

2022-2023 OPERATING BUDGET







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February 28, 2022



Marcus Pimentel

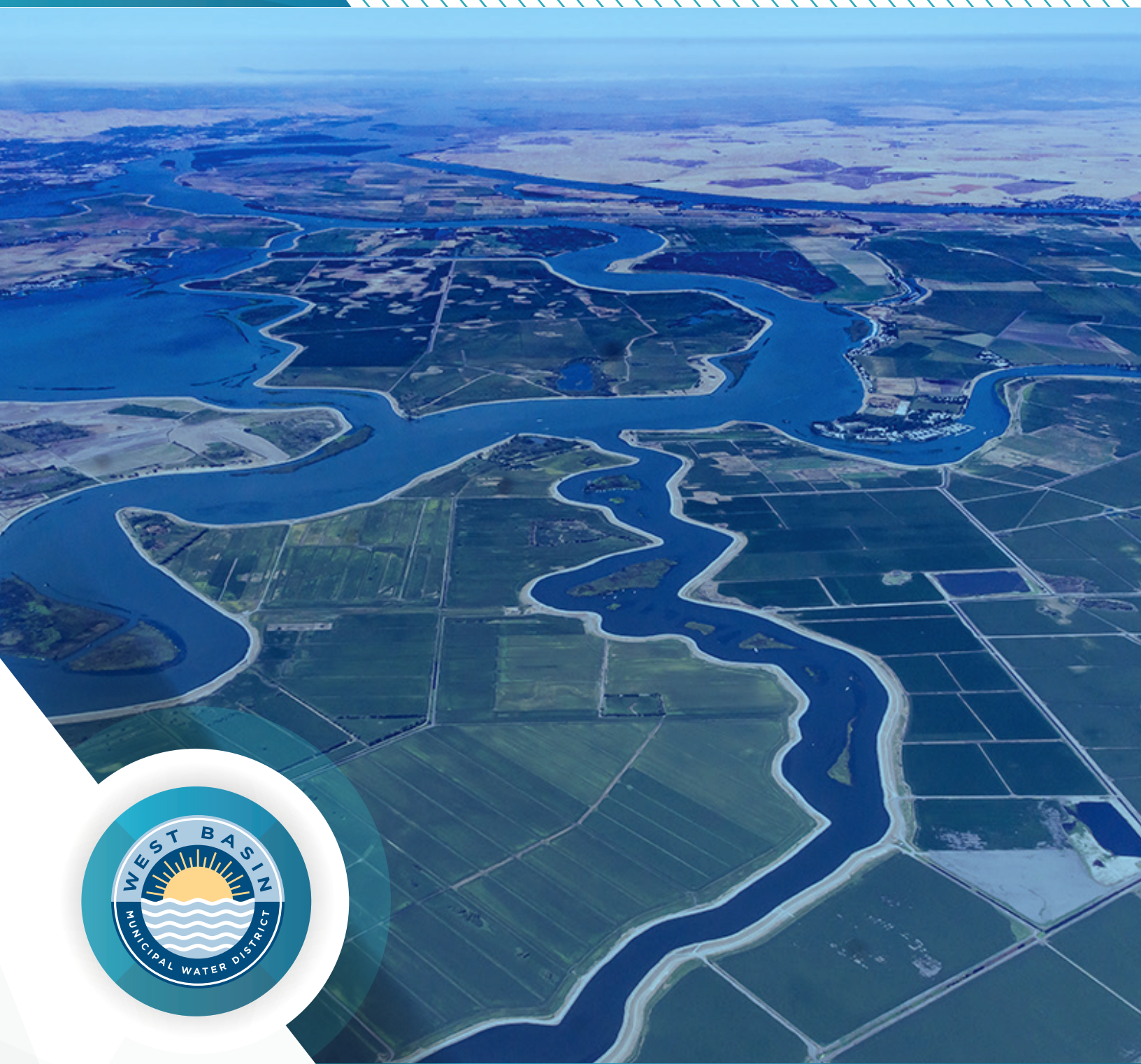
**Marcus Pimentel
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GENERAL MANAGER'S MESSAGE







General Manager's Message

June 27, 2022

Honorable Board of Directors and Customers of West Basin Municipal Water District

I am pleased to present West Basin Municipal Water District's (West Basin) operating and Capital Improvement Program (CIP) budgets for Fiscal Year (FY) beginning July 1, 2022 and ending June 30, 2023 (FY 2022-23). Priorities set by our Board of Directors (Board) shaped the development of our budget in recognition of the strategic opportunities that are ahead, while taking into consideration water supply challenges facing agencies across California. West Basin's operating budget is set at \$235.9 million and CIP investments at \$45.6 million. Rates and charges set by Board Resolution, combined with grants, loans, a draw on reserves and other contributions, are sufficient to fund the expenditure plan. As a result, West Basin is able to maintain a healthy financial position relative to PAYGO funding, debt service coverage and reserves.

The presentation of West Basin's Operating Budget book (Budget Book) has been prepared in expert fashion by our Finance Department along with contributions by each department. This Budget Book sets forth the expenditure plan for programs and services provided in support of the 17 cities and unincorporated communities of Los Angeles County that are within the West Basin service area. This provides the basis for revenue requirements, and therefore West Basin's rates and charges, to fund each of our important programs.

The Appendix of the Budget Book presents West Basin's CIP Budget prepared by our Engineering & Operations department. This document sets forth the FY 2022-2023 budget authorization for each project along with the anticipated multi-year expenditure plan for each project. Projects under future consideration are also presented so as to provide a five-year forecast of potential infrastructure investments that may be necessary in upcoming fiscal years.

As a regional municipal water district, West Basin facilitates the delivery of imported supply to a population of nearly one million people. With the current historic drought, Governor Gavin Newsom has called upon all Californians to increase efforts to conserve water. West Basin's Board proactively implemented Level 3 Water Shortage Contingency Plan to ensure conservation is a California way of life. Water conservation remains a top priority for FY 2022-23, and West Basin will continue making water use efficiency programs available to help our customers lower per-capita water use. Program funding will continue to support West Basin's public information, education, water policy, and legislative programs to enhance public awareness of regional water supply issues and response efforts by state and local officials.

West Basin Municipal Water District

For more than 25 years, West Basin has made tremendous strides towards developing recycled water and reducing regional reliance on imported water supply. This has been largely possible via application of recycled water toward non-potable uses (industrial and irrigation uses). This remains a top priority as the Board re-envision water recycling as a regional water supply and develops opportunities to collaborate with regional partners to expand upon indirect potable reuse. As this vision takes shape, capital investments into FY 2022-23 currently involves expansions, rehabilitation, and replacement of the existing infrastructure in order to maintain and improve the quantity, quality, and reliability of the program as it is currently configured.

During the past year, the Board reevaluated its investments in alternative local water supplies, and made the decision to divest its interest in the C. Marvin Brewer Desalter and discontinue pursuit of ocean desalination. The C. Marvin Brewer Desalter began operations in July 1993 to explore desalting of brackish groundwater to produce potable supply. As the infrastructure aged and reliability decreased, West Basin made a determination that cost of operations could not be fully recovered. As a result, West Basin entered into an agreement with the Water Replenishment District of Southern California (WRD) for the sale of the Desalter extraction well and initiated demolition of the facility to be completed by first quarter FY 2022-2023.

West Basin pursued development of ocean desalination for nearly 20 years. In December 2021, by majority vote (3-2) the Board decided to terminate the endeavor, which would have sited a 20 million gallons per day facility in El Segundo. As a result, the financial statements will reflect a write-down of approximately \$61 million in capital development costs.

While ending the ocean desalination program concludes an important chapter for the District, local water supply development remains a top priority for the Board. As West Basin celebrates its 75th anniversary as an agency, the Board is set to establish the vision and direction with the renewal of its five-year Strategic Business Plan (2022-2027). The Board along with assistance of the General Manager will re-envision the regional water recycling program, maintain water conservation as an urgent priority, and establish targeted goals for financial performance, workforce development, public engagement, and customer service.



While there is much excitement about future prospects, West Basin is facing significant challenges that it will need to navigate. The costs to produce recycled water has been impacted by significantly higher operating costs from energy, chemicals, and sludge hauling



services. Those price increases are the result of raw material shortages, supply chain disruptions, and increased volatility of contract pricing with our chemical vendors.

The budgeted total operating expense for FY 2022-23 is \$235.9 million, representing an increase of \$12.1 million from the prior fiscal year. One significant increase is in Water Purchases, having an expected increase of \$8.9 million. Water Purchases are comprised of two components: 1) Metropolitan Water District of Southern California (MWD) Tier 1 imported water rate, and 2) the MWD Readiness-to-Serve (RTS) rate. Beginning January 1, 2023, the MWD Tier 1 water rate will increase by \$66 per acre-feet (AF) and RTS rate by an effective increase of \$21/AF. When these rates take effect on January 1, both costs will be passed through to our customers via West Basin's Resolution of Rates and Charges.

Chemical costs impacting the water recycling program increased by \$146.50/AF or 48 percent which equates to a \$4.3 million dollar increase in FY 2022-23. Utilities, which includes the cost of electricity, increased by 20 percent. To lessen the impact of rising electricity costs, the District now participates in the Direct Access program with an estimated savings of \$2.3 million over the next three years.



Revenues for FY 2022-23 are set at \$235.9 million, representing an increase of \$12.1 million (5.4 percent). To meet its revenue requirements, the Fiscal Year 2022-23 budget incorporates a pass-through of the MWD rates and charges, a modest increase in West Basin's reliability service charge with a slight reduction in West Basin's fixed service charge. These adjustments are reflected in the Board's Resolution of Rates and Charges. Significant challenges affecting revenues

include the settlement of a 2017 class action lawsuit contesting the District's standby charge. West Basin has exercised its statutory authority since 1991 to levy a standby charge that generates revenues at approximately \$10 million annually. With the April 1, 2022 approval by Los Angeles County Superior Court of a 2020 negotiated settlement, the standby charge will undergo a phased reduction and eventual elimination of this revenue by 2030.

Additional revenue reductions are likely during FY 2022-23 as consumer usage of imported retail water is expected to decrease as we enter in the third consecutive year of a severe drought. The West Coast Basin Barrier (Barrier) has historically been replenished with a mix of recycled and imported water to prevent seawater intrusion. The goal is to deliver 100 percent recycled water to the Barrier, however prior experience has shown about 80 percent of replenishment is sourced from recycled water with the balance sourced from imported supply. In addition, West Basin currently serves recycled water to more than 400 metered

West Basin Municipal Water District

connections where revenue assumptions were lowered to more closely align with current sales. Additional reductions in nitrified water supplied to the Chevron Refinery is anticipated should the District proceed with a tank rehabilitation project which serves the refinery. Expected recycled water sales are comprised of approximately 34 percent to the Barrier, 52 percent to local refineries, and the remaining 14 percent to be used in parks, golf courses, schools, street medians, and other public green spaces.

With expected changes in revenues resulting from reduced sales of imported water supplies and the phased elimination of the standby charge, finding ways to streamline operations, create efficiencies, and reduce or maintain costs are critical elements in the budget process.

Planned capital expenditures for FY 2022-2023 are set at \$45.6 million, which includes two construction projects totaling \$25.9 million:

1. **Expansion of Juanita Millender-McDonald Carson Regional Water Reclamation Plant** — installation of a 5.88 MGD custom engineered microfiltration (CEMF) system to improve reliability and redundancy.
2. **Palos Verdes Recycled Water Lateral** — nearly four-mile recycled water pipeline through the City of Torrance and Palos Verdes Estates terminating at Palos Verdes Golf Club.

West Basin has been able to secure approximately \$12.2 million in grants and another \$8.9 million in customer contributions to help defray the costs of the new infrastructure and shared facilities. Additional expenditures are anticipated to support system expansion projects, and rehabilitation and replacement projects in FY 2022-23. The intent of these projects is to enhance the recycled water process, provide more reliability to customers, and achieve cost savings through an improved, efficient operation. Additional review will be provided for these projects to ensure cost effectiveness and alignment with future direction for regional water recycling program. The CIP Budget document presents detailed information about each project authorized for FY 2022-2023, along with project scope, schedule, purpose and necessity, and anticipated multi-year expenditure plans.

