Basin's programs at over 100 community events, webinars, and networking opportunities in partnership with the South Bay Environmental Services Center.✓ Collaborated with the Public Information and Education (PIE) Department to create updated marketing materials to promote existing water use efficiency programs.✓ Coordinated with the PIE Department to utilize social media to enhance program awareness and participation.	<ul style="list-style-type: none">▶ Promote West Basin's programs at community events and webinars in partnership with the South Bay Environmental Services Center.▶ Support West Basin's retail customer agencies in complying with state mandates and new standards for water use efficiency.▶ Continue promoting MWD's California Friendly Landscape Training Webinars to the public.▶ Continue providing the public with West Basin's educational Grass Replacement webinar Chats.▶ Serve as a subject matter expert for potential future projects across the service area.



Environmental Stewardship

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 5.2 - Continue to gain environmental community support for West Basin programs</p>	<ul style="list-style-type: none"> ✔ Participated in MWD's monthly Water Efficiency and Project Advisory Committee Meetings. ✔ Participated in the monthly South Bay Environmental Services Center (SBESC) Partners' Meeting. ✔ Worked with the SBESC to promote the Green Building Program to businesses. ✔ Participated in the California Water Efficiency Partnership's (CalWEP) Program Committee and Research & Evaluation Committee. ✔ Participated in West Basin's Green Team meeting and helped launch various activities to engage and promote sustainability. ✔ Partnered with the Palos Verdes Peninsula Land Conservancy and distributed over 700 Ca. Native Plants. 	<ul style="list-style-type: none"> ▶ Maintain strong relationships with city staff that help promote the implementation of new Grass Replacement projects in public agency landscapes. ▶ Continue outreach to gain environmental and community support in the development and implementation of our water efficiency programs. ▶ Partner with various cities, agencies, and non-profit groups in the distribution of water efficiency devices and promotion of educational webinars provided through the WaterLab series. ▶ Continue representing the District as a board member on the CalWEP Board. This group leads many research projects on the implementation of new water use efficiency technology. ▶ Participate in the Malibu Area Conservation Coalition (MACC) Committee Meeting and represent West Basin.



Performance Metrics

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Budget	Budget
Distribution of Rain Barrels	1000	1500	1500	1500	1500
Secure 25% Outside Funding for Conservation Programs	30%	30%	26%	25%	25%
Remove up to 266,000 square feet of grass through Grass Replacement Rebate Program (Residential, Commercial, Public Agency)	112,149	107,472	266,000	266,000	450,000
Conserve 28 million gallons per year through the Malibu / Topanga Smart Program (1)	N/A	N/A	31M Gallons	28M Gallons	Project Ended
Provide 500 conservation kits through the Change & Save Program (1)	N/A	N/A	1500	500	Project Ended
Provide 400 clothes washer rebates at \$500 each (1)	N/A	N/A	232	400	Project Ended
Implement Water Use Efficiency Classes / Webinars	5	5	6	6	6
Host Firescaping classes	N/A	N/A	1	1	2
SoCalGas Partnership Program - Target 100 homes	N/A	N/A	100	100	50
Commercial Water Efficiency Program Site Assessments (2)	N/A	N/A	15	50	25

(1) Program ended in FY 2021-22

(2) New program beginning in FY 2022-23



Purveyor Water Quality Monitoring Program

West Basin administers the Water Quality Monitoring Program for two of its potable water purveyors - City of Manhattan Beach and City of Inglewood. Program activities include compliance sample scheduling, contracting wellhead sampling, contracting laboratory analytical services, reviewing water quality data for compliance, maintaining water quality databases, providing water quality data and relevant information distributed from Metropolitan Water District, coordinating monitoring and reviewing results for the Unregulated Contaminant Monitoring Rule (UCMR) program, and providing data to assist purveyors with triennial Public Health Goals report, in addition to the preparation of annual Consumer Confidence Reports. The program is designed for West Basin staff to assist our water purveyors in complying with California's Title 22 regulations for drinking water and with the Federal Safe Drinking Water Act regulations.



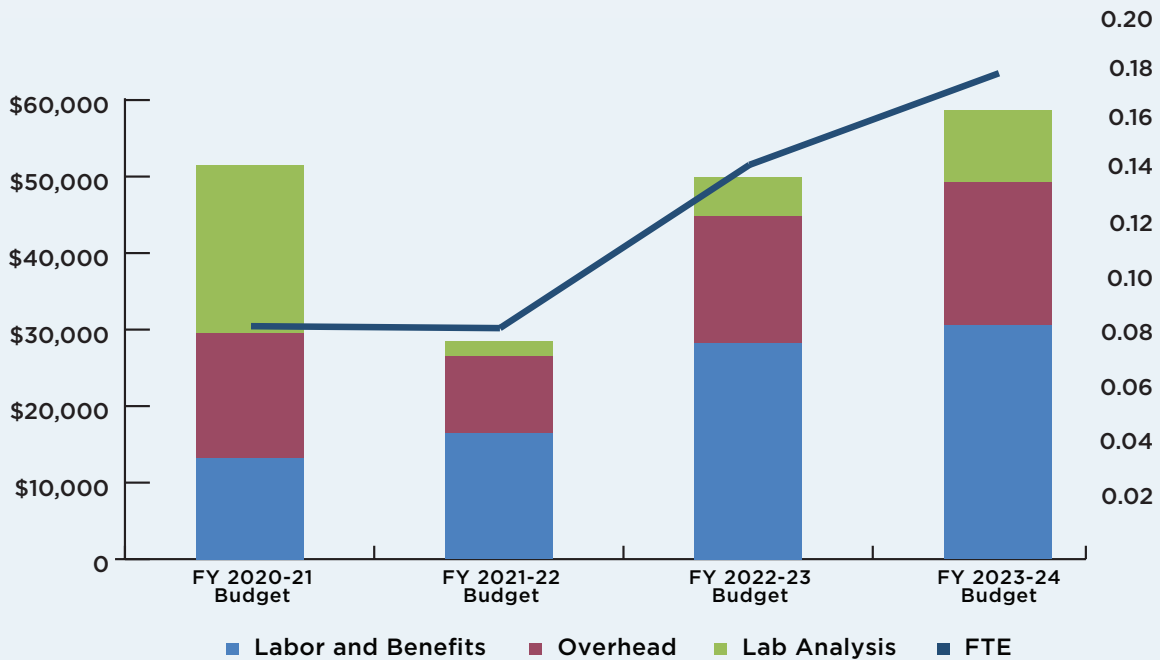
Operating Budget

	FY 2020-21	FY2 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Budget	Budget
Monitoring Program	\$ 6,440	\$ 1,510	\$ 5,008	\$ 4,800	\$ 9,348
Labor and Benefits	9,704	9,357	19,000	29,307	32,521
Overhead	8,921	10,728	12,000	16,018	18,633
Title 22 Monitoring	\$ 25,065	\$ 21,595	\$ 36,008	\$ 50,125	\$ 60,502

In FY 2023-24 additional staff time will be required in order to communicate and coordinate with cities to draft monitoring schedules and to submit required sampling reports to the EPA for the UCMR 5 program.

Program costs include sampling and analytical costs that may vary each year depending on the programmatic requirements. In FY 2023-24 the UCMR 5 program adds additional required sampling and analyses to the standard wellhead sampling, and costs are dependent on the number of constituents that must be monitored and the associated laboratory analyses that are required by state and federal regulations. Participating retailers reimburse West Basin for the sampling and analytical costs relating to their wells.

Purveyor Water Quality Monitor Budget Trend





Strategic Goals and Objectives

Water Quality

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 3.3 - Meet permit and contractual water quality requirements</p>	<ul style="list-style-type: none"> ✓ Completed all water quality sampling, scheduling, and analyses required to comply with Federal Safe Drinking Water Act and California Title 22 Drinking Water regulations such as analyses of all inorganic, organic, and radioactive compounds through coordination with laboratories, participating retailers, and regulators. ✓ Completed annual consumer confidence water quality reports and Triennial Public Health Goal Report for participating retailers as required by the Department of Drinking Water for public water systems. ✓ Gathered information for UCMR 5 and began coordination with cities about drafted schedules. 	<ul style="list-style-type: none"> ▶ Complete all water quality sampling, scheduling, and analyses required to comply with Federal Safe Drinking Water Act and California Title 22 Drinking Water regulations such as analyses of all inorganic, organic compounds, and radioactive compounds through coordination with laboratories, participating retailers, and regulators. ▶ Complete annual consumer confidence water quality reports for participating retailers as required by the Department of Drinking Water for public water systems. ▶ Finalize monitoring schedules and coordinate sampling. Review and approve data once posted to EPA website.

Environmental Stewardship

Strategic Business Plan	FY 2022-23 Accomplishments	FY 2023-24 Strategies
<p>Strategy 4.2 - Ensure client and customer agency satisfaction</p>	<ul style="list-style-type: none"> ✓ Assisted purveyors with planning for UCMR 5 program. ✓ Provided information from relevant webinars and workshops ✓ Confirmed cities were interested in program participation (quarterly wellhead sampling, consumer confidence report assistance, and management of the UCMR 5 program). 	<ul style="list-style-type: none"> ▶ Work with purveyors to plan sampling and reporting required by the EPA for the UCMR 5 program. ▶ Review and approve data once posted to the EPA website. ▶ Draft a budget and send to cities to confirm interest in program participation (quarterly wellhead sampling, consumer confidence report assistance, and management of the UCMR 5 program).



Performance Metrics

	FY 2020-21	FY2 2021-22	FY 2022-23	FY 2022-23	FY 2023-24
	Actual	Actual	Projected	Target	Target
Bill Purveyors on time	✓	✓	✓	✓	✓
Complete annual Consumer Confidence Reports and send to Cities	✓	✓	✓	✓	✓
Prepare quarterly monitoring schedule for Cities	✓	✓	✓	✓	✓
Begin UCMR 5 Program implementation					✓







GLOSSARY / ACRONYM





Acronyms

AB - Assembly Bill

ACWA/JPIA - Association of California Water Agencies/Joint Powers Insurance Authority

AF - Acre-Foot

AFY - Acre-Foot per Year

CFS - Cubic Feet per Second

CIP - Capital Improvement Program

CPI - Consumer Price Index

CWSC - California Water Service Company

CY - Calendar Year

DWR - Department of Water Resources

ECLWRF - Edward C. Little Water Recycling Facility

EPA - Environmental Protection Agency

FTE - Full-Time Equivalent

FY - Fiscal Year

GAAP - Generally Accepted Accounting Principles

GASB - Government Accounting Standards Board

HPBF - High Pressure Boiler Feed

JMMCRWRF - Juanita Millender-McDonald Carson Regional Water Recycling Facility

LADWP - Los Angeles Department of Water and Power

LASAN - Los Angeles Sanitation District

LPBF - Low Pressure Boiler Feed

LRP - Local Resources Program

LRFP - Long Range Financial Plan

MBR - Membrane Bioreactor

MF - Microfiltration

MGD - Million Gallons per Day

MWD - Metropolitan Water District of Southern California

OPEB - Other Post-Employment Benefits

OS - Official Statement

PARS - Public Agency Retirement System

PAYGO - Pay-As-You-Go

POS - Preliminary Official Statement

POTS - Plain Old Telephone Service

R&D - Research and Development

R&R - Rehabilitation and Replacement

RCS - Reliability Service Charge

RO - Reverse Osmosis

RTS - Readiness-To-Serve

RWMP - Recycled Water Master Plan

SB - Senate Bill

SRF - State Revolving Fund

UCMR - Unregulated Contaminant Monitoring Rule

UWMP - Urban Water Management Plan

USBR - United States Bureau of Reclamation

WRD - Water Replenishment District



Glossary

Accrual Basis – The basis of accounting under which transactions are recognized when they occur, regardless of timing of cash receipts and disbursements.

Acre-Foot – A unit of measure equivalent to 325,900 gallons of water that meets the need of two average families, in and around the home, for one year.

Adjustable Rate Revenue Certificates of Participation – Tax-exempt government variable rate securities used to finance capital costs.

AFY – Acre-Foot per Year

Annual Comprehensive Financial Report – An annual report intended to provide interested parties a broad financial outlook of West Basin.

Annual Tier 1 Maximum – An annual set amount of non-interruptible water an agency may purchase at a preferred rate.

Balanced Budget – A balanced budget occurs when the total sum of money a government collects in a year is equal to the amount it spends on goods, services, and debt interest.

Barrier Water – Imported or recycled water that is injected into wells to prevent seawater intrusion into the groundwater.

Bond Fund – Restricted funds used to pay for capital expenditures.

Brackish Water – A mixture of seawater and freshwater.

Budget – A balanced financial plan for a specified period of time.

California Public Employees Retirement System – An agency in the California executive branch that manages public employees' pension and health benefits.

California Water Service Company – The largest investor-owned American water utility west of the Mississippi River and the third largest in the country. Formed in 1926, the San Jose-based company serves 460,000 customers through 26 Customer and Operations Centers throughout the state.

Capacity Charge – A charge to recover the cost of providing peak capacity within the distribution system.

Capital Expenditure – Costs incurred that will derive a future benefit and include the acquisition or upgrade of land, equipment or facilities.

Capital Improvement Program – A multi-year plan identifying capital projects to be funded during the planning period.



Certificate of Participation – a type of financing where an investor purchases a share of the lease revenues of a program rather than the bond being secured by those revenues.

Cubic feet per second – Unit of measure used to determine volume of water flowing through meters.

Colorado River Aqueduct – The 242 mile-long water conveyance system built by Metropolitan Water District to carry water from the Colorado River to its Southern California services area.

Consumer-Price-Index – A measurement of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.

COVID-19 – a mild to severe respiratory illness that is caused by a coronavirus (Severe acute respiratory syndrome coronavirus 2 of the genus Betacoronavirus), is transmitted chiefly by contact with infectious material (such as respiratory droplets) or with objects or surfaces contaminated by the causative virus, and is characterized especially by fever, cough, and shortness of breath and may progress to pneumonia and respiratory failure.

Debt Limit – The legal maximum debt permitted a municipal, state, or national government.

Defeasance – A provision that voids a bond or loan when the borrower sets aside cash or bonds sufficient enough to service the borrower's debt.

Debt Coverage – The ratio of annual net income to annual debt service.

Debt Service – Principal and interest payments on bonds or other debt instruments used to finance capital facilities.

Department of Water Resources – DWR operates and maintains the State Water Project, including the California Aqueduct. The department also provides dam safety and flood control services, assists local water districts in water management and conservation activities, promotes recreational opportunities, and plans for future statewide water needs.

Designated Funds – Unrestricted funds that can be used for any lawful purpose at the discretion of the Board of Directors.

Disinfected Tertiary Recycled Water – Secondary treated wastewater that has been filtered and disinfected for industrial and irrigation uses.

Double Pass Reverse Osmosis Water – Secondary treated wastewater pretreated by ozone and microfiltration, followed by two passes of RO treatment for high pressure boiler feed water

Edward C. Little Water Recycling Facility – The main water recycling plant in El Segundo, California that began operations in 1995.

Effluent – Wastewater or other liquid, partially or completely treated or in its natural state, flowing from a treatment plant.



Enterprise Fund – An entity with a self-balancing set of accounts established to record the financial position and results that pertain to a specific governmental activity.

Environmental Protection Agency – An independent executive agency of the United States Federal government tasked with environmental protection matters.

Financial Policies – Document approved by the Board of Directors that identifies parameters through which West Basin operates and provides a standard in which fiscal performance can be reviewed.

Fiscal Year – The time frame in which the budget applies, this is the period of July 1 through June 30.

Fixed Service Charge – A fixed fee collected from customers to recover the cost of providing services.

Full-Time Equivalent – An employee that normally works 40 hours per week and receives full benefits.

Fund Balance – Represents the difference between assets and liabilities.

General Fund – Unrestricted funds used to pay for general or operating expenditures.

Government Accounting Standards Board – The source of generally accepted accounting principles used by State and Local governments in the United States of America.

Groundwater – Water that has percolated into natural, underground aquifers; water in the ground, not water collected on the surface.

Imported Water – Water imported by MWD through the Colorado River Aqueduct system and from Northern California.

Integrated Regional Water Management Plan – A plan prepared by a Regional Water Management Group pursuant to the Department of Water Resources' IRWMP Program. The plan describes how integrated planning is the effective management of resources through collaboration of efforts and cooperation of various entities. The integration of multiple water management strategies via multipurpose projects creates opportunities to meet regional water resource needs, efficiently use fiscal resources, and provide the public with tangible community benefits.

Irrigation – Applying water to crops, lawns, or other plants using pumps, pipes, hoses, sprinklers, etc.

Juanita Millender – McDonald Carson Regional Water Recycling Facility – A satellite recycling plant in Carson, California.

LIBOR – The London Interbank Offered Rate is the average interest rate estimated by leading banks in London that they would be charged if borrowing from other banks.



Local Resources Program - A program offered by MWD that provides financial assistance to member agencies and local water purveyors who make beneficial use of treated wastewater.

Metropolitan Water District of Southern California - MWD is one of the world's largest water agencies. It imports almost 60% of the water used by more than 15 million people in Southern California, including San Diego County. This water is wholesaled to Metropolitan's 26 member agencies. MWD is governed by a 37-member Board of Directors representing its member agencies.

Metropolitan's Tier 1 Supply Rate - Recovers the cost of maintaining a reliable amount of supply.

Metropolitan's Tier 2 Supply Rate - Set at MWD's cost of developing additional supply to encourage efficient use of local resources.

Metropolitan's Treatment Surcharge - Recovers the costs of treating imported water.

Metropolitan's System Access Rate - Recovers a portion of the costs associated with the delivery of supplies.

Metropolitan's System Power Rate - Recovers MWD's power costs for pumping supplies to Southern California.

Metropolitan's Water Stewardship Rate - Recovers the costs of MWD's financial commitment to conservation, water recycling, groundwater clean-up and other local resource management programs.

Microfiltration - A membrane filtration process in which water passes through small pores of the micro-filtration membrane, accumulating particles on its surface. Periodically, flow is reversed to remove the debris.

Moody's - One of the nationally recognized statistical-rating organizations.

Nitrified Water - Disinfected Tertiary Recycled Water that has been nitrified to remove ammonia for industrial cooling towers.

Non-Interruptible Water - The treated firm water supply that is available year-round.

Official Statement - A legal statement which serves as the prospectus for a municipal bond. It is a disclosure of the finances surrounding the issue of the municipal bond, and is prepared by the local or state government and its legal counsel. It also indicates how investors in the bonds will be repaid.

Overhead - Indirect expenses to support the general operations of West Basin.

Pay-As-You-Go - The practice of funding construction expenditures from current operating revenues in-lieu of using debt proceeds.

Potable - Drinkable water. Conversely, non-potable means non-drinkable.



Public Agency Retirement System - A retirement plan established to provide benefits to Board of Directors that meets certain minimum requirements.

Readiness-To-Serve Charge - A charge designed to provide firm revenue for Capital Investment Plan debt service to meet the reliability and quality needs of existing users.

Recycled Water - Tertiary treated water that cannot be used for domestic purposes and must meet appropriate federal, state, and local laws and regulations.

Refunding Revenue Bonds - A bond that retires another bond before the first bond matures. Refunding bonds may be issued for a number of reasons, but mainly to reduce the cost of funding as a result of lower interest rates.

Reliability Service Charge - West Basin's charge to cover the cost of its programs and services.

Restricted Funds - Funds restricted by a third party, by law, regulation or contractual obligation.

Revenue Certificates of Participation - Tax-exempt government securities used to finance capital costs related to construction or acquisition and may not be used to finance ongoing operating costs.

Reverse Osmosis - A filtration process that forces water through membranes that contain microscopic holes, removing microorganisms, organic chemicals and inorganic chemicals, producing very pure water.

Seawater Intrusion - The movement of salt water into a body of fresh water. It can occur through surface water or groundwater basins.

Single Pass Reverse Osmosis Water - Secondary treated wastewater pretreated by ozone and microfiltration, followed by one pass of RO treatment for low-pressure boiler feed water.

Standby Charges - An annual charge paid by property owners to fund West Basin's debt service obligation on the West Basin Water Recycling Facilities.

Standards & Poor's - One of the nationally recognized statistical-rating organizations.

State Revolving Fund Loan - a fund administered by a state for the purpose of providing low-interest loans for investment in water and sanitation infrastructure.

State Water Project - An aqueduct system that delivers water from Northern California to Central and Southern California.

Teleworking - the use of home computers, telephones, etc, to enable a person to work from home while maintaining contact with colleagues, customers, or a central office. Also called: telecommuting

Title 22 - A section of California Code of Regulations pertaining to various aspects of drinking water and recycled water standards.



Treated Sewer water – is a type of wastewater that has been treated to remove contaminants and is an effluent that is suitable for discharge to the surrounding environment or an intended reuse application.

Unrestricted Funds – Funds not restricted by a third party, by law, regulation or by contractual obligation.

Urban Water Management Plan – A report prepared by a water purveyor to ensure the appropriate level of reliability of water service sufficient to meet the needs of its various categories of customers during normal, single dry or multiple dry years. The California Water Management Planning Act of 1983, as amended, requires urban water suppliers to develop an UWMP every five years in the years ending in zero and five.

Water Reclamation – Wastewater treatment making the water suitable for beneficial reuse, such as landscape irrigation. Also called water recycling.

Water Replenishment District - WRD manages groundwater for nearly four million residents in 43 cities of Southern Los Angeles County. The 420 square mile service area uses about 250,000 acre-feet of groundwater per year, which equates to nearly 40% of the total demand for water. The WRD ensures that a reliable supply of high-quality groundwater is available through its clean water projects, water supply programs, and effective management principles.

Water Use Efficiency – the best tool for stretching water supplies without making unnecessary investments in infrastructure, shifting available water resources or negatively impacting the environment.







WEST BASIN MUNICIPAL WATER DISTRICT

17140 S. AVALON BLVD., CARSON, CA 90746

WESTBASIN.ORG



2023-2024

CAPITAL IMPROVEMENT PROGRAM BUDGET



WEST BASIN MUNICIPAL WATER DISTRICT
17140 S. AVALON BLVD. CARSON, CA 90746



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West Basin Municipal Water District Board of Directors



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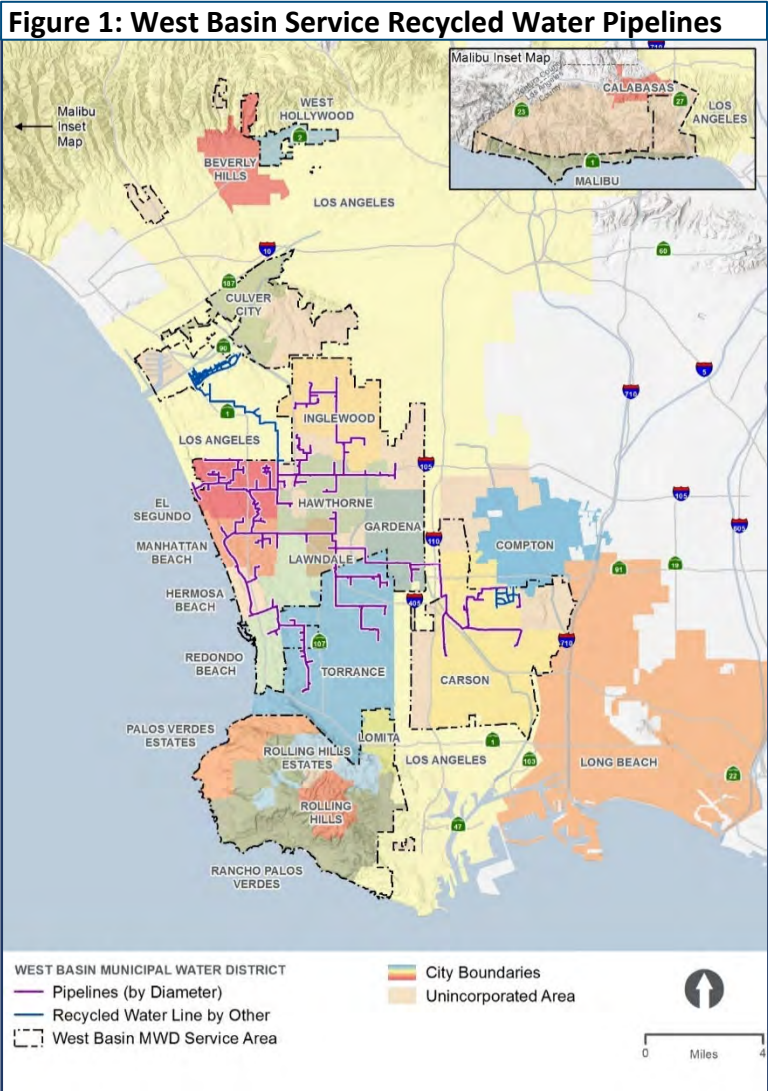


Section 1. Introduction

For 75 years, West Basin Municipal Water District (West Basin or District) has dedicated itself to providing a cost-effective, safe, and reliable water supply to its service area communities in Los Angeles County. Faced with a declining groundwater table and over-reliance on the West Coast Groundwater Basin, water authorities recommended the establishment of a local municipal water district in the 1940s. In 1947, voters approved their recommendation, and West Basin was formed. A year later, West Basin became a member agency of the Metropolitan Water District of Southern California (MWD), a 26-member agency that provides the region with imported water. Today, West Basin is California's sixth largest water district, encompassing a 185-square-mile service area and serving 17 cities and unincorporated areas of Los Angeles County.

1.1 Current Recycled Water Program

Through the years, West Basin has strategically invested in projects and programs that have expanded and diversified its water supply portfolio to meet the ever-changing needs of the region’s diverse water users. West Basin has focused on meeting the region’s ongoing water demands by maximizing water education and conservation, and expanding its water recycling program. In response to the extreme drought of the late 1980s and early 1990s, West Basin secured state and federal funding in 1992 to design and build a world-class, state-of-the-art water recycling treatment facility in the City of El Segundo. The award-winning Edward C. Little Water Recycling Facility (ECLWRF) facility currently produces an annual average of 34 million gallons of recycled water per day (MGD). West Basin accomplishes this by pumping and treating effluent from the City of Los Angeles’s Hyperion Water Reclamation Plant (HWRP). This effluent would otherwise be discharged to Santa Monica Bay. The ECLWRF and West Basin’s three satellite treatment plants produce five customer-tailored,





fit-for-purpose recycled water types. West Basin provides recycled water to more than 400 industrial, commercial, and public facilities via a distribution system shown in Figure 1. Recycled water customers include refineries, industrial facilities, commercial buildings, golf courses, landscapes, parks, and school districts. Advanced treated recycled water is also provided to the Water Replenishment District of Southern California (WRD) for a seawater intrusion barrier to protect the local groundwater basin.

1.2 Future Direction of Recycled Water Program

The State of California, regional water agencies, and West Basin are preparing for a future with prolonged drought periods and reduced reliability of imported water. The State Water Board is working to establish a framework for regulating potable reuse projects and develop uniform water recycling criteria for direct potable reuse (DPR) through raw water augmentation by December 31, 2023. In parallel, West Basin and other regional partners are looking to expand the use of recycled water for groundwater replenishment (i.e, Indirect Potable Reuse, or IPR) and evaluate DPR opportunities.

In Southern California, two regional water reuse programs are currently advancing to expand both IPR and DPR opportunities (Figure 2):

- Operation NEXT / Hyperion 2035: A partnership between the Los Angeles Department of Water & Power (LADWP) and Los Angeles Sanitation and Environment (LASAN), aimed to recycle wastewater collected at the Hyperion Water Reclamation Plant in southwest Los Angeles, California.
- Pure Water Southern California: A partnership between The Metropolitan Water District of Southern California (Metropolitan) and the Los Angeles County Sanitation Districts (LACSD), aimed to recycle wastewater collected at the Joint Water Pollution Control Plant in Carson, California.

Figure 2: Two Regional Programs in Southern California



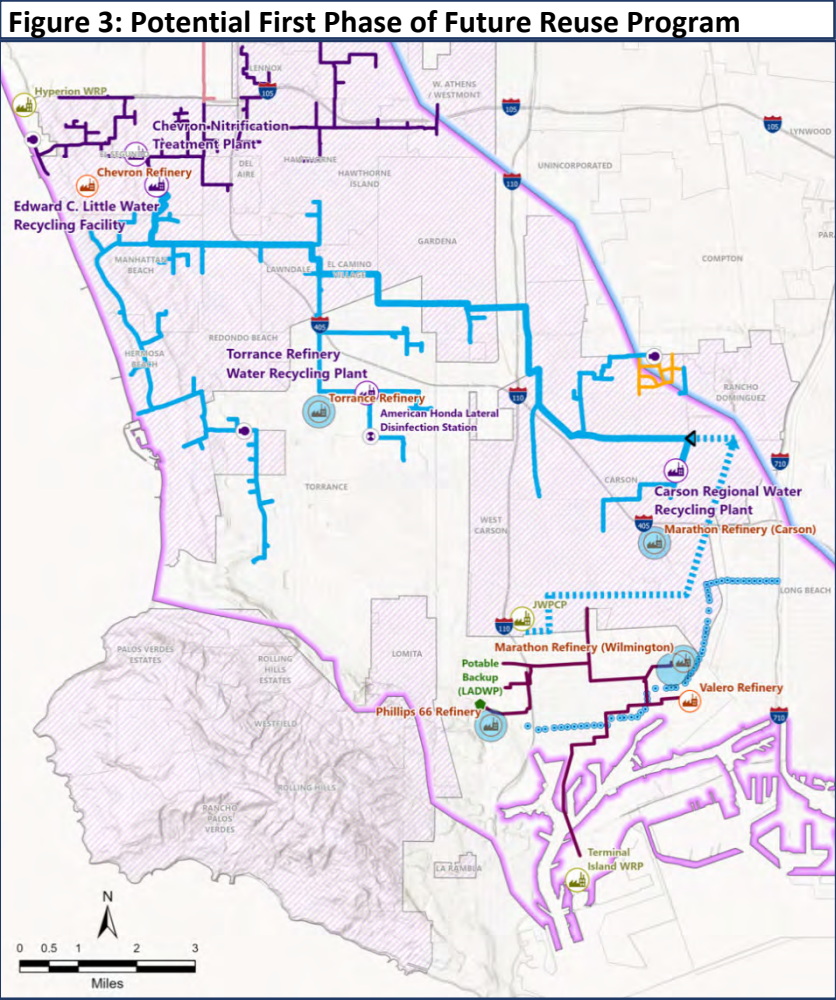


With West Basin’s existing recycled water infrastructure geographically located in the middle of these two programs, the District is uniquely positioned to:

- Provide early wins for both programs
 - By providing nearby connection points with existing and new demands, enabling early delivery of water to customers before full program completion
 - At a lower immediate cost by using existing West Basin infrastructure.
- Contribute to long-term regional integration
 - By connecting the two programs and allowing potential exchanges of water
 - At a lower regional cost by using existing West Basin infrastructure.

Figure 3 illustrates a potential first phase of West Basin’s partnering with the Pure Water Southern California program, which can potentially provide West Basin with a secondary source of recycled water and increase its use of advanced-treated water.

To help define the future of West Basin’s water recycling program, West Basin will need to conduct multiple studies to evaluate the feasibility of integrating West Basin’s system to the regional water reuse programs. The studies are aimed to prepare a roadmap towards maximizing available capacity in West Basin’s existing infrastructure, and better frame the District’s long-term



(20-year) capital investment plan. As a result, this Capital Improvement Program Budget document is primarily focused on the District’s near-term (5-year) outlook, with projected investments largely based on adopted policies, recent Board approvals, standing program goals, and current District business plan objectives.

West Basin will conduct the feasibility studies in collaboration with its various regional reliability partners (Figure 4). For Fiscal Year 2023-2024, these studies will be conducted as technical planning projects, separate from the Capital Improvement Program.

Figure 4: Regional Reliability Partners



While regional reuse programs progress and West Basin may receive a source of advanced treated water within the next 10 to 20 years, the District must maintain its level of service and meet contractual obligations for existing customers. Therefore, West Basin must balance (a) keeping current systems operating efficiently and (b) not making significant investments in systems that may not be needed in the future.

1.3 Capital Improvement Program (CIP) Project Categories

West Basin's recycled water program, the cornerstone of the District's efforts to increase water reliability in the region, represents the District's majority of past, present, and future Capital Improvement Program (CIP) expenditures. Recycled water program CIP projects have traditionally been categorized as either "New Infrastructure" or "Rehabilitation and Replacement" (R&R) projects. CIP expenditures unrelated to the District's recycled water program are categorized separately. The three CIP components are described as follows:

1. **New Infrastructure:** Projects that call for the construction of new recycled water infrastructure and equipment to increase recycled water use by expanding the distribution system, constructing new lateral pipelines, and establishing new customer connections; increase the capacity and improve the reliability of the existing recycled water facilities by installing new treatment systems; and address water quality and regulatory requirements with new technologies, unit processes, or equipment. This CIP category also includes efforts related to West Basin's headquarters facility.
2. **Rehabilitation and Replacement:** Phase 1 construction of West Basin's recycled water treatment and distribution systems was completed in 1995. With aging infrastructure, the R&R of existing facilities and equipment is critical to maintaining the District's production capacity, achieving its water quality goals, meeting contractual commitments, and extending the useful life of existing treatment infrastructure. West Basin periodically conducts equipment assessments of its recycled water facilities to determine the condition of the equipment and develop R&R project plans. The R&R projects are

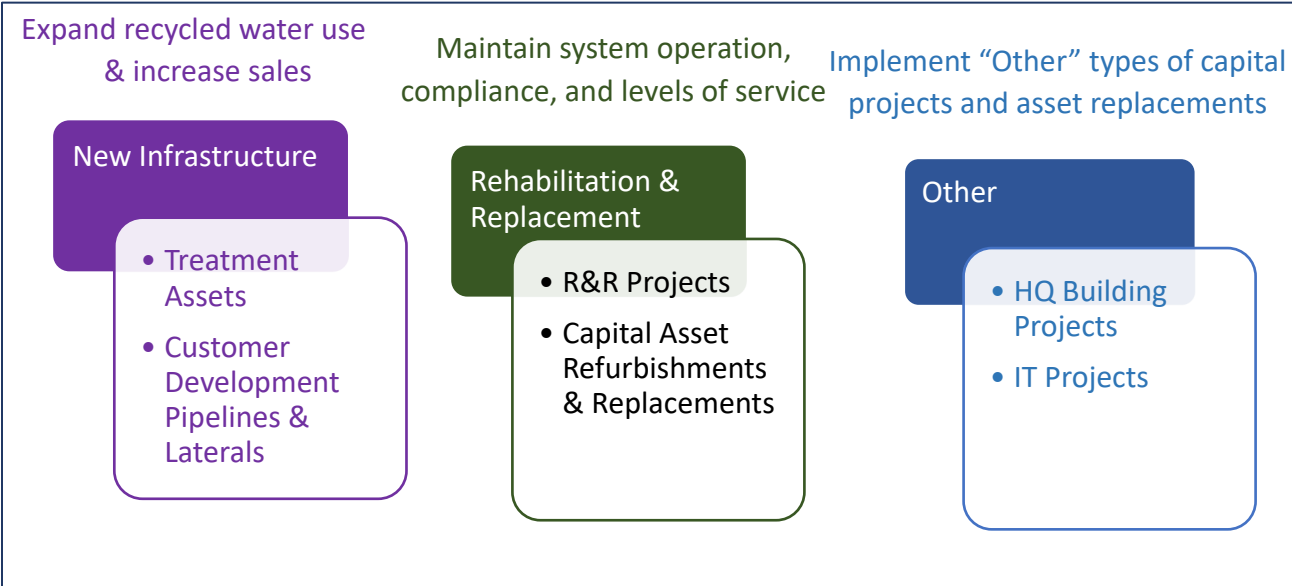


continuously prioritized, planned, and implemented by West Basin to maintain service to existing customers. R&R projects also enhance recycled water processes in response to changed asset and water quality conditions, restore lost recycled water system capacity, and realize cost savings by efficiently operating upgraded equipment.

- 3. Other: This component includes capital projects that support West Basin’s efforts in exploring other local water supply sources, maintaining existing building assets, and implementing necessary Information Technology (IT) related upgrades.

The three key goals and components of West Basin’s CIP, graphically illustrated in Figure 5, are designed to support the District’s mission statement and strategic business plan objectives, which include the pursuit of water reliability, water quality, environmental stewardship, customer service, and sound financial and resource management. Each of these objectives requires West Basin to be strategic and collaborative in developing a near-term and long-term financial plan that would ensure West Basin’s goals and objectives are met in a fiscally sustainable and responsible manner.

Figure 5: CIP Goals, Categories, and Subcategories





Section 2. CIP Budget Process

Each year, West Basin prepares an operating budget to reflect the financial resources needed to meet the priorities, goals, and objectives of West Basin’s Board of Directors (Board). The CIP Budget process, concurrent with the Operating Budget preparation, is essential for the proper financial management of the CIP projects. The CIP budget is developed based on a master plan and other planning-level studies, as well as input from the Board, executive team, department managers, and various project managers and system operators throughout the organization.

2.1 Initial Project Prioritization

In 2021, West Basin concluded master planning efforts and developed a report to serve as a guide for maintaining appropriate levels of service and reliability through a prioritized R&R program, identifying potential opportunities to maximize recycled water use in the region, and evaluating the impact of changed water quality from the HWRP in 2035. The master planning efforts were conducted in collaboration with the surrounding community and interested stakeholders and consideration of upcoming known and potential future regulations impacting recycled water use. Findings from recent R&R program assessments, past feasibility studies, and other planning-level reports are considered by the master plan and incorporated in the information. Both pending and potential capital projects were scheduled in a 20-year CIP projection based on weighted prioritization criteria shown in Table 1 below. The 2021 master plan offered three alternative 20-year predictions. The projections present potential recycled water expansion options and provide a brief guide. However, such long-term projections are subject to change based on pending collaboration between West Basin and its regional partners. Since regional stakeholders are working to define the next phase of water reuse in the general Los Angeles County area, all alternative projections offered by the master plan suggested a CIP approach that focused on prioritized R&R projects in the near term.

Table 1: Master Plan Level Project Prioritization Criteria

Criteria	Definition
Safety	<ul style="list-style-type: none"> Reduces immediate, identifiable safety risks to the public and employees Mitigates likelihood or consequence of safety risk that could result in injury or death of an employee or member of the public
Customer Experience	<ul style="list-style-type: none"> Improves water quality for customer Improves delivery of recycled water to customers (pressure, storage, surge control, etc.)
Reliability	<ul style="list-style-type: none"> Increases reliability by replacing equipment reaching its useful life Increases reliability in meeting permitting requirements Reduces potential for system outages or reduction in production capacity



Criteria	Definition
Compliance and Stewardship	<ul style="list-style-type: none"> • Contributes to meeting regulatory compliance requirements • Supports achieving conservation goals or other mandated requirements • Contributes to meeting environmental stewardship objectives (e.g., spill containment, air pollution)
Schedule	<ul style="list-style-type: none"> • Requires significant lead time to order equipment/parts • Impacts other R&R or expansion project schedules
Cost Savings	<ul style="list-style-type: none"> • Increases generation of revenue through improved efficiency or availability • Contributes to cost savings associated with RW production

2.2 Annual Considerations and Updates

West Basin staff re-evaluates District capital projects annually as part of this CIP budget development. It determines the need to re-prioritize specific projects based on the newly available information (e.g., recently completed planning studies, new data analyses), current/changed infrastructure conditions (e.g., changed operating conditions or newly completed condition assessments), and new board policies or directives. Staff also considers available funding opportunities, District contractual commitments, regulatory/permit requirements, and level of service. Capital projects are re-evaluated annually and sometimes re-prioritized considering several factors before presenting a capital budget recommendation for the following year to the Board.

Figure 6: Annual CIP Project Considerations

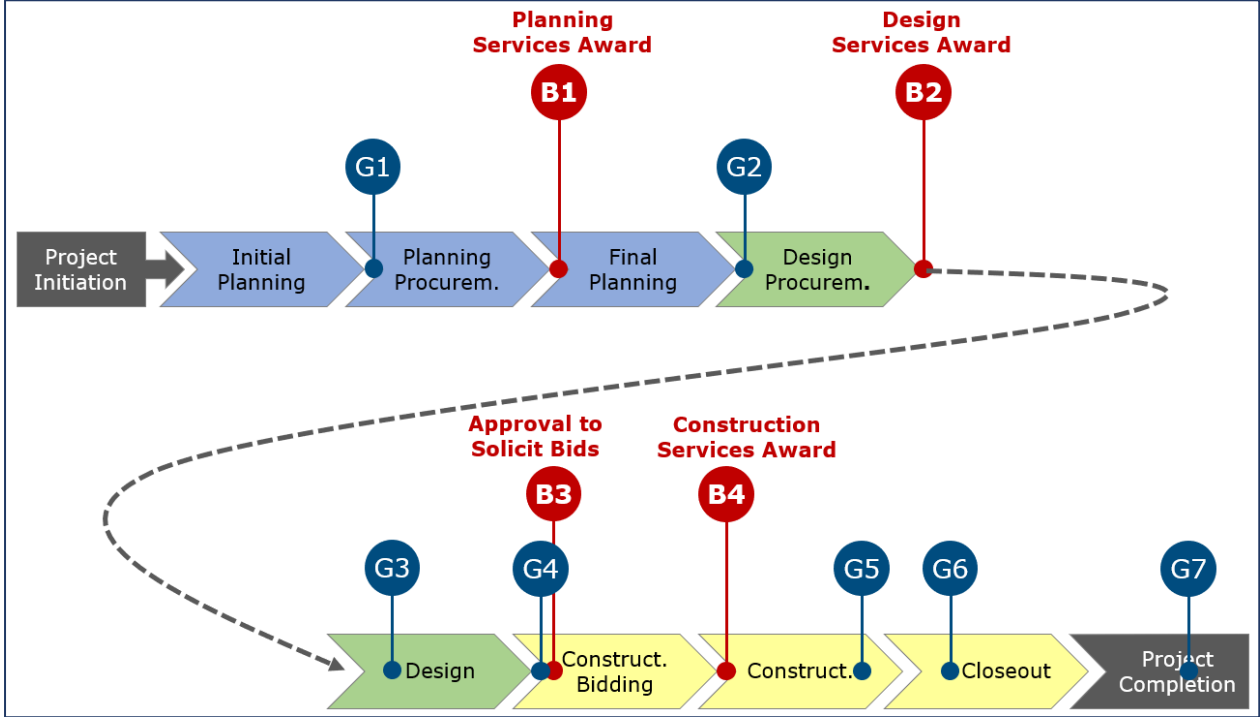


In addition, capital projects are reviewed throughout the fiscal year via a *Stage Gate* process, in which multiple departments and stakeholders are engaged in developing and recalibrating ongoing projects. Stakeholders for the *Stage Gate* process may include West Basin’s Executive Management Team, Managers, various internal departments, the Contract Plant Operator, and Contract Distribution System Operator. Stage gates break up projects into a series of stages with gates between them, where a decision is made as to whether the project can move to the next stage.



The *Stage Gate* process provides several opportunities for input and feedback on the scope and cost of the project from the Board and other stakeholders as the project develops from the preliminary design report (PDR) through the construction stage. Figure 7 below illustrates West Basin’s *Stage Gate* process. The Board will be involved in three key decision touchpoints in the project development process, the Planning Services Award (B1), the Design Services Award (B2), the Approval to Solicit Bids (B3), and the Construction Services Award (B4). The *Stage Gate* process will provide the Board with the most up-to-date project implementation and project cost information.

Figure 7: Stage Gate Process



As part of the Fiscal Year (FY) 2023-2024 CIP budget process, and in consideration of the prioritization process discussed above, West Basin staff divided the list of CIP projects into three groups (or Tables) for the Board’s consideration:

- Table A - Proposed 5-Year CIP Projects: This list includes underway and other prioritized projects for FY 2023-2024. A more detailed breakdown of Table A projects is provided in Attachment A.
- Table B - Anticipated 5-Year CIP Projects: These projects are not proposed to proceed in FY 2023-2024 and are instead anticipated to occur within the next 5 to 10 years. However, for budget estimation purposes, the projects are assumed to occur within the next 5 years. A breakdown of Table B projects is provided in Attachment B.



- Table C - Other Potential CIP Projects: This list includes large-scale recycled water system expansion projects identified by past planning studies. Such projects, listed in Attachment C, are unlikely to proceed without significant external funding sources.

Table 2: Proposed 5-Year CIP Projects (Table A Projects)

Count	CIP No.	Project Name
		New Infrastructure - Treatment Assets
#1	10022	JMMCRWRP Phase II Expansion Project
#2	10102	West Basin HQ Conceptual Design Options
		New Infrastructure - Customer Development Pipelines & Laterals
#3	10047	Palos Verdes Recycled Water Pipeline Project
#4	10061	Park Place Extension
#5	10090	Mills Park Recycled Water Lateral Project
#6	10091	North Gardena Recycled Water Lateral Project
#7	10094	IBEC RW Improvement
#8	10101	Nash Street Lateral
#9	10119-01	ECLWRF Fill Station
#10	10119-02	Other RW Fill Stations
#11	10121	South Bay I-405 Auxiliary Lanes
#12	10123	Metro Centinela Grade Separation
#13	10125	Costco Wholesale Carson CA
		R&R Projects
#14	10059	ECLWRF Solids Handling Improvements
#15	10073	ECLWRF Title 22 Filters Rehabilitation & Replacement
#16	10080	Distributed Control System Replacement
#17	10085	ECLWRF Barrier Basin & Pump Station Rehabilitation
#18	10092	ECLWRF Disinfected Tertiary Product Pumps & VFDs Rehabilitation
#19	10093-01	ECLWRF Bulk Chemical Storage Improvements
#20	10096	ECLWRF Phase II & III MF Replacement
#21	10097	ECLWRF RO Pretreatment
#22	10099	HSEPS R&R Project
#23	10100-01	Hyperion Force Main R&R Condition Assessment
#24	10116	ECLWRF Title 22 North Leg Valve Replacement
#25	10124	ECLWRF Backwash Waste Clarifiers Assessment



Count	CIP No.	Project Name
		R&R Projects - CNTP
#26	10065-01	Chevron Nitrified Product Water Tank Rehabilitation*
#27	10093-02	CNTP Bulk Chemical Storage
		R&R Projects - JMMCRWRP
#28	10093-04	JMMCRWRP Bulk Chemical Storage Improvements
		R&R Projects - TRWRP
#29	10048	TRWRP Sulfuric Acid Chemical Containment R&R*
#30	10065-02	TRWRP Nitrified Product Water Tank Rehabilitation*
#31	10084	TRWRP Retaining Wall and Backflow Preventer Replacement*
#32	10093-03	TRWRP Bulk Chemical Storage Improvements*
#33	10104-01	TRWRP MF Replacement Project - Feasibility Study Phase *
#34	10108	TRWRP Waste Discharge Improvements Project*
#35	10109	TRWRP Fiberglass Pipe (FRP) Replacement*
#36	10117	TRWRP 93MCC2 Replacement*
		R&R Projects - Capital Asset Rehabilitation & Replacement
#37	10103	Ops MF Membrane Replacement
#38	10106	Ops RO Membrane Replacement
#39	10112	Ops Facility R&R
#40	10113	Ops Compliance Laboratory
		Other Projects
#41	10044-02	DLD Elevator Modernization
#42	10044-03	DLD Air Conditioning Units Refurbishment
#43	10115	IT CIP Projects

*Project that will only proceed with external stakeholder funding

Attachment D of this CIP Budget Book provides detailed data sheets for projects, including project drivers, description, business case, schedule, estimated expenditures, and funding sources.

2.3 Board Workshops and Feedback

To engage the Board and customers, West Basin staff presented the proposed FY 2023-2024 CIP budget in a series of five meetings from March 2023 to June 2023. Major CIP projects were highlighted with discussion of project statuses, drivers, goals, scopes of work, funding sources, and other considerations. The list of 43 total CIP projects proposed for FY 2023-2024 (Table 2) remained unchanged throughout the budget workshops.



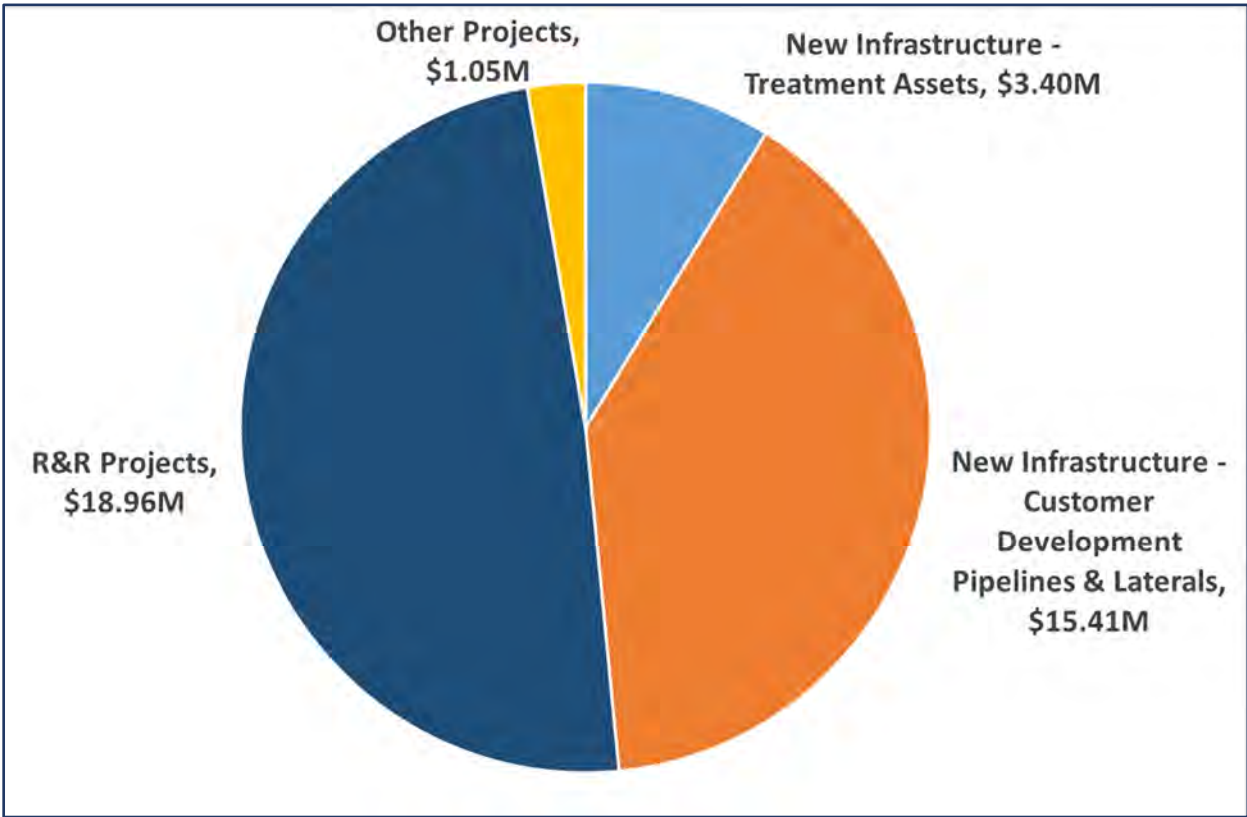
Section 3. Proposed FY 2023-2024 CIP Budget

The annual CIP expenditures for FY 2023-2024 totals approximately \$38.8 million.

3.1 FY 2023-2024 Budget

The proposed CIP FY 2023-2024 budget of \$38,826,410 includes 43 budgetary line items that consist of 36 Capital Projects; and 7 separate budgets for refurbishing or replacing capital assets located at the District’s water treatment plants (e.g., membranes, valve, etc.) and at the District headquarters building (e.g., HVAC equipment, servers, etc.). A breakdown of the proposed CIP FY 2023-2024 budget is shown in Figure 8 below.

Figure 8: Summary of FY 23-24 CIP Budget by Category



Approximately \$33.7 million of the proposed CIP FY 2023-2024 budget is attributed to the following six Capital Projects:

- 10022: JMMCRWRP Phase II Expansion Project..... \$3.2 million
- 10047: Palos Verdes Recycled Water Pipeline Project..... \$14 million
- 10059: ECLWRF Solids Handling Improvements.....\$2.7 million
- 10073: ECLWRF Title 22 Filters Rehabilitation & Replacement..... \$5.1 million
- 10092: ECLWRF Disinfected Tertiary Product Pumps & VFDs Rehab..... \$1.6 million
- R&R Projects - Capital Asset Rehabilitation & Replacement..... \$7.3 million



3.2 5-Year Projections

As summarized in Table 3 below, the implementation of the proposed projects for FY 2023-2024 will ultimately result in a total expenditure of approximately \$153 million over the next 5 years. A detailed (per project) breakdown of the proposed projects’ 5-year expenditure schedule is provided in Table A in Attachment A.

Table 3: Proposed CIP Projects 5-Year Projections

Category	FY23-24 Budget	FY24-25 Budget	FY25-26 Budget	FY26-27 Budget	FY24-25 Budget
New Infrastructure - Treatment Assets	\$3,400,827	\$0	\$0	\$0	\$0
New Infrastructure - Customer Development Pipelines & Laterals	\$15,410,658	\$2,680,367	\$0	\$0	\$0
R&R Projects	\$18,963,756	\$30,761,582	\$40,822,772	\$26,690,410	\$13,001,378
Other Projects	\$1,051,168	\$341,077	\$0	\$0	\$0
Total: \$153,123,996	\$38,826,410	\$33,783,026	\$40,822,772	\$26,690,410	\$13,001,378

Figure 9 below illustrates the 5-year estimated expenditures for the projects listed in the FY 2023-2024 CIP budget. Total expenditures related to the FY 2023-2024 projects, estimated at approximately \$227 million, can be summarized as follows:

- Past/Pending Expenditures (including current FY 2022-2023)..... \$42.2 million
- Next 5-year Expenditures (including FY 2023-2024) \$153 million
- Future Expenditure beyond the next five years..... \$31.4 million



Figure 9: Estimated 5-Year CIP Expenditures by Category

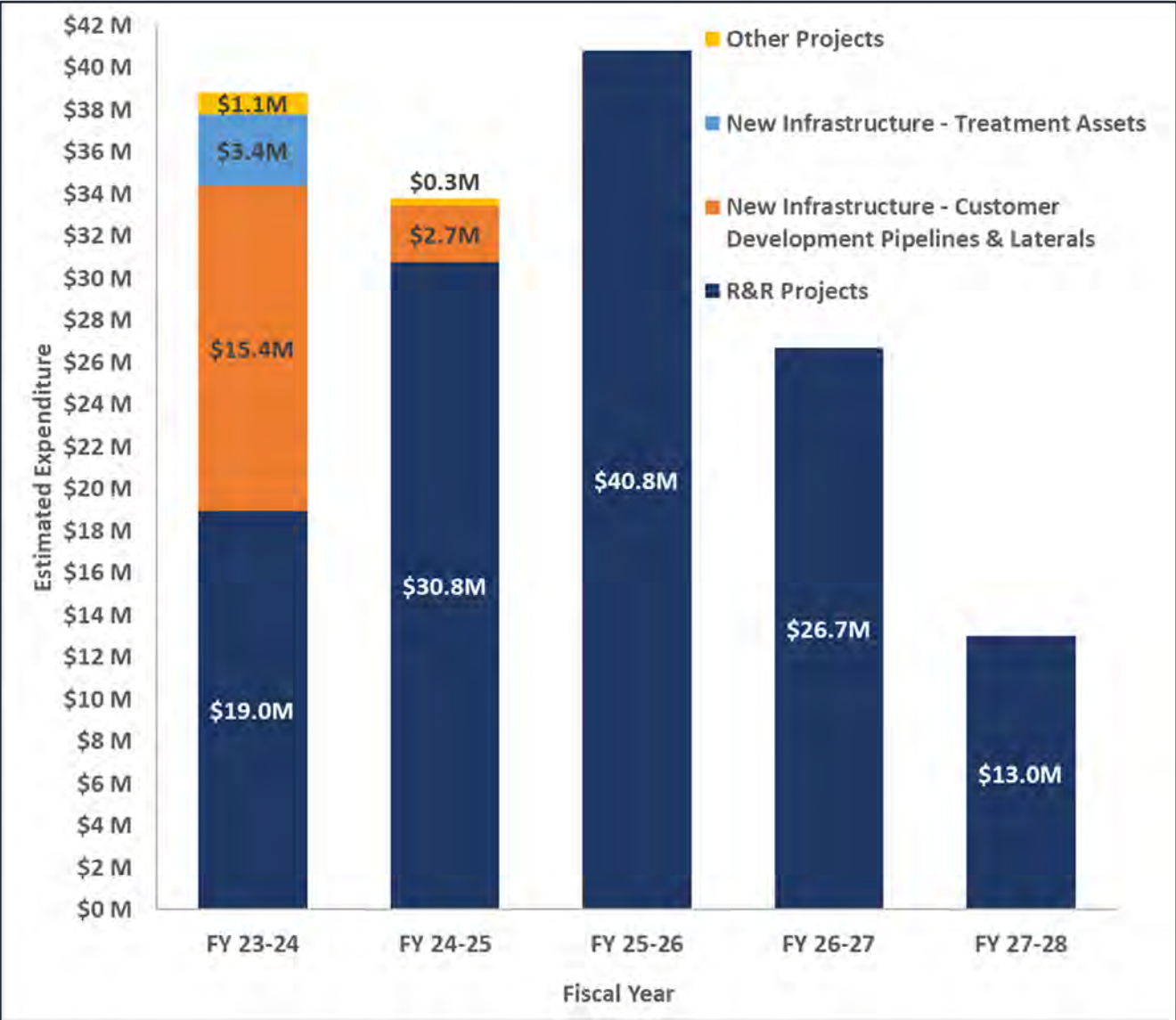


Table 4 below combines the “Proposed” and “Anticipated” 5-year CIP projects for a more complete 5-year projection of CIP expenditures.

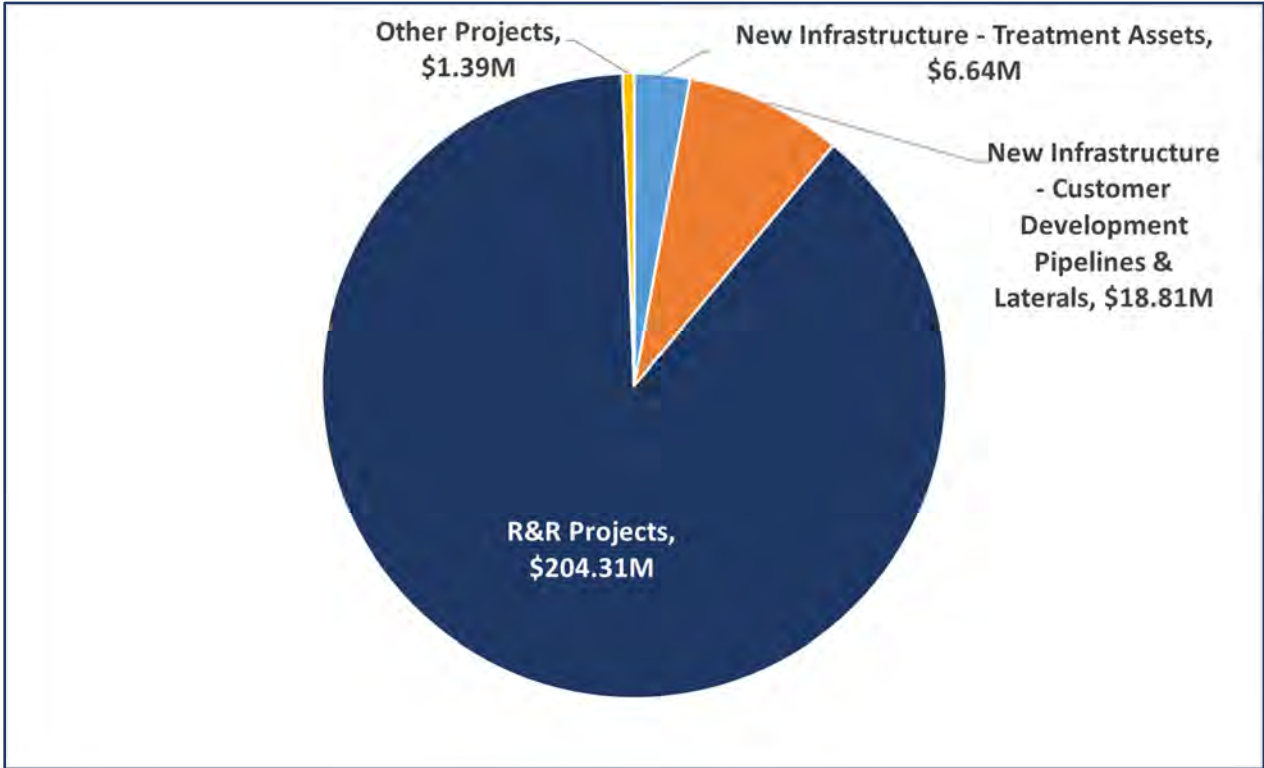
Table 4: Proposed CIP Projects 5-Year Projections (Table A and Table B)

Category	FY23-24 Budget	FY24-25 Budget	FY25-26 Budget	FY26-27 Budget	FY27-28 Budget
Proposed Projects (Table A)	\$38,826,410	\$33,783,026	\$40,822,772	\$26,690,410	\$13,001,378
Subtotal: \$153M					
Anticipated Projects (Table B)	\$0	\$3,049,496	\$21,940,785	\$30,957,097	\$22,082,469
Subtotal: \$78M					
Total: \$231M	\$38,826,410	\$36,832,522	\$62,763,557	\$57,647,507	\$35,083,846



Figure 10 below shows approximately \$204 million (88 percent) of the projected CIP expenditure over the next five years (\$231 million) related to proposed and anticipated R&R projects. In comparison, of the \$287.6 million CIP expenditures recorded over the 10 years from FY 2010-2011 to FY 2019-2020, only \$51.1 million (18 percent) related to R&R projects.

Figure 10: 5-Year Projections related to Proposed and Anticipated CIP Projects





3.3 FY 2023-2024 Project List

Table 5 lists each FY 2023-2024 CIP budget project.