The current inflationary environment has its effects on District operations, and a planned draw from reserves to partly fund the capital program will lessen our costs of borrowed funds. Anticipated debt service coverage ratio is 1.36, which if achieved would fall below the District's targeted coverage of 1.75 but still complies with debt covenants. However, the Resolution of Rates and Charges demonstrates the Board's continuing commitment to manageable rate increases.

West Basin takes a long-term view towards managing its financial stability. This ensures we take into consideration future revenue and costs assumptions when adopting rates and charges for the particular fiscal year. West Basin's approach towards proposed rate actions is guided by several factors, including: near- and long-term expenditure plans (Capital and



Operational); maintenance of appropriate credit rating to ensure access to attractive interest rates and low cost of borrowed funds; strong emphasis on financial metrics such as cash reserves (days cash on hand) and debt service coverage ratio; West Basin Board policy to achieve and maintain above a certain minimum cash reserve and debt coverage ratio, along with consideration of risks/consequences of falling below targets set by Board policy; rate management and stabilization in order to avoid unpredictable and steep rate increases to recover cost of service; hydrological factors, in particular drought conditions and heightened promotion of water conservation which may reduce water sales assumptions; and escalating operating costs and supply chain disruptions.

In Conclusion

Celebrating 75 years of water supply reliability for our 17 cities and unincorporated communities of Los Angeles County is a significant milestone. Since our formation, West Basin has taken a balanced and cost-effective approach towards water supply diversification. This includes important emphasis on water conservation while providing innovative leadership in water recycling. As we continue to build upon this 75-year legacy, our Board is ready to lead the way forward in collaboration with our regional water agencies and retail water purveyors. As General Manager, I am very excited about working with the Board to help shape the direction for our next 75 years!

Having conducted a series of eleven budget workshops to review the policies, programs, priorities, and proposed expenditure plans of each department, our Board authorized the recommended budget and Resolution of Rates and Charges by majority vote (4-1) on June 27, 2022. This noteworthy accomplishment culminated a process designed to facilitate public review by our public and privately-held retail water agencies, municipal organizations, and the general public. All workshops were recorded and made available to the public on West Basin's website. I applaud West Basin's dedicated staff of trained professional public servants who facilitated a very open and transparent process, and it is for their efforts that I am truly grateful.

I would like to thank our Board of Directors, West Basin staff, our management team, District Counsel and professional advisors, our municipal and investor-owned retail water agencies, and our engaged customers and stakeholders for their significant contributions towards the preparation of our FY 2022-23 budget.

Kind regards,

A handwritten signature in black ink, appearing to read "Gregory Reed", written in a cursive style.

Gregory Reed, P.E.
General Manager



ABOUT WEST BASIN MUNICIPAL WATER DISTRICT







About 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 882,000 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 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 coastal Los Angeles County.

Recycled water is the cornerstone of West Basin's efforts to increase water reliability by augmenting local supplies. The District's award-winning 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 groundwater replenishment and protection. West Basin provides recycled water through more than 550 connections to industrial, commercial and public facilities in the service area.

To protect the local groundwater aquifer from seawater intrusion, West Basin currently provides highly purified recycled water to the WRD for injection into the West Coast seawater barrier. While West Basin does not pump groundwater, it is another source of water for many of the communities within our service area.

In August 2017, West Basin's Board of Directors approved an updated Strategic Business Plan. In March 2019, West Basin updated its Water Reliability Program to reflect current goals through a reinvigorated 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 and other programs focused on providing value to our service area.

West Basin Municipal Water District

Board of Directors



Harold C. Williams

Immediate Past President

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

Treasurer

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

Vice 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

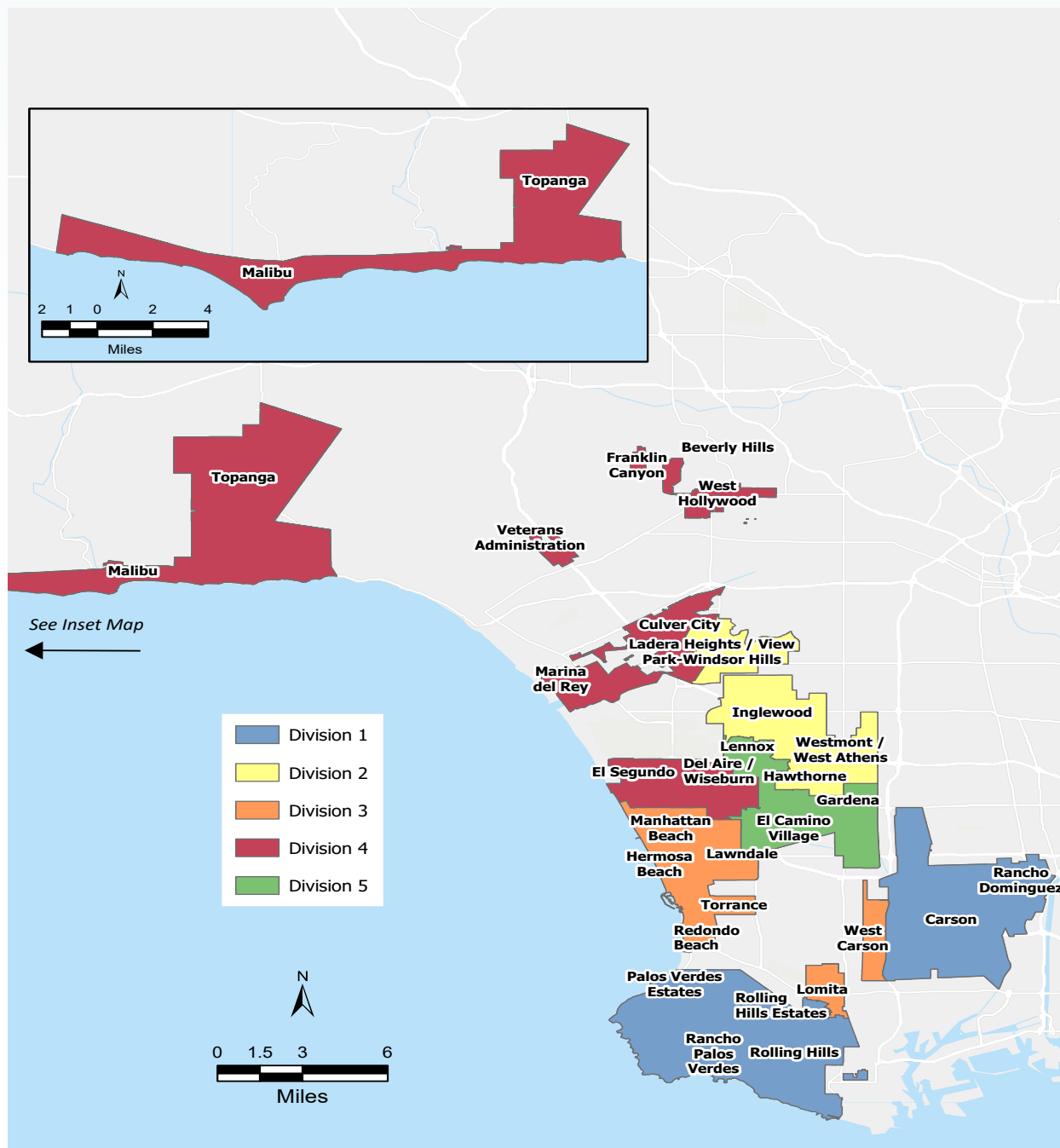
President

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 serves a diverse population in 17 cities and parts of unincorporated coastal Los Angeles County.



This map reflects changes to division boundaries as a result of a redistricting associated with the 2020 Census. The West Basin Board of Directors adopted the changes on April 6, 2022. The November 2022 General Election will reflect the updated boundaries for Divisions I, II, and IV. Updated boundaries for Divisions III and VI will be reflected in the November 2024 General Election.

West Basin Municipal Water District

District Statistics

Formed	December 17, 1947
Estimated Population	882,000
Area Served	17 cities and unincorporated areas of Los Angeles County within 185-square miles
Water Portfolio	Potable, Recycled
Average Residential Parcel Size	9,240 square feet
Average Median Income	\$88,125 - Service area
Lowest Median Income	\$14,685 - Westmont
Highest Median Income	Over \$250,000 - Manhattan Beach, Palos Verdes





Monthly Average Climate Data in Los Angeles County

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.

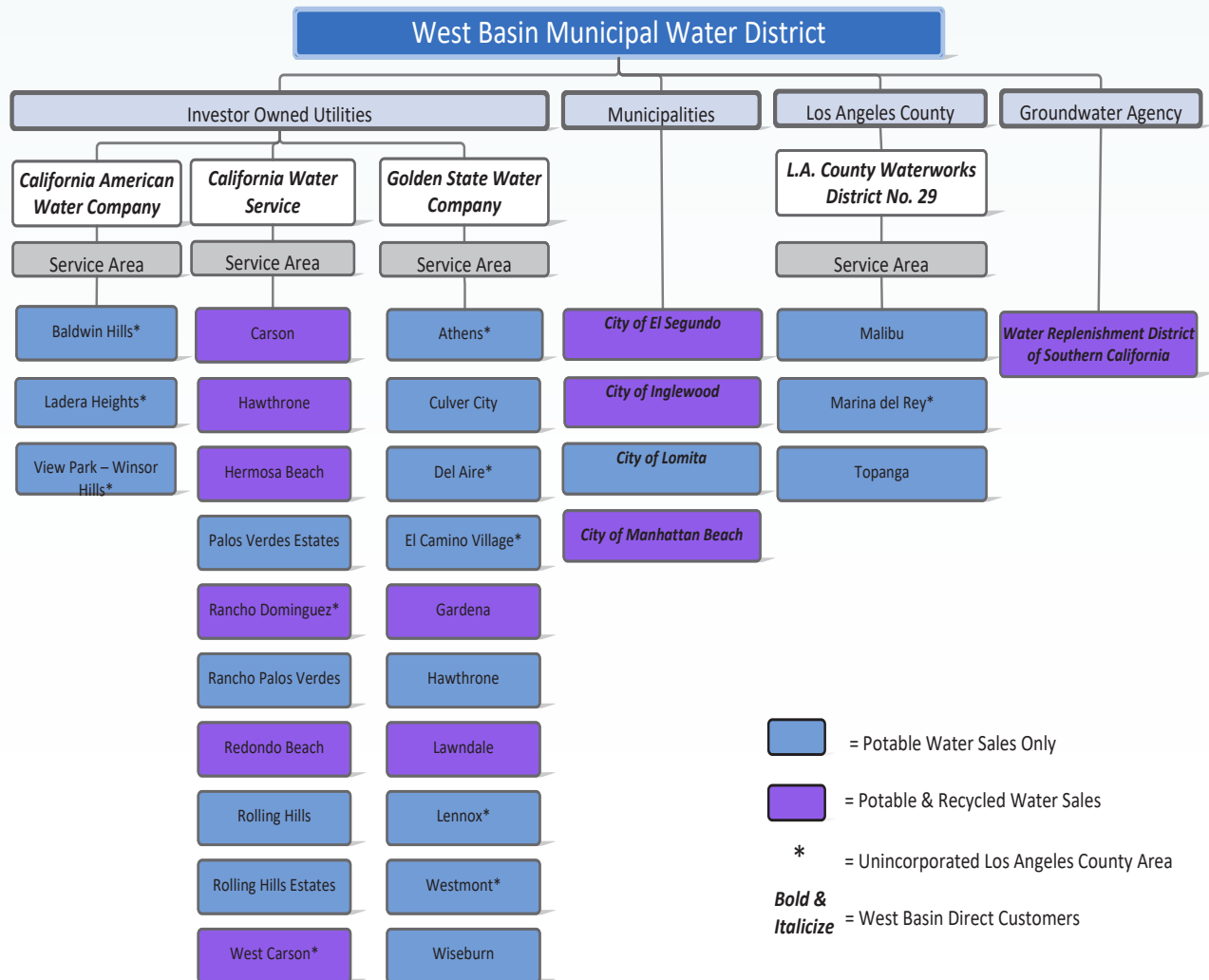
Ten Largest Employers Within West Basin Service Area