Table 5: FY 2023-2024 CIP Budget Project List

CIP No.	Project Name	FY23-24 Budget
New Infrastructure - Treatment Assets		\$3,400,827
10022	JMMCRWRP Phase II Expansion Project	\$3,176,767
10102	West Basin HQ Conceptual Design Options	\$224,060
New Infrastructure - Customer Development Pipelines & Laterals		\$15,410,658
10047	Palos Verdes Recycled Water Pipeline Project	\$13,957,098
10061	Park Place Extension	\$32,427
10090	Mills Park Recycled Water Lateral Project	\$235,031
10091	North Gardena Recycled Water Lateral Project	\$225,573
10094	IBEC RW Improvement	\$17,421
10101	Nash Street Lateral	\$84,923
10119-01	ECLWRF Fill Station	\$160,956
10119-02	Other RW Fill Stations	\$532,196
10121	South Bay I-405 Auxiliary Lanes	\$139,158
10123	Metro Centinela Grade Separation	\$22,658
10125	Costco Wholesale Carson CA	\$3,218
R&R Projects		\$18,963,756
10059	ECLWRF Solids Handling Improvements	\$2,666,509
10073	ECLWRF Title 22 Filters Rehabilitation & Replacement	\$5,101,678
10080	Distributed Control System Replacement	\$1,200,786
10085	ECLWRF Barrier Basin & Pump Station Rehabilitation	\$30,052
10092	ECLWRF Disinfected Tertiary Product Pumps & VFDs Rehab	\$1,559,011
10093-01	ECLWRF Bulk Chemical Storage Improvements	\$19,409
10096	ECLWRF Phase II & III MF Replacement	\$33,546
10097	ECLWRF RO Pretreatment	\$18,364
10099	HSEPS R&R Project	\$419,639



CIP No.	Project Name	FY23-24 Budget
10100-01	Hyperion Force Main R&R Condition Assessment	\$197,484
10116	ECLWRF Title 22 North Leg Valve Replacement	\$10,323
10124	ECLWRF Backwash Waste Clarifiers Assessment	\$99,110
R&R Projects - CNTP		\$163,932
10065-01	Chevron Nitrified Product Water Tank Rehabilitation*	\$0
10093-02	CNTP Bulk Chemical Storage	\$163,932
R&R Projects - JMMCRWRP		\$163,319
10093-04	JMMCRWRP Bulk Chemical Storage Improvements	\$163,319
R&R Projects - TRWRP		\$0
10048	TRWRP Sulfuric Acid Chemical Containment R&R*	\$0
10065-02	TRWRP Nitrified Product Water Tank Rehabilitation*	\$0
10084	TRWRP Retaining Wall and Backflow Preventer Repl.*	\$0
10093-03	TRWRP Bulk Chemical Storage Improvements*	\$0
10104-01	TRWRP MF Replacement Project - Feasibility Study Phase *	\$0
10108	TRWRP Waste Discharge Improvements Project*	\$0
10109	TRWRP Fiberglass Pipe (FRP) Replacement*	\$0
10117	TRWRP 93MCC2 Replacement*	\$0
R&R Projects - Capital Asset Rehabilitation & Replacement		\$7,280,594
10103	Ops MF Membrane Replacement	\$3,709,698
10106	Ops RO Membrane Replacement	\$2,315,535
10112	Ops Facility R&R	\$1,173,675
10113	Ops Compliance Laboratory	\$81,685
Other Projects		\$1,051,168
10044-02	DLD Elevator Modernization	\$211,808
10044-03	DLD Air Conditioning Units Refurbishment	\$63,860
10115	IT CIP Projects	\$775,500
Total CIP Expenditure		\$38,826,410

*Project that will only proceed with external stakeholder funding



3.4 FY 2023-2024 Projects by Phase

Tables 6 through 8 list the FY 2023-2024 CIP projects by their phase in June 2023, when the FY 2023-2024 budget was approved. Table 9 lists the FY 2023-2024 annual budget for Capital Asset Refurbishments or Replacements. A summary breakdown of the FY 2023-2024 CIP budget by the phase they were in at the time the FY 2023-2024 budget was approved is as follows:

<u>June 2023 Project Status/Phase</u>	<u>FY 2023-2024 Budget</u>
• Construction Phase:	\$23,875,835
• Design Phase Projects:	\$3,136,683
• Planning	\$3,757,798
• <u>Capital Asset Refurbishments or Replacements</u>	<u>\$8,056,094</u>
• Total Budget	\$38,826,410

Table 6: FY 2023-2024 CIP Projects in Bidding & Construction Phase (as of June 2023)

CIP No.	Project Name	FY23-24 Budget	Total Project Cost
10022	JMMCRWRP Phase II Expansion Project	\$3,176,767	\$33,295,940
10044-03	DLD Air Conditioning Units Refurbishment	\$63,860	\$111,909
10047	Palos Verdes Recycled Water Pipeline Project	\$13,957,098	\$16,784,430
10048	TRWRP Sulfuric Acid Chemical Containment R&R	\$0	\$1,593,562
10073	ECLWRF Title 22 Filters Rehabilitation & Replacement	\$5,101,678	\$6,572,763
10084	TRWRP Retaining Wall and BFP Replacement	\$0	\$787,973
10092	ECLWRF Disinfected Tertiary Product Pumps & VFDs Rehab	\$1,559,011	\$8,771,255
10094	IBEC RW Improvement	\$17,421	\$55,210
10117	TRWRP 93MCC2 Replacement	\$0	\$227,565
Total		\$23,875,835	\$68,200,607

Table 7: FY 2023-2024 CIP Projects in Design Phase (as of June 2023)

CIP No.	Project Name	FY23-24 Budget	Total Project Cost
10059	ECLWRF Solids Handling Improvements	\$2,666,509	\$16,235,033
10061	Park Place Extension	\$32,427	\$43,740
10065-01	Chevron Nitrified Product Water Tank Rehabilitation	\$0	\$4,796,171
10065-02	TRWRP Nitrified Product Water Tank Rehabilitation	\$0	\$4,505,571
10085	ECLWRF Barrier Basin & Pump Station Rehabilitation	\$30,052	\$13,172,732
10093-03	TRWRP Bulk Chemical Storage Improvements	\$0	\$3,510,940
10101	Nash Street Lateral	\$84,923	\$109,457
10109	TRWRP Fiberglass Pipe (FRP) Replacement	\$0	\$706,103
10119-01	ECLWRF Fill Station	\$160,956	\$539,199
10121	South Bay I-405 Auxiliary Lanes	\$139,158	\$147,153
10123	Metro Centinela Grade Separation	\$22,658	\$22,658
Total		\$3,136,683	\$43,788,758

**Table 8: FY 2023-2024 CIP Projects in Planning Phase (as of June 2023)**

CIP No.	Project Name	FY23-24 Budget	Total Project Cost
10044-02	DLD Elevator Modernization	\$211,808	\$735,014
10080	Distributed Control System Replacement	\$1,200,786	\$30,736,429
10090	Mills Park Recycled Water Lateral Project	\$235,031	\$1,361,215
10091	North Gardena Recycled Water Lateral Project	\$225,573	\$1,793,456
10093-01	ECLWRF Bulk Chemical Storage Improvements	\$19,409	\$11,756,308
10093-02	CNTP Bulk Chemical Storage	\$163,932	\$2,273,819
10093-04	JMMCRWRP Bulk Chemical Storage Improvements	\$163,319	\$3,206,300
10096	ECLWRF Phase II & III MF Replacement	\$33,546	\$11,277,098
10097	ECLWRF RO Pretreatment	\$18,364	\$1,195,683
10099	HSEPS R&R Project	\$419,639	\$11,352,417
10100-01	Hyperion Force Main R&R Condition Assessment	\$197,484	\$2,536,607
10102	West Basin HQ Conceptual Design Options	\$224,060	\$378,875
10104-01	TRWRP MF Replacement Project - Feasibility Study Phase	\$0	\$885,646
10108	TRWRP Waste Discharge Improvements Project	\$0	\$1,006,284
10116	ECLWRF Title 22 North Leg Valve Replacement	\$10,323	\$1,618,909
10119-02	Other RW Fill Stations	\$532,196	\$594,650
10124	ECLWRF Backwash Waste Clarifiers Assessment	\$99,110	\$99,110
10125	Costco Wholesale Carson CA	\$3,218	\$11,043
	Total	\$3,757,798	\$82,818,861

Table 9: FY 2023-2024 Annual Capital Asset Refurbishments or Replacements

CIP No.	Project Name	FY23-24 Budget	Total Project Cost
10103	Ops MF Membrane Replacement	\$3,709,698	\$16,219,668
10106	Ops RO Membrane Replacement	\$2,315,535	\$8,424,728
10112	Ops Facility R&R	\$1,173,675	\$6,053,080
10113	Ops Compliance Laboratory	\$81,685	\$375,056
10115	IT CIP Projects	\$775,500	\$775,500
	Total	\$8,056,094	\$31,848,032



Section 4. CIP Project Funding

As essential as it is to prioritize and evaluate each project to understand its nature and useful life, the Capital Improvement Program must also consider the timing of the project and the funding sources. While the timing of the project is determined based on the asset management plan for R&R or customer need for recycled water expansion, the funding source may vary based on the nature of the specific project.

4.1 Funding Sources

The funding source of capital projects may come in various forms and, at times, may come from a multitude of sources. The typical funding sources are as follows:

1. PAYGO: Also known as Pay-As-You-Go, PAYGO funds capital improvement projects from current rates/revenues
2. Reserves: Represents Unrestricted funds that can be used for any lawful purpose at the discretion of the Board of Directors.
3. External Funding: An agency may receive funding from third parties, including customers, regional partners, or through public-private-partnerships. This may include projects that are completed by a developer who transfers project assets at its completion to the District. The District may also receive capital grants from federal or state agencies, including the Bureau of Reclamation or the United States Army Corps of Engineers (USACE).
4. Government Loans: Examples are the California State Water Resources Control Board (SWRCB) State Revolving Fund Low-Interest Loans, or the loans issued through the United States Environmental Protection Agency (EPA) referred to as the Water Infrastructure Finance and Innovation Act (WIFIA).
5. Municipal Bond and Bank Debt: A public agency may issue short-term or long-term debt through the general market, private placement, direct purchase arrangements, or interim financing.

4.2 Determination of the Funding Source

Reviewing each project allows the District to determine the most appropriate use of funding sources. The District will review the project scope and confirm that the project is capitalizable per the District's Capitalization Policy. Those projects that do not meet the District's capitalization threshold will be expensed and funded with current revenues. The District refers to these costs as facility maintenance.

For those assets that meet the minimum useful life of three years and \$10,000, the District will capitalize. Those assets with a useful life shorter than 15 years are typically funded with PAYGO. PAYGO funding is mainly utilized because the District issues debt that often exceeds 15 years; and the District's Debt Management Policy requires the debt issued to coincide with the asset's



life. The exception would be if the District were to acquire debt or enter a loan that matches the useful life of the capital asset.

The District considers the external funding that may be received from grants or customers. The District has successfully received grants and contributions that have offset the cost of capital facilities. Customers who plan to contribute will enter into an agreement with the District that stipulates the reason and requirements for their consideration. This is often the result of negotiations to provide a certain amount of recycled water to ensure the reliability, quality, and quantity the customer seeks to lessen its dependence on imported water.

Debt is a broad term used to reflect borrowing that may happen on a short-term or long-term basis. For those projects that have a longer useful life (greater than 15 years), the District will seek to finance those costs over the useful life. The consideration of issuing long-term debt is to spread the repayment costs of principal and interest over the useful life of the asset that the end user benefits. The repayment of the debt is often from the user fees of those customers. This is often referred to as inter-generational equity.

The District may utilize interim financing to lower its cost of borrowing. Interim financing provides market access to the District at the time it is needed. In addition, it allows the District to effectively manage its cash flow so that it is not holding funds and accruing interest during the period to construct the capital asset. Interim financing is also beneficial when the capital project is being built, using other funding sources like customer funding or grants. The repayment of interim financing is either completed by a cash repayment or by converting the interim financing to long-term debt. It is still essential for the District to ensure that the refund still matches the long-term nature of the debt with the longer useful life.

To ensure that the District has sufficient cash reserves, the District maintains a designated funds policy that outlines the calculation to determine a minimum balance that should be maintained. The analysis of the core target includes consideration of operating reserve, operating and capital contingency, and capital reserve. Using reserves on long-term assets may result in future rate increases to pay for shorter useful life projects. As such, the District takes a long-term view of balancing projects between cash and debt financing.

As the District aims to achieve its targeted debt service coverage, it will earn net revenues that may be invested in capital projects annually. The District will maximize the annual net revenues towards funding capital projects and may use PAYGO for assets with longer-term helpful life. However, this assumes that the minimum designated fund's target is met. This allows the District to minimize the amount of future debt. Alternatively, the District could increase its rates and charges to fund its capital projects and reduce the need to issue future debt.

In many cases, the District has the flexibility as to when a capital project will occur, including the associated use of reserves or debt issuance; however, the District should consider the potential higher operational costs or consequences of failure with the postponement of any capital project.



In conclusion, the District will balance the following factors in its determination of funding capital projects that are essential to its mission to deliver safe and reliable water to the communities we serve:

- Debt service is paid from rates and charges
- Long-term debt spreads capital cost to current and future ratepayers (inter-generational equity)
- Borrowing increases total cost due to interest payments and the cost of financing
- A mix of debt and PAYGO is necessary to meet rate and financial objectives.

The funding approach shown in Table 10 below outlines the funding approach for FY 2023-2024:

Table 10: Funding Approach for FY 2023-2024 CIP Budget

Funding Source	FY 23-24 Budget
PAYGO Funding	\$3.2M
Draw on Reserves	\$19.0M
External Funding	\$12.7M
Customer Contribution	\$7.1M
Grants	\$4.6M
Developer Reimbursement	\$0.1M
Refinery Contribution	\$0.9M
Government Loans	\$3.9M
Loan	\$3.9M
Municipal Bond and Bank Debt	\$0.0M
Total	\$38.8M

Within the individual capital project sheets, shown in Attachment A, each project sheet describes the District's funding based on the general approach noted above. However, the District will annually evaluate the funding based on the circumstances, such as available PAYGO and reserves, and therefore may opt to utilize a different funding source than what is currently identified. This allows West Basin to manage its long-term strategy based on currently available information. As noted in Table 10, the District will fully draw on its net revenues identified for FY 2023-2024 to be used towards PAYGO projects and will draw on reserves to fund the balance of the identified projects. In this case, the District does not intend to specifically issue commercial paper (CP) for FY 2023-2024. However, depending on the timing of external funding/loans, staff may need to utilize the CP line with the intent of repaying the CP line once external funding/state loan funds are received.



Section 5. CIP Environmental Review

The recommended list of capital projects to be included in the FY 2023-2024 CIP Budget and its associated 5-year CIP projections are not projects as defined by the California Environmental Quality Act (CEQA) guidelines because approval of the 5-year CIP does not commit the District to a definite course of action that may impact the environment at the time of budget approval. Environmental review for the individual projects listed within the FY 2023-2024 CIP Budget will undergo review as they are proposed and may be subject to CEQA. Such studies would be conducted before the design phase of those projects and before the approval of a construction services agreement.

Attachment A Proposed 5-Year CIP Projects

FY23-24 Budget Book Capital Improvement Program



Attachment A: TABLE A - PROPOSED 5-YR CIP PROJECTS
CAPITAL IMPROVEMENT PROGRAM

CIP No.	Project Name	SUMMARY		
		FY 23-24 Total	5-Year Total	Total Project Cost (Past, Pending, Future)
New Infrastructure - Treatment Assets		\$ 3,400,827	\$ 3,400,827	\$ 33,674,815
10022	JMMCRWRP Phase II Expansion Project	\$ 3,176,767	\$ 3,176,767	\$ 33,295,940
10102	West Basin HQ Conceptual Design Options	\$ 224,060	\$ 224,060	\$ 378,875
New Infrastructure - Customer Development Pipelines & Laterals		\$ 15,410,658	\$ 18,091,025	\$ 21,462,210
10047	Palos Verdes Recycled Water Pipeline Project	\$ 13,957,098	\$ 13,980,142	\$ 16,784,430
10061	Park Place Extension	\$ 32,427	\$ 32,427	\$ 43,740
10090	Mills Park Recycled Water Lateral Project	\$ 235,031	\$ 1,333,798	\$ 1,361,215
10091	North Gardena Recycled Water Lateral Project	\$ 225,573	\$ 1,768,413	\$ 1,793,456
10094	IBEC RW Improvement	\$ 17,421	\$ 17,421	\$ 55,210
10101	Nash Street Lateral	\$ 84,923	\$ 84,923	\$ 109,457
10119-01	ECLWRF Fill Station	\$ 160,956	\$ 160,956	\$ 539,199
10119-02	Other RW Fill Stations	\$ 532,196	\$ 540,087	\$ 594,650
10121	South Bay I-405 Auxiliary Lanes	\$ 139,158	\$ 139,158	\$ 147,153
10123	Metro Centinela Grade Separation	\$ 22,658	\$ 22,658	\$ 22,658
10125	Costco Wholesale Carson CA	\$ 3,218	\$ 11,043	\$ 11,043
R&R Projects		\$ 18,963,756	\$ 130,239,898	\$ 169,896,811
10059	ECLWRF Solids Handling Improvements	\$ 2,666,509	\$ 15,411,303	\$ 16,235,033
10073	ECLWRF Title 22 Filters Rehabilitation & Replacement	\$ 5,101,678	\$ 5,101,678	\$ 6,572,763
10080	Distributed Control System Replacement	\$ 1,200,786	\$ 15,965,205	\$ 30,736,429
10085	ECLWRF Barrier Basin & Pump Station Rehabilitation	\$ 30,052	\$ 5,701,860	\$ 13,172,732
10092	ECLWRF Disinfected Tertiary Product Pumps & VFDs Rehabilitation	\$ 1,559,011	\$ 8,505,742	\$ 8,771,255
10093-01	ECLWRF Bulk Chemical Storage Improvements	\$ 19,409	\$ 11,570,085	\$ 11,756,308
10096	ECLWRF Phase II & III MF Replacement	\$ 33,546	\$ 11,272,819	\$ 11,277,098
10097	ECLWRF RO Pretreatment	\$ 18,364	\$ 1,194,463	\$ 1,195,683
10099	HSEPS R&R Project	\$ 419,639	\$ 11,352,417	\$ 11,352,417
10100-01	Hyperion Force Main R&R Condition Assessment	\$ 197,484	\$ 2,536,607	\$ 2,536,607
10116	ECLWRF Title 22 North Leg Valve Replacement	\$ 10,323	\$ 1,618,909	\$ 1,618,909
10124	ECLWRF Backwash Waste Clarifiers Assessment	\$ 99,110	\$ 99,110	\$ 99,110
R&R Projects - CNTP		\$ 163,932	\$ 6,645,215	\$ 7,069,990
10065-01	Chevron Nitrified Product Water Tank Rehabilitation	\$ -	\$ 4,405,042	\$ 4,796,171
10093-02	CNTP Bulk Chemical Storage	\$ 163,932	\$ 2,240,173	\$ 2,273,819
R&R Projects - JMMCRWRP		\$ 163,319	\$ 3,195,613	\$ 3,206,300
10093-04	JMMCRWRP Bulk Chemical Storage Improvements	\$ 163,319	\$ 3,195,613	\$ 3,206,300
R&R Projects - TRWRP		\$ -	\$ 12,176,724	\$ 13,223,644
10048	TRWRP Sulfuric Acid Chemical Containment R&R	\$ -	\$ 1,015,188	\$ 1,593,562
10065-02	TRWRP Nitrified Product Water Tank Rehabilitation	\$ -	\$ 4,259,839	\$ 4,505,571
10084	TRWRP Retaining Wall and Backflow Preventer Replacement	\$ -	\$ 666,695	\$ 787,973
10093-03	TRWRP Bulk Chemical Storage Improvements	\$ -	\$ 3,504,799	\$ 3,510,940
10104-01	TRWRP MF Replacement Project - Feasibility Study Phase	\$ -	\$ 843,975	\$ 885,646
10108	TRWRP Waste Discharge Improvements Project	\$ -	\$ 1,006,284	\$ 1,006,284
10109	TRWRP Fiberglass Pipe (FRP) Replacement	\$ -	\$ 706,103	\$ 706,103
10117	TRWRP 93MCC2 Replacement	\$ -	\$ 173,841	\$ 227,565
R&R Projects - Capital Asset Rehabilitation & Replacement		\$ 7,280,594	\$ 17,892,147	\$ 31,072,532
10103	Ops MF Membrane Replacement	\$ 3,709,698	\$ 6,912,440	\$ 16,219,668
10106	Ops RO Membrane Replacement	\$ 2,315,535	\$ 4,736,275	\$ 8,424,728
10112	Ops Facility R&R	\$ 1,173,675	\$ 5,868,375	\$ 6,053,080
10113	Ops Compliance Laboratory	\$ 81,685	\$ 375,056	\$ 375,056
Other Projects		\$ 1,051,168	\$ 1,392,246	\$ 1,622,422
10044-02	DLD Elevator Modernization	\$ 211,808	\$ 552,886	\$ 735,014
10044-03	DLD Air Conditioning Units Refurbishment	\$ 63,860	\$ 63,860	\$ 111,909
10115	IT CIP Projects	\$ 775,500	\$ 775,500	\$ 775,500
Total CIP Expenditure		\$ 38,826,410	\$ 153,123,996	\$ 226,656,258

Prior Years (thru 6/30/23)	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	Beyond
\$ 30,273,988	\$ 3,400,827	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 30,119,173	\$ 3,176,767	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 154,815	\$ 224,060	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 3,371,185	\$ 15,410,658	\$ 2,680,367	\$ -	\$ -	\$ -	\$ -
\$ 2,804,288	\$ 13,957,098	\$ 23,043	\$ -	\$ -	\$ -	\$ -
\$ 11,313	\$ 32,427	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 27,417	\$ 235,031	\$ 1,098,767	\$ -	\$ -	\$ -	\$ -
\$ 25,043	\$ 225,573	\$ 1,542,839	\$ -	\$ -	\$ -	\$ -
\$ 37,790	\$ 17,421	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 24,533	\$ 84,923	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 378,243	\$ 160,956	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 54,563	\$ 532,196	\$ 7,891	\$ -	\$ -	\$ -	\$ -
\$ 7,995	\$ 139,158	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ 22,658	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ 3,218	\$ 7,825	\$ -	\$ -	\$ -	\$ -
\$ 8,290,408	\$ 18,963,756	\$ 30,761,582	\$ 40,822,772	\$ 26,690,410	\$ 13,001,378	\$ 31,366,505
\$ 823,731	\$ 2,666,509	\$ 12,744,794	\$ -	\$ -	\$ -	\$ -
\$ 1,471,085	\$ 5,101,678	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 738,628	\$ 1,200,786	\$ 2,017,732	\$ 1,605,583	\$ 4,465,399	\$ 6,675,705	\$ 14,032,595
\$ 256,956	\$ 30,052	\$ 1,027,381	\$ 890,959	\$ 1,152,853	\$ 2,600,615	\$ 7,213,916
\$ 265,512	\$ 1,559,011	\$ 803,539	\$ 6,062,964	\$ 80,228	\$ -	\$ -
\$ 9,684	\$ 19,409	\$ 427,663	\$ 3,221,274	\$ 5,402,120	\$ 2,499,620	\$ 176,539
\$ 4,280	\$ 33,546	\$ 670,213	\$ 2,802,702	\$ 7,714,595	\$ 51,762	\$ -
\$ 1,220	\$ 18,364	\$ 156,497	\$ 838,670	\$ 180,933	\$ -	\$ -
\$ -	\$ 419,639	\$ 602,912	\$ 9,363,385	\$ 966,481	\$ -	\$ -
\$ -	\$ 197,484	\$ 386,844	\$ 1,952,279	\$ -	\$ -	\$ -
\$ -	\$ 10,323	\$ 1,608,586	\$ -	\$ -	\$ -	\$ -
\$ -	\$ 99,110	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 424,775	\$ 163,932	\$ 3,149,468	\$ 3,331,722	\$ 93	\$ -	\$ -
\$ 391,129	\$ -	\$ 2,941,898	\$ 1,463,143	\$ -	\$ -	\$ -
\$ 33,646	\$ 163,932	\$ 207,569	\$ 1,868,579	\$ 93	\$ -	\$ -
\$ 10,687	\$ 163,319	\$ 236,656	\$ 2,795,565	\$ 72	\$ -	\$ -
\$ 10,687	\$ 163,319	\$ 236,656	\$ 2,795,565	\$ 72	\$ -	\$ -
\$ 1,046,920	\$ -	\$ 5,005,831	\$ 6,783,992	\$ 386,901	\$ -	\$ -
\$ 578,374	\$ -	\$ 1,015,188	\$ -	\$ -	\$ -	\$ -
\$ 245,732	\$ -	\$ 1,364,416	\$ 2,895,424	\$ -	\$ -	\$ -
\$ 121,278	\$ -	\$ 666,695	\$ -	\$ -	\$ -	\$ -
\$ 6,140	\$ -	\$ 270,815	\$ 2,847,083	\$ 386,901	\$ -	\$ -
\$ 41,671	\$ -	\$ 564,037	\$ 279,937	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 279,275	\$ 727,009	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 671,564	\$ 34,539	\$ -	\$ -	\$ -
\$ 53,724	\$ -	\$ 173,841	\$ -	\$ -	\$ -	\$ -
\$ 3,236,931	\$ 7,280,594	\$ 1,923,467	\$ 1,173,675	\$ 6,340,735	\$ 1,173,675	\$ 9,943,455
\$ 2,390,268	\$ 3,709,698	\$ 170,422	\$ -	\$ 3,032,320	\$ -	\$ 6,916,960
\$ 661,958	\$ 2,315,535	\$ 432,685	\$ -	\$ 1,988,055	\$ -	\$ 3,026,495
\$ 184,705	\$ 1,173,675	\$ 1,173,675	\$ 1,173,675	\$ 1,173,675	\$ 1,173,675	\$ -
\$ -	\$ 81,685	\$ 146,685	\$ -	\$ 146,685	\$ -	\$ -
\$ 230,177	\$ 1,051,168	\$ 341,077	\$ -	\$ -	\$ -	\$ -
\$ 182,128	\$ 211,808	\$ 341,077	\$ -	\$ -	\$ -	\$ -
\$ 48,049	\$ 63,860	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ 775,500	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 42,165,757	\$ 38,826,410	\$ 33,783,026	\$ 40,822,772	\$ 26,690,410	\$ 13,001,378	\$ 31,366,505

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Attachment B Anticipated 5-Year CIP Projects

FY23-24 Budget Book Capital Improvement Program



Attachment B: TABLE B - ANTICIPATED 5-YR CIP PROJECTS
CAPITAL IMPROVEMENT PROGRAM

Project Name	SUMMARY		
	FY 23-24 Total	5-Year Total	Total Project Cost (Past, Pending, Future)
New Infrastructure - Treatment Assets	\$ -	\$ 3,239,124	\$ 3,746,975
Inglewood Disinfection Station	\$ -	\$ 1,939,124	\$ 2,276,975
Well WB-1 Sewer Connection	\$ -	\$ -	\$ 170,000
JMM Phase II tMBR	\$ -	\$ -	\$ -
ECLWRF Conveyance of Title 22 Product Water to Barrier System	\$ -	\$ 400,000	\$ 400,000
ECLWRF Relocation of Ozone Feed Ahead of Title 22 System	\$ -	\$ 900,000	\$ 900,000
New Infrastructure - Customer Development Pipelines & Laterals	\$ -	\$ 723,620	\$ 969,733
Morningside HS Lateral RW Service Relocation	\$ -	\$ 53,304	\$ 64,683
Carson Street Recycled Water Connection	\$ -	\$ 334,002	\$ 546,056
Creek at Dominguez Lateral	\$ -	\$ 171,314	\$ 171,314
MWD Service Connection WB-23A	\$ -	\$ -	\$ 17,490
Carson Reclamation Authority	\$ -	\$ 165,000	\$ 170,190
R&R Projects	\$ -	\$ 74,067,102	\$ 74,141,651
Title 22 Common Filter Systems	\$ -	\$ 7,414,226	\$ 7,414,226
JMMCRWRP Waste Storage Tank R&R	\$ -	\$ 3,500,000	\$ 3,500,000
ECLWRF BF RO Treatment System R&R	\$ -	\$ 1,700,000	\$ 1,700,000
ECLWRF BF RO Post Treatment System R&R	\$ -	\$ 730,000	\$ 730,000
JMMCRWRP Title 22 Piping Replacement	\$ -	\$ 1,500,000	\$ 1,500,000
ECLWRF Instrument Air System Improvements for Phase IV MF	\$ -	\$ 740,000	\$ 740,000
TRWRP RO Product Tank R&R	\$ -	\$ 1,960,000	\$ 1,960,000
CNTP Electrical System Upgrade	\$ -	\$ 500,000	\$ 500,000
All Sites RO CIP Batching System R&R	\$ -	\$ 680,451	\$ 755,000
TRWRP Analyzer and Chemical Waste System R&R	\$ -	\$ 415,000	\$ 415,000
Satellite Plant Breakpoint Reactor R&R Project	\$ -	\$ 1,625,000	\$ 1,625,000
JMMCRWRP Plant-wide Containment System	\$ -	\$ 1,220,000	\$ 1,220,000
Satellite Plant Surge Protection System (Pipes & Tanks)	\$ -	\$ 6,900,000	\$ 6,900,000
CNTP Nitrified RW Process Water Piping R&R	\$ -	\$ 3,263,100	\$ 3,263,100
TRWRP Nitrified RW Process Water Piping R&R	\$ -	\$ 3,285,000	\$ 3,285,000
Title 22 Valve Installation Project	\$ -	\$ 1,994,000	\$ 1,994,000
ECLWRF Copper Pipe Replacement	\$ -	\$ 614,000	\$ 614,000
Satellite Plant Biofor Mechanical Improvements	\$ -	\$ 4,486,000	\$ 4,486,000
ECLWRF EQ Pump Project	\$ -	\$ 829,000	\$ 829,000
ECLWRF Relocate Ozone Feed Ahead of T22 System	\$ -	\$ 900,000	\$ 900,000
ECLWRF Diversion PS	\$ -	\$ 4,734,333	\$ 4,734,333
190th Street Disinfection Station Modification	\$ -	\$ 525,000	\$ 525,000
TRWRP Secondary Power Source	\$ -	\$ 176,058	\$ 176,058
TRWRP VFD R&R	\$ -	\$ 1,516,135	\$ 1,516,135
CNTP VFD R&R Project	\$ -	\$ 1,960,000	\$ 1,960,000
Satellite Plant Surge Protection (Pipes & Tanks)	\$ -	\$ 7,413,440	\$ 7,413,440
TRWRP MF Replacement Project - Design/Construction Phase	\$ -	\$ 13,486,359	\$ 13,486,359
Other Projects	\$ -	\$ -	\$ -
Total CIP Expenditure	\$ -	\$ 78,029,846	\$ 78,858,360

Prior Years (thru 6/30/23)	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	Beyond
\$ 337,851	\$ -	\$ 1,603,204	\$ 486,157	\$ 1,149,763	\$ -	\$ 170,000
\$ 337,851	\$ -	\$ 303,204	\$ 486,157	\$ 1,149,763	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170,000
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 900,000	\$ -	\$ -	\$ -	\$ -
\$ 246,113	\$ -	\$ 144,488	\$ 551,769	\$ 27,363	\$ -	\$ -
\$ 11,379	\$ -	\$ -	\$ 26,305	\$ 26,999	\$ -	\$ -
\$ 212,054	\$ -	\$ 81,759	\$ 252,243	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 32,747	\$ 138,568	\$ -	\$ -	\$ -
\$ 17,490	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 5,190	\$ -	\$ 29,982	\$ 134,653	\$ 364	\$ -	\$ -
\$ -	\$ -	\$ 1,301,804	\$ 20,902,859	\$ 29,779,971	\$ 22,082,469	\$ 74,549
\$ -	\$ -	\$ 386,793	\$ 7,027,318	\$ 115	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 1,643,480	\$ 1,856,520	\$ -	\$ -
\$ -	\$ -	\$ 299,299	\$ 1,400,701	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 128,522	\$ 601,478	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 264,087	\$ 1,235,913	\$ -	\$ -
\$ -	\$ -	\$ 130,283	\$ 609,717	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 204,267	\$ 1,755,733	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 88,029	\$ 411,971	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 662,571	\$ 17,880	\$ -	\$ 74,549
\$ -	\$ -	\$ -	\$ -	\$ 73,064	\$ 341,936	\$ -
\$ -	\$ -	\$ -	\$ 100,000	\$ 1,525,000	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 155,661	\$ 1,064,339	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 480,000	\$ 6,420,000	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 533,332	\$ 2,729,768	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 536,911	\$ 2,748,089	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 162,910	\$ 1,831,090	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 82,800	\$ 531,200	\$ -
\$ -	\$ -	\$ 274,000	\$ 4,212,000	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 93,268	\$ 735,732	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 158,452	\$ 741,548	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 419,462	\$ 4,314,871	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 77,163	\$ 447,837	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ 176,058	\$ -
	\$ -	\$ -	\$ 123,848	\$ 1,392,288	\$ -	\$ -
	\$ -	\$ -	\$ 204,267	\$ 1,755,733	\$ -	\$ -
\$ -	\$ -	\$ 211,430	\$ 596,241	\$ 6,605,769	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 3,637,810	\$ 9,848,549	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 583,964	\$ -	\$ 3,049,496	\$ 21,940,785	\$ 30,957,097	\$ 22,082,469	\$ 244,549

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Attachment C Other Potential CIP Projects

FY23-24 Budget Book Capital Improvement Program



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**TABLE C - OTHER POTENTIAL CIP PROJECTS
CAPITAL IMPROVEMENT PROGRAM**

Project Name	Budget	Potential Demand (AFY)
Chevron HP & LP VFD & Pump R&R	\$ 2,783,998	N/A
Kenneth Hahn Recycled Water Lateral - Phase 1	\$ 17,600,000	392
Kenneth Hahn Recycled Water Lateral - Phase 2	\$ 13,200,000	208
Kenneth Hahn Recycled Water Lateral - Phase 3	\$ 3,800,000	108
Groundwater Augmentation Project - Phase 1	\$ 92,000,000	10,000
Groundwater Augmentation Project - Phase 2	\$ 87,900,000	10,000
Redondo Beach Expansion Area	\$ 8,200,000	150
Torrance Expansion Area	\$ 27,700,000	874
North Palos Verdes Expansion Area	\$ 11,000,000	519
South Palos Verdes Expansion Area	\$ 35,400,000	1,722
Northeast Carson Expansion Area	\$ 6,700,000	948
Northeast Carson RO Expansion Area	\$ 7,300,000	1,055
Central Basin Expansion Area	\$ 2,400,000	172
Harbor City Project	\$ 1,100,000	313
	\$ 317,083,998	26,460

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D-1 New Infrastructure - Treatment Assets

FY23-24 Budget Book

Capital Improvement Program





FY23-24 \$3,177,000	5-yr CIP \$3,177,000	Total Cost (past, present, future) \$33,300,000
-------------------------------	--------------------------------	-----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$30,119,173	\$3,176,767	\$0	\$0	\$0	\$0	\$0	\$33,295,940

* Total Estimated Costs through 6/30/2023, including studies and engineering efforts for other facilities ultimately excluded from the current Project (e.g., Harbor Cities pipeline & tMBR system)

Funding Source(s)

District Funding*	Refinery**	Prop 1 Grant*	Cal Water Contribution***
\$15.1M	\$1.9M	\$8.1M	\$4.0M

* SRF Loan amount up to \$15,055,900, Prop 1 Grant up to \$8,078,282

** Reimbursement from Marathon for past design/studies

*** Pending

Total External Funding **\$14.0M**

Project Description

Project will increase microfiltration water production to 5.88 MGD and improve system operability and reliability. The Project includes the construction of a new custom engineered microfiltration system (CEMF), new carbon dioxide storage and dosing system, and potable water back up system for critical water supplies.

Purpose / Benefit

Installing new recycled water infrastructure will improve the supply capacity, water quality, and water reliability of recycled water to one of West Basin's most critical industrial customers.

Drivers

- **Improved Technology:** New membrane technology (polyvinylidene fluoride) is available which will provide better performance and lower costs for future membrane replacements.
- **Equipment Age:** Many system components already have reached or are reaching the end of their useful life.
- **Critical Process:** There is currently limited redundancy for key operating equipment.

The Project will increase operational revenue by increasing the boiler feed production and also reduce O&M costs by replacing the failing system. The CEMF will also provide West Basin with the ability to competitively bid future membrane replacements. The Project is also utilizing currently available funding opportunities (SRF Loan up to \$15,055,900 & Prop 1 Grant up to \$8,078,282).

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- Goal 5: Environmental Stewardship

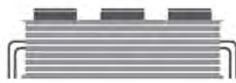
Last Budget Approval

Date	Budget
6/27/2022	\$16,562,000



Custom Engineered Microfiltration System at JMMCRWRP

End Use



Refinery
Cooling Towers



Refinery
Boiler Feed



Status

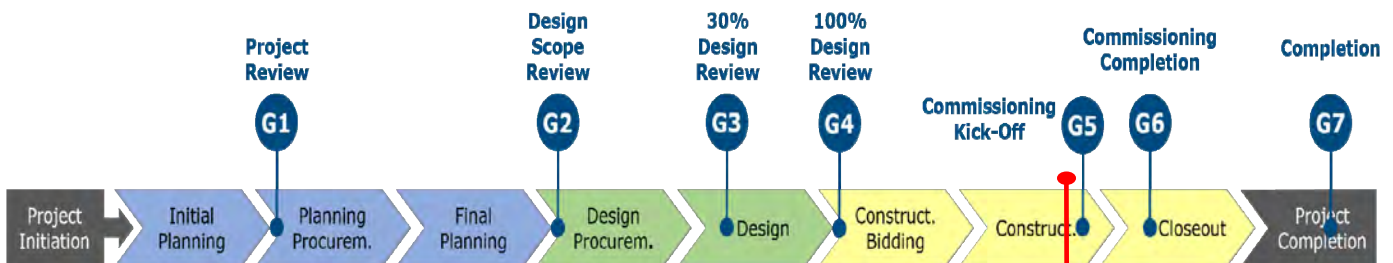
- **Completed:** Construction of all infrastructure, mechanical installation of CEMF, and site grading.
- **Current:** Remaining electrical wiring installation, system programming, and integration.
- **Upcoming:** Commissioning, project closeout, and transfer to Operations.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2023 Completion

Gate Review



March 2023

10022: JMMCRWRP Phase II Expansion Project



FY23-24 \$224,000	5-yr CIP \$224,000	Total Cost (past, present, future) \$380,000
------------------------------------	-------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$154,815	\$224,060	\$0	\$0	\$0	\$0	\$0	\$378,875

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	-	-	-
\$0.4M	-	-	-

Total External Funding **\$0.0M**

Project Description

West Basin has established a long-term vision for the relocation of the Donald L. Dear Headquarters Building from its current location in Carson, California to the Edward C. Little Water Recycling Facility (ECLWRF) in El Segundo, California. This Project will provide conceptual design options for a new headquarters building at ECLWRF for further evaluation.

Purpose / Benefit

A new headquarters building would provide a strong public identity for West Basin and allow for improved access for the public to District functions (i.e., public meetings, events, tours, etc.). A new headquarters building would also create a flexible workplace for District employees that would best allow them to service Constituents for the next 50 plus years.

Drivers

- Customer Service: Improved access for public to District functions.
- Board of Directors: Following Board's direction to relocate in lieu of refurbishing the existing headquarters building.

Strategic Goals

Goal 1: Water Supply Reliability

✓ *Goal 2: Sound Financial and Resources Management*

Goal 3: Water Quality

✓ *Goal 4: Customer Service*

✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

<u>Date</u>	<u>Budget</u>
6/27/2022	\$ 244,000



Left photo: Currently West Basin HQ in Carson, California. Right photo: ECLWRF in El Segundo, California.



Status

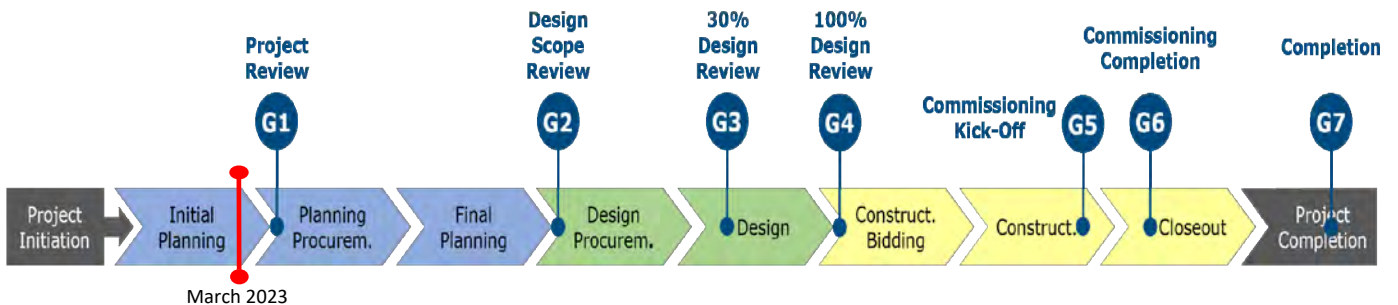
- Completed: Initial documentation and high-level conceptual design, per Board direction.
- Current: Workshops with Board to determine project scope and next steps.
- Upcoming: Advertisement of Request for Proposals

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2023 Completion

Gate Review



March 2023

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D-2 New Infrastructure - Customer Development Pipelines & Laterals

FY23-24 Budget Book

Capital Improvement Program





FY23-24 \$13,957,000	5-yr CIP \$13,980,000	Total Cost (past, present, future) \$16,780,000
--------------------------------	---------------------------------	-----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$2,804,288	\$13,957,098	\$23,043	\$0	\$0	\$0	\$0	\$16,784,430

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	Props 84 and 68	CalWater / PVGC	Loans*
\$4.8M	\$4.1M	\$3.0M	\$4.8M

* Debt / CWSRF Loan and WRFPP Prop. 1 Loan

Total External Funding **\$11.9M**

Project Description

Install a new 3.5 mile distribution system and a 500 gallon per minute pump station to deliver approximately 240 AFY of recycled water to irrigate green areas of schools, parks, medians, and a golf course. The main distribution pipeline will range in diameter from 10 inches to 4 inches and will travel through the cities of Torrance and Palos Verdes Estates.

Purpose / Benefit

The Project will deliver recycled water to the Anza and Caltrans medians, Lago Seco Park, Richardson Middle School, Los Arboles Park, Riviera Elementary School and Palos Verdes Municipal Golf Course.

Drivers

- **Drought Proof Supply:** Recycled water supplies a sustainable water source throughout the year.
- **Increased Costs Savings to Customers:** Recycled water is less expensive than potable.
- **Helps Local Cities Meet Water Conservation Mandates:** Provides an alternate source of water.
- **Funding:** Federal and State funding Sources had been obtained for the Project. Not being able to move the Project forward could jeopardize future fundings.

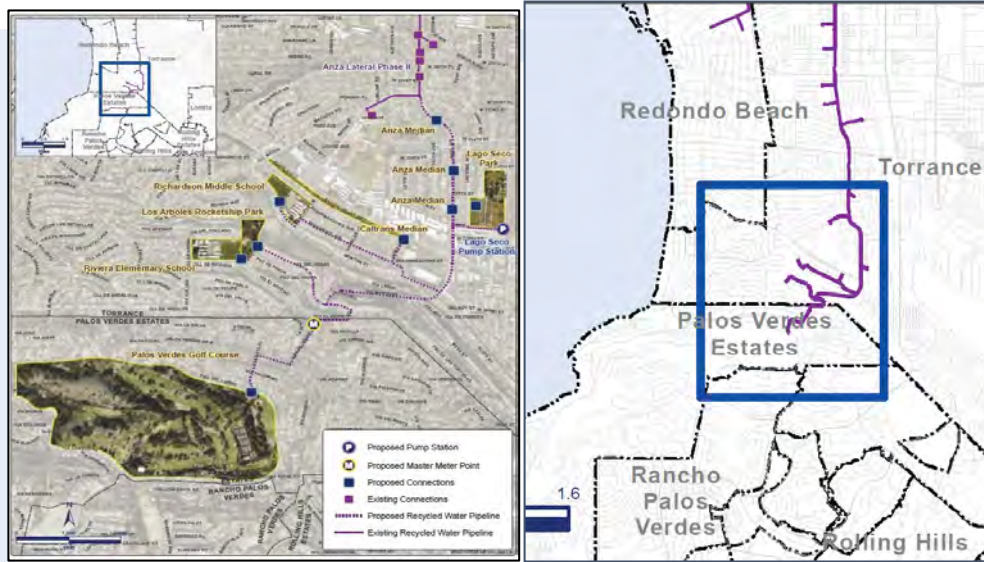
The project helps extend the use of recycled water and it is estimated that it will contribute to the city of Torrance savings (Medians & Parks) of \$15,000 to \$24,000/year and savings to the Torrance Unified School District (School Grounds): \$5,000 to \$9,000/year. Combined Potential Savings over 40 years are approximately \$822K to \$1.31M. Project costs are being offset by external funding from Cal Water (\$2.5M), PV Golf Club (\$500K), DWR Prop.84 (\$2.045M), WR Subsidy Prop. 68 (\$2.1M), WRFPP Prop. 1 Loan (\$900k) and CWSRF Loan (\$3.9M).

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$9,337,672



Proposed Recycled Water Pipeline map.

End Use



Status

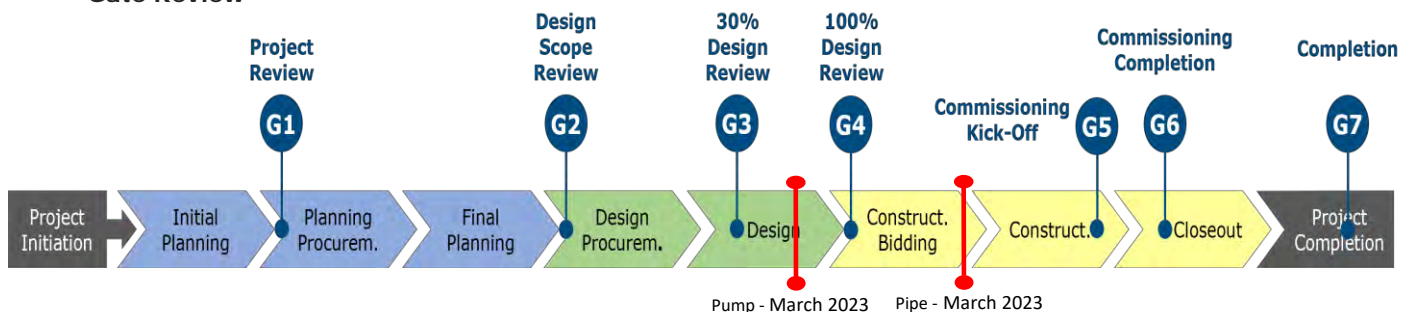
- **Completed:** CEQA, feasibility study, preliminary design, Pipeline bid package and bidding process, procurement of services including labor compliance, community outreach, and material testing and specialty inspection.
- **Current:** Final design for bid package for pump station, pipeline construction.
- **Upcoming:** Pump station bidding, pump station construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2024 Completion

Gate Review





FY23-24 \$32,000	5-yr CIP \$32,000	Total Cost (past, present, future) \$40,000
----------------------------	-----------------------------	-------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$11,313	\$32,427	\$0	\$0	\$0	\$0	\$0	\$43,740

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	-	Developer	-
-	-	\$0.044M	-

Total External Funding **\$0.044M**

Project Description

The City of El Segundo (City) is proposing to extend Park Place, between Nash Street and Allied Way, by means of a grade separation with Park Place underneath existing BNSF railroad tracks and the installation of a roundabout intersection. Per the project Environmental Impact Report, the City has requested West Basin relocate an existing 42-inch recycled water transmission pipeline in the project area.

Purpose / Benefit

The proposed roadway profile is lower than the existing elevation of the 42-inch recycled water transmission pipeline. Therefore, it is recommended that the pipeline either be lowered or relocated. The current location of the pipeline resides in an existing easement therefore any work shall be fully funded by the City.

Drivers

- Critical Infrastructure: The 42-inch recycled water pipeline serves West Basin's "south" system.
- Customer Service: Realignment of the 42-inch recycled water pipeline will allow the District to continue service.

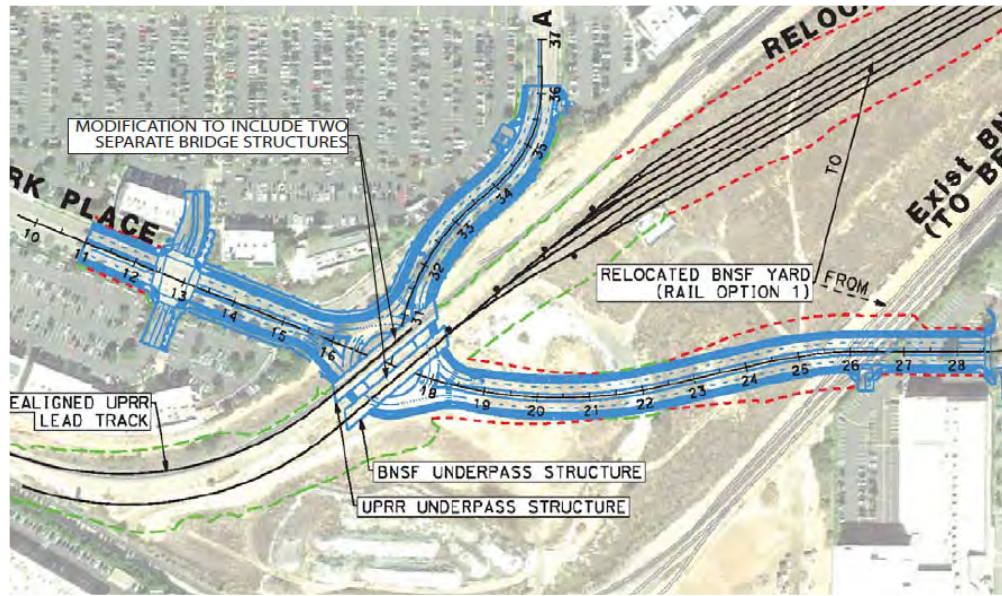
The Park Place Extension Project has been part of the city of El Segundo's General Plan since 2004. The proposed roadway alignment will lower the elevation of the site to meet vertical sight distance requirements for improved drivability. Therefore, the 42-inch recycled water pipeline's elevation will need to be lowered or relocated through the proposed roadway. By either lowering the profile of the pipeline or relocation, both options will allow the District to continue service to the "south" system serving both irrigation and refinery customers. Loss of supply to the "south" system results in loss of recycled water sales and revenue. The District has an existing easement and superior rights which means the City will have to fund any proposed solution.

Strategic Goals

- Goal 1: Water Supply Reliability
- Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- Goal 4: Customer Service
- Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
-	-

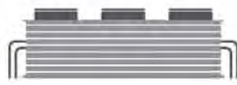


Park Place Extension (El Segundo)

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

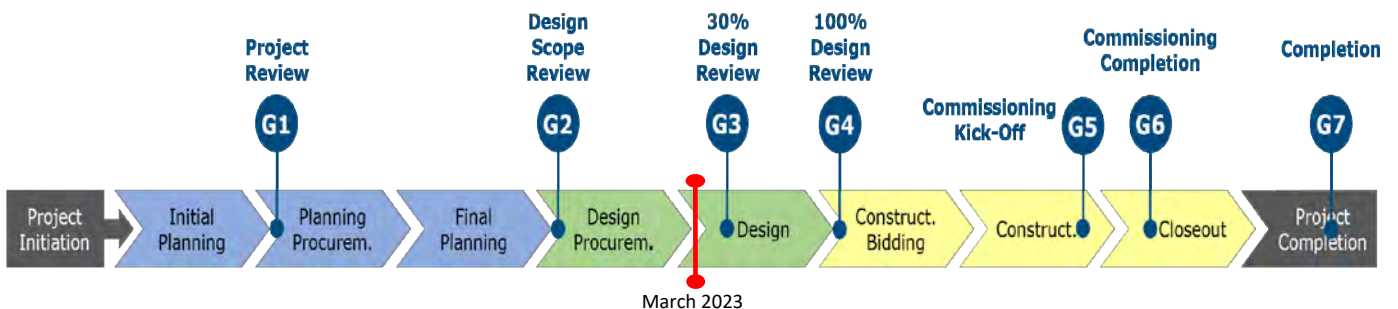
- Completed: None
- Current: Design.
- Upcoming: Construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2024 Completion

Gate Review





FY23-24 \$235,000	5-yr CIP \$1,334,000	Total Cost (past, present, future) \$1,360,000
-----------------------------	--------------------------------	----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$27,417	\$235,031	\$1,098,767	\$0	\$0	\$0	\$0	\$1,361,215

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	USACOE	Prop 1*	-
\$0.8M	\$1.6M	\$0.6M	-

* Pending

Total External Funding **\$2.2M**

Project Description

The Project is located in the City of Carson and will deliver 35 acre-feet per year of recycled water to Mills Park and Curtiss Middle School for landscape irrigation. The Project will install approximately 3,000 feet of new pipeline with ranging diameter between 4 and 6 inches. The proposed lateral will connect to West Basin's existing 42" recycled water main located along Del Amo Boulevard at the intersection with Central Avenue recycled water main on Del Amo Boulevard.

Purpose / Benefit

The Project will deliver recycled water to new sites in the City of Carson which includes schools, parks and landscaped medians and parkways.

Drivers

- Drought Proof Supply: Recycled water supplies a sustainable water source throughout the year.
- Increased Costs Savings to Customers: Recycled water is less expensive than potable.
- Helps Local Cities Meet Water Conservation Mandates: Provides an alternate source of water.
- Green Community Space Support: Use of recycled water helps maintain green areas throughout the year for community enjoyment.

West Basin worked with Congress to obtain funds for the project. An approval Bill has been issued for funding the U.S. Army Corps of Engineers (USACOE) to work with West Basin on the funding of the project which will help offset the costs of the Project. West Basin has worked in the past with USACOE under the Harbor South Bay Project (together built \$35M in new recycled water laterals and pump stations). In addition, there is a Proposition 1 Grant application under processing. Total project cost is estimated at \$2.97M (allocation funds from USACOE and Prop. 1 total approximately \$2.17 M). It is estimated that if grant was to be approved in 2023 and the project is cancelled, the grant agreement will not be signed; the ability to obtain additional funds through grants could be more challenging. The use of recycled water could produce approximately \$53,200/year in recycled water sales.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$989,121



Top Left: Mills Park. Left Bottom: Curtiss Middle School. Right: Project map

End Use



Irrigation
Title 22

Status

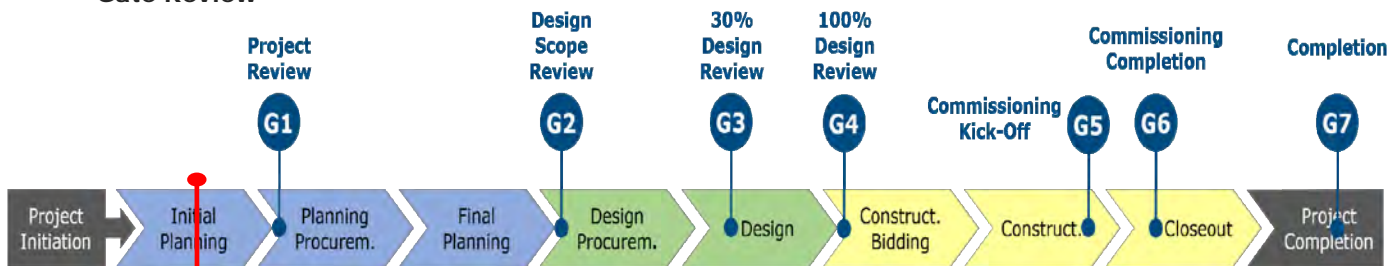
- Completed: Project description provided to U.S. Army Corps of Engineers. Prop 1 Grant Application Submittal.
- Current: Development of agreement with U.S. Army Corps of Engineers. Prop. 1 Processing for grant approval.
- Upcoming: Design, construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning	█				
Design		█			
Bidding			█		
Construction				█	
Closeout					█
Completion					█

2025 Completion

Gate Review



March 2023



FY23-24 \$226,000	5-yr CIP \$1,768,000	Total Cost (past, present, future) \$1,790,000
-----------------------------	--------------------------------	----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$25,043	\$225,573	\$1,542,839	\$0	\$0	\$0	\$0	\$1,793,456

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	USACOE	Prop 1*	-
\$1.0M	\$2.2M	\$0.7M	-

* Pending

Total External Funding **\$2.9M**

Project Description

The North Gardena Recycled Water Lateral is a project located in the City of Gardena that will serve recycled water through 3,700 feet of new pipeline, with a diameter of 4 to 6 inches, to deliver approximately 24 acre-feet per year of recycled water to Peary Middle School and Mas Fukai Park. West Basin owns and maintains a 42-inch diameter recycled water distribution pipeline that travels along 166th Street and that would be used to perform the connection.

Purpose / Benefit

The Project will supply recycled water to new sites which include parks, schools and median and parkway landscaping.

Drivers

- Drought Proof Supply: Recycled water supplies a sustainable water source throughout the year.
- Increased Costs Savings to Customers: Recycled water is less expensive than potable.
- Helps Local Cities Meet Water Conservation Mandates: Provides an alternate source of water.
- Green Community Space Support: Use of recycled water helps maintain green areas throughout

West Basin worked with Congress to obtain funds for the project. An approval Bill has been issued for funding the U.S. Army Corps of Engineers (USACOE) to work with West Basin on the funding of the project which will help offset the costs of the Project. West Basin has worked in the past with USACOE under the Harbor South Bay Project (together built \$35M in new recycled water laterals and pump stations). In addition, there is a Proposition 1 Grant application under processing. Total project cost is estimated at \$3.9M (allocation funds from USACOE and Prop. 1 total approximately \$2.9M). It is estimated that if grant was to be approved in 2023 and the project is cancelled, the grant agreement will not be signed; the ability to obtain additional funds through grants could be more challenging. The use of recycled water could produce approximately \$25,000/year in recycled water sales. Potable water will continue to be used for irrigation if recycled water is not used.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$914,300



Conceptual City of Gardena Recycled Water Extension

End Use



Irrigation
Title 22

Status

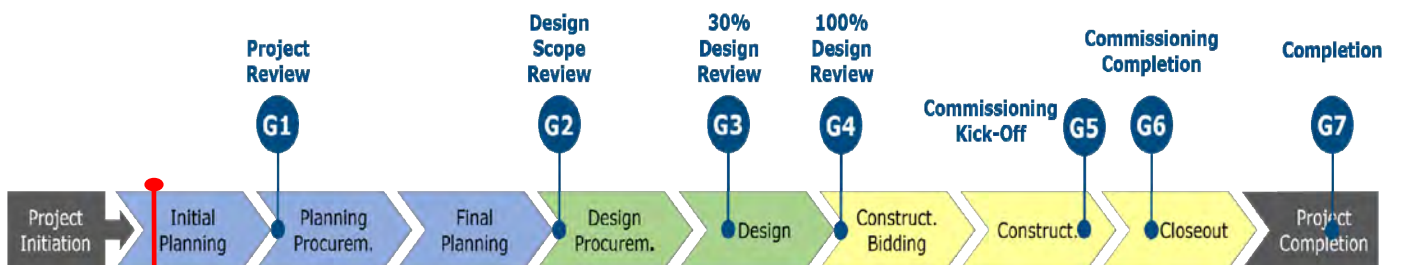
- Completed: Project description provided to U.S. Army Corps of Engineers.
- Current: Development of agreement with U.S. Army Corps of Engineers.
- Upcoming: Design, construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning	█				
Design		█			
Bidding		█			
Construction			█		
Closeout				█	
Completion					█

2025 Completion

Gate Review



March 2023



FY23-24 \$17,000	5-yr CIP \$17,000	Total Cost (past, present, future) \$60,000
----------------------------	-----------------------------	-------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$37,790	\$17,421	\$0	\$0	\$0	\$0	\$0	\$55,210

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	-	Developer	-
-	-	\$0.1M	-

Total External Funding **\$0.1M**

Project Description

This Project will construct a recycled water lateral connection to service the future Inglewood Basketball Entertainment Center (IBEC). The expected use of recycled water at this site is 45 AFY. The schedule is driven by the developer.

Purpose / Benefit

Provide recycled water from the existing recycled water distribution system for a new customer.

Drivers

- Customer Development: Introduce recycled water to new development
- Water Reliability: Offset the use of potable water and implement community green space

Project implementation is driven by the developer (Murphy's Bowl LLC). This project will provide recycled water to a new customer and the developer is paying for all expenses.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$3,265



Left photo to Right photo: Project Site, 6-inch welded Nozzle outlet, Welded Wrapper Plate onto 36" existing pipeline

End Use



Status

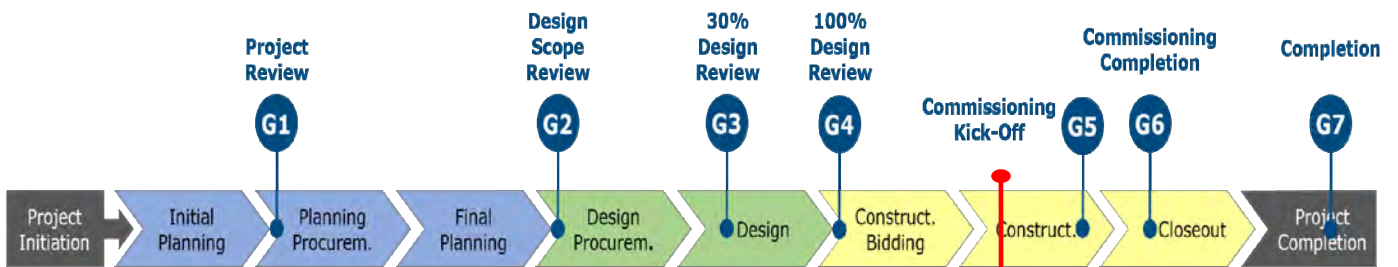
- Completed: Design Review
- Current: Construction Inspection
- Upcoming: Project Closeout

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2023 Completion

Gate Review



March 2023



FY23-24 \$85,000	5-yr CIP \$85,000	Total Cost (past, present, future) \$110,000
----------------------------	-----------------------------	--------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$24,533	\$84,923	\$0	\$0	\$0	\$0	\$0	\$109,457

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	-	Developer	-
-	-	\$0.1M	-

Total External Funding **\$0.1M**

Project Description

The project is located in the City of El Segundo and will serve new developments along the Nash Street extension. Recycled water will be delivered for the propose of irrigation of functional turf and landscaping. Approximately 3,320 feet of new 8" diameter recycled water pipeline will be constructed as a part of this project.

Purpose / Benefit

The project will deliver approximately 66 acre-feet per year of recycled water for irrigation of functional turf and landscaping.

Drivers

- Drought Proof Supply: Recycled water supplies a sustainable water source throughout the year.
- Increased Costs Savings to Customers: Recycled water is less expensive than potable.
- Helps Local Cities Meet Water Conservation Mandates: Provides an alternate source of water.
- Green Community Space Support: Use of recycled water helps maintain green areas throughout the year for community enjoyment.