Employer	Number of Employees
Boeing Satellite Systems Inc.	13,411
Northrop Grumman Corporation	10,604
Raytheon Company	6,000
Space Exploration Technologies	5,094
Aerospace Corporation	3,400
Sony Pictures Entertainment	3,000
Mattel, Inc.	1,545
Westfield Shoppingtown-Fox Hills	1,500
Amazon Fulfillment Center	1,500
PV Unified School District	1,461

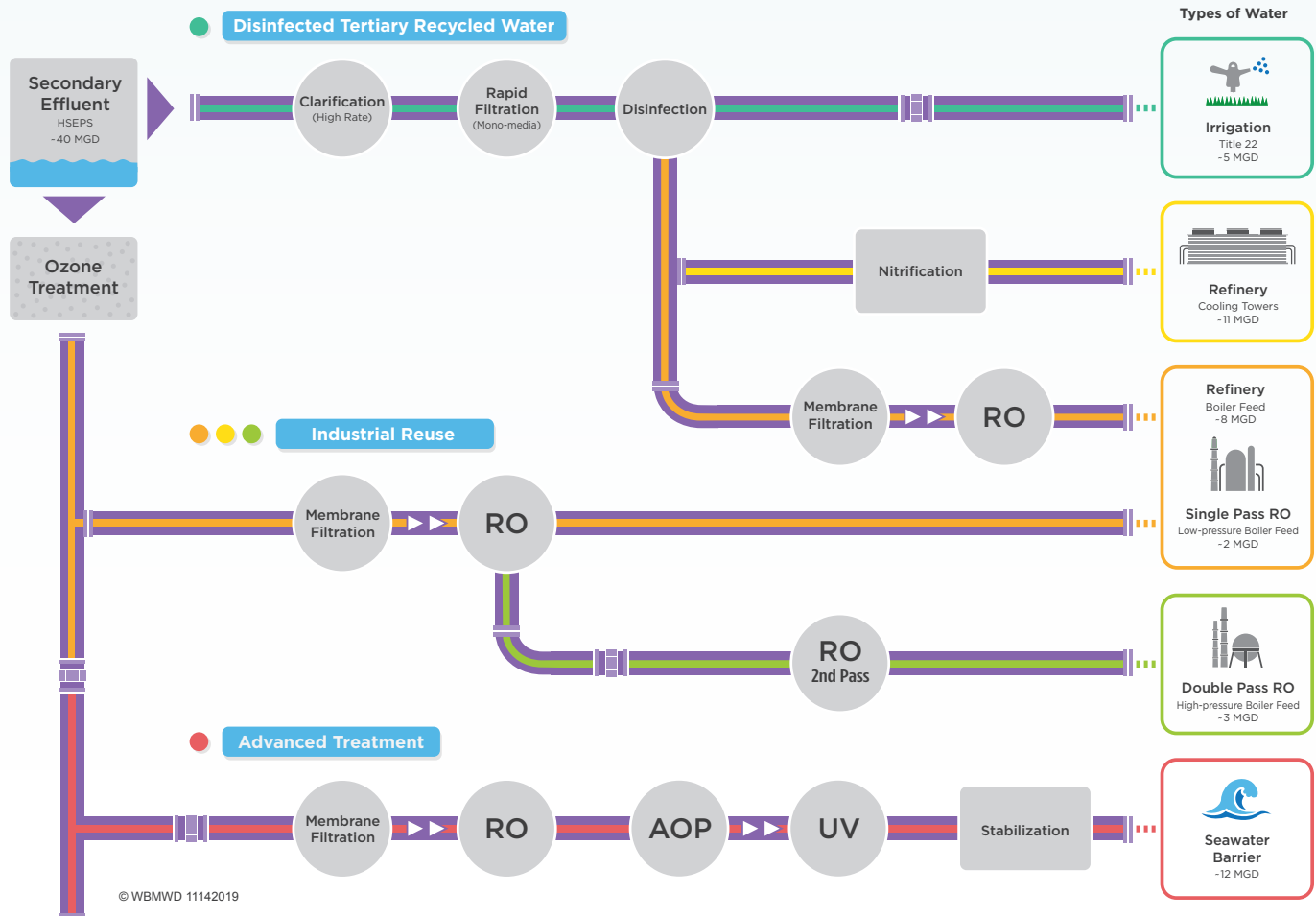
Source: West Basin Finance Department

West Basin Municipal Water District

West Basin Customers



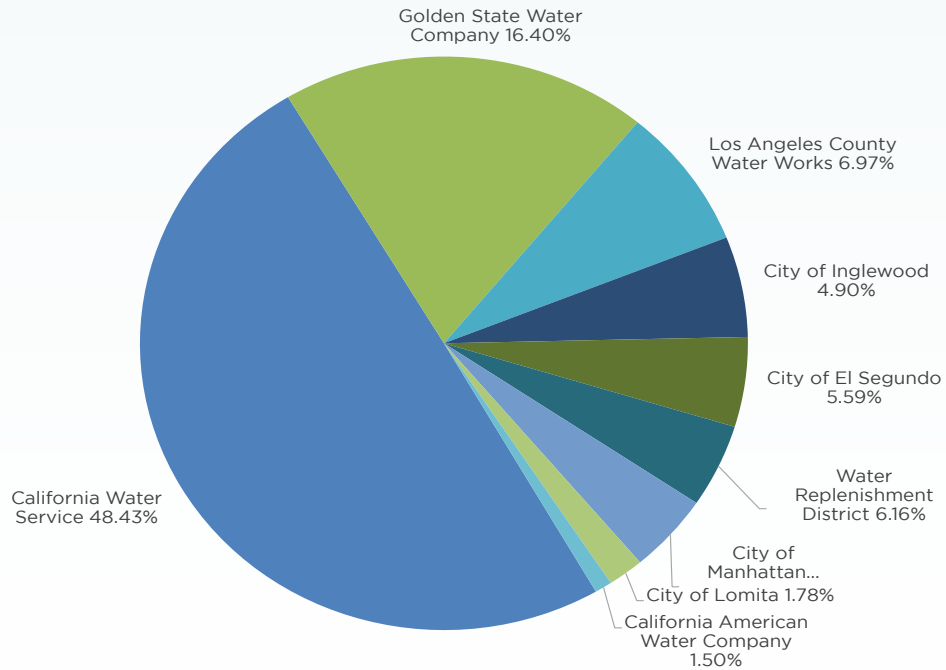
Types of Recycled Water Produced by West Basin



AOP: Advanced Oxidation Process
HSEPS: Hyperion Secondary Effluent Pump Station
RO: Reverse Osmosis
UV: Ultraviolet Disinfection

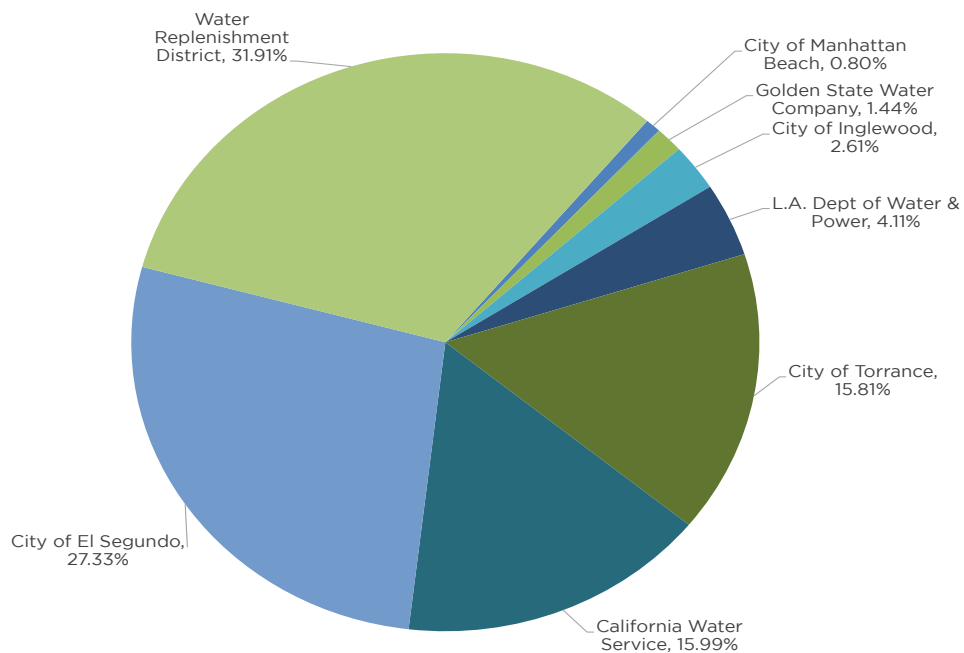
Potable Water Customer Sales Distribution

FY 2020-21



Recycled Water Customer Sales Distribution

FY 2020-21





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 MWD. 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.

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 an international 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 region through a diverse supply of water that includes imported, recycled, desalted and conserved water. All West Basin departments contribute to the agency's efforts to meet the goals and objectives of the Board of Directors' Strategic Business Plan.

Our Mission

To provide a safe and reliable supply of high-quality water to the communities we serve.



FINANCIAL OVERVIEW & SUMMARY







Financial Overview & Summary

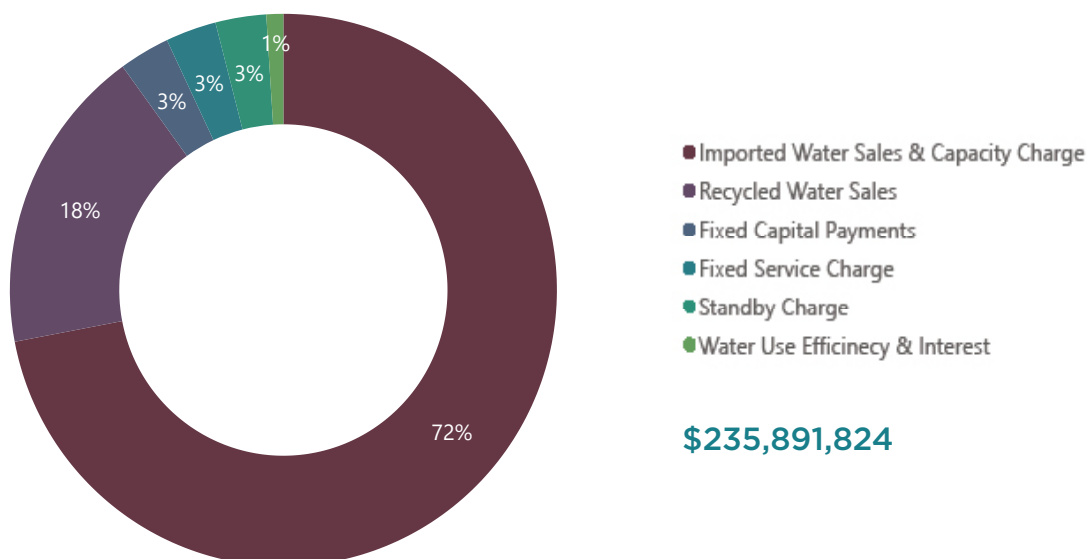
Each fiscal year West Basin prepares a budget based on the priorities, goals, and objectives set by its Board of Directors. When preparing the budget, staff considers many factors including water sales assumptions, rates and charges, salaries and benefits, debt service, program expenses, and capital expenditures. All of these factors are considered in the FY 2022-23 budget, and discussed in detail in the following sections of this document. This section provides the overview and highlights of the FY 2022-23 budget.

Financial Highlights for FY 2022-23

For FY 2022-23 West Basin's budget is \$235.9 million, and is \$12.1 million or 5.4% higher than the FY 2021-22 budget. There are several factors that affected the FY 2022-23 budget. While West Basin planned to budget slightly more conservatively in FY 2022-23 and reduce its "normal" imported retail sales from 103,000 AF to 101,300 AF, a one-time loss of nitrified recycled water sales to account for a capital project scheduled to begin at the beginning of CY 2023 required the addition of 1,900 AF to its imported water sales budget. In addition to the one-time increase in budgeted AF, MWD increased their Tier 1 imported water rate by \$66/AF and the effective adjustment in the Readiness-to-Serve (RTS) increased \$21/AF. These two pass-through charges, along with West Basin's increase of \$12/AF in its Reliability Service Charge (RSC), and the additional imported water sales of 1,900 AF resulted in a \$10.2 million increase in budgeted imported water revenues. More information can be found in Source of Revenue section.

Source of Funds

FY 2022-23

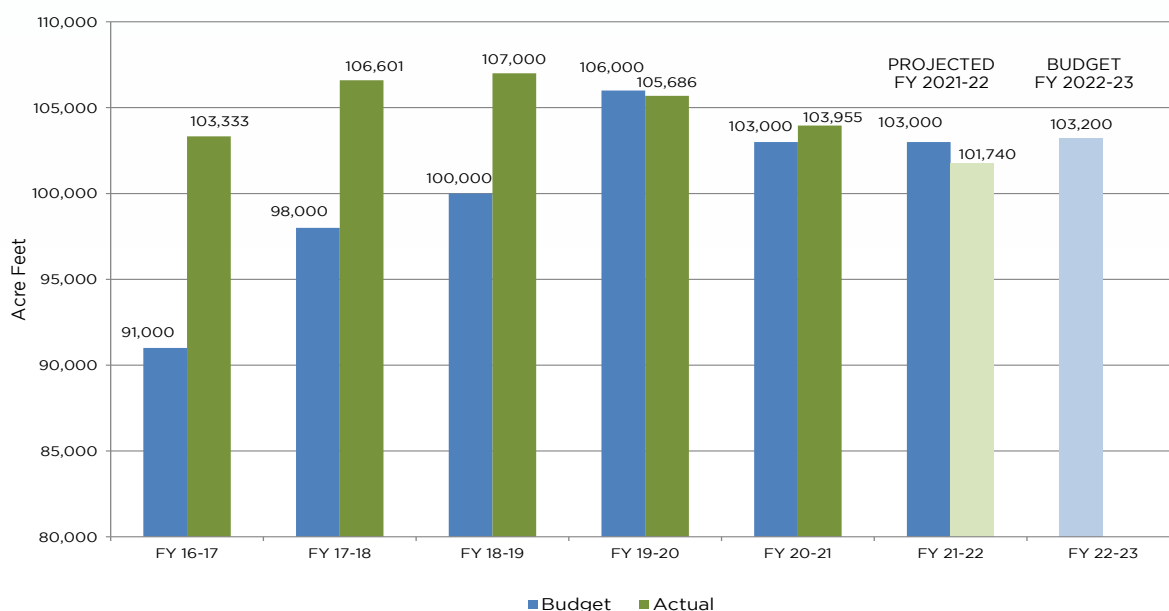


West Basin Municipal Water District

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 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 Water Retail Sales

FY 2016-17 thru FY 2022-23



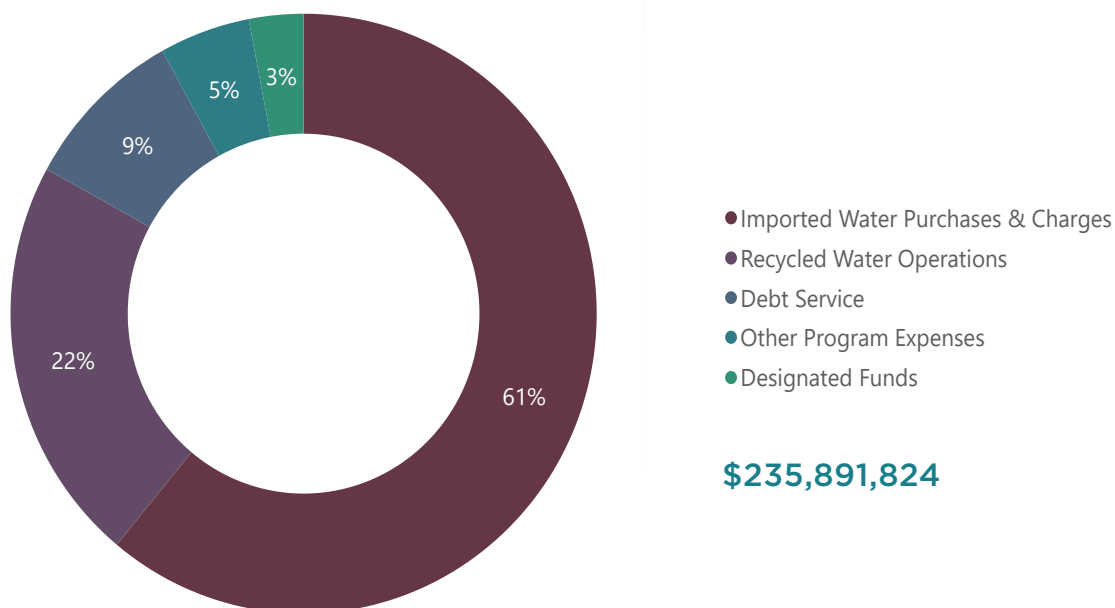
Similar to the revenues, operating expenses for FY 2022-23 are budgeted at \$235.9 million and is \$12.1 million higher than the FY 2021-22 operating expenses. With an expected increase in MWD rates and charges, finding ways to streamline operations, create efficiencies, and reduce costs were critical 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 \$9.3 million. West Basin has experienced double digit increases in its cost of chemicals in FY 2021-22 as a result of unprecedented supply chain constrictions, raw material increases and increases in the freight cost and does not anticipate this trend to end in FY 2022-23. In addition to higher chemical cost, cost of electricity is also rising. All West Basin program expenses are further described in Use of Funds section.

Use of Funds

FY 2022-23



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 Fiscal Year 2022-23, West Basin reduced the number of authorized positions from the current fifty-six (56) full-time employees to fifty-four (54) full-time employees while maintaining the intern program at six staff persons. Although the number of authorized positions is reduced, West Basin will continue to only budget (fund) fifty (50) full-time positions. This is consistent with the FY 2021-22 budget. The four positions not budgeted include one position in Executive Management, one in Contracts, one in Engineering and one in Public Information & Education at a savings of approximately \$0.9 million.

	FY 2021-22	FY 2022-23
Total Positions Budgeted	56	56
Full-time Regular	49	50
Full-time Limited	1	0
Interns	6	6
Total Positions Authorized	62	60





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 2022-23 Overhead program budget for a consultant to assist in the review and update of the Strategic Business Plan.

Our Mission

To provide a safe and reliable supply of high-quality water to the communities we serve.

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:	Prepare and periodically update water supply plans.
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.

West Basin Municipal Water District

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 a 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

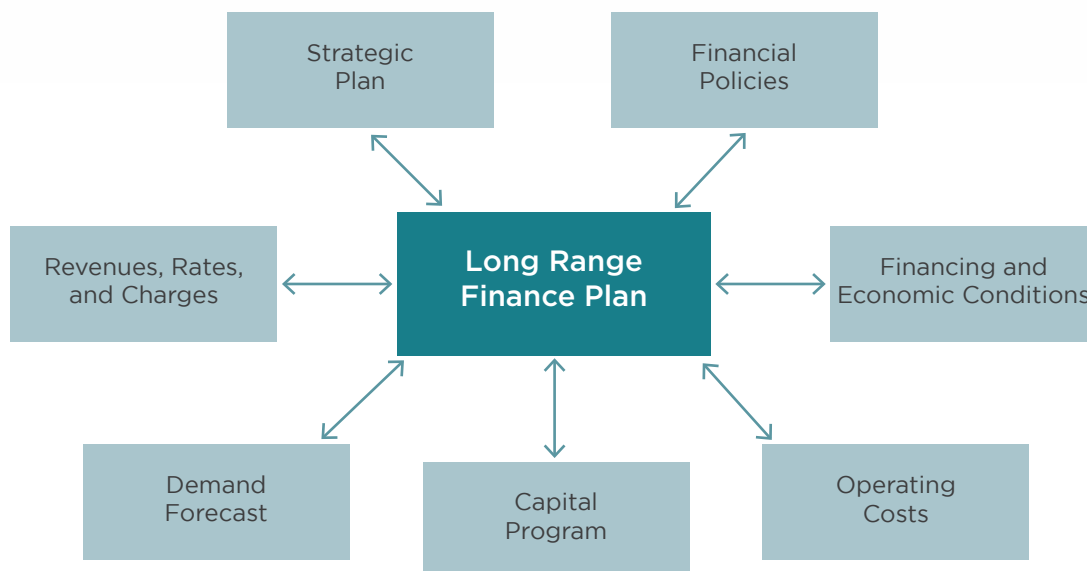
Within the Operating Program Expenses section, West Basin has identified FY 2021-22 accomplishments and FY 2022-23 strategies identified above.

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.

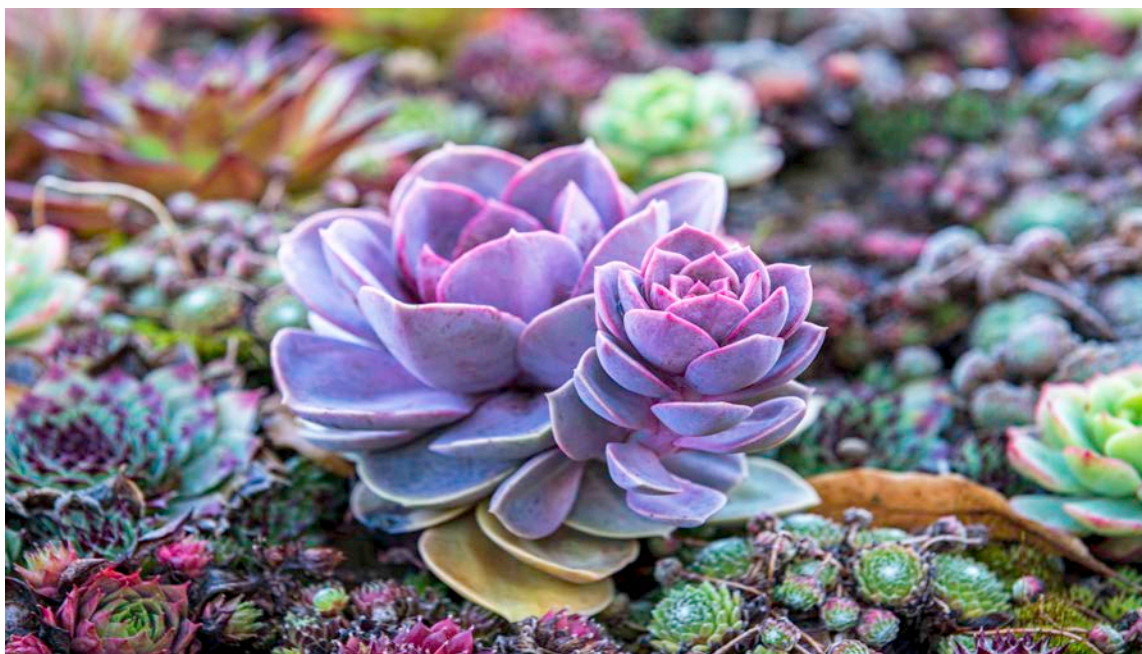




As West Basin continues to strive to meet its mission of delivering safe and reliable water, staff has developed long term planning tools including meeting the goals and objectives set in the Plan, developing capital master plans, and developing more local resources through increasing its efforts in 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.

Staff has adopted financial policies and those policies are reviewed annually to ensure they reflect regulatory requirements, best practices, and targeted financial metrics. The last detailed analysis to determine West Basin's targeted financial metrics was in March 2015. During this review the Board directed staff to increase its target debt service coverage to 1.75. Since that time, all past budgets, with the exception of FY 2020-21, FY 2021-22 and FY 2022-23, were based on achieving at least the 1.75 target.

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.



West Basin Municipal Water District

Another component of the LRFP is the development of the Recycled Water Master Plan (RWMP). The RWMP 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 2022-2023 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 that 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 2022-23, the chart below demonstrates the projected funding for the CIP budget.