The Project will generate revenue for the District with an additional 66 AFY in recycled water sales. The Project is fully funded by the developer.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- Goal 2: Sound Financial and Resources Management*
- Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

<u>Date</u>	<u>Budget</u>
FY 22/23	\$ 175,566



Nash Street (Raytheon Campus)

End Use



Irrigation
Title 22



Status

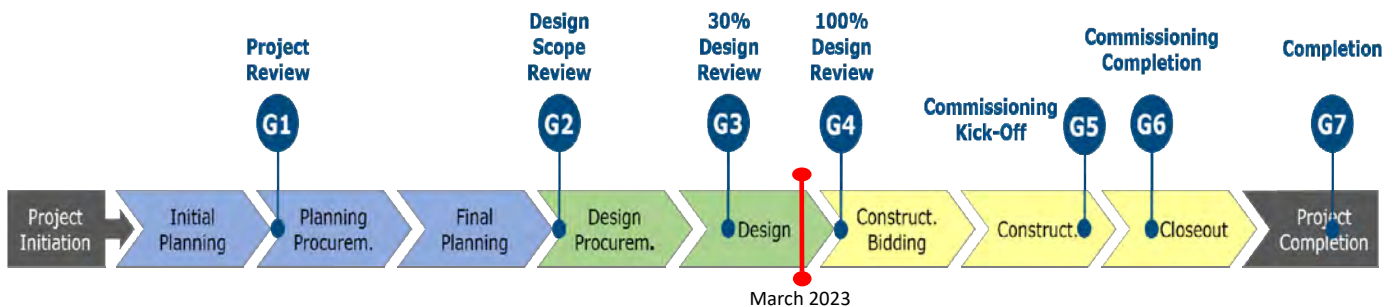
- Completed: Design.
- Current: Construction.
- Upcoming: Closeout.

Anticipated 5-Yr Schedule

	FY23-24		FY24-25		FY25-26		FY26-27		FY27-28	
Planning										
Design										
Bidding										
Construction										
Closeout										
Completion										

2023 Completion

Gate Review



March 2023



FY23-24 \$161,000	5-yr CIP \$161,000	Total Cost (past, present, future) \$540,000
------------------------------------	-------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$378,243	\$160,956	\$0	\$0	\$0	\$0	\$0	\$539,199

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	-	-	-
\$0.5M	-	-	-

Total External Funding **\$0.0M**

Project Description

The Project will serve residential customers within the service area. The proposed recycled water fill station will connect to the existing irrigation system at ECLWRF or connect via a new 2-inch meter and service lateral to the existing 8-inch main along Hughes Way. The fill station design consists of a hose hanger, hose, hose bib or shutoff valve, control valve, locking valve, and recycled water identification tags and signs. Operation of the project includes personnel, equipment maintenance, and customer training needs.

Purpose / Benefit

The Project will provide recycled water to all West Basin customers to use in areas where recycled water is not readily available.

Drivers

- Water Reliability: Recycled water supplies a sustainable water source during a drought.
 - Customer Service: Provide recycled water available for pick up by residential and/or commercial customers in the service area.
- The fill station will serve the local communities and enable water users in the West Basin service area to obtain and utilize recycled water during a drought. Maximizing the use of recycled water will reduce the use of potable water for outdoor irrigation.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

<i>Date</i>	<i>Budget</i>
-	-



End Use



Status

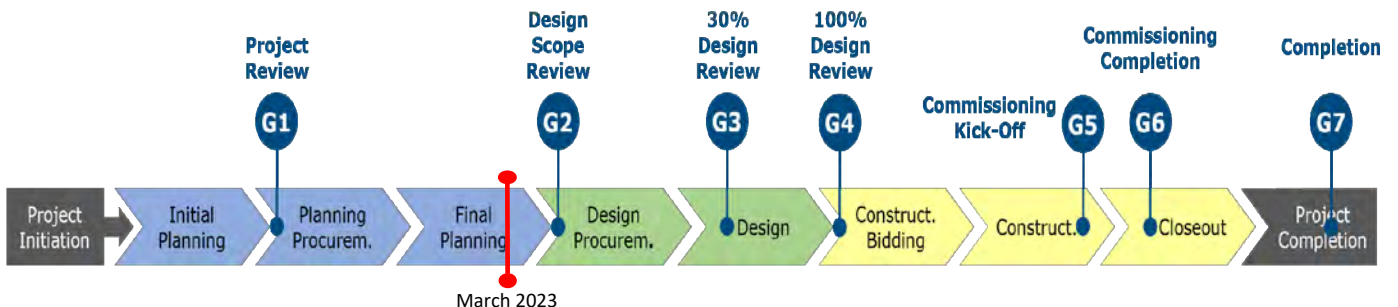
- **Completed:** Onboard Consultant, Feasibility Analysis (Technical Memorandum 1)
- **Current:** Feasibility Analysis (Technical Memorandum 2), Supplemental Engineering Report, Design
- **Upcoming:** Construction

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2023 Completion

Gate Review





FY23-24 \$532,000	5-yr CIP \$540,000	Total Cost (past, present, future) \$590,000
-----------------------------	------------------------------	--------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$54,563	\$532,196	\$7,891	\$0	\$0	\$0	\$0	\$594,650

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$0.6M	-	-	-

Total External Funding **\$0.0M**

Project Description

The Project aims to serve residential, commercial, and/or industrial customers within the service area. The Project consists of a feasibility analysis of three potential remote sites and implementation of the design and construction of one remote fill station. A feasibility analysis will analyze three potential remote sites to find the best location and identify accessibility, construction improvements, connection points, hydraulic analysis assessment, benefits, risks, requirements for operation and maintenance, permits, cost estimates, schedules, and recommendations.

Purpose / Benefit

The Project will provide recycled water to all West Basin customers to use in areas where recycled water is not readily available. Due to the expansive customer service area, the goal is to make the recycled water easily accessible to as many customers as possible.

Drivers

- Water Reliability: Recycled water supplies a sustainable water source during a drought.
- Customer Service: Provide recycled water available for pick up by residential and/or commercial customers in the service area.

The fill station will serve the local communities and enable water users in the West Basin service area to obtain and utilize recycled water during a drought. Maximizing the use of recycled water will reduce the use of potable water for outdoor irrigation.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
-	-



Los Angeles Department of Water and Power Commercial Fill Station

End Use



Status

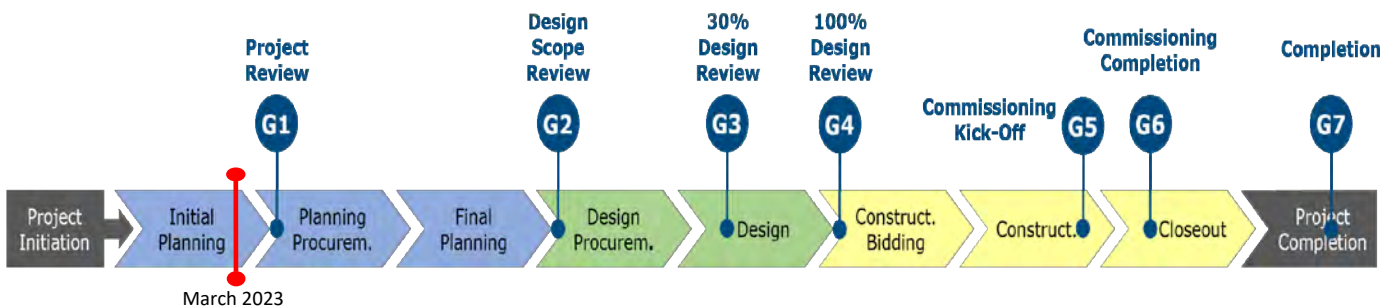
- Completed: Preliminary mapping and analysis of potential remote sites in service area
- Current: Planning (Feasibility Analysis of potential remote sites)
- Upcoming: Design, Construction

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2024 Completion

Gate Review





FY23-24 \$139,000	5-yr CIP \$139,000	Total Cost (past, present, future) \$150,000
-----------------------------	------------------------------	--------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$7,995	\$139,158	\$0	\$0	\$0	\$0	\$0	\$147,153

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$0.1M	-	-	-

Total External Funding **\$0.0M**

Project Description

Caltrans, in cooperation with Metro, propose improvements to the auxiliary lanes on both northbound/southbound I-405 from Artesia Boulevard to the I-405/I-105. The improvements call for the expansion of existing bridge structures. The proposed foundations for supporting the bridge expansion are being designed and located to have minimal impact on existing utilities at these locations. Metro's on-board design consultant (HDR, Inc.), is working with West Basin to discuss options regarding a 42-inch recycled water pipeline at the location of Marine Avenue and I-405.

Purpose / Benefit

Protecting the 42-inch recycled water pipeline minimizes the potential for failure due to being struck in the future by a Contractor during construction.

Drivers

- Agency Requirement: Caltrans is requiring a concrete encasement through their right-of-way for the pipeline.
- Customer Service: Encasement will allow the continued service downstream to irrigation and refineries.

Due to the I-405 bridge expansion, Caltrans is requiring the District to encase the 42-inch recycled water transmission pipeline per their standards. By performing an encasement as opposed to a relocation, the District will potentially avoid shutdowns and mitigate any impacts to irrigation and two refinery customers downstream of Marine Avenue at I-405. The District will cover the costs of design and construction as no easement is in place for this segment of the pipeline.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- Goal 2: Sound Financial and Resources Management*
- Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
-	-

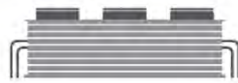


Marine Avenue and I-405 (overhead) looking East

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Status

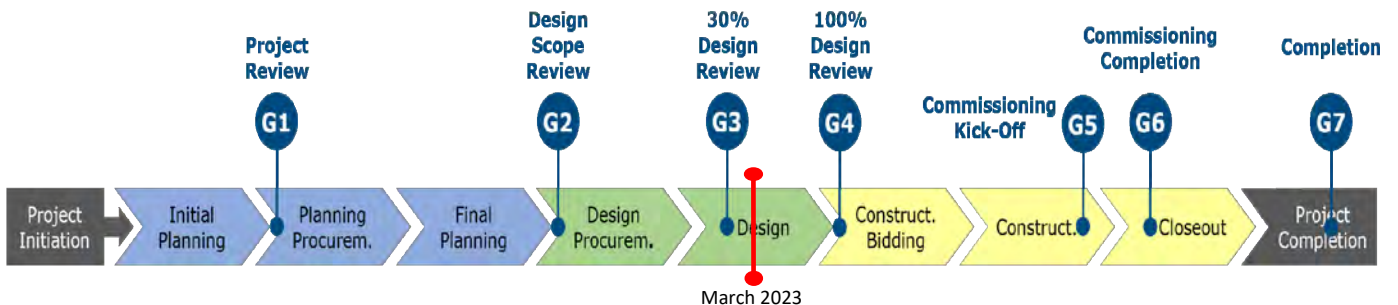
- Completed: None.
- Current: Planning.
- Upcoming: Design and Construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2023 Completion

Gate Review





FY23-24 \$23,000	5-yr CIP \$23,000	Total Cost (past, present, future) \$20,000
----------------------------	-----------------------------	-------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$22,658	\$0	\$0	\$0	\$0	\$0	\$22,658

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	-	LA County Metro	-
-	-	\$0.02M	-

Total External Funding **\$0.02M**

Project Description

LA County Metropolitan is performing railroad construction along Florence Avenue in the City of Inglewood that may propose an impact to the existing recycled water distribution system. A steel encased 6-inch ductile iron pipe is located approximately 17.5 feet underneath the LA County Metropolitan railroad construction site. The project will include design review of the proposed construction and periodic inspection visits during installation of a temporary shoofly track.

Purpose / Benefit

The proposed project will maintain the integrity of the recycled water distribution system and ensure any necessary mitigation is implemented during the temporary shoofly track construction.

Drivers

- Water Reliability: Ensure the integrity of the existing distribution system is not impacted by nearby construction.

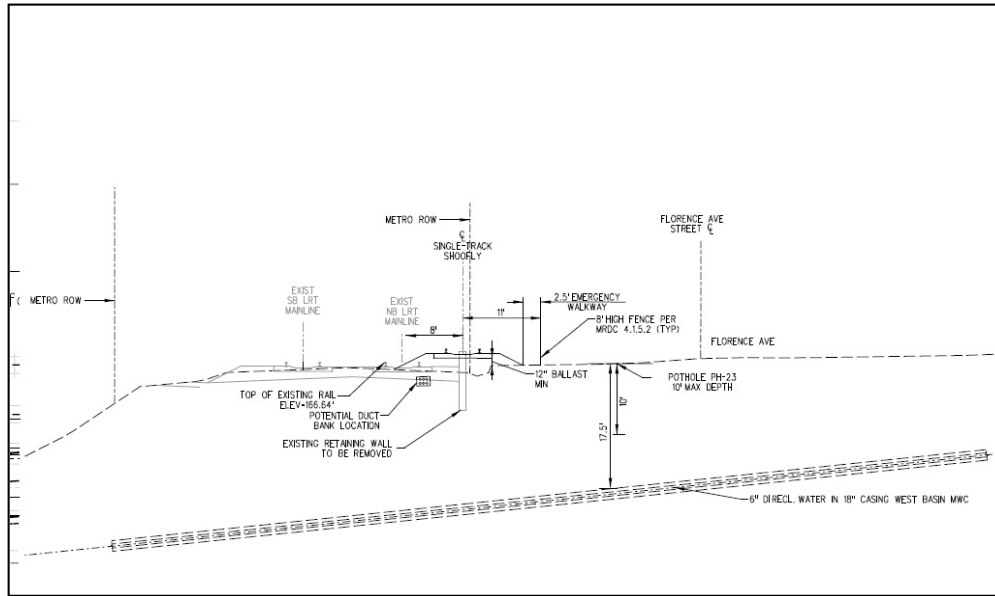
The developer will be subject to all expenses needed to ensure the existing pipeline is not harmed during project construction.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
-	-



Metro Utility Draft Project Drawings

End Use

Status

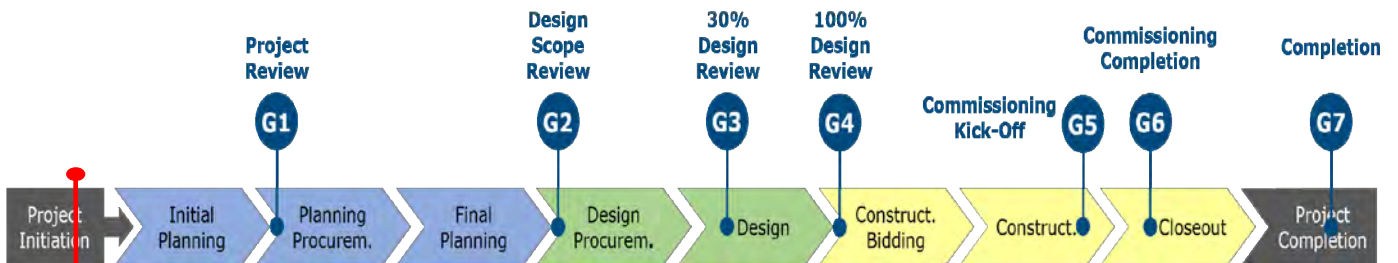
- Completed: None
- Current: Initial project scoping
- Upcoming: Design review, Inspection

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



March 2023



FY23-24 \$3,000	5-yr CIP \$11,000	Total Cost (past, present, future) \$10,000
---------------------------	-----------------------------	-------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$3,218	\$7,825	\$0	\$0	\$0	\$0	\$11,043

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	-	Developer	-
-	-	\$0.01M	-

Total External Funding **\$0.01M**

Project Description

The Project is located in the City of Carson and will deliver recycled water to a proposed commercial development which will include a Costco Wholesale store.

Purpose / Benefit

The Project will deliver recycled water to the Costco Wholesale at the City of Carson, CA. The new customer development would promote the use of a more sustainable recycled water source.

Drivers

- Customer Development: Provide customer support to a new customer.
- Water Reliability: Provide reliable source of water throughout a drought.

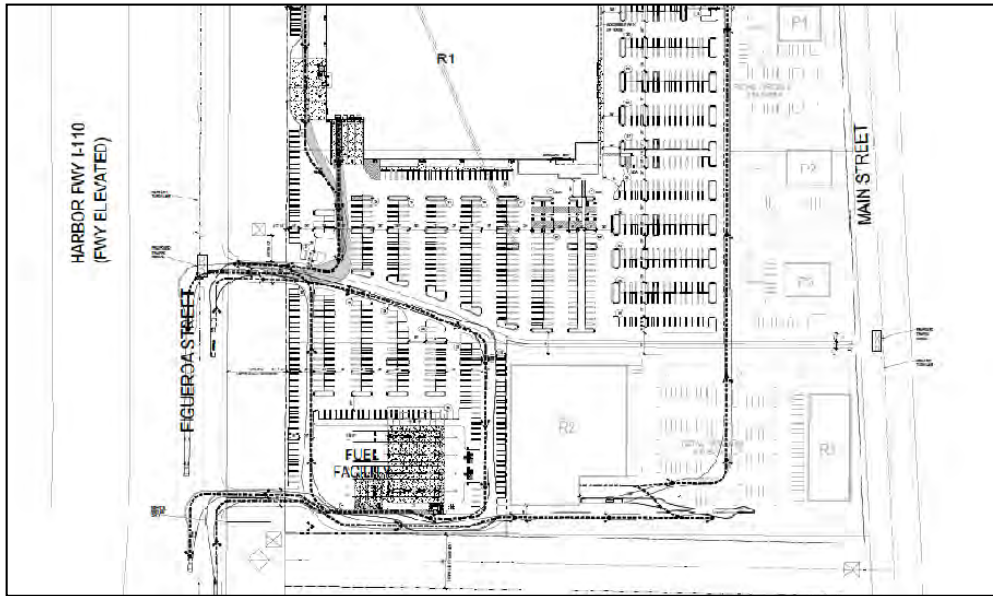
This is a customer driven project that is paid by the developer. This project will provide recycled water to a new customer and the developer is paying for all expenses. The new connection service would offset potable water use during a drought while using more sustainable recycled water.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- Goal 2: Sound Financial and Resources Management*
- Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
-	-



Costco Wholesale - Concept Site Plan

End Use



Irrigation
Title 22

Status

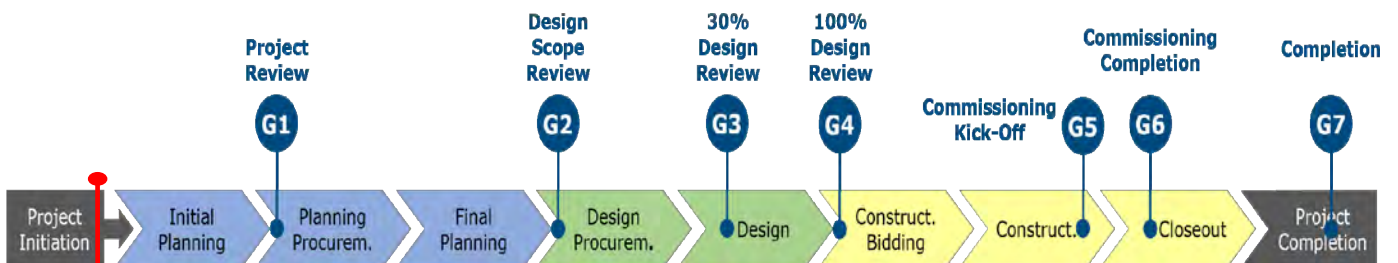
- Completed: None
- Current: Developer is completing the environmental Documentation for the Project.
- Upcoming: Design Review

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



March 2023

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D-3A Rehabilitation & Replacement Projects

FY23-24 Budget Book

Capital Improvement Program





FY23-24 \$2,667,000	5-yr CIP \$15,411,000	Total Cost (past, present, future) \$16,240,000
--------------------------------------	----------------------------------------	------------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$823,731	\$2,666,509	\$12,744,794	\$0	\$0	\$0	\$0	\$16,235,033

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	Refinery	--	--
\$12.4M	\$3.8M	--	--

Total External Funding **\$3.8M**

Project Description

This project will rehabilitate the solids handling system at the ECLWRF. The existing solids handling was constructed in 1995 with a major overhaul and expansion in 2007. Some major parts of the solids handling systems are now obsolete and operational staff experiences difficulty in obtaining replacement parts and components to keep the equipment in service and operating efficiently. This project will upgrade and replace these obsolete components and replace worn major components within the solids handling system.

Purpose / Benefit

The rehabilitation of the existing solids handling system will provide reliability, better performance, redundancy, compliance with Class A Bio-Solids Permit requirement, and reduction in operational costs (including hauling/tipping fees), and will ensure the continued and efficient operation of the system that supports the delivery of West Basin's five types of recycled water.

Drivers

- **Critical Process:** Equipment failures disrupt the solids handling process and interrupt the continued and efficient operation that provides the delivery of West Basin's recycled water.
- **Equipment Aging and Failure:** Major components have exceeded their useful lives.
- **Financial:** Increased operation and maintenance costs.

West Basin has expended an average of \$5M per year during the three prior fiscal years on operation and maintenance (O&M) of the Solids Handling System. This O&M cost is anticipated to increase to approximately \$5.8M per year moving forward due to inflationary costs and the increasing likelihood of component failures. West Basin staff project that undertaking the ECLWRF Solids Handling Improvements Project will reduce the annual O&M expenditure to approximately \$2.8M per year. This would result in a break-even period of approximately 5 years, and savings of approximately \$40M across a 15-year period.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$ 1,520,000

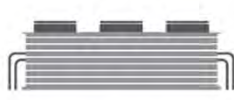


Plate and Frame Filter Press #1 in the Dewatering Building at ECLWRF

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier



Status

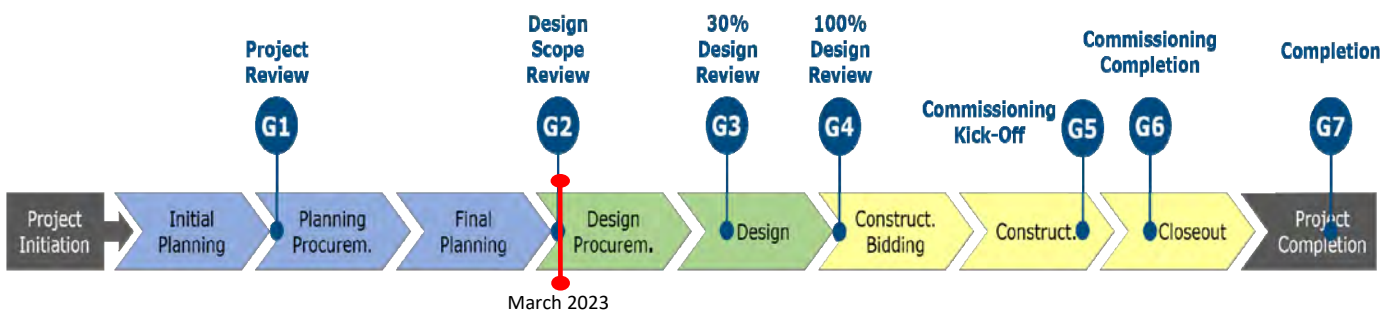
- Completed: Condition assessments, planning, and cost estimating.
- Current: Design bidding period.
- Upcoming: Design phase and pre-procurement.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



March 2023



FY23-24 \$5,102,000	5-yr CIP \$5,102,000	Total Cost (past, present, future) \$6,570,000
--------------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$1,471,085	\$5,101,678	\$0	\$0	\$0	\$0	\$0	\$6,572,763

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$6.6M	-	-	-

Total External Funding **\$0.0M**

Project Description

This Project will include the replacement of failing Title 22 filter underdrains, seismic structural strengthening, restoration of concrete surfaces, concrete crack repair, concrete trough coating, and replacement of filter appurtenances within the filter basins. The scope of work would be performed on 11 filter basins as 3 filter basins have already been rehabilitated.

Purpose / Benefit

The Title 22 filters are approaching their design life and have periodically been taken offline due to system failure. Rehabilitating the Title 22 filter system will ensure that the satellite plants and end users of the disinfected tertiary water will not experience loss in capacity and quality.

Drivers

- **Equipment Failure:** 4 converted filters are non-operational.
- **Equipment Age:** Many filter system components are reaching end of useful life.
- **Critical Process:** The Title 22 filters are crucial to deliver disinfected tertiary water for various uses.
- **Project Ranking:** Highly-ranked project in Recycled Water Master Plan.

The replacement of Title 22 filter underdrains will minimize any long term impacts to the Title 22 process by reducing interruptions to supply. Title 22 recycled water is the source water for irrigation customers and the satellite plants that serve the refineries. When there is not enough Title 22 recycled water to serve as source water, potable water supplement has to be used as make up water which comes at a high cost to the District. In fiscal year 2021/2022, the District lost \$2,476,368 in recycled water sales due to potable water supplement. Due to the amount of potable water supplement used, by performing the Project a return on investment would occur between 3-7.5 years after completion.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
6/27/2022	\$ 5,217,000

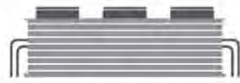


Filters 1-10 (left) and Filters 11-14 (right)

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Status

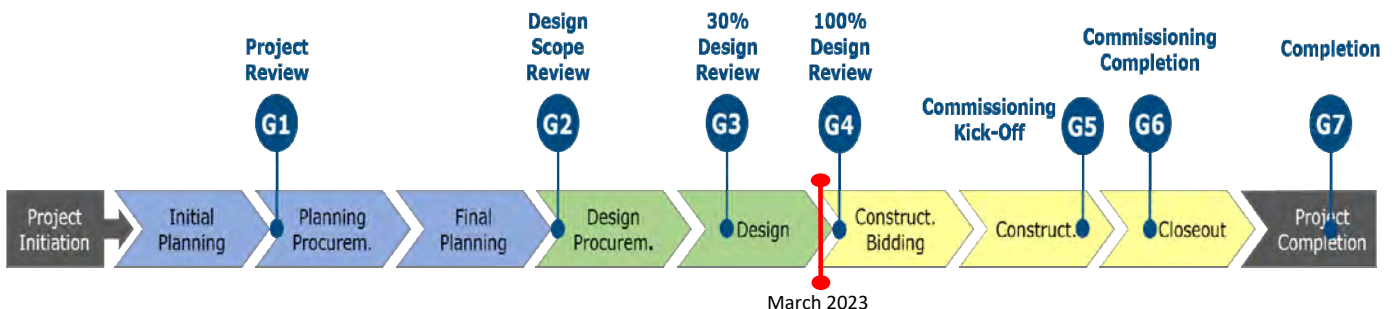
- Completed: Planning and design.
- Current: Authorization for request for solicitation.
- Upcoming: Construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2024 Completion

Gate Review





FY23-24 \$1,201,000	5-yr CIP \$15,965,000	Total Cost (past, present, future) \$30,740,000
-------------------------------	---------------------------------	-----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$738,628	\$1,200,786	\$2,017,732	\$1,605,583	\$4,465,399	\$6,675,705	\$14,032,595	\$30,736,429

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	Refinery	--	--
\$25.8M	\$4.9M	--	--

Total External Funding **\$4.9M**

Project Description

Installation of a new Distributed Control System (DCS) across every West Basin facility. This will involve replacing and upgrading all defunct and obsolete controllers, and creating a modern, future-proof Supervisory Control and Data Acquisition (SCADA) system run from ECLWRF. The new DCS system would provide West Basin with a modern control system that is cohesive across all sites and a solid platform for future site improvements.

Purpose / Benefit

The purpose of this project is to maintain the continued operation of the system through the upkeep of our control systems. A 2021 Audit and Technology Review of all DCS and SCADA systems across West Basin's five main facilities identified that 63% of West Basin controllers were beyond their useful life, and that West Basin's current control system requires major upgrades and refurbishment. A failure of one of these controllers could result in lengthy downtimes and significant repair costs as replacement controllers are procured.

Drivers

- Equipment Age: Many critical systems have reached, or are reaching, the end of their useful life.
- Modernization: Installing a modern, robust system that would reduce downtime, increase capabilities, ensure safety, and adhere to regulatory compliance.
- Critical Process: There is currently limited redundancy for key operating equipment.
- Project Ranking: Highly-ranked project within CIP program amongst Operations staff.

The majority of control system components across all West Basin sites are beyond their useful life, with many of them no longer being manufactured. To replace each of these components as they fail is anticipated to cost approximately \$42M, not including design, downtime costs, or staff labor. This estimate will increase as the obsolete components become more scarce.

This project conducts a systematic and procedural approach to replacing these components. This allows for subsystems to be replaced with more efficient equipment in planned stages, streamlining the DCS system as a whole whilst expanding its capabilities.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
6/27/2022	\$ 878,930

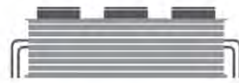


A local programmable logic controller (PLC) at Torrance Refinery Water Recycling Plant

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier



Status

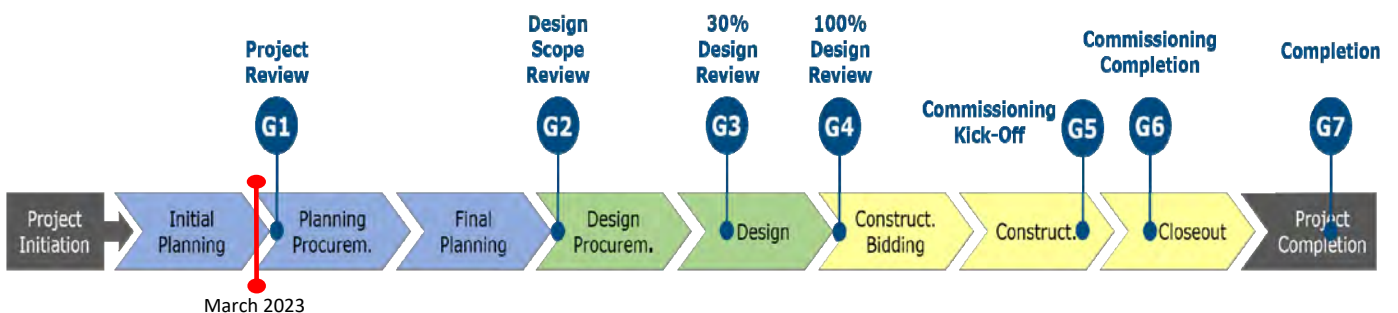
- Completed: Full audit of DCS system across all sites.
- Current: Task prioritization and project planning.
- Upcoming: Design phase bidding.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2034 Completion

Gate Review



March 2023



FY23-24 \$30,000	5-yr CIP \$5,702,000	Total Cost (past, present, future) \$13,170,000
-----------------------------------	---------------------------------------	------------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$256,956	\$30,052	\$1,027,381	\$890,959	\$1,152,853	\$2,600,615	\$7,213,916	\$13,172,732

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$13.2M	-	-	-

Total External Funding **\$0.0M**

Project Description

Based on a condition assessment, rehabilitation of the basin and pump station serving the Barrier system will be prioritized into three phases:

- Phase 1: Replace motor control centers #1,#2 and pumps #1,#2,#3
- Phase 2: Renew basin and pump basin structure
- Phase 3: Replace motor control center #3; pumps #4,#5,#6; variable frequency drive #6; switchboard; manifold.

Purpose / Benefit

Rehabilitating targeted components of the water delivery infrastructure will ensure that the end users of seawater intrusion barrier water will not experience loss of service.

Drivers

- **Water Quality and Compliance:** Deterioration of the basins' concrete walls is impacting a water quality parameter; this parameter is being monitored to determine the urgency of basin structural repairs.
- **Equipment Age:** Many system components are at end of useful life; these components will need to be replaced or renewed within 10 years.
- **Critical Process:** The electrical system and basin structures are critical components to the process.

With approximately half of the system components expected to reach end of useful life by 2031 at a total estimated cost of \$13M, a strategically phased rehabilitation program is recommended to:

- Replace or renew critical components before they fail
- Maximize remaining useful life of specific components
- Prevent loss of service.