Funding Sources	FY 2022-23 (In millions)
External Funding	
Customer Contributions	\$6.8
Grants	9.8
Refinery Contributions	2.5
State Revolving Fund Low Interest Loan	9.6
PAYGO Funding	7.7
Use of Reserves	9.2
Total CIP Funding	\$45.6

Anticipated CIP expenditures over the next five fiscal years are estimated to total more than \$156.4 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 2023-24 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 Appendix section.

West Basin Municipal Water District

West Basin Municipal Water District Projected Operating Results

Fiscal Year	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
REVENUES						
Water Sales	168,034,312	169,349,601	171,642,000	175,508,334	184,867,124	194,930,431
Capacity Charge	2,448,604	2,378,394	2,514,554	2,608,140	2,608,140	2,608,140
Fixed Service Charge	6,312,275	6,501,643	6,696,693	6,897,593	7,104,521	7,317,657
Recycled Water Project Revenues						
Recycled Water Sales	42,174,392	50,663,735	55,035,110	57,502,433	60,084,600	62,804,392
TORC O&M Rebate	1,092,000	182,000	—	—	—	—
MET LRP Rebate	7,500	318,750	318,750	318,750	318,750	318,750
Fixed Revenue Charges	8,308,524	5,848,924	3,457,204	2,211,204	2,211,204	
Standby Charges	6,179,217	5,953,064	5,723,960	7,631,947	7,631,947	7,631,947
Other Revenues						
Interest Earnings/Other	1,065,000	1,000,000	1,100,000	1,100,000	1,100,000	1,100,000
Water Use Efficiency Incentives	270,000	270,000	270,000	270,000	270,000	270,000
Total Revenues	\$235,891,824	\$242,466,111	\$246,758,270	\$254,048,402	\$266,196,286	\$276,981,317
EXPENSES						
Water Purchases/RTS from MET	140,739,032	141,555,010	143,781,267	147,496,700	155,585,332	164,158,894
Capacity Charge	2,448,440	2,378,380	2,443,840	2,443,840	2,443,840	2,443,840
Program Expenses						
Recycled Operations	50,916,200	54,007,942	55,682,399	57,355,292	59,075,951	60,848,229
Technical Planning	4,507,747	1,692,979	1,743,769	1,796,082	1,849,964	1,905,463
Water Policy & Resource Develop	1,687,418	1,738,041	1,790,182	1,843,887	1,899,204	1,956,180
Public Information & Education	4,624,857	4,763,603	4,906,511	5,053,706	5,205,317	5,361,477
Water Use Efficiency	2,095,957	2,158,836	2,223,601	2,290,309	2,359,018	2,429,789
Purveyor Water Quality Monitoring	50,125	51,378	52,663	53,979	55,329	56,712
Designated Funds/Other	7,606,661	12,037,637	11,556,539	13,058,676	15,008,302	15,138,165
2012A	—	—	—	—	—	—
2016A	10,421,104	10,440,125	10,440,667	10,441,208	10,435,979	10,437,792
2021A	7,043,642	7,002,267	9,609,954	6,986,413	4,754,142	4,575,996
2022A	3,443,978	3,641,333	1,196,500	3,623,417	5,908,875	6,091,771
Swap Payments	216,663	176,479	135,439	92,884	48,023	—
State loan (PV)	—	—	129,839	209,908	209,908	209,908
State loan (Phase II)		681,101	681,101	681,101	681,101	681,101
2018/2021 Commercial Paper	90,000	141,000	384,000	621,000	676,000	686,000
Total Expenses	\$235,891,824	\$242,466,111	\$246,758,270	\$254,048,402	\$266,196,285	\$276,981,317
Coverage - All Debt	1.36	1.55	1.51	1.58	1.66	1.67



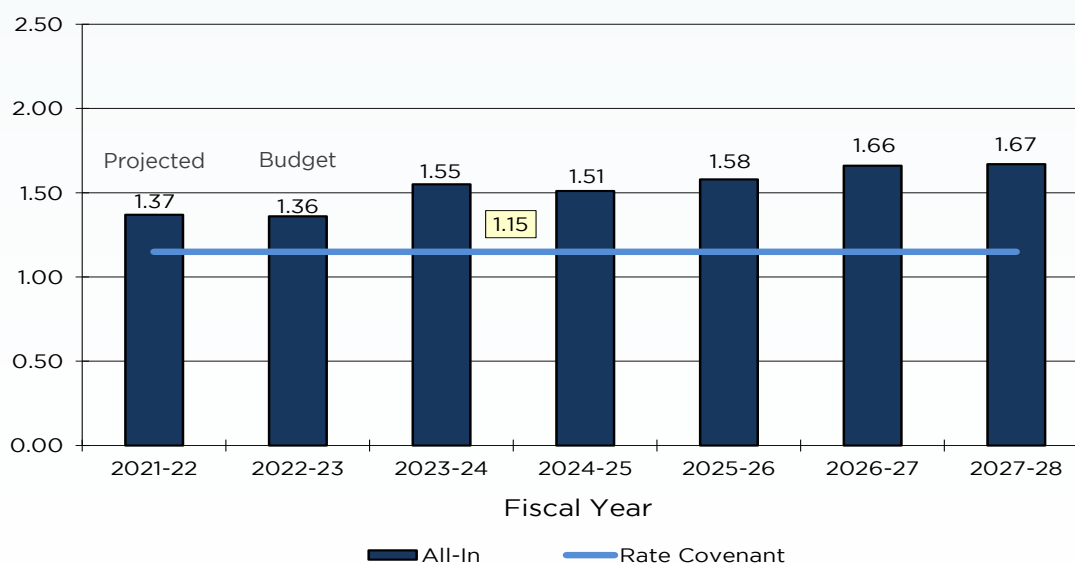
West Basin Municipal Water District Assumptions

Fiscal Year	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
COST (SALES PRICE) OF WATER (\$/af)						
MET Imported - Tier 1 (Jul)	1,143	1,209	1,256	1,344	1,425	1,511
MET Treated NonInt - Tier 2 (Jul)	1,185	1,418	1,455	1,544	1,625	1,711
MET Imported - Tier 1 (Jan)	1,209	1,256	1,344	1,425	1,511	1,602
MET Treated NonInt - Tier 2 (Jan)	1,418	1,455	1,544	1,625	1,711	1,802
MET RTS Commodity Charge (Jul)	100	121	130	138	135	135
MET RTS Commodity Charge (Jan)	121	130	138	135	135	108
MET Seawater Barrier - Tier 1 (Jul)	1,143	1,209	1,256	1,344	1,425	1,511
MET Seawater Barrier - Tier 2 (Jul)	1,185	1,418	1,455	1,544	1,625	1,711
MET Seawater Barrier - Tier 1 (Jan)	1,209	1,256	1,344	1,425	1,511	1,602
MET Seawater Barrier - Tier 2 (Jan)	1,418	1,455	1,544	1,625	1,711	1,802
Disinfected Ter. Within WB	1,520	1,592	1,706	1,803	1,906	2,015
Disinfected Ter. - LADWP	1,562	1,634	1,748	1,845	1,948	2,057
Disinfected Ter. - Torrance	1,562	1,634	1,748	1,845	1,948	2,057
Nitrified - Torrance	1,143	1,177	1,213	1,249	1,286	1,325
Barrier - RW	1,174	1,209	1,245	1,282	1,320	1,360
LPBF - Recycled Water	847	872	899	926	953	982
LPBF - Recycled Water (2)	1,567	1,640	1,754	1,851	1,954	2,063
HPBF - Recycled Water	956	985	1,014	1,045	1,076	1,108
Nitrified - Recycled Water	1,319	1,392	1,506	1,603	1,706	1,815
Reliability Service Charge	257	270	284	298	313	328
MET LRP Rebate	250	250	250	250	250	250
MET LRP Rebate - New Rate	—	340	340	340	340	340
Capacity Charge - MET	12,200	10,600	11,200	11,200	11,200	11,200
Capacity Charge - MET (Jan)	10,600	11,200	11,200	11,200	11,200	11,200
Capacity Charge-Cust	10,025	9,135	9,468	10,200	10,200	10,200
Capacity Charge-Cust (Jan)	9,135	9,468	10,200	10,200	10,200	10,200
SALES VOLUME (afy)						
Non-Interruptible (Retail)	103,200	99,800	97,296	95,286	95,286	95,286
Seawater Barrier (Dominguez Gap)	2,800	3,000	1,500	—	—	—
Seawater Barrier (West Coast)	3,900	1,700	1,700	1,700	1,700	1,700
Recycled Water	32,643	37,456	38,460	38,470	38,470	38,470
Disinfected Ter. - Within WB	5,472	7,469	7,693	7,703	7,703	7,703
Outside Service Area - LADWP	826	826	826	826	826	826
Outside Service Area - Torrance	2,865	2,865	2,865	2,865	2,865	2,865
Nitrified - Torrance	2,700	2,700	2,700	2,700	2,700	2,700
Barrier	11,600	13,800	13,800	13,800	13,800	13,800
LPBF	1,800	1,800	1,800	1,800	1,800	1,800
LPBF (2)	4,030	4,646	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	211.8	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	255.5	255.7	255.7	255.7	255.7	255.7
Capacity Charge (In cfs) - Cust (Jan)	255.7	255.7	255.7	255.7	255.7	255.7
FIXED PAYMENTS						
Marathon	2,136,000	2,136,000	1,246,000	—	—	—
TRWRF NH3	1,377,060	229,510	—	—	—	—
TRWRF BF (phase 2)	1,574,460	262,410	—	—	—	—
Chevron Nitrification	1,009,800	1,009,800	—	—	—	—
Chevron Boiler Feed	2,211,204	2,211,204	2,211,204	2,211,204	2,211,204	552,801
TOTAL FIXED PAYMENTS	\$8,308,524	\$5,848,924	\$3,457,204	\$2,211,204	\$2,211,204	\$552,801

West Basin Municipal Water District

Debt Coverage Projected, Current Budget and 5-year Projection

FY 2021-22 thru FY 2027-28



Although West Basin's bond covenants' require a debt coverage ratio of 1.15, West Basin has set a higher target of 1.75. West Basin's Board of Directors selected the higher target to maintain its 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 2014-15 thru FY 2020-21

Name of Agency	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Central Basin MWD (1)	1.56	1.20	0.77	1.00	1.29	—	—
Calleguas MWD	1.64	1.42	1.93	2.12	2.06	1.84	2.29
Eastern MWD	2.30	2.80	2.50	2.70	3.50	3.60	3.60
Las Virgenes MWD (2)	2.47	2.61	2.90	2.69	2.60	N/A	N/A
Inland Empire Utilities Agency	2.75	3.42	3.67	4.35	4.35	4.49	5.18
San Diego County Water Authority	1.50	1.50	1.50	1.50	1.56	1.56	1.92
West Basin MWD	1.45	1.84	2.27	2.31	2.07	1.89	1.84
Western MWD	2.69	3.40	4.38	5.64	5.31	6.10	5.11

(1) FYs 2019-20 and 2020-21 information is unavailable.

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



Fund Balance (Designated Funds)

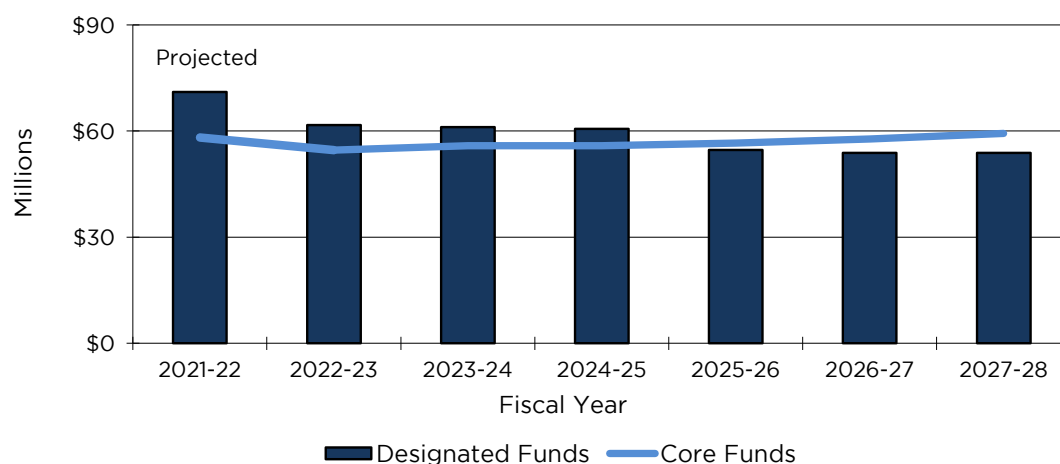
West Basin maintains two major types of funds, both restricted and unrestricted. Restricted funds consist of custodial accounts and bond reserves; the latter is subject to the conditions of the respective bond financing documents. The unrestricted reserves may be designated by the Board of Directors.