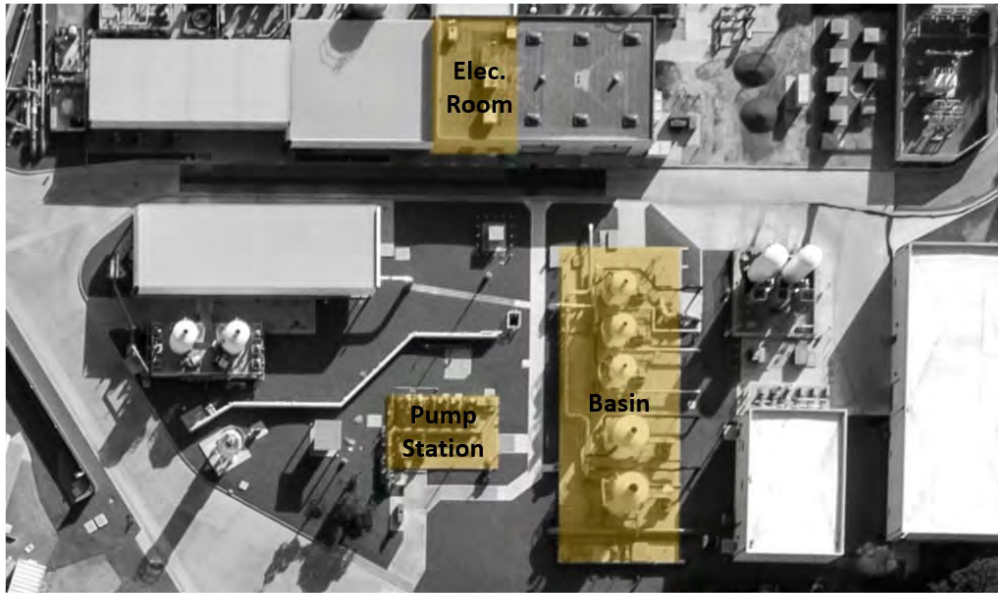
A 1-month loss of service can cost West Basin approximately \$1,000,000 in unrealized Barrier product water sales.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
6/27/2022	\$ 295,099



Aerial Photo of Subject System

End Use



Seawater Barrier



Status

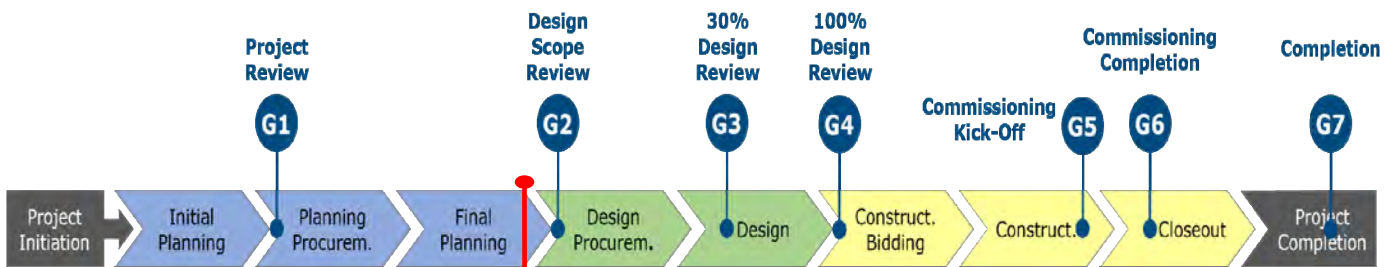
- Completed: Level 2 condition assessment.
- Current: Project prioritization & phasing and developing design scope.
- Upcoming: Phased Design and Construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2033 Completion

Gate Review



March 2023



FY23-24 \$1,559,000	5-yr CIP \$8,506,000	Total Cost (past, present, future) \$8,770,000
--------------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$265,512	\$1,559,011	\$803,539	\$6,062,964	\$80,228	\$0	\$0	\$8,771,255

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$8.8M	--	--	--

Total External Funding **\$0.0M**

Project Description

This project will rehabilitate product pumps and variable frequency drives (VFDs) for the disinfected tertiary water (Title 22 recycled water) system. This project is split into two phases. Currently failed components will be replaced in the fiscal year 2023-2024, with a comprehensive rehabilitation program of the product pumps and VFDs to follow in future fiscal years.

Purpose / Benefit

Rehabilitating the water delivery infrastructure will ensure that the end users of the disinfected tertiary water will not experience loss of service. VFDs are required to manage the output of product water pumps. This ensures that the hydraulic system is not overpressurized, which could lead to burst or damaged pipelines. In addition, VFDs ensure that the system is operating efficiently and reliably, reducing both water and electricity waste.

Drivers

- Equipment Failure: 3 obsolete VFDs have failed and replacement parts are not available.
- Equipment Age: Many system components are reaching end of useful life.
- Critical Process: There is currently limited redundancy; additional failures could disrupt water delivery.

Within the last five years, three of the six product pump VFDs at ECLWRF have failed. Total peak pumping capacity has dropped from 63MGD to 47MGD. Peak hour demand is 44MGD. If another VFD fails, peak pumping capacity will drop to 39.2MGD, which is 11% below the peak hour demand. It would take approximately two months to procure and install a temporary soft-starter for the pump to regain capacity. A reduction of 11% recycled water production over two months is estimated to cost approximately \$1,400,000 in lost recycled water sales and supplementary potable water costs. If two VFDs fail in a short period this would result in a 33% reduction and an estimated \$4,100,000 loss. These costs are in addition to replacing VFDs at approximately \$500,000 each.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$ 985,465

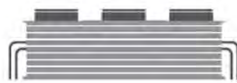


The western side of ECLWRF, with the product pumps, Title 22 filters, and dewatering building shown

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier



Status

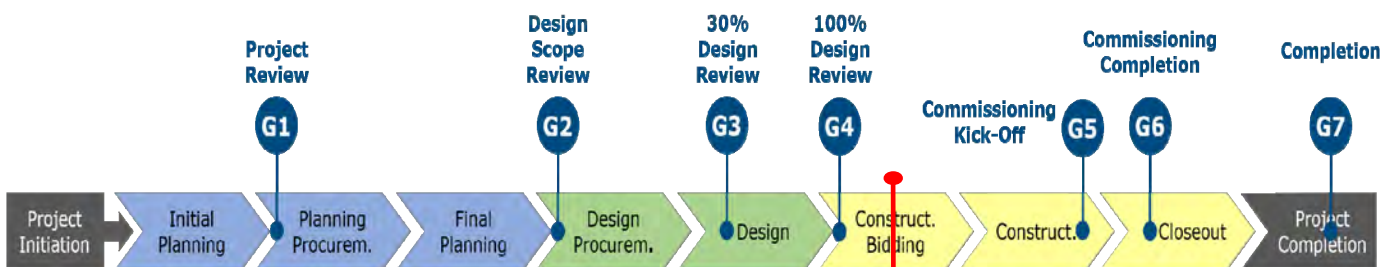
- Completed: Design and procurement of three VFDs to replace failed components.
- Current: Construction bidding for VFD installation contract.
- Upcoming: Installation of three VFDs.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2026 Completion

Gate Review



March 2023



FY23-24 \$19,000	5-yr CIP \$11,570,000	Total Cost (past, present, future) \$11,760,000
----------------------------	---------------------------------	-----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$9,684	\$19,409	\$427,663	\$3,221,274	\$5,402,120	\$2,499,620	\$176,539	\$11,756,308

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	Refinery	-	-
\$11.0M	\$0.8M	-	-

Total External Funding **\$0.8M**

Project Description

This project will replace bulk chemical storage tanks and ancillary equipment at the Edward C. Little Water Recycling Facility. West Basin is kicking off the condition assessment of the chemical storage tanks under the technical planning program, prior to starting design.

Purpose / Benefit

Rehabilitating the water delivery infrastructure will ensure that the end users of the disinfected tertiary water will not experience loss of service. This project will address regulatory requirements, best management practices for chemical storage and convenience, operator safety, and environmental safety.

Drivers

- **Equipment Failure:** Multiple tanks have begun failing. The Sodium Hypochlorite Day tank was recently replaced in 2022.
- **Equipment Age:** Many tanks have reached or are reaching end of useful life.
- **Critical Process:** Chemicals are critical to treatment process; additional tank failures could disrupt water delivery to customers.

As the tanks continue to age, the risk of failure increases. If a tank fails, the location and severity of the leak determines if the system is safe to operate or must go offline. There are safety risks associated such as the environmental risk and operator safety risk when a chemical leak occurs and reduced seismic safety with temporary tanks because there is no anchoring. Temporary tank monthly rental costs can vary between \$1,500 - \$3,000 depending on size. A tank failure could result in \$14,427 to \$100,994 revenue loss and \$19,169 to \$134,187 potable water costs in order to obtain and connect a temporary tank and keep the system online.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$ 173,999

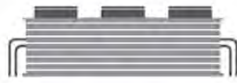


Aerial photo of Edward C. Little Water Recycled Facility

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier



Status

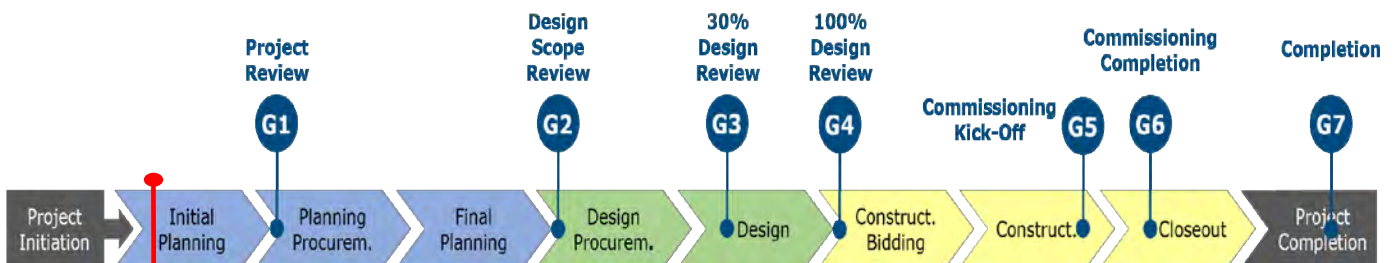
- Completed: Day Tank replacement
- Current: Planning (condition assessment, see TP-CAS project)
- Upcoming: Design Procurement

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2029 Completion

Gate Review



March 2023



FY23-24 \$34,000	5-yr CIP \$11,273,000	Total Cost (past, present, future) \$11,280,000
-----------------------------------	----------------------------------------	------------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$4,280	\$33,546	\$670,213	\$2,802,702	\$7,714,595	\$51,762	\$0	\$11,277,098

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	Refinery	-	-
-	\$11.3M	-	-

Total External Funding **\$11.3M**

Project Description

To replace the existing decommissioned ECLWRF Phase II and Phase III MF with the most advanced membrane technology.

Purpose / Benefit

Replacing the Phase II and Phase III MF with the most advanced membrane technology will provide reliability, better performance, redundancy, compliance with product water requirements, and brings additional revenue for the District. The completion of this project will also maximize the recycled water supply to Chevron Refinery, which is currently supplemented by the Barrier MF system.

Drivers

- Critical Process: There is currently no redundancy for recycled-water production at ECLWRF.
- Economy: Loss of production and revenue.
- Compliance: The outdated Phase II & III MF systems failed to provide the water quality required for Barrier Water

The original MF Phase II is obsolete and has been decommissioned. MF Phase III has deteriorated and replacement is necessary. West Basin has contractual requirements to meet and in order to keep up with the demands for Chevron and Barrier injection, new equipment needs to be installed. The loss capacity at the Phase II and III indirectly reduces water supply to Barrier as the Barrier MF system is currently used to meet refinery demand. Refinery has pledged approximately \$10M for project implementation through fixed monthly payments. The Project would add 10 MGD of MF capacity that ultimately would produce approximately \$10.5M per year of recycled water revenue.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- Goal 5: Environmental Stewardship*

Last Budget Approval

<i>Date</i>	<i>Budget</i>
5/24/2021	\$ 684,042



ECLWRF Phase III

End Use



Refinery
Boiler Feed



Seawater
Barrier

Status

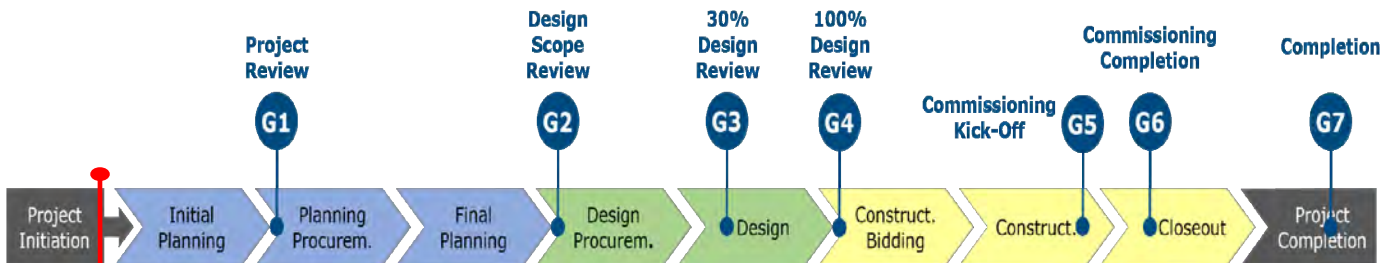
- Completed: Initial project budgeting and scoping.
- Current: Initiating RFP process.
- Upcoming: Design and construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2027 Completion

Gate Review



March 2023



FY23-24 \$18,000	5-yr CIP \$1,194,000	Total Cost (past, present, future) \$1,200,000
----------------------------	--------------------------------	----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$1,220	\$18,364	\$156,497	\$838,670	\$180,933	\$0	\$0	\$1,195,683

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	Refinery	-	-
\$1.1M	\$0.1M	-	-

Total External Funding **\$0.1M**

Project Description

This project will upsize cartridge filter pretreatment facilities and upgrade feed pumps for reverse osmosis trains at ECLWRF to maximize the capacity of the trains.

Purpose / Benefit

Upsizing the cartridge filters and RO feed pumps for the RO trains will provide reliability, better performance, redundancy, compliance with product water requirements, and bring additional revenue for the District.

Drivers

- **Optimize Performance:** RO pretreatment equipment is undersized for upgraded RO trains and do not meet current hydraulic conditions. This project will boost performance, not increase capacity.
- **Critical Process:** There is currently limited redundancy; additional failures could disrupt solids delivery
- **Financial:** Maximize production to Barrier Water and Chevron Refinery

The RO feed pumps and cartridge filters affect the Barrier water and Chevron Boilerfeed product water delivery. The project could increase efficiency, reduce the frequency of replacing the cartridge filters, and reduce O&M costs. Currently, the cartridge filters are overloaded and replaced every 3-4 months. If a facility shutdown is required to replace a failed feed pump or cartridge filter, the revenue loss for these product water deliveries is \$20,839 per day and the supplemental potable water cost is \$27,499 per day.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
5/24/2021	\$22,609

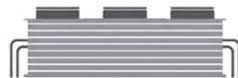


RO Feed Pumps

End Use



**Seawater
Barrier**



**Refinery
Cooling Towers**

Status

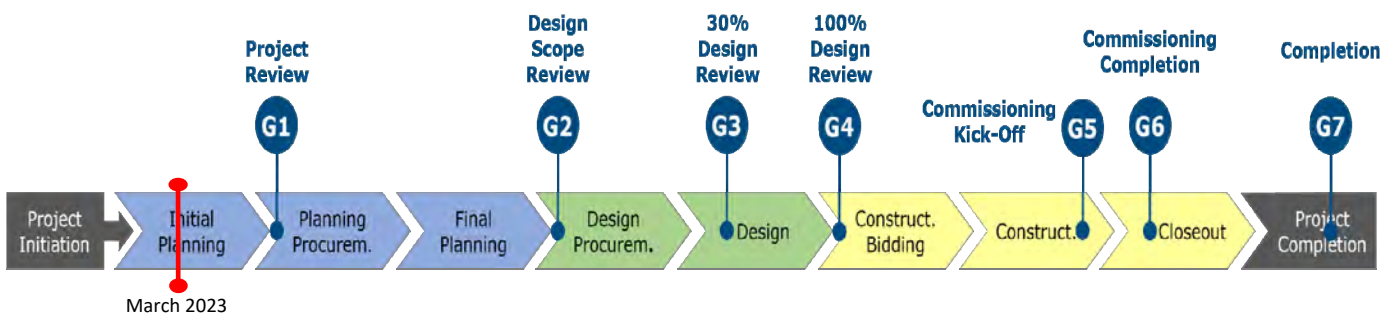
- Completed: Initial project budgeting and scoping
- Current: Operations data collection
- Upcoming: Evaluate data and issues, Assessment

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2026 Completion

Gate Review



March 2023



FY23-24 \$420,000	5-yr CIP \$11,352,000	Total Cost (past, present, future) \$11,350,000
------------------------------------	----------------------------------------	------------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$419,639	\$602,912	\$9,363,385	\$966,481	\$0	\$0	\$11,352,417

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	Refinery	-	-
\$10.0M	\$1.4M	-	-

Total External Funding **\$1.4M**

Project Description

Rehabilitation and replacement of the pumps, motors, electrical equipment, and appurtenances at the existing Hyperion Pump Station (Pumps 1-4), which are all a part of the original construction in 1995. The Project also includes the installation of a new isolation valve and flow meter on force main for added operational control.

Purpose / Benefit

The Hyperion Pump Station is the sole provider of source water for the Edward C. Little Water Recycling Facility. Rehabilitating the pump station infrastructure will ensure that the recycled water program and all customers will not experience a loss of service.

Drivers

- **Equipment Failure:** 1 obsolete VFD has failed and replacement parts are not available. The VFD has been converted to a soft starter. The other VFD is operational; however, its associated pump has failed. The remaining three pumps are in need of rehabilitation.
- **Equipment Age:** Many systems are reaching end of useful life.
- **Critical Process:** There is currently limited redundancy; additional failures could disrupt water deliveries.

The Hyperion Pump Station is West Basin's most critical facility. There is currently limited redundancy and additional failures may impact contractual obligations and revenue from recycled water sales, system wide. In anticipation of needing to take the existing pump station offline for this Project, a new pump station has been constructed, via the Hyperion Secondary Effluent Pump Station Improvements Project, which was completed in 2021.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
6/27/2022	\$ 443,000

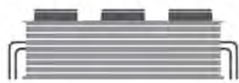


Existing Hyperion Pump Station (Indoor) alongside New Pump Station (Outdoor)

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier



Status

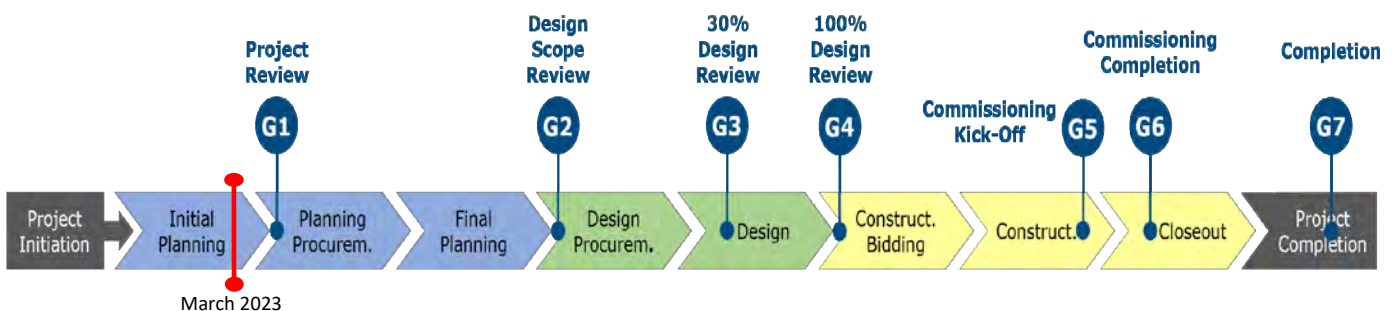
- Completed: No work has been completed.
- Current: Project review and preparation of the Request for Proposals.
- Upcoming: Advertisement of the Request for Proposals.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2027 Completion

Gate Review





FY23-24 \$197,000	5-yr CIP \$2,537,000	Total Cost (past, present, future) \$2,540,000
-----------------------------	--------------------------------	----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$197,484	\$386,844	\$1,952,279	\$0	\$0	\$0	\$2,536,607

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	Refinery	-	-
\$2.3M	\$0.3M	-	-

Total External Funding **\$0.3M**

Project Description

Rehabilitation of the existing 60-inch reinforced concrete pressure pipe from Hyperion Pump Station to Edward C. Little Water Recycling Facility (ECLWRF) with PVC lining. Prior investigations have shown damage to the existing PVC liner. A condition assessment will be the first phase of this Project and is required to determine the extent of the necessary repairs. The total length of the force main pipeline is 14,918 linear feet.

Purpose / Benefit

The secondary effluent force main (SEFM) is the sole pipeline used to convey source water from the Hyperion Pump Station to the ECLWRF. Rehabilitation of the lining will ensure pipeline integrity is maintained and that recycled water end users will not experience a loss of service.

Drivers

- **Equipment Failure:** Initial inspection of existing PVC lining showed bubbling in the lining and indicated the need to perform repairs and/or complete replacement of the lining.
- **Equipment Age:** The pipeline lining is approaching the end of useful life.
- **Critical Process:** There is no redundancy to the SEFM; additional failures could impact the integrity of the SEFM and subsequently disrupt water deliveries.

Complete failure of the lining would halt all recycled water production and deliveries to end users. Repairs are necessary to limit impacts to the integrity of this critical asset.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$ 198,000

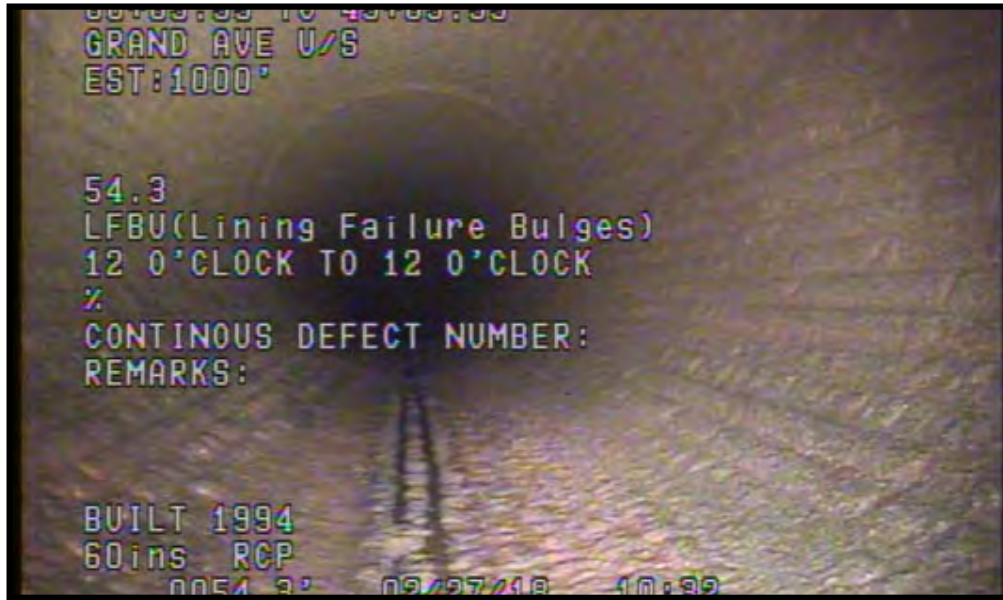
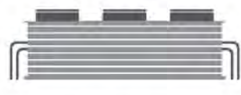


Image of Lining Failure (bulges) in SEFM taken in 2018

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier



Status

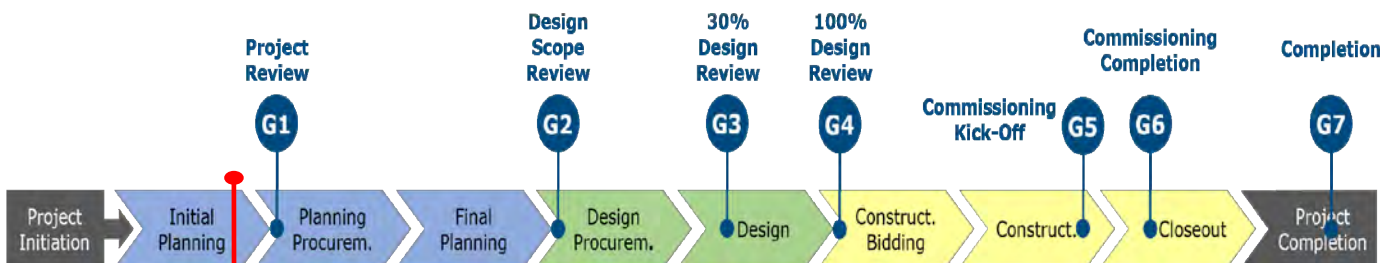
- Completed: Camera inspections during past system shutdowns.
- Current: Project review with the General Manager and preparation of the Request for Proposals.
- Upcoming: Advertisement of the Request for Proposals.

Anticipated 5-Yr Schedule

	FY23-24			FY24-25			FY25-26			FY26-27			FY27-28		
Planning															
Design															
Bidding															
Construction															
Closeout															
Completion															

2026 Completion

Gate Review



March 2023



FY23-24 \$10,000	5-yr CIP \$1,619,000	Total Cost (past, present, future) \$1,620,000
-----------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$10,323	\$1,608,586	\$0	\$0	\$0	\$0	\$1,618,909

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$1.6M	-	-	-

Total External Funding **\$0.0M**

Project Description

This project will replace an inoperable distribution system valve at ECLWRF.

Purpose / Benefit

Replacement of this valve will allow the north leg of the Title 22 distribution pipeline to be isolated, which in turn will allow the south leg to remain operational if a shutdown of the north leg is needed. The south leg serves two refineries; the north leg serves one refinery.

Drivers

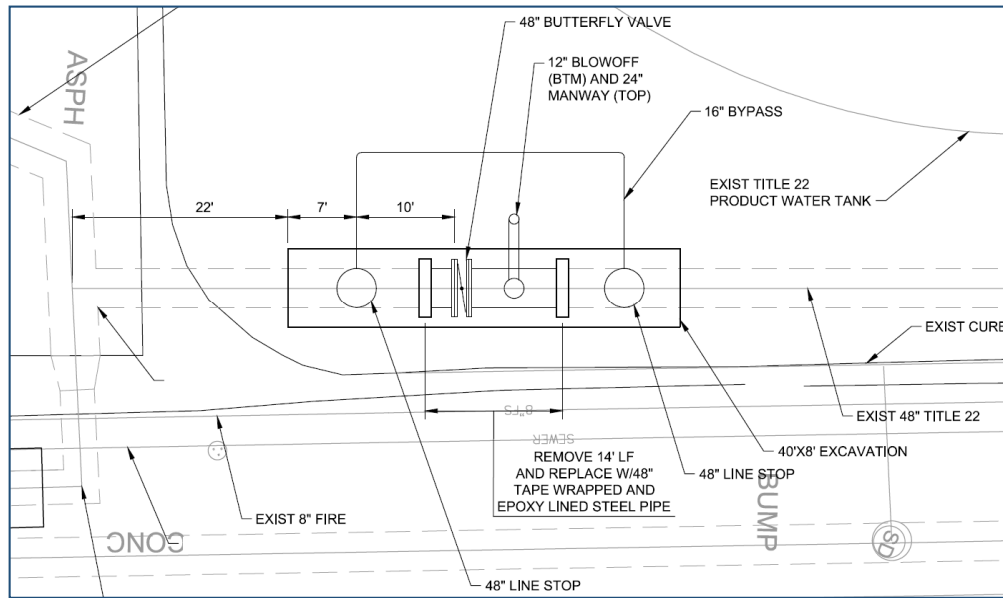
- Equipment Failure: The valve is currently inoperable.
 - Reliability: Without this valve, a shutdown of the north leg would require a shutdown of the south leg.
- A shutdown of the south leg would cost West Basin approximately \$1,400,000 per month in unrealized recycled water sales, plus the cost of supplemental potable water to serve customers where a contractual obligation exists.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
-	-

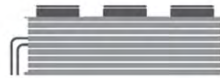


Feasibility Study for Valve Replacement

End Use



Irrigation
Title 22



Refinery
Cooling Towers

Status

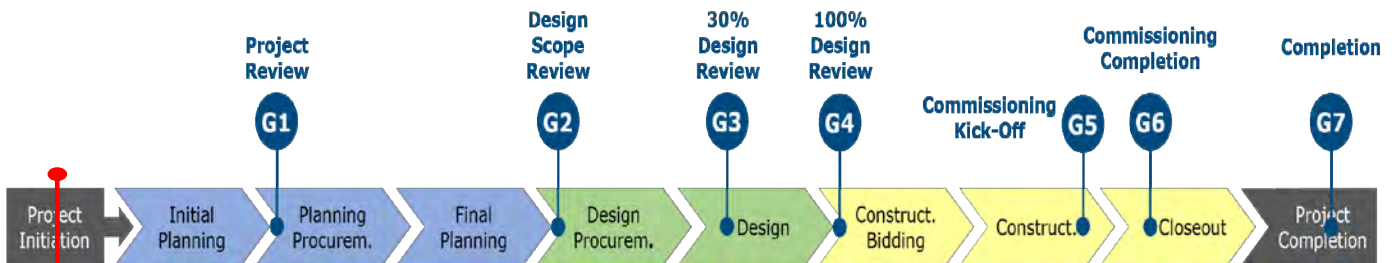
- Completed: Feasibility Study
- Current: Planning
- Upcoming: Design and Construction

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



March 2023



FY23-24 \$99,000	5-yr CIP \$99,000	Total Cost (past, present, future) \$100,000
-----------------------------------	------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$99,110	\$0	\$0	\$0	\$0	\$0	\$99,110

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	-	-	-
\$0.1M	-	-	-

Total External Funding **\$0.0M**

Project Description

The Backwash Waste Clarifiers (clarifiers) treats wastewater flows from the Title 22 backwash, microfiltration backwash, gravity belt thickeners supernatant, and dewatering press liquids. The clarifiers were installed during Phase II (#1) and Phase III (#2 and #3) expansions of ECLWRF and have undergone multiple repairs and rehabilitation. This assessment will include a condition assessment of the clarifiers, capacity analysis compared to today's and potential future demands, and an evaluation of technology alternatives to the clarifiers.

Purpose / Benefit

The clarifiers have undergone multiple repairs and rehabilitation. Performing an assessment will look to meet the District's current demands while recommending any future improvements as it relates to regional recycled water goals.

Drivers

- Equipment Age: Many system components are reaching end of useful life.
- Critical Process: The clarifiers are an important step in the production of all recycled water types at ECLWRF.

The clarifiers treat waste from several processes for the production of Title 22 recycled water, boiler feed, and barrier water. Based on today's demands, the clarifiers are undersized due to the change in secondary effluent water quality coming from Hyperion Wastewater Treatment Plant as compared to the original design. The change in water quality has decreased the clarifiers' ability to treat backwash and dewatering filtrates properly, which results in higher recirculation back to the head of the disinfected tertiary system and leads to higher chemical costs. The implementation of any recommended replacements or rehabilitation from the assessment will allow the District to continue the production of recycled water. Interruptions due to equipment failure can result in loss in the production of recycled water and therefore loss in revenue due to a decline in recycled water sales.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
-	-

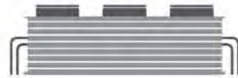


Backwash Waste Clarifiers at ECLWRF

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier



Status

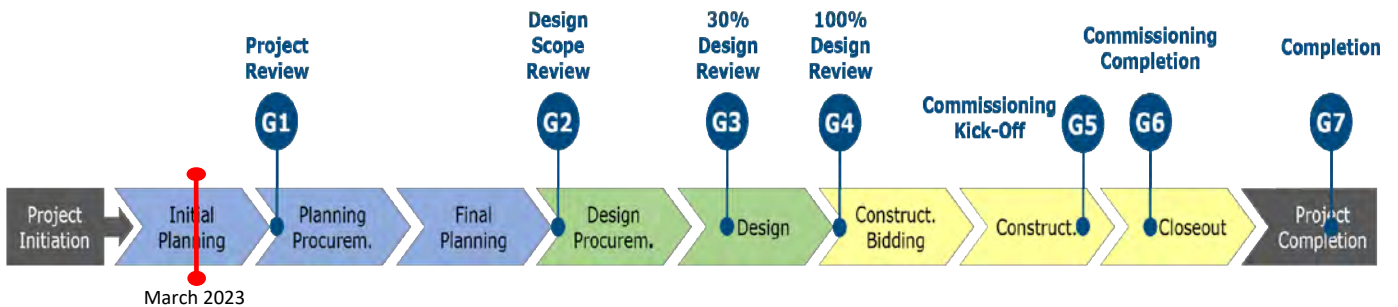
- Completed: None.
- Current: Planning.
- Upcoming: RFP for condition assessment.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2023 Completion

Gate Review



March 2023

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D-3B Rehabilitation & Replacement Projects - Chevron Nitrified Treatment Plant

FY23-24 Budget Book

Capital Improvement Program





FY23-24 \$0	5-yr CIP \$4,405,000	Total Cost (past, present, future) \$4,800,000
------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$391,129	\$0	\$2,941,898	\$1,463,143	\$0	\$0	\$0	\$4,796,171

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	Refinery*	-	-
-	\$4.8M	-	-

* Pending Refinery Funding Agreement

Total External Funding **\$4.8M**

Project Description

Rehabilitation of 650,000-gallon storage tank to extend its useful life at West Basin's Chevron Nitrification Satellite Plant. Per 2021 dive inspection, the tank is in fair condition but there is heavy corrosion on the roof interior and exterior. Rehabilitation will include sandblast, recoating, roof plates and rafters replacement, valve and piping replacements, and updating the level transmitter.

Purpose / Benefit

Rehabilitating the storage infrastructure will ensure that the refinery will continue to receive nitrified water and not experience loss of service.

Drivers

- **Equipment Age:** Condition assessment indicated that the tank is reaching the end of its useful life
- **Equipment Failure:** Delaying rehabilitation will increase risk of catastrophic failure that requires tank replacement
- **Critical Process:** There is no redundance for this system; additional failures could disrupt nitrified water delivery

The risk of a tank failure increases as the tank ages. If the project does not occur, the rehabilitation will occur on a future date where all construction costs are subject to increase or a new tank replacement will be required because of tank failure. Assume 2 months for an emergency bypass to be installed (100% potable water (PW)), 10 months for new design, construction solicitation, and material procurement, and 8 months of tank construction (50% temporary bypass is operating). A tank failure will have a total revenue loss of \$6,004,000, PW Costs to makeup for RW offline of \$10,266,000, and an additional cost of \$5,878,000 to design, construct, and inspect a new tank. Compared to the project's estimated total revenue loss of \$1,634,000 and PW costs of \$2,799,914. This project is currently on hold until a refinery funding agreement is secured.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

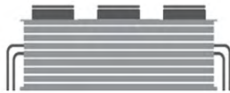
Last Budget Approval

<i>Date</i>	<i>Budget</i>
6/27/2022	\$ 10,117



Roof of 650,000-gal steel tank

End Use



Refinery

Cooling Towers

Status

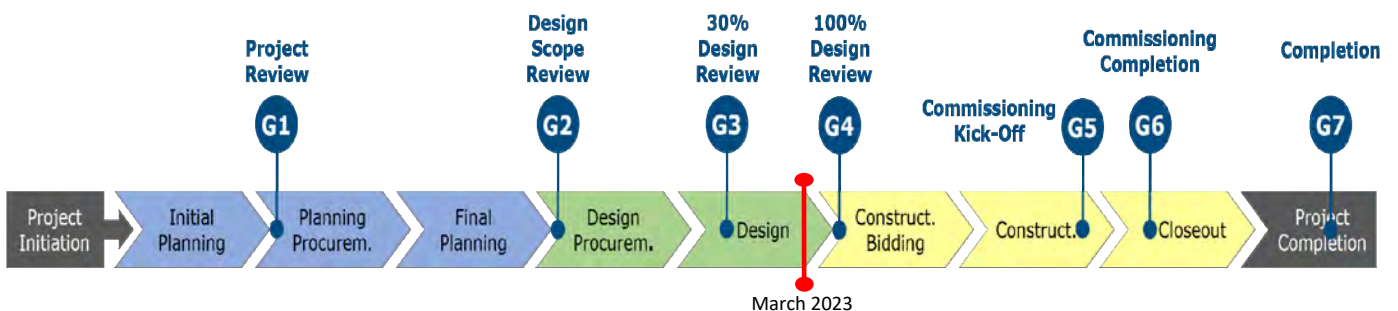
- Completed: Preliminary Design Report, 100% design
- Current: Request for Bid solicitation, Refinery schedule coordination
- Upcoming: Construction

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2026 Completion

Gate Review





FY23-24 \$164,000	5-yr CIP \$2,240,000	Total Cost (past, present, future) \$2,270,000
------------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$33,646	\$163,932	\$207,569	\$1,868,579	\$93	\$0	\$0	\$2,273,819

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$2.3M	-	-	-

Total External Funding **\$0.0M**

Project Description

This project will replace the bulk chemical storage tanks and ancillary equipment at Chevron Nitrification Treatment Plant (CNTP). Safety and compliance improvements will also be implemented. An emergency sodium hypochlorite (NaOCl) tank and anchoring replacement emergency project will be implemented first.

Purpose / Benefit

Rehabilitating the water delivery infrastructure will ensure that the end users of the nitrified water will not experience loss of service. This project will address regulatory requirements, best management practices for chemical storage and convenience, operator safety, and environmental safety.

Drivers

- **Equipment Failure:** Two temporary tanks are being used for a failed 8,000-gal. NaOCl tank that occurred in 2017 and a failed temporary NaOCl tank in 2022.
- **Equipment Age:** These tanks were installed in 1994 and are reaching the end of their useful lives.
- **Critical Process:** Chemicals are critical to treatment processes; additional tank failures could disrupt recycled water delivery to customers.

The chemicals at CNTP are critical to the nitrification process at CNTP. The monthly Chevron nitrified revenue is approximately \$545,838. The temporary 6,900-gallon sodium hypochlorite tanks cost \$2,839 per month to rent. If the project does not occur, the monthly revenue is reduced to \$543,000 until a new tank is built. A tank failure for any of the other 4 chemical tanks onsite would result in a minimum revenue loss of \$9,097 per tank, in order to connect a temporary tank to the system. A failure could result in a revenue loss up to \$100,070 for the system being offline if a temporary tank is not readily available and the leak is severe enough that the system cannot operate. Any chemical leak poses a safety and environmental risk as there is no secondary containment in the piping so it would leak onto the ground.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
5/24/2021	\$ 607,000



(2) Temporary 6,900-gal Rain For Rent sodium hypochlorite tanks (grey) and existing 7,985-gal sodium hypochlorite tank (white) at CNTP

End Use

Refinery
Cooling Towers

Refinery
Boiler Feed

Irrigation
Title 22

Status

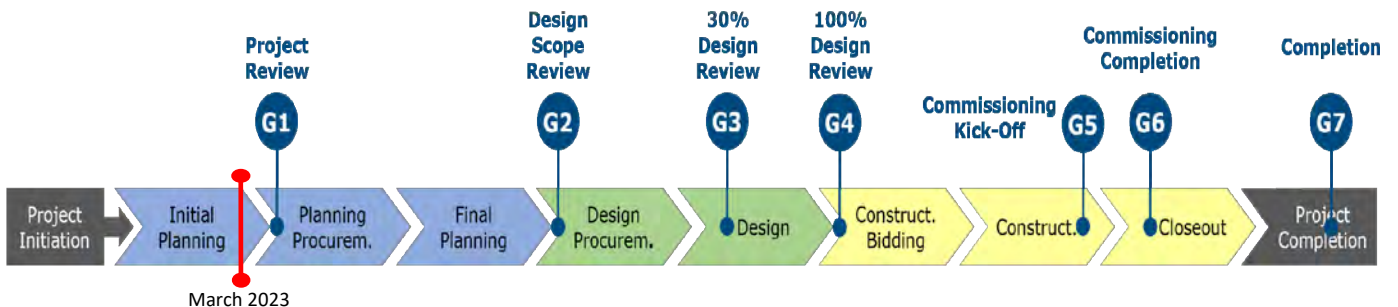
- Completed: Scoping, Sodium hypochlorite temporary tanks installation
- Current: Request for Proposal for Emergency NaOCl tank replacement
- Upcoming: Design and Construction of NaOCl tank replacement, condition assessment of remaining tanks

Anticipated 5-Yr Schedule

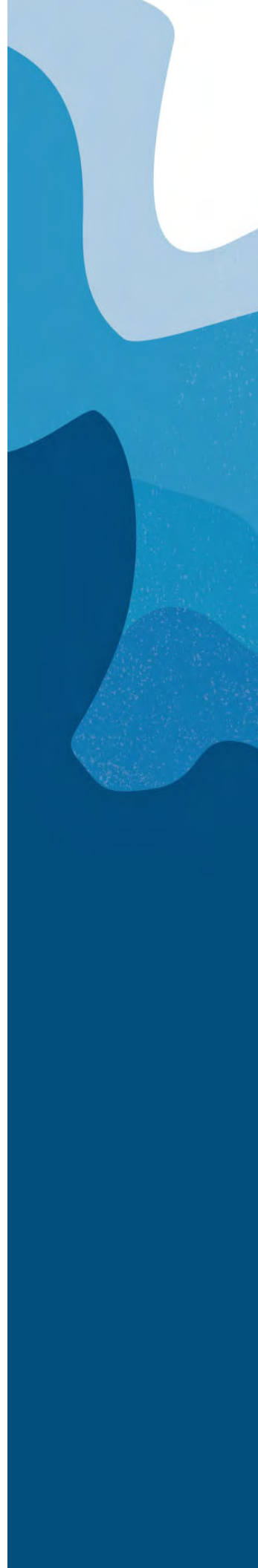
	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2026 Completion

Gate Review



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D-3C Rehabilitation & Replacement Projects -
Juanita Millender-
McDonald Carson
Regional Water
Recycling Plant

FY23-24 Budget Book

Capital Improvement Program





FY23-24 \$163,000	5-yr CIP \$3,196,000	Total Cost (past, present, future) \$3,210,000
------------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$10,687	\$163,319	\$236,656	\$2,795,565	\$72	\$0	\$0	\$3,206,300

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$3.2M	-	-	-

Total External Funding **\$0.0M**

Project Description

The project will update aging chemical storage structures and appurtenances at JMMCRWRP to ensure safety and reliable water production. This will be accomplished by replacing or rehabilitating tanks, pumps, and controls as necessary.

Purpose / Benefit

Rehabilitating the water delivery supporting infrastructure will ensure that the end users of the product water will not experience loss of service. This project will address regulatory requirements, best management practices for chemical storage and convenience, operator safety, and environmental safety.

Drivers

- **Equipment Failure:** Multiple tanks have started failing.
- **Equipment Age:** Many tanks have reached or are reaching the end of their useful life.
- **Critical Process:** Chemicals are critical to treatments processes; additional tanks failures could disrupt water delivery to customers.

The bulk chemical tanks at JMMCRWRP are critical components to the pretreatment and nitrification process for boiler-feed and cooling tower applications. In 2022, a temporary SHC tank was installed due to a failer resulting in additional rental fees (approximately \$2,800/month) and delivery costs. In addition, temporary tanks have no anchors adding a safety issue. The maximum downtime of a tank is between 3-5 hours depending on the chemical. If multiple tanks at the facility start failing before replacement, water production will be affected. Recovery time for a failure tank varies depending on the chemical from 1-4 days. Refinery applications could switch to potable with coordination of two weeks' notice and a revenue loss of \$70,000 (approximately \$17,000/day plus rental fees).

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

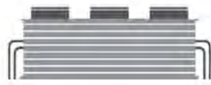
Last Budget Approval

Date	Budget
5/24/2021	\$ 607,000



Right photo: SHC tank out of service. Left Photo: Temporary SHC tank.

End Use



Refinery
Cooling Towers



Refinery
Boiler Feed



Status

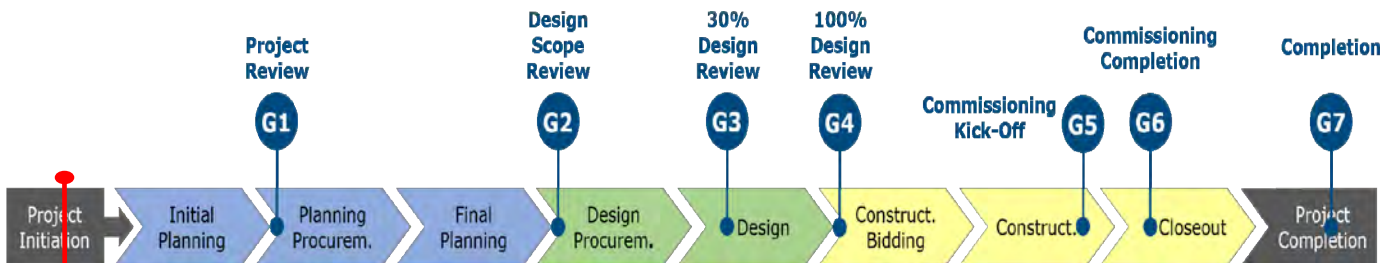
- Completed: None
- Current: Development of RFP
- Upcoming: Planning, design and construction

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2026 Completion

Gate Review



March 2023

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D-3D Rehabilitation & Replacement Projects - Torrance Refinery Water Recycling Plant

FY23-24 Budget Book

Capital Improvement Program





FY23-24 \$0	5-yr CIP \$1,015,000	Total Cost (past, present, future) \$1,590,000
-----------------------	--------------------------------	----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$578,374	\$0	\$1,015,188	\$0	\$0	\$0	\$0	\$1,593,562

* Total Estimated Costs through 6/30/2023, including design services for other facilities that were ultimately excluded from the current Project.

Funding Source(s)

-	Refinery*	-	-
-	\$1.6M	-	-

* Pending Refinery Funding Agreement

Total External Funding **\$1.6M**

Project Description

This project focuses on the highest priority chemical containment and feed systems at the Torrance Refinery Water Recycling Plant. The work includes the replacement of the sulfuric acid's day storage tank, replacement of feed and carrier piping, pipe supports, concrete chemical containment pads and walls, and safety improvements.

Purpose / Benefit

This project will address regulatory requirements, best management practices for chemical storage and convenience, operator and other personnel safety, and environmental safety.

Drivers

- Equipment Failure: Chemical carrier pipes leak and the chemical containment concrete is deteriorated.
- Equipment Age: The bulk storage tank is beyond its useful life.
- Critical Process: Temporary delivery system is in place but needs additional deliveries due to capacity.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

Currently, sulfuric acid is delivered to the day tank for injection into the boiler feed process. The day tank is smaller than the bulk storage tank which results in more frequent deliveries of sulfuric acid at a higher cost. Additionally, if the day tank fails then there is no mitigation method to inject sulfuric acid into the boiler feed process which would result in the refinery using potable water supplement. This Project is currently on hold until a refinery funding agreement is secured.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

<u>Date</u>	<u>Budget</u>
5/24/2021	\$ 2,418,780



Left Photo: Sulfuric acid bulk storage tank. Right Photo: Sulfuric acid carrier pipe.

End Use



Refinery
Boiler Feed



Status

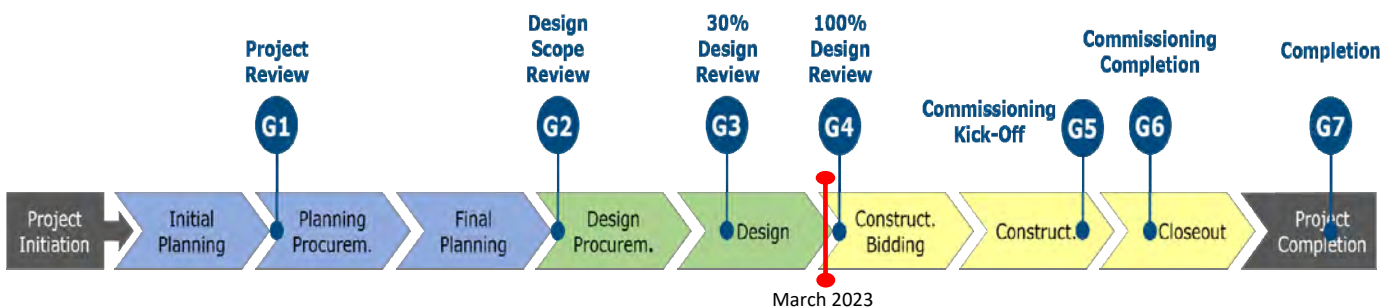
- Completed: Design.
- Current: Agreement negotiations.
- Upcoming: Construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



March 2023



FY23-24 \$0	5-yr CIP \$4,260,000	Total Cost (past, present, future) \$4,510,000
------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$245,732	\$0	\$1,364,416	\$2,895,424	\$0	\$0	\$0	\$4,505,571

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	Refinery*	-	-
-	\$4.5M	-	-

* Pending Refinery Funding Agreement

Total External Funding **\$4.5M**

Project Description

This project will rehabilitate a 700,000-gallon nitrified product water storage tank at West Basin's Torrance Refinery Water Recycling Plant. A 2021 inspection of the tank revealed that the tank is in good condition with heavy corrosion of the roof ceiling. The work will include replacement of the tank roof rafters, roof plates, access hatches, and roof vents, recoating of the interior and exterior of the tank.

Purpose / Benefit

Rehabilitation of the tank is the most cost effective approach to management of this asset at this time. This project will extend the useful life of the asset and prevent a more costly repair or replacement of the tank at a future date.

Drivers

- **Equipment Failure:** Delaying rehabilitation will increase risk of catastrophic failure that requires tank replacement and imposed cost implications. Tank failure could result in financial, social, and environmental impact.
- **Equipment Age:** Condition assessment indicated that the tank is reaching the end of its useful life.
- **Critical Process:** There is no redundancy; additional failures could disrupt nitrified water delivery.

The risk of a tank failure increases as the tank ages. If a tank failure occurs, there are financial, social, and environmental impacts including impact to sanitary conditions, risk of spill containment and stormwater discharge fines, use of potable water during a drought, poor public perception, risk of equipment damage, tank replacement design and construction costs, and a Safety Health Environmental risk cost of \$600,000 per year. A tank failure would result in a revenue loss of \$3,451,866, \$11,280,790 in potable water costs to makeup for RW offline for the refinery, and \$4,661,270 to design, construct and inspect a new tank. Compared to the project's estimated revenue loss of \$941,418 and \$3,076,579 potable water costs. This project is currently on hold until a refinery funding agreement is secured.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- Goal 2: Sound Financial and Resources Management*
- Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

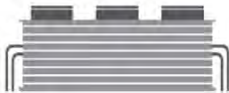
Last Budget Approval

<i>Date</i>	<i>Budget</i>
6/27/2022	\$ 28,923



700,000-gal steel nitrified product water storage tank at TRWRP

End Use



Refinery

Cooling Towers

Status

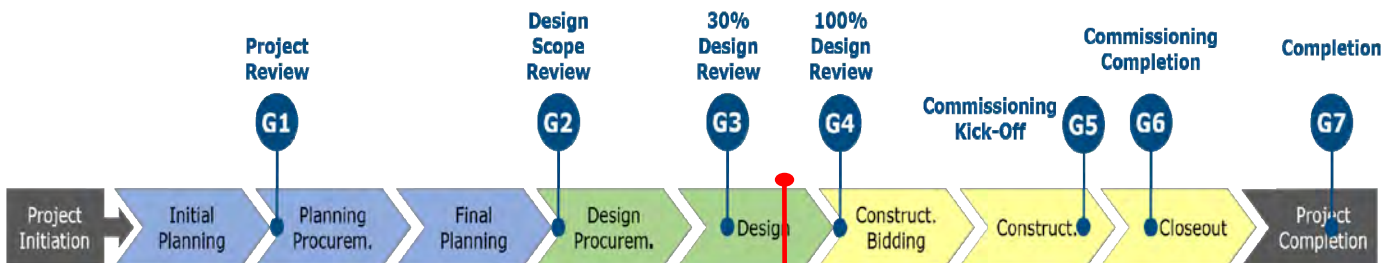
- Completed: Preliminary Design Report, 60% Design
- Current: Refinery design coordination, 90% design
- Upcoming: 100% design, Request for bid solicitation

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2026 Completion

Gate Review



March 2023



FY23-24 \$0	5-yr CIP \$667,000	Total Cost (past, present, future) \$705,000
------------------------------	-------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$121,278	\$0	\$666,695	\$0	\$0	\$0	\$0	\$787,973

* Total Estimated Costs through 6/30/2023

Funding Source(s)

--	Refinery*	--	--
--	\$0.7M	--	--

* Pending Refinery Funding Agreement

Total External Funding **\$0.8M**

Project Description

This project will construct a new retaining wall to prevent the potential undermining of (a) pipe supports and (b) a 700,000 gallon nitrified product water storage tank, and replace a failing backflow preventer. This project is currently on hold until a refinery funding agreement is secured.

Purpose / Benefit

This project will maintain recycled water supply and backup potable water to the satellite plant. The new retaining wall will stabilize the soil on the site and prevent the undermining of pipe supports and a 700,000 gallon nitrified product water storage tank. The backflow preventer is a regulatory compliance requirement to prevent contamination of the public water supply system.

Drivers

- **Equipment Failure:** The existing backflow preventer did not pass annual testing in 2021; a partial repair was completed to maintain compliance.
- **Critical Process:** The influent recycled water pipe is critical to site operation and product water delivery to the customer; the supports for this pipe need to be protected from being undermined.

Various failure scenarios can be mitigated by implementing this project. The failure scenarios include:

- Loss of potable water service to the facility
- Loss of recycled water service to the facility
- Contamination of an upstream potable water system
- Damage to refinery pipelines adjacent to the treatment plant.

Costs incurred for each failure scenario can potentially range from \$100,000 to multiple \$1,000,000s.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- Goal 5: Environmental Stewardship

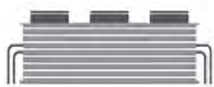
Last Budget Approval

Date	Budget
-	-



Existing Backflow Preventer

End Use



Refinery
Cooling Towers



Refinery
Boiler Feed



Status

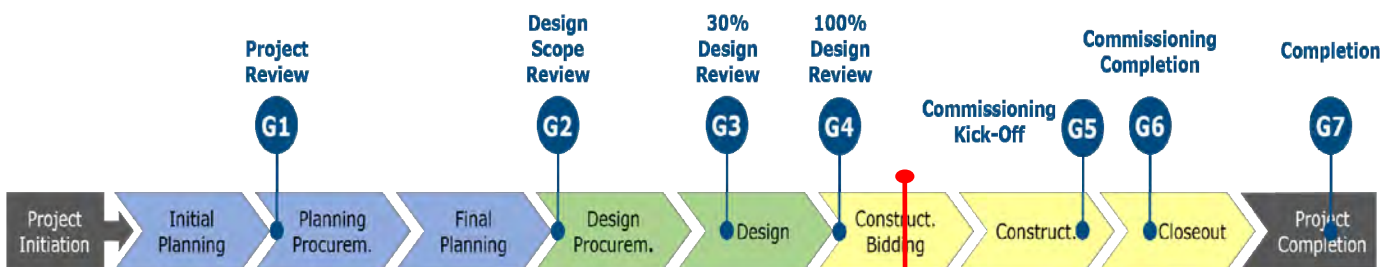
- Completed: Design.
- Current: Funding negotiation.
- Upcoming: Construction and Installation.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



March 2023



FY23-24 \$0	5-yr CIP \$3,505,000	Total Cost (past, present, future) \$3,510,000
-----------------------	--------------------------------	----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$6,140	\$0	\$270,815	\$2,847,083	\$386,901	\$0	\$0	\$3,510,940

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	Refinery*	-	-
-	\$3.5M	-	-

* Pending Refinery Funding Agreement

Total External Funding **\$3.5M**

Project Description

This project will replace the bulk chemical storage tanks and ancillary equipment at Torrance Recycled Water Treatment Plant (TRWRP). Safety and compliance improvements will also be implemented.

Purpose / Benefit

Rehabilitating the water delivery infrastructure will ensure that the end users of the nitrified water will not experience loss of service. This project will address regulatory requirements, best management practices for chemical storage and convenience, operator safety, and environmental safety.

Drivers

- **Equipment Failure:** Leaks in equipment could lead to disruption of the treatment plant.
- **Equipment Age:** Tanks are reaching the end of their useful lives.
- **Critical Process:** Chemicals are critical to treatments processes; additional tank failures could disrupt recycled water delivery to customers.

The bulk chemical tanks at TRWRP are critical components of the nitrification process for irrigation, boiler-feed, and cooling tower applications. If multiple tanks at the facility start failing before replacement, water production will be affected. The recovery time of a tank varies from 1-4 days depending on the chemical and water demands. Additional rental fees of approximately (\$2800) will be acquired to install temporary tanks. Temporary tanks are not anchored causing safety issues too. Refinery applications could switch to potable which represents a loss cost in recycled water of up to \$42,000 (\$10,500 per each day that the refinery uses potable water). This project is currently on hold until a refinery funding agreement is secured.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

<u>Date</u>	<u>Budget</u>
5/24/2021	\$ 607,000

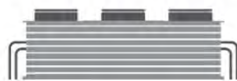


Bulk Chemical Storage Tanks at TRWRP

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Status

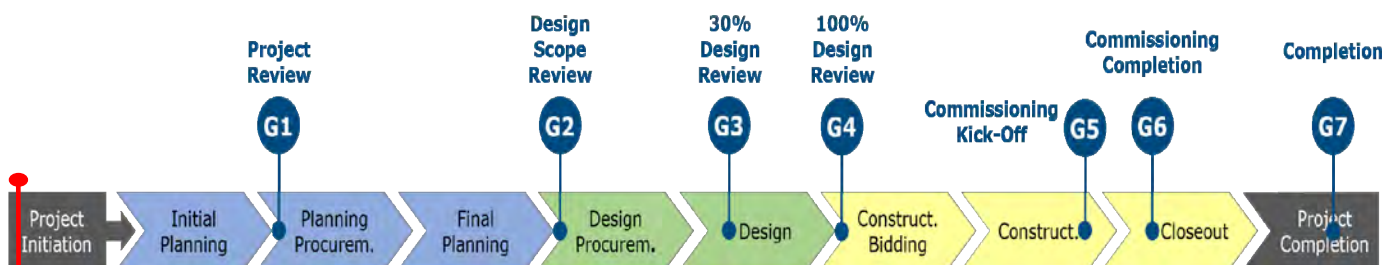
- Completed: None
- Current: None
- Upcoming: Design and construction

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2026 Completion

Gate Review



March 2023



FY23-24 \$0	5-yr CIP \$844,000	Total Cost (past, present, future) \$880,000
------------------------------	-------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$32,634	\$0	\$564,037	\$279,937	\$0	\$0	\$0	\$876,609

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$0.9M	-	-	-

Total External Funding **\$0.0M**

Project Description

The Microfiltration system was built in 1999 and consists of six units designed for a capacity of 3.73 MGD (518 gpm/unit). Deterioration over the years has reduced capacity to produce water. Replacement of the equipment and supportive ancillary is necessary. This project will start with a feasibility study phase to identify the needs to replace the system, increase water production capacity, and needs to move and install West Basin's potable ultrafiltration system (PUF).

Purpose / Benefit

The purpose of the feasibility phase of the project is to identify the needs for the replacement, assess the requirements of the equipment and design, identify project implementation procedures, evaluate potential increase in water production capacity, and evaluate mobilization of West Basin's PUF system to this site. Currently, capacity can only achieve approximately 50%. The PUF System could help overcome water production shortages and new equipment could produce the desired capacity.

Drivers

- Water Quality: Due to leaks in the existing system, pressure integrity testing cannot be performed
- Capacity: A new assessment will evaluate the possibility to restore and potential increase MF system treatment capacity.
- Reliability: A new system will reduce system maintenance and improve system reliability.

The existing system has reached its useful life and needs to be replaced. There is no redundancy in the system. There is decline in water production due to aging equipment deficiencies which show leaks in system, insufficient cleaning processes due to integrity loss in system. There are difficulties finding equipment and thus a need to upgrade pumps, VFDs, autostrainers, tanks and ancillary equipment. The monthly losses of revenues for the boiler feed are approximately \$300K/month and for recycled water the losses range between \$150K and \$300K pending in continuity. The use of potable water results between \$200K and \$400K (pending on continuity) as additional expense to the refinery. Construction of the PUF is estimated at \$2.22M.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
6/27/2022	\$ 89,718



Aerial photo of TRWRP

End Use



Refinery
Boiler Feed

Status

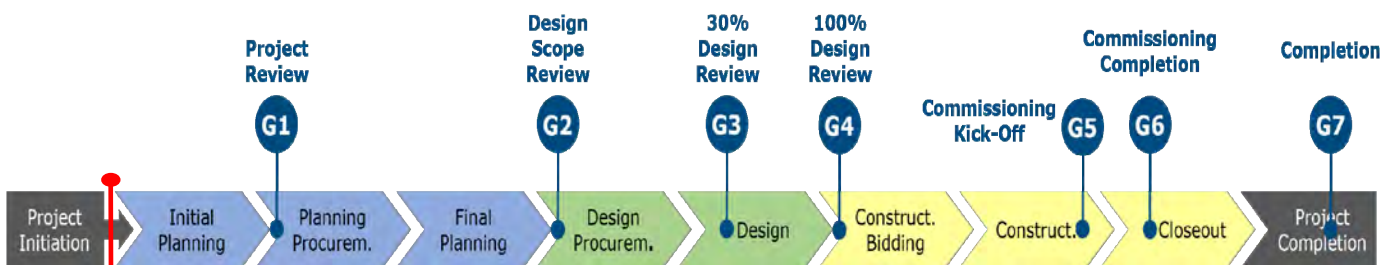
- Completed: Design plans and technical specifications for PUF relocation.
- Current: Agreement negotiations.
- Upcoming: Execution of agreement.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Feasibility Study					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



March 2023



FY23-24 \$0	5-yr CIP \$1,006,000	Total Cost (past, present, future) \$1,010,000
-----------------------	--------------------------------	----------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$0	\$279,275	\$727,009	\$0	\$0	\$0	\$1,006,284

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	Refinery*	-	-
-	\$1.0M	-	-

* Pending Refinery Agreement

Total External Funding **\$1.0M**

Project Description

Conduct a hydraulic analysis for underground waste line to identify the factors limiting pump discharge from the nitrification wash water tank at the West Basin's Torrance Refinery Water Recycling Plant (TRWRP). The decrease of the pump discharge capacity are due to the current operational changes from the original plant operating conditions.

Purpose / Benefit

Increased capacity of the discharge pump at the nitrification wash water tank would mitigate the potential for a degradation in nitrified product water quality from the nitrification process. A study will identify the factors limiting pump discharge from the wash water tank and will allow to make modifications to the system.