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 2021-22 (projected) through FY 2027-28.

Budgeted Designated Funds

FY 2021-22 thru FY 2027-28



West Basin Municipal Water District

Below are the projected revenues and expenses for FY 2021-22, as well as the budgeted revenues and expenses for FY's 2022-23 through FY 2027-28.

Designated Funds Cash Flow (In 000s)

Fiscal Year	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Description	Estimated	Budget	Projected	Projected	Projected	Projected	Projected
Designated Funds (Beg Bal)	\$96,709	\$71,012	\$61,712	\$61,112	\$60,612	\$54,611	\$53,811
Imported Water Revenue	172,024	176,795	178,230	180,853	185,014	194,580	204,856
Recycled Water Revenue	48,297	57,761	62,966	64,535	67,664	70,246	70,755
Other Revenues	3,703	1,335	1,270	1,370	1,370	1,370	1,370
Total Revenues	224,024	235,891	242,466	246,758	254,048	266,196	276,981
Water Purchases	142,405	143,187	143,933	146,225	149,941	158,029	166,603
Program Expenses	65,052	63,882	64,413	66,399	68,393	70,445	72,558
Net Debt Service	22,104	21,215	22,082	22,577	22,656	22,714	22,683
PAYGO/Draw Down on Reserves	20,160	16,907	12,638	12,057	19,059	15,808	15,138
Total Expenses	249,721	245,191	243,066	247,258	260,049	266,996	276,982
Designated Funds (End Bal)	\$71,012	\$61,712	\$61,112	\$60,612	\$54,611	\$53,811	\$53,810





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 December 2021:

- Investment Policy with alterations to add language to limit the amount of callable Federal Agency securities, to exclude Supranational securities from the 5% issuer limitation, and to maintain duration of the portfolio within 20% of the benchmark.
- The Swap Policy was considered and re-approved in December 2021 to add language to the evaluation considerations regarding the index, add clarifying language to the term and notional amount of the swap agreements, and to add language to allow amendments for market changes.
- The Debt Management Policy had several significant additions to add language to include considerations made prior to debt financing, including a State Revolving loan, to add language for liquidity and Letter of Credit providers, to add Remarketing Agent/Commercial Paper Dealer to list of consultants, and to change Financial Advisor and Municipal Advisor and include language the services they can provide.
- The Small and Community Bank Investment Program Policy was updated to change language to agree with the Community Reinvestment Act's definition of "small institution", and to add language to require banks with investments greater than \$250,000 to provide a copy of their latest Community Reinvestment Act (CRA) Rating report.

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 of 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.

Swaps

- Each swap will be structured by the CFO/Executive Manager of Finance and members of the financing team.
- Board of Directors has final authority for approval of each swap.
- Quarterly reporting to the Board of Directors is required.
- West Basin may execute a swap if the swap reduces exposure to changes in interest rates, or achieves lower net cost of borrowing, or manages variable interest rate exposure, or optimizes the timing and amounts of debt service payments.
- Interest rate swaps, caps, floors, swaptions and collars are allowable.
- West Basin can only enter into swap transactions with qualified swap counterparties and will utilize a qualified independent swap advisor to assist with the evaluation and executions of swap transactions.
- Each swap agreement shall contain terms & conditions as set forth in the International Swap and Derivatives Association, Inc.

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.



BUDGET PROCESS & TIMELINE







Budget Process and Timeline

Public agencies develop budgets as a performance tool to measure accountability to its 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
Fund Refurbishment and Replacement Projects with PAYGO	<input checked="" type="checkbox"/>
Pass-through of MWD rates and charges	<input checked="" type="checkbox"/>
Consider a long-term rate management strategy to achieve target debt coverage ratio	<input checked="" type="checkbox"/>
Meet strategic business plan goals	<input checked="" type="checkbox"/>
Understanding the long-term fiscal impact of changes in revenue streams	<input checked="" type="checkbox"/>

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. For West Basin, 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 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.

West Basin Municipal Water District

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. 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 2022-23

Date	Key Activities
January 3, 2022	Submit Budget Questionnaires due to Budget Team
January 7, 2022	Submit staff labor allocation
January 19, 2022	Budget Workshop – Budget schedule and Priorities
January 28, 2022	Sales projections (AF) due for both Potable and Recycled Water
February 4, 2022	Submit proposed FY 2022-23 operating program budgets
February 18, 2022	Submit FY 2021-22 year-end projections
February 23, 2022	Budget Workshop – Review Memberships and Sponsorships, Labor and Benefits
March 1, 2022	Discuss proposed capital budget
March 1, 2022	Budget meeting with all managers
March 9, 2022	Budget Workshop – Present proposed program budgets: Recycled Water and Technical Planning budget
March 10, 2022	Budget Workshop – Present proposed program budgets: Water Use Efficiency and Public Information and Education budget
March 16, 2022	Budget Workshop – Present proposed program budgets: Water Policy and Resource Development and Overhead budget
April 6, 2022	Board Budget Workshop – Water Sales Assumptions
April 13, 2022	Board Budget Workshop – Operating Revenues and Expenses Overview
April 20, 2022	Board Workshop – Capital Budget Workshop
April 27, 2022	Board Workshop – Long-Range Financial Planning
April 28, 2022	Customer Agency Workshop
May 18, 2022	Finance Committee – Present draft rates/charges and budget document
June 15, 2022	Finance Committee – Present final rates/charges and budget document
June 27, 2022	Board Meeting – Adopt rates/charges and budget

Budget Process

January

Department managers review staffing levels, submit justifications for any new positions and submits 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 aide in the development of water sales assumptions for both imported and recycled water sales. Program Managers review their current budget versus actual reports. Managers will then submit their proposed programmatic operating for FY 2022-23 and their year-end projections for FY 2021-22. Budget team will present the first budget workshop to discuss the schedule and priorities with the Board at the January Finance and Administration Committee.

February

Program managers submit their proposed operating budget for FY 2022-23 and their year-end projections for FY 2021-22. Budget staff will recommend the necessary water rates and charges to meet the budget objectives for FY 2022-23 and the next four years beyond. Budget conducts the next budget presentations with the Board to discuss the memberships and sponsorships, labor, and benefits.

March

Engineering Team meets with budget staff to go over FY 2022-23 capital projects and funding. 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. Budget Staff presents proposed program budget to the Board in multiple workshops. 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 present host additional workshops to discuss the water sales assumptions, revised program budget expenses, debt service, proposed revenues capital budget, and long-range financial planning. West Basin conducts a customer agency workshop to discuss its goals, the proposed budget, and water rates.

May

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.

June

Staff present final rates/charges and budget document. The Board of Directors adopts the annual water rates, charges. The Board of Directors motions to adopt the operating budget for the next fiscal year beginning July 1.



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.





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 71% and recycling sales represent 18% of all revenue sources. Total budgeted revenues for Fiscal Year (FY) 2022-23 are \$235,891,824.

Revenue Highlights

West Basin is a wholesale water agency who purchases imported water from 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.

Annually West Basin receives 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.

On May 23, 2022 through Resolution 05-22-1160, the annual standby charge was adopted. West Basin also establishes its water rates and charges through a resolution through with Board approval. Resolution 06-22-1163 was adopted on June 27, 2022 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 06-22-1163 reflects imported water rates for two tiers, Tier 2 pricing is not anticipated for West Basin customers.

West Basin Municipal Water District

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. Further, the impact on both imported and recycled water sales in early FY 2021-22 due to the Hyperion sewage spill, was shared with the Board at committee meetings, during the budget workshops, and has been considered in developing the sales assumptions for FY 2022-23. Retail imported water sales are projected to slightly decrease to 101,740 AF in 2021-22 from actual retail imported water sales of 103,955 AF in FY 2020-21.

With Governor Newsom taking steps to drive water conservation at the local level by calling on local water suppliers to Level 2 of their Water Shortage Contingency Plans, West Basin's Board also activated a Level 1 in July 2021 and then further took an action to direct staff to activate Level 3 in November 2022. As a result, West Basin prudently budgeted slightly more conservatively than actual results and reduced its "normal" imported retail sales to 101,300 AF. The FY 2022-23 budget for retail water sales reflects a total of 103,200 AF as West Basin added 1,900 AF to its budget of 101,300 AF to make-up for a one-time loss of nitrified recycled water sales to account for a capital project scheduled to begin at the beginning of CY 2023.

Imported water sales to both of the barriers (West Coast and Dominguez Gap) is anticipated to exceed budgeted sales in FY 2021-22 as a result of the limited amount of recycled barrier water available for injection due to the effects of the Hyperion sewage spill in July 2021 on West Basin's recycled water production. Budgeted sales of 6,700 AF of imported barrier water in FY 2022-23 are also anticipated to be higher than the budget in FY 2021-22. 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, 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's 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 2022-23. Based on the information provided, and discussion with West Basin operation's staff, West Basin has set the budget to 11,600 AF in recycled water and 3,900 AF of imported water for replenishment demand in FY 2022-23.

On April 1, 2022, the Los Angeles Superior Court approved the settlement agreement for the standby charge which provides instructions for the wind down of the standby charge over an eight-year period. Although not a material impact to the operating revenue in FY 2022-23



as compared to FY 2021-22, West Basin has budgeted a modest increase of approximately \$110,000, or approximately \$6.2 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 2021-22 & FY 2022-23) to see the trend of various revenue sources.

Revenues	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actuals	Actuals	Projected	Budget	Budget
Imported Water Sales	\$155,896,431	\$154,521,456	\$163,025,753	\$157,875,420	\$168,034,312
Fixed Service Charge	3,919,411	7,459,131	6,572,329	6,572,329	6,312,275
Capacity Charge	1,758,096	2,023,801	2,425,519	2,425,519	2,448,604
Recycled Water / LRP	43,428,442	38,645,372	29,989,318	41,038,046	43,273,892
Fixed Capital Charge	7,562,454	12,109,530	8,308,524	8,308,524	8,308,524
Desalter Water	144,318	427,455	—	—	—
General Fund Interest	1,732,218	984,326	843,800	1,000,000	1,020,000
Standby Charge	9,986,787	10,051,886	10,000,000	6,067,616	6,179,217
Conservation Income	558,280	344,166	421,100	421,100	270,000
Other Income	273,954	158,991	2,437,645	45,000	45,000
Total Revenues	\$225,260,391	\$226,726,114	\$224,023,988	\$223,753,554	\$235,891,824

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)	Factor	Effective Rate Change
WB Reliability Service Charge	Per Acre-Foot (AF)	July 1, 2022
MWD Imported Tier I Rate (Pass-Thru)	Per Acre-Foot (AF)	January 1, 2023
MWD Readiness to Serve (RTS) (Pass-Thru)	Per Acre-Foot (AF)	January 1, 2023

Fixed Charges	Factor	Effective Rate Change
WB Fixed Service Charge	Annual Calculation based on 3-Year Historic Sales	July 1, 2022
MWD Capacity Charge (Pass-Thru)	Annual Calculation based on peaking cubic feet per second flow rate	January 1, 2023

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).

In FY 2018-19, West Basin added another component, the Fixed Service Charge. (See page 68 for further information regarding the Fixed Service Charge).

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 \$12/AF for FY 2022-23 at the Board meeting on June 27, 2022 per resolution 06-22-1163. 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 \$168.0 million in imported water sales and reducing its Fixed Service Charge \$6.3 million.



MWD Commodity Rate

On April 12, 2022 MWD'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 MWD Tier 1 commodity rate of \$1,209/AF beginning January 1, 2023 and \$1,256/AF beginning January 1, 2024.