Drivers

- **Equipment Failure:** Delaying assessment will increase risk of failure that requires system adaption to current operational conditions.
- **Critical Process:** There is currently limited redundancy. The Priority Ranking of this project is critical.
- **Operational Constraint:** Current conditions limit operations to an specific reduced capacity that is reflected on water production. This constraint also reduces backwash frequency due to the limited capacity of water that could be discharged impacting cleaning operations at the RO system.

Hydraulic constraints in the pipeline at the discharge system reduces water production capacity and has a potential risk of overflowing the basin causing environmental and safety risk estimated to cost approximately \$3M per year. Given this risk, in 2017 Veolia installed a temporary bypass to discharge flow in the Crenshaw open channel at Torrance. This temporary solution remains in place to date and has raised concerns that the refinery relate it to their NPDES permit. The financial penalty for quarterly surcharges can be estimated at approximately \$10,000. Alternatively, getting a potential sewer connection to release the system is estimated to cost approximately \$3M. This Project is currently on hold until a refinery funding agreement is secured.

Strategic Goals

Goal 1: Water Supply Reliability

✓ *Goal 2: Sound Financial and Resources Management*

Goal 3: Water Quality

✓ *Goal 4: Customer Service*

✓ *Goal 5: Environmental Stewardship*

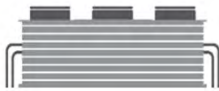
Last Budget Approval

Date	Budget
5/24/2021	\$ 66,106



Waste Discharge Basin at TRWRP

End Use



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

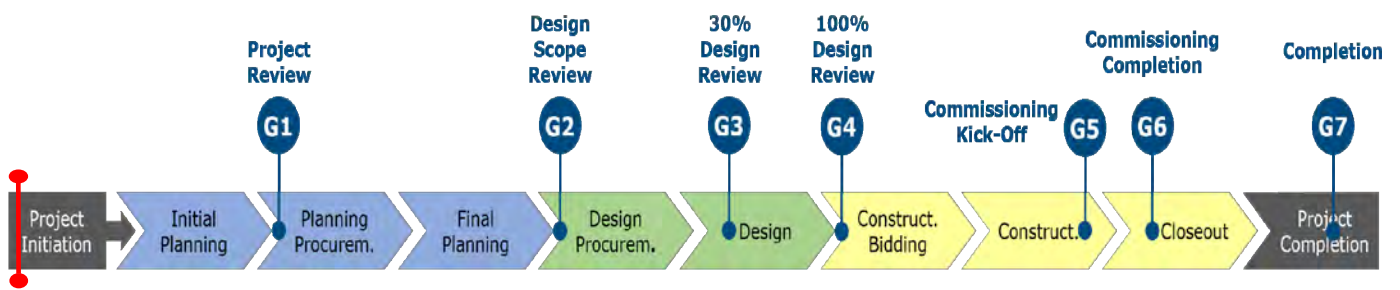
- Completed: None
- Current: Pending Refinery Agreement
- Upcoming: Planning, request for proposal preparation and design.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



March 2023



FY23-24 \$0	5-yr CIP \$706,000	Total Cost (past, present, future) \$710,000
-----------------------	------------------------------	--------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$0	\$671,564	\$34,539	\$0	\$0	\$0	\$706,103

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	Refinery*	-	-
-	\$0.7M	-	-

* Pending Refinery Funding Agreement

Total External Funding **\$0.7M**

Project Description

Replacement of a 14" Fiberglass (FRP) pipe with an approximate length of 70 feet that goes upstream of the cartridge filters at West Basin's Torrance Refinery Water Recycling Plant Satellite facility (TRWRP). The pipe section which is 25 years old has a significant decrease of thickness (~6%) indicating that the pipe integrity has deteriorated and may fail in the near future increasing the need for replacement.

Purpose / Benefit

Replacing the FRP pipe will ensure that Torrance Refinery will not experience loss of service or jeopardize refinery operations. Installing a new pipeline that will reduce risk of catastrophic failure and will enhance the useful life of the system.

Drivers

- **Equipment Failure:** Delaying replacement will increase risk of catastrophic failure causing potential flooding in the facility and an immediate shutdown of the TRWRP Boiler Feed production.
- **Equipment Age:** Condition assessment indicated that the FRP pipe has reduced thickness and it is reaching end of useful life.
- **Critical Process:** Pipe failure would disrupt TRWRP Boiler Feed production and jeopardize refinery operations.

Big pieces of pipe have been found during inspections at the cartridge filters. Failure of this pipe will cause a leak and water MF Filtrate water will flow towards the refinery's North Cooling Tower causing environmental and safety risks of about \$300,000/year. The Boiler Feed Production will be halted due to inability to run ROs. If the pipeline fails, it would take about 2-4 days for flow to be restored causing a water production loss of approximately 2.2 MGD. The Torrance refinery has the ability to switch to potable water which represents a loss in sales of recycled water of approximately \$10,500 per each day that the refinery uses potable water. This Project is currently on hold until a refinery funding agreement is secured.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
-	-



TRWRP Fiberglass Pipeline upstream of the cartridge filters

End Use



Refinery
Boiler Feed

Status

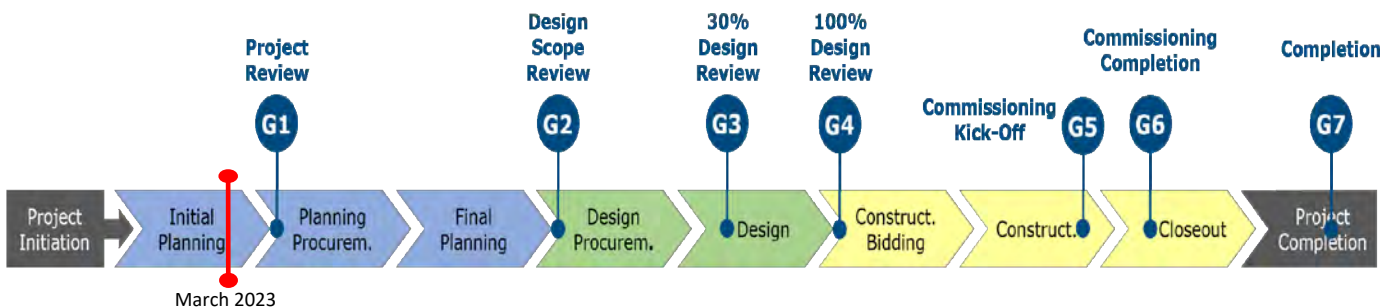
- Completed: Risk assessment and project implementation request.
- Current: Project Budgeting and Scoping. Pending Refinery agreement.
- Upcoming: Design and construction.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review





FY23-24 \$0	5-yr CIP \$174,000	Total Cost (past, present, future) \$230,000
-----------------------	------------------------------	--------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$53,724	\$0	\$173,841	\$0	\$0	\$0	\$0	\$227,565

* Total Estimated Costs through 6/30/2023

Funding Source(s)

-	Refinery*	-	-
-	\$0.2M	-	-

* Pending Refinery Funding Agreement

Total External Funding **\$0.2M**

Project Description

This project will replace the motor control center #2 (93MCC2) at Torrance Refinery Water Recycling Plant (TRWRP).

Purpose / Benefit

Rehabilitating the water delivery infrastructure will ensure that the end users of nitrified water will not experience loss of service.

Drivers

- **Equipment Failure:** A neighboring and aging motor control center has failed due to component failure in 2021, requiring a critical replacement. As such, similar MCC2 will be replaced preemptively.
- **Equipment Age:** This cabinet was installed in 1996 and is reaching end of its useful life.
- **Critical Process:** Motor control cabinets are critical to treatments processes; additional failures will disrupt recycled water delivery to customers.

TRWRP utilizes two identical motor control centers (MCCs) to pump water to the Torrance refinery. In 2021, one of these MCCs catastrophically failed and caught on fire. In total, it cost over \$180,000 to rectify and caused a 50% reduction in water delivery to the refinery for over three months. The fire also represented a significant health and safety risk that was very fortunate to not cause further damage.

A similar failure of the second MCC, which is identical in both age and model, is estimated to result in emergency response costs of approximately \$210,500. It is therefore deemed prudent to pre-emptively replace the second MCC. This project is currently on hold until a refinery funding agreement is secured.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

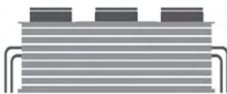
Last Budget Approval

Date	Budget
-	\$ -



Motor control center at TRWRP.

End Use



Refinery

Cooling Towers

Status

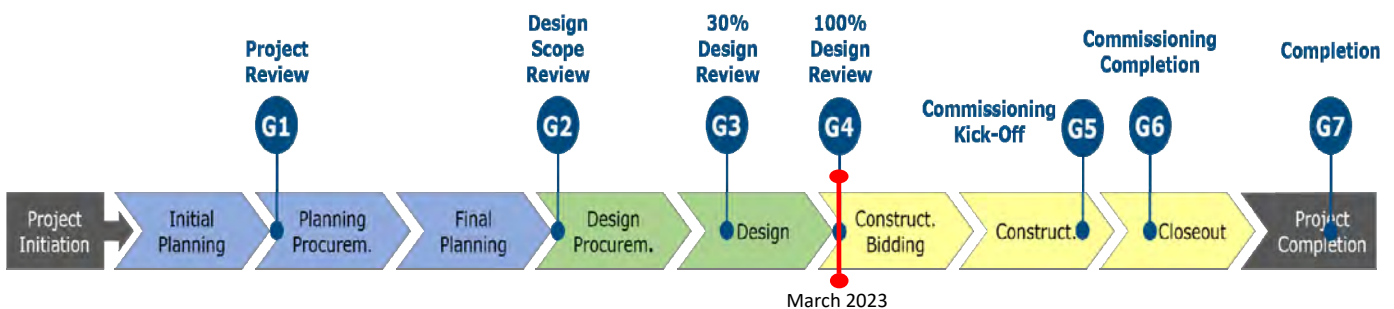
- Completed: Full design.
- Current: Construction bidding and procurement.
- Upcoming: Construction and installation.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review



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D-3E Rehabilitation &
Replacement Projects -
Capital Asset
Rehabilitation and
Replacement

FY23-24 Budget Book

Capital Improvement Program





FY23-24 \$3,710,000	5-yr CIP \$6,912,000	Total Cost (past, present, future) \$16,220,000
--------------------------------------	---------------------------------------	------------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$2,390,268	\$3,709,698	\$170,422	\$0	\$3,032,320	\$0	\$6,916,960	\$16,219,668

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	-	-	-
\$16.2M	-	-	-

Total External Funding **\$0.0M**

Project Description

This project will replace microfiltration membranes that are used in the advance water treatment process.

Purpose / Benefit

The typical useful life of a microfiltration (MF) membrane at West Basin is approximately 5 years; timely replacement of membranes is needed to maximize production and meet water quality requirements. West Basin will begin to conduct membrane pre-qualification on PVDF Microfiltration membranes to move away from sole source procurement. The original Memcor Pressurized MF system, such as the system in TRWRP, can only be fitted with the original OEM membrane.

Drivers

- **Equipment Failure:** Membrane typical useful life at West Basin is approximately 5 years.
- **Critical Process:** Without integral microfiltration membranes will risk reduction in production and water quality exceedances for compliance and contractual requirement.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- Goal 5: Environmental Stewardship

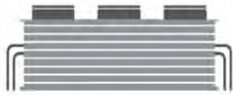
Last Budget Approval

Date	Budget
6/27/2022	\$ 402,000



Microfiltration Membrane System at ECLWRF

End Use



Refinery
Cooling Towers



Seawater Barrier



Status

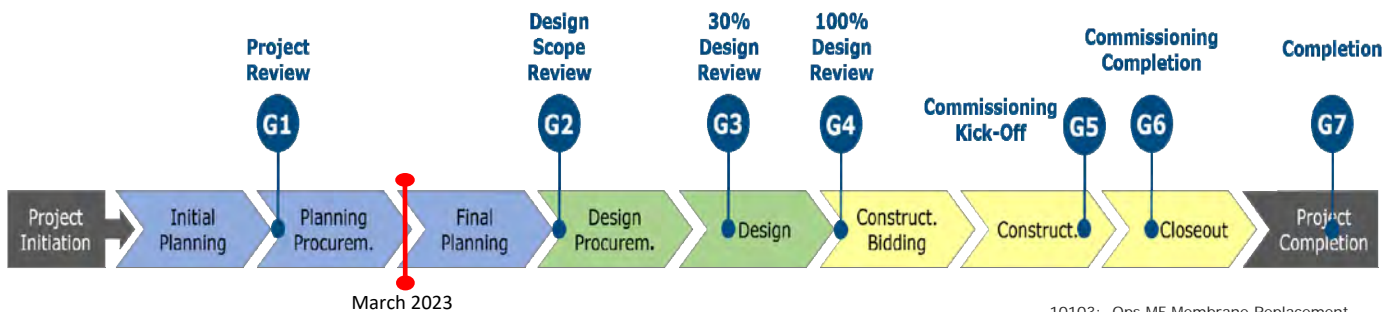
- Completed:
- Current: Planning
- Upcoming: Piloting and procurement

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2032 Completion

Gate Review





FY23-24 \$2,316,000	5-yr CIP \$4,736,000	Total Cost (past, present, future) \$8,420,000
--------------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$661,958	\$2,315,535	\$432,685	\$0	\$1,988,055	\$0	\$3,026,495	\$8,424,728

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$8.4M	-	-	-

Total External Funding **\$0.0M**

Project Description

This is regular replacements of the reverse osmosis membranes that are used as part of the advanced water treatment processes.

Purpose / Benefit

The typical useful life of a reverse osmosis (RO) membrane at West Basin is approximately 5 years; timely replacement of membranes is needed to maximize production and meet water quality requirements.

Drivers

- **Equipment Failure:** Membrane typical useful life at West Basin is approximately 5 years.
- **Critical Process:** If aging RO membranes are not replaced in a timely manner, water production may be at risk and water quality may not meet compliance and contractual requirements.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
6/26/2022	\$ 10,000



Reverse Osmosis Membranes at ECLWRF

End Use



Irrigation
 Title 22



Refinery
 Cooling Towers



Status

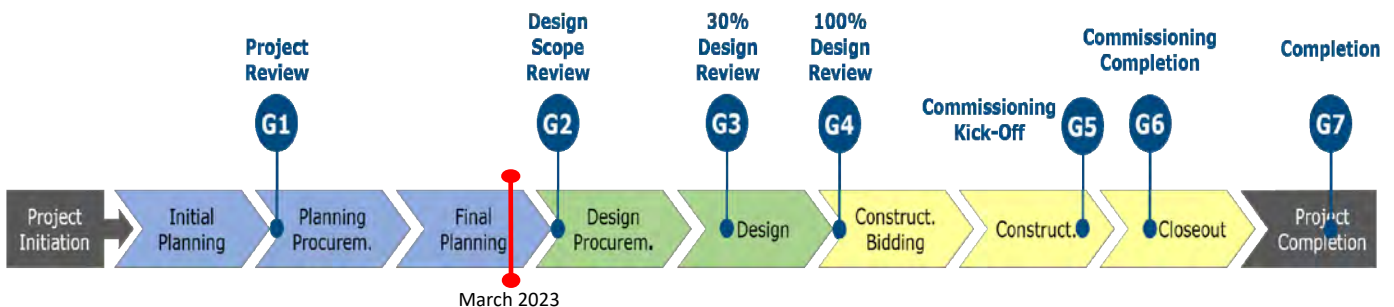
- Completed:
- Current: Planning
- Upcoming: Piloting and procurement

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2031 Completion

Gate Review



March 2023



FY23-24 \$1,174,000	5-yr CIP \$5,868,000	Total Cost (past, present, future) \$6,050,000
--------------------------------------	---------------------------------------	-----------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$184,705	\$1,173,675	\$1,173,675	\$1,173,675	\$1,173,675	\$1,173,675	\$0	\$6,053,080

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$6.1M	-	-	-

Total External Funding **\$0.0M**

Project Description

This project will repair and rehabilitate critical treatment facility components identified and prioritized during each fiscal year.

Purpose / Benefit

Repair and rehabilitation of treatment facility components will allow for reliable and compliant operation.

Drivers

- Equipment Age: Treatment facility components at end of useful life will need replacement.
- Water Quality: Treatment facility components critical to water quality will be repaired or replaced as needed.

Strategic Goals

- ✓ *Goal 1: Water Supply Reliability*
- ✓ *Goal 2: Sound Financial and Resources Management*
- ✓ *Goal 3: Water Quality*
- ✓ *Goal 4: Customer Service*
- ✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
6/26/2022	\$ 1,567,000

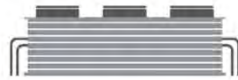


Aerial Photo of ECLWRF in El Segundo, California

End Use



Irrigation
 Title 22



Refinery
 Cooling Towers



Refinery
 Boiler Feed



Seawater
 Barrier



Status

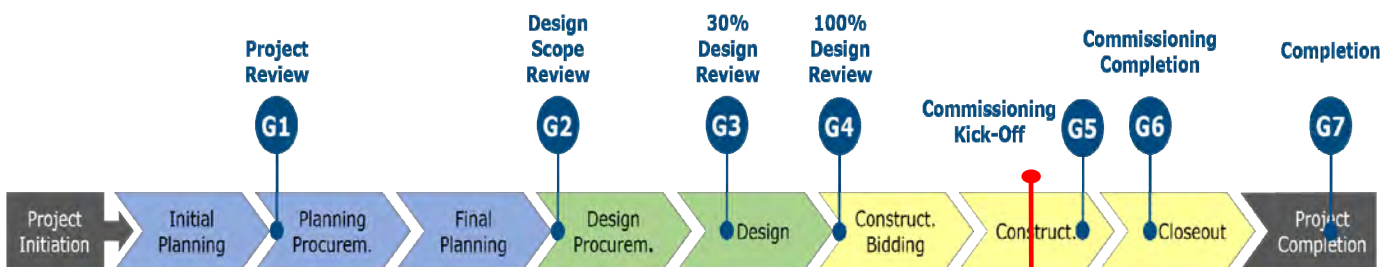
- Completed:
- Current:
- Upcoming: Implementation

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2028 Completion

Gate Review



March 2023



FY23-24 \$82,000	5-yr CIP \$375,000	Total Cost (past, present, future) \$375,000
-----------------------------------	-------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$81,685	\$146,685	\$0	\$146,685	\$0	\$0	\$375,056

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$0.4M	-	-	-

Total External Funding **\$0.0M**

Project Description

Laboratory equipment and instruments for certified analysis of recycled water will be replaced.

Purpose / Benefit

Replacement of required laboratory equipment and instruments for certified analysis of recycled water is needed to maintain compliance with permit conditions.

Drivers

- Equipment Failure: Aging laboratory equipment needs to be replaced to maintain analytical performance.

Strategic Goals

- ✓ Goal 1: Water Supply Reliability
- ✓ Goal 2: Sound Financial and Resources Management
- ✓ Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/26/2022	\$ 181,000



Laboratory at ECLWRF

End Use

Status

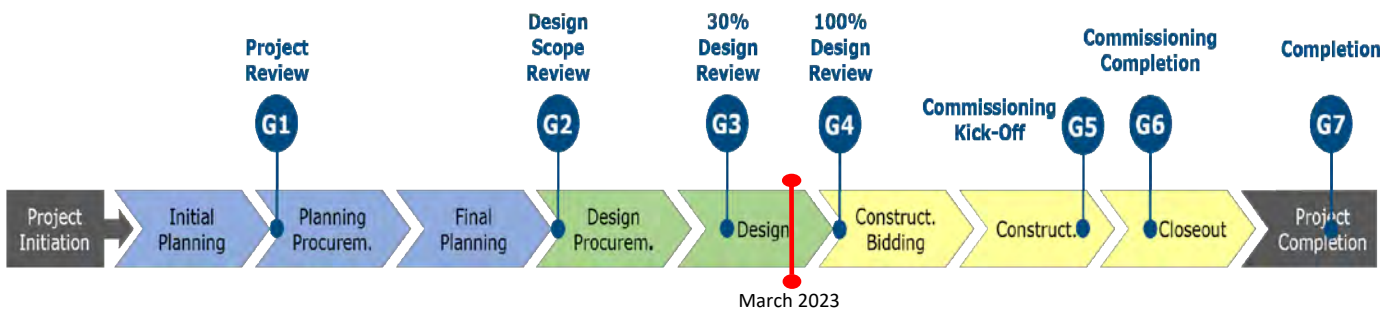
- Completed:
- Current:
- Upcoming: Equipment solicitation, purchase, installation

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

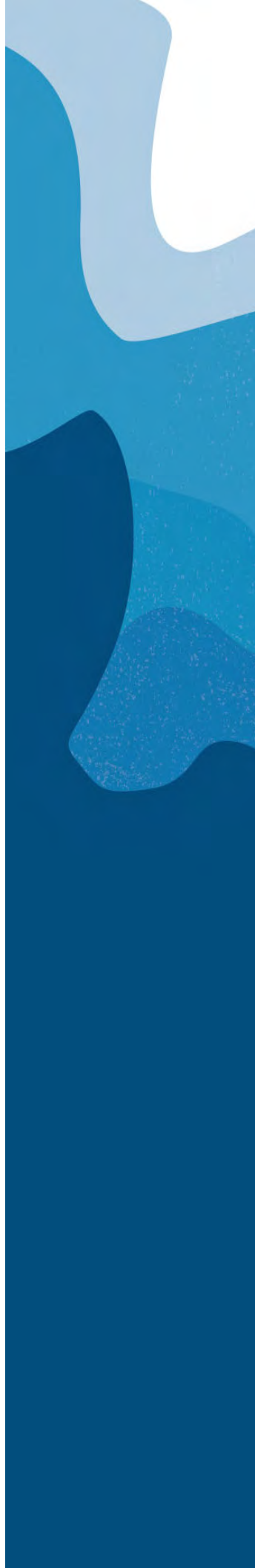
2027 Completion

Gate Review



March 2023

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D-4 Other Projects

FY23-24 Budget Book

Capital Improvement Program





FY23-24 \$212,000	5-yr CIP \$553,000	Total Cost (past, present, future) \$740,000
------------------------------------	-------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$182,128	\$211,808	\$341,077	\$0	\$0	\$0	\$0	\$735,014

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding	-	-	-
\$0.7M	-	-	-

Total External Funding **\$0.0M**

Project Description

Rehabilitation of both elevators in the Donald L. Dear Building, extending their useful life by 20 years and bringing them up to ADA, CBC and ASME requirements.

Purpose / Benefit

A 2018 assessment by an elevator specialist deemed at least 50% of the elevator components to be beyond their design life, with a further 20% due to reach this stage by 2024. In addition, the elevators do not meet updated building regulations and codes, such as CBC (California Building Code) and ADA (Americans with Disabilities Act) requirements.

Drivers

- Equipment Age: Many systems have reached, or are reaching, the end of their useful life.
- Code Compliance: The current elevators do not comply with the latest building codes and regulations.
- Reputation: DLD elevators are used by members of the public attending board meetings.

The elevators in the Donald L. Dear Building are beyond their useful life and no longer meet building codes nor ADA requirements. Given the age of components, and the lack of available parts, the risk of the elevators failing is increased. If an individual were to become trapped in one of these elevators whilst working for West Basin or attending a public Board Meeting, the District would be liable for any associated damages and emergency callouts.

Strategic Goals

Goal 1: Water Supply Reliability

✓ *Goal 2: Sound Financial and Resources Management*

Goal 3: Water Quality

✓ *Goal 4: Customer Service*

Goal 5: Environmental Stewardship

Last Budget Approval

<i>Date</i>	<i>Budget</i>
5/24/2021	\$ 605,000



The Donald L. Dear Building

Status

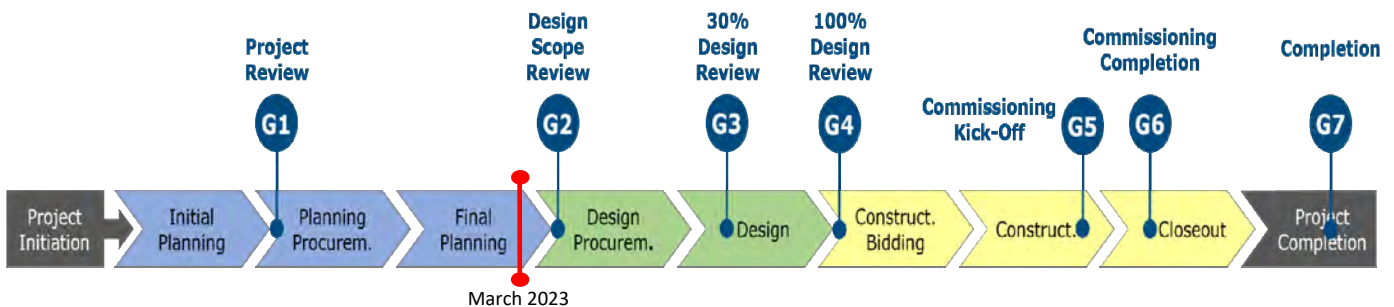
- Completed: Condition assessments and cost estimation.
- Current: Design consultant procurement.
- Upcoming: Design and construction bidding.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Gate Review





FY23-24 \$64,000	5-yr CIP \$64,000	Total Cost (past, present, future) \$110,000
-----------------------------------	------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$48,049	\$63,860	\$0	\$0	\$0	\$0	\$0	\$111,909

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$0.1M	-	-	-

Total External Funding **\$0.0M**

Project Description

A continuation of the prior rehabilitation of the two air conditioning units in the Donald L. Dear Building to extend the useful life of the building air conditioning system. A full replacement is recommended, however this short-term, lower-cost refurbishment replaces the two condenser coils in each unit and would extend the useful life of the units by several years. The first unit was rehabilitated in the 2022-2023 fiscal year, with the second unit to be rehabilitated in the 2023-2024 fiscal year.

Purpose / Benefit

Both air conditioning units in the Donald L. Dear Building are beyond their useful life. Their age and condition has contributed to a higher repair rate and the release of an Ozone-Depleting Substance (ODS), refrigerant R-22. This refurbishment would prevent the release of R-22 and reduce the current repair rate.

Drivers

- Extend Useful Life: Replacing the coils would extend the useful life of both units by several years.
- Environmental Stewardship: Replacing the coils would prevent the release of refrigerant R-22.
- Economic Impact: Replacing the coils would reduce the currently increasing repair rate.

The replacement of condenser coils extends the useful life of the air conditioning unit and mitigates the risk of catastrophic failure. The catastrophic failure of air conditioning units in the Donald L. Dear Building has previously led to an uncomfortable working environment, particularly during the summer months. In addition, the replacement of a catastrophically failed air conditioning unit could cost from \$1M to \$2M and may trigger up to \$4M of structural improvements to the building.

Strategic Goals

Goal 1: Water Supply Reliability

✓ *Goal 2: Sound Financial and Resources Management*

Goal 3: Water Quality

Goal 4: Customer Service

✓ *Goal 5: Environmental Stewardship*

Last Budget Approval

Date	Budget
6/27/2022	\$ 114,083



The Donald L. Dear Building

Status

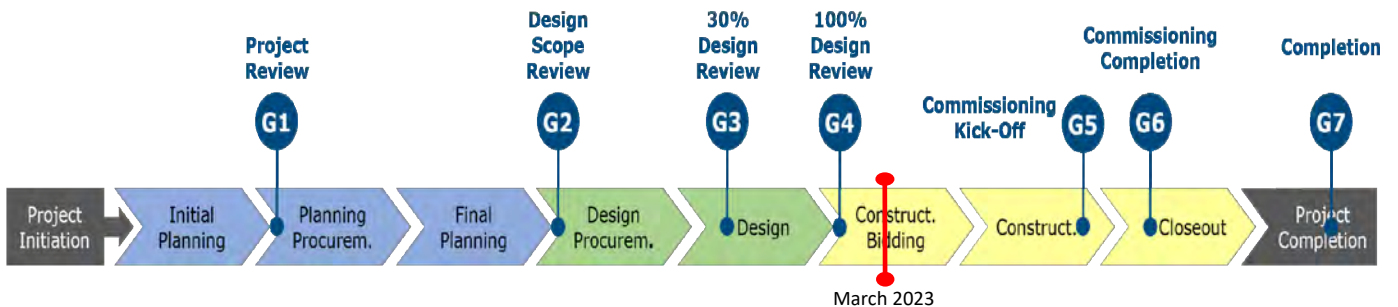
- Completed: Replacement of condenser coils in the first air conditioning unit.
- Current: Procurement of second set of condenser coils.
- Upcoming: Installation of second set of condenser coils.

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2024 Completion

Gate Review





FY23-24 \$776,000	5-yr CIP \$776,000	Total Cost (past, present, future) \$780,000
------------------------------------	-------------------------------------	---------------------------------------------------------------

Prior Years*	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28	Beyond	Total
\$0	\$775,500	\$0	\$0	\$0	\$0	\$0	\$775,500

* Total Estimated Costs through 6/30/2023

Funding Source(s)

District Funding			
\$0.8M	-	-	-

Total External Funding **\$0.0M**

Project Description

This project will provide technological replacements and upgrades to maintain and improve West Basin functions.

Purpose / Benefit

- Hardware and server components will be replaced to maintain IT system reliability.
- Uninterruptible power supplies, wi-fi, and software will be upgraded to improve West Basin functions.

Drivers

- Equipment Age: Some hardware is at end of life and requires replacement before failure.
- Reliability and Safety: Safeguards are needed to protect West Basin functions.
- Efficiency: Improvements to connectivity and processes are needed for efficient operation.

Strategic Goals

Goal 1: Water Supply Reliability

✓ *Goal 2: Sound Financial and Resources Management*

Goal 3: Water Quality

Goal 4: Customer Service

Goal 5: Environmental Stewardship

Last Budget Approval

Date	Budget
6/27/2022	\$ 737,000



Donald L. Dear Building in Carson, California

Status

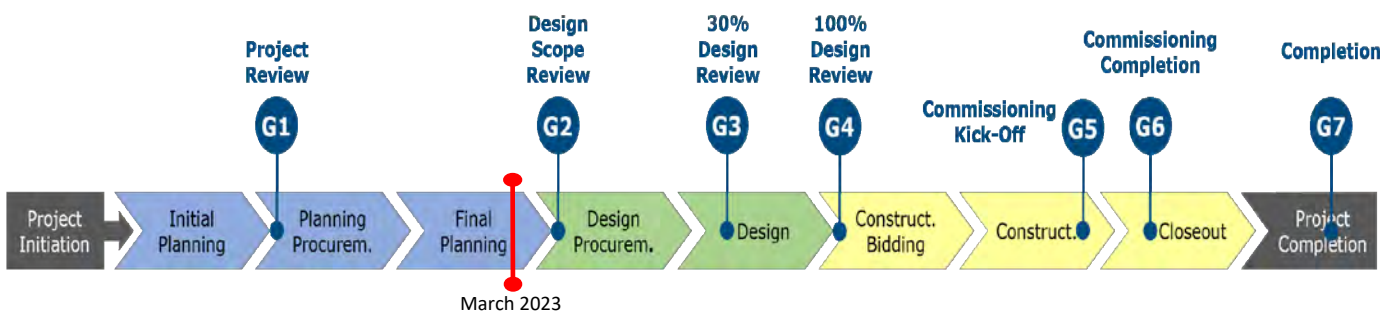
- Completed: Planning
- Current: Design and Procurement
- Upcoming: Implementation

Anticipated 5-Yr Schedule

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2024 Completion

Gate Review





WEST BASIN MUNICIPAL WATER DISTRICT

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