Readiness-to-Serve Charge

MWD'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 MWD standby charge, as such, West Basin converts the MWD'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 MWD's RTS fixed charge of \$11,641,700 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 \$121/AF, effective January 1, 2023. This is a \$21/AF increase above the current charge of \$100/AF in calendar year 2022.

	Calendar Year 2022	Calendar Year 2022
MWD Calendar Year Collection	\$140M	\$157M
West Basin's Allocation of MWD's Total Collection (Based on 10-year rolling average)	7.82%	8.01%
West Basin's Allocated Share (6-month increments) July - December 2021 January - June 2022	\$5,474,000	\$6,287,850

Reliability Service Charge

When determining the RSC, West Basin considers both the current year and the five-year forecast in striving for a target of 1.75 on the all-in debt service coverage. This process helps in avoiding large spikes in the RSC from year to year but may also provide an all-in debt service coverage in any one year to be lower or higher than the minimum. 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 (and the effective rate for the in the FSC decreased \$8/AF) in FY 2021-22. However, the FY 2022-23 budget reflects the cost increases required to maintain service to our customers in order to provide a safe and reliable supply of high-quality water and thereby necessitates a \$12/AF increase in the RSC.

Rate Components	Today	Effective July 1, 2022	Effective January 1, 2023	Annual Rate Adjustment
		July - December	January - July	
MWD Imported Water Tier I Rate	\$1,143	\$1,143	\$1,209	\$66
MWD Readiness to Serve (RTS)	\$100	\$100	\$121	\$21
West Basin Reliability Service Charge (RSC)	\$245	\$257	\$257	\$12
Total West Basin Tier I Community Rate	\$1,488	\$1,500	\$1,587	\$99

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 101,740 AF, a drop of 2,215 AF from the previous fiscal year actual sales of 103,955 AF. Based on discussions with customer agency and their input regarding overall water management strategies and trends, and due to the uncertainty of what the State may do in response to the ongoing drought and, West Basin is budgeting for retail sales at 103,200 AF in FY 2022-23.

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 following table shows the rebound in groundwater use beginning in FY 2018-19 and continuing and projected through FY 2021-22. The rebound in groundwater use projected in FY 2022-23 has been incorporated in the budget for imported retail sales.



Groundwater Pumping History

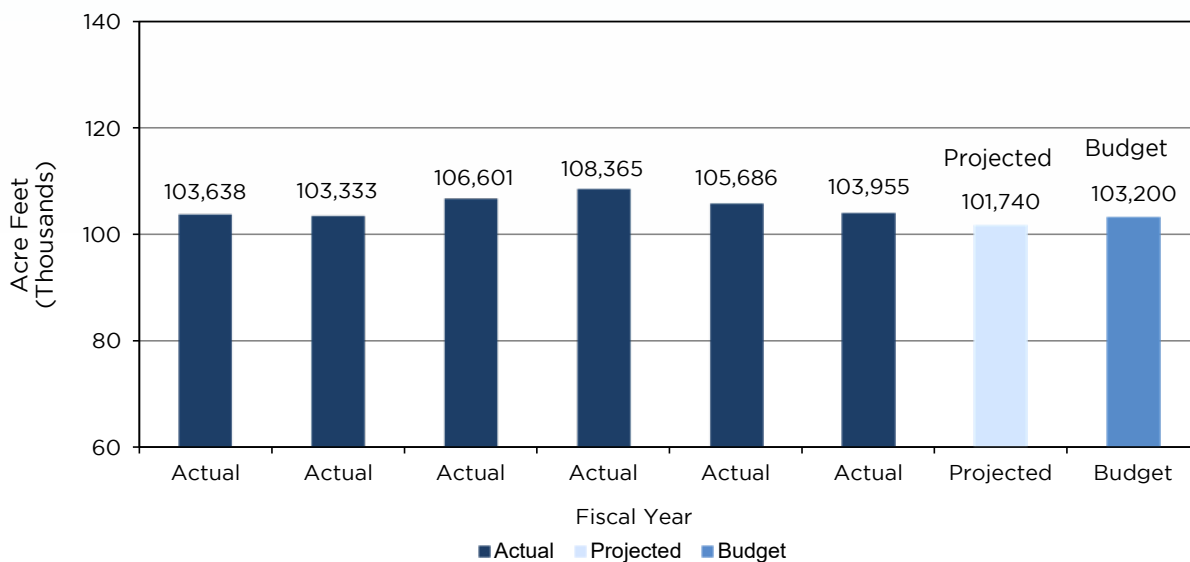
FY 2017-18 thru FY 2021-22

Fiscal Year	Groundwater AFY
FY 2017-2018	27,474
FY 2018-2019	19,776
FY 2019-2020	20,556
FY 2020-2021	24,937
FY 2021-2022 (1)	25,000

(1) Estimated based on actual groundwater extraction through April 30, 2022.

Retail Sales

FY 2015-16 thru FY 2022-23



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 to the effects of the Hyperion sewage spill, imported barrier water sales to the Barrier is anticipated to exceed budgeted sales in FY 2021-22 as a result of a limited amount of recycled barrier water available for injection. West Basin anticipated 10,600 AF in recycled replenishment water, with 2,700 AF budgeted as imported barrier water; however, actual sales are expected to be reversed, with approximately 2,200 AF in recycled and 8,900 AF of imported. 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 2022-23. Based on the information provided, and discussion with West Basin operation's staff, West Basin has set the budget to 3,900 AF of imported water for replenishment demand and 11,600 AF in recycled water in FY 2022-23.

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 2022-23 at 2,800 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 \$6,672,327 in FY 2021-22 to \$6,312,275 in FY 2022-23, effectively a \$2/AF reduction, beginning July 1, 2022. While determined on an annual basis, West Basin charges its customers on a monthly basis. Overall, this fixed service charge represents about 20% of the West Basin's own imported water revenues.

Fixed Service Charge

FY 2022-23

Customer Agencies	3-Year Ave Deliveries (AF)	Annual Charge	Monthly Charge
California American Water Co.	1,375	\$78,775	\$6,565
California Water Service - Dominguez	23,147	1,326,117	110,510
California Water Service - Hawthorne	3,117	178,591	14,883
California Water Service - Hermosa Redondo	10,491	601,040	50,087
California Water Service - Palos Verdes	17,317	992,106	82,676
City of El Segundo	6,410	367,221	30,602
City of Inglewood	6,426	368,154	30,680
City of Lomita	1,872	107,260	8,938
City of Manhattan Beach	4,674	267,801	22,317
Golden State Water	22,798	1,306,130	108,844
L.A. Co. Water Works District No. 29	8,149	466,889	38,907
WRD - Dominguez Gap Barrier	4,402	252,191	21,016
TOTAL	110,179	\$6,312,275	\$526,025

Capacity Charge

MWD 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 MWD's existing infrastructure and defers capacity expansion costs. As this is an MWD 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 253.0 for CY 2021 increased to 255.5 cfs for CY 2022 and increases slightly to 255.7 cfs for CY 2023 and is calculated on each customer's highest overall peak level during the past three (3) years.

West Basin models MWD'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 MWD 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 MWD's charge as the agency's highest peak may be different than the individual customer's highest peak.

West Basin will decrease its current Capacity Charge Rate from \$10,025/cfs to \$9,135/cfs on January 1, 2023, with anticipated revenues of \$2,448,604 during FY 2022-23 to pass through the higher MWD cost.



The tables below show the peak cfs for CY's 2022 and 2023 by customer agency.

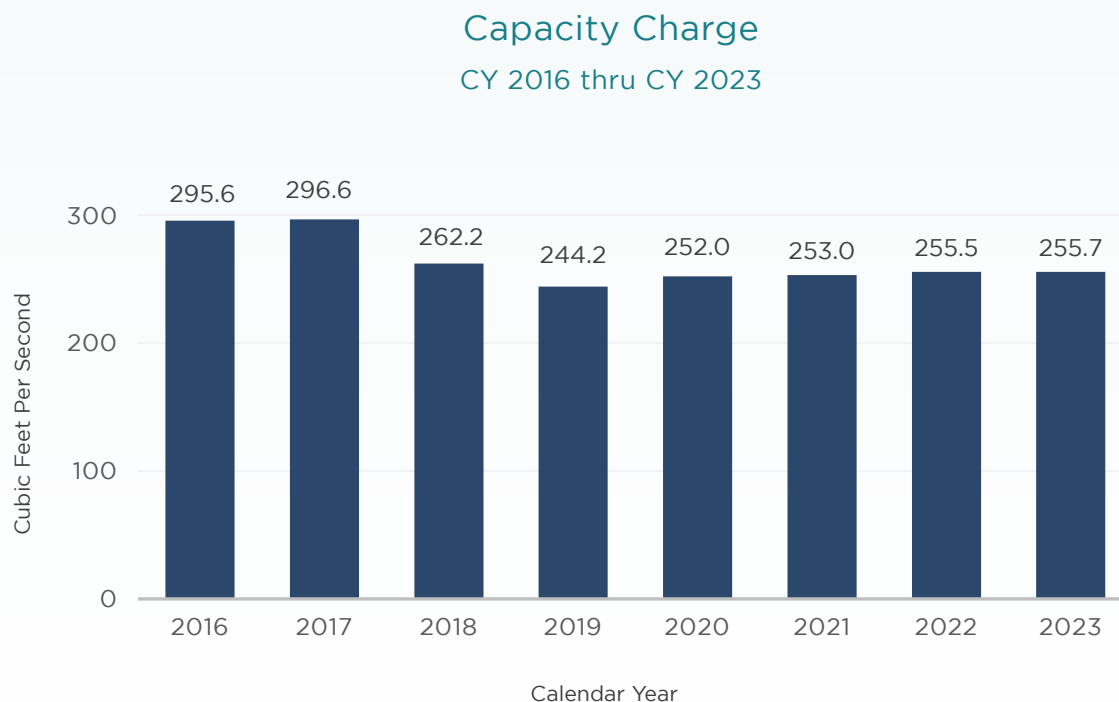
Capacity Charge

Effective 1/1/22 to 12/31/22				
	Calendar Year			
West Basin Customers	2017	2018	2019	3-Year Peak
California American Water Co.	4.0	5.0	4.8	5.0
Cal Water - Dominguez	52.3	43.5	44.2	52.3
Cal Water - Hawthorne	6.7	6.2	6.4	6.7
Cal Water - Hermosa Redondo	21.0	19.2	19.7	21.0
Cal Water - Palos Verdes	39.3	40.4	44.8	44.8
LA County Waterworks No. 29	16.1	14.7	15.8	16.1
City of El Segundo	12.1	12.3	8.5	12.3
City of Inglewood	13.8	11.8	12.0	13.8
City of Lomita	3.2	3.5	3.8	3.8
City of Manhattan Beach	8.5	8.1	8.4	8.5
Golden State Water Co.	42.2	44.5	40.9	44.5
Water Replenishment District	26.8	26.0	12.8	26.8
			TOTAL	255.5

Effective 1/1/23 to 12/31/23				
	Calendar Year			
West Basin Customers	2018	2019	2020	3-Year Peak
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

West Basin Municipal Water District

The chart below shows the collective annual peak for West Basin's customers from CY 2016 through CY 2023.



Recycled Water Charges and Fixed Revenue Charges

By resolution 06-22-1163, West Basin historically adopts 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. For disinfected tertiary recycled water, West Basin has applied a discount of approximately 4% on its effective non-interruptible tier 1 rate when setting those rates. The discount applied to disinfected tertiary recycled water was decreased in FY 2022-23 from approximately 15% to more closely reflect the increase in the cost per AF to produce disinfected tertiary recycled water. Previously, the discount was given in order to continue to attract new customers and expand existing customers to a more reliable source of water at relatively lower rate. Historically, revenues from recycled water sales consisted of commodity charges and incentive payments from MWD'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 MWD 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 2022-23 based on the estimated sales to 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. 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 of recycled water revenue including LRP is \$43,273,892 for FY 2022-23.

Recycled Water Rates (Effective July 1, 2022)				
Volume (AF/Month)	WBMWD Service Area	Outside Service Area	Designer Recycled Water	
0-25	\$1,520/AF	\$1,562/AF	West Coast Barrier Nitrified Low Pressure Boiler Feed High Pressure Boiler Feed	Established by Agreement
25-50	\$1,510/AF	\$1,552/AF		
50-100	\$1,500/AF	\$1,542/AF		
100-200	\$1,490/AF	\$1,532/AF		
200+	\$1,480/AF	\$1,522/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 \$8.3 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	8/31/2024
Chevron - Boiler Feed	\$184,267	\$2,211,204	9/30/2027
Marathon - Nitrified and Boiler Feed	\$178,000	\$2,136,000	1/31/2025
Torrance Refining - Nitrified	\$114,755	\$1,377,060	8/31/2023
Torrance Refining - Boiler Feed	\$131,205	\$1,574,460	8/31/2023
TOTALS	\$692,377	\$8,308,524	

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

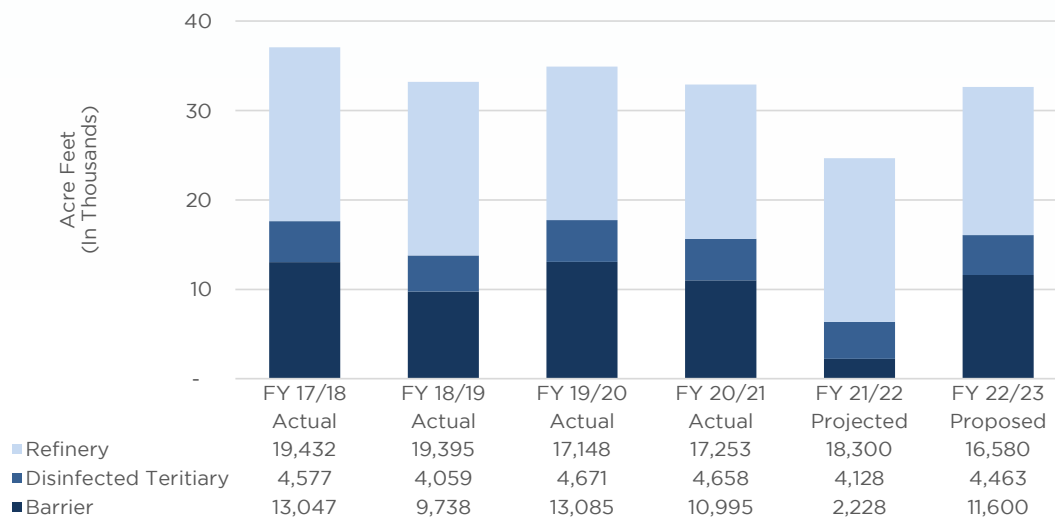
FY 23	FY 24	FY 25	FY 26	FY 27	FY 28 - FY 30 (remaining)
\$8,308,524	\$5,848,924	\$3,457,204	\$2,211,204	\$2,211,204	\$552,801

West Basin Municipal Water District

West Basin currently serves recycled water to more than 400 meters with sales projected at 24,656 AF in FY 2021-22 compared to the FY 2021-22 budget of 34,200 AF. For FY 2022-23, West Basin did budget a decrease to 32,643 AF in recycled water sales. The overall change considers lower anticipated nitrified sales to Chevron, through the City of El Segundo, due to a planned capital project to rehabilitate the nitrification tank scheduled to begin during FY 2022-23. These sales are offset by the anticipated higher sales to the West Coast Barrier as the impact of the Hyperion sewage spill returns demands after the first quarter of FY 2022-23. Expected recycled water sales are approximately 51% to the refineries, 35% to the WRD for the Barrier, and the remaining 14% will be used in parks, golf courses, schools and street medians.

Total Recycled Water Sales

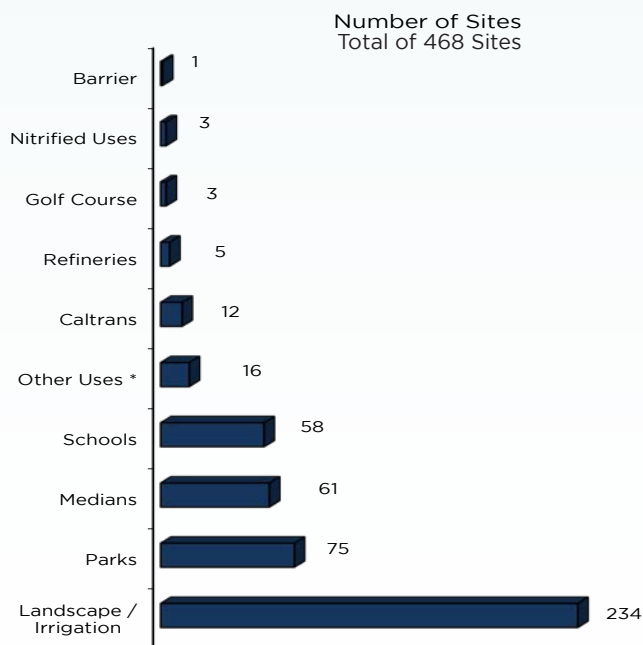
FY 2017-18 thru FY 2022-23





Recycled Water Sites

As of June 30, 2021



Desalted Brackish Water Charges

The C. Marvin Brewer Desalter (Desalter) initially began operations in July 1993 as a five-year pilot program to explore treatment of brackish water to potable water standards. The program proved viable and West Basin continued to operate the facility for the next 28 years. As the infrastructure aged and the reliability decreased, West Basin invested in numerous rehabilitation projects. An economic analysis was performed to outline the near and long-term capital improvements that would be required for a sustainable operation of the Desalter, including alternatives to maintain or expand production levels. The analysis showed that none of the alternatives indicate an ability to recover the full cost of operations. With that information, the Board of Directors created an ad hoc committee to develop a plan to divest West Basin of the Desalter program. In FY 2021-22 the Board agreed to a sale of the Desalter's extraction well with WRD anticipated to take place once the decommissioning is completed. As such, the FY 2022-23 operating budget for Desalter Operations assumes the full divestment of the C. Marvin Brewer Desalter resulting in no revenues anticipated for the fiscal year. West Basin will receive \$1,500,000 from the sale of the Desalter, and this cost will offset the costs incurred to decommission the facility. Any funds remaining from the decommissioning will be considered as miscellaneous income. Until the net revenues are known, West Basin has not included in the FY 2022-2023 Budget.

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. In addition, for the 2022-23 fiscal year, an additional reduction will be applied to the Standby Charge, reflecting the application of residual amounts in the settlement fund, as required by the settlement agreement and the court's order finally approving the settlement. Based on the terms of the settlement agreement West Basin has budgeted its standby charge revenue for FY 2022-23 at \$6.2 million.

The Board conducted a public hearing on May 23, 2022, 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 05-22-1160) at its May 23, 2022 meeting.

The following tables are an excerpt from the engineer's report that specifies the anticipated number of units included in the Standby Charge Program in FY 2022-23 broken out between Outside West Hollywood and West Hollywood only.

Outside West Hollywood			
	Parcels =<1 Acre	Acres >1 Acre	MFR Units
Residential			
SFR, Duplex	139,550	14,576	N/A
MFR	N/A	N/A	168,163
Low-use	2	203	N/A
Non-Residential			
Non-residential	11,588	14,915	N/A
Low-use	8	21	N/A
TOTAL	151,148	29,715	168,163



West Hollywood Only			
	Parcels =<1 Acre	Acres >1 Acre	MFR Units
Residential			
SFR, Duplex	1,559	—	N/A
MFR	N/A	N/A	25,104
Low-use	—	—	N/A
Non-Residential			
Non-residential	976	61	N/A
Low-use	—	—	N/A
TOTAL	2,535	61	25,104

Water Use Efficiency Income

West Basin continues to participate in the MWD 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 2022-23, West Basin will continue to receive MAA funding, and has estimated the total conservation income at \$270,000.

In addition, West Basin currently has a pending application for a state grant, which if awarded, will aid in funding additional water use efficiency programs in FY 2022-23. The pending grant is through the DWR Urban & Multi-benefit Drought Relief for \$300,000.

The pending grant is not included in the FY 2022-23 budget.

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 2022-23 is expected to be approximately \$1.02 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 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Budget	Budget
Imported Water Purchases / RTS	\$129,656,603	\$129,088,278	\$139,361,154	\$131,811,540	\$140,739,032
Capacity Charge	1,757,870	2,023,690	2,425,110	2,425,110	2,448,440
Debt Service	23,455,660	23,440,981	16,910,266	20,607,288	21,215,387
Water Recycling Operations	38,950,560	38,031,146	43,913,170	41,539,800	50,916,200
Desalter Operations	815,763	934,359	210,481	210,481	—
Water Policy	2,306,102	1,821,242	1,701,482	2,086,815	1,687,418
Public Information	3,988,770	3,758,544	3,240,372	4,406,051	4,624,857
Water Use Efficiency	2,109,110	2,087,520	2,091,069	2,447,174	2,095,957
Water Quality Monitoring	35,740	25,065	7,187	28,775	50,125
Technical Planning	1,309,637	1,977,879	2,888,669	3,866,503	4,507,747
Designated Funds	20,874,576	23,537,411	11,275,028	14,324,017	7,606,661
Total Expenditures	\$225,260,391	\$226,726,114	\$224,023,988	\$223,753,554	\$235,891,824

Expense Highlights

Overall expenditures are budgeted to increase by approximately \$12.1 million in FY 2022-23 as compared to FY 2021-22. The increased expenditures are primarily due to the increase in the cost of imported water and operating program expenditures. Imported water purchases and RTS accounts for approximately 60% of West Basin's budget for expenses. West Basin has historically passed along to its customers the increase in the cost of imported water from MWD, including the RTS and Capacity Charge. In addition to the increase in the cost of imported water, 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 system. 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 Municipal Water District

West Basin does expect to have less designated funds than in the past to support its CIP program. See “Capital Improvement Program” in the Appendix for further explanation.

Water Purchases and Charges

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 response to the Governor’s recent declaration of drought in areas throughout the state, West Basin looked at water trends from the last drought to understand the potential impact for this fiscal year. While sales have begun to normalize from the COVID-19 pandemic, West Basin has conservatively budgeted its retail imported sales at 103,200 AF for FY 2022-23. West Basin included 1,900 AF in its budget of 103,200 AF to make up for a one-time loss of nitrified recycled water sales to account for a capital project scheduled to begin at the beginning of CY 2023. 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) when the goal of injecting 100% recycled water into the Barrier cannot be met. Imported water sales to both Barriers are expected to increase to 6,700 AF in FY 2022-23 from 5,000 AF in FY 2021-22 due to an anticipated increase in the injection of recycled water into the Barrier. West Basin works closely with WRD to budget for the Dominguez Gap Barrier. With planned downtime at the Dominguez Gap for refurbishment, staff has budgeted for less AF to be sold in the new fiscal year.

	Dominguez Gap		West Coast Barrier	
	FY 2021-22	FY 2022-23	FY 2021-22	FY 2022-23
Imported	3,000	2,800	2,000	3,900



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 MWD was 5.0% for CY 2023, the imported water commodity rate for Tier 1 effectively increased 5.8%, or \$66 per AF effective January 1, 2023. The commodity rate is a direct pass-through to West Basin's customers. The components of MWD's non-interruptible commodity rate and their cost per AF are shown below.

MWD Non-Interruptible Commodity Rate		
	Effective Dates	
	1/1/22	1/1/23
Supply Rate Tier 1	\$243	\$321
Supply Rate Tier 2	\$285	\$530
System Access Rate	\$389	\$368
Treatment Rate	\$344	\$354
Power Rate	\$167	\$166
Total Tier 1	\$1,143	\$1,209
Total Tier 2	\$1,185	\$1,418

MWD's Readiness-to-Serve (RTS) Charge

The RTS is a fixed charge that MWD 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 MWD's member agencies elect to have their RTS share collected by MWD; however, West Basin's RTS share is a pass-thru to its customers, the collection of which is explained more thoroughly in the "Source of Revenue" section.

MWD's Board of Directors approved in April 2022 an overall RTS collection of \$154 million in CY 2023 from its 26-member agencies, with rate changes 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).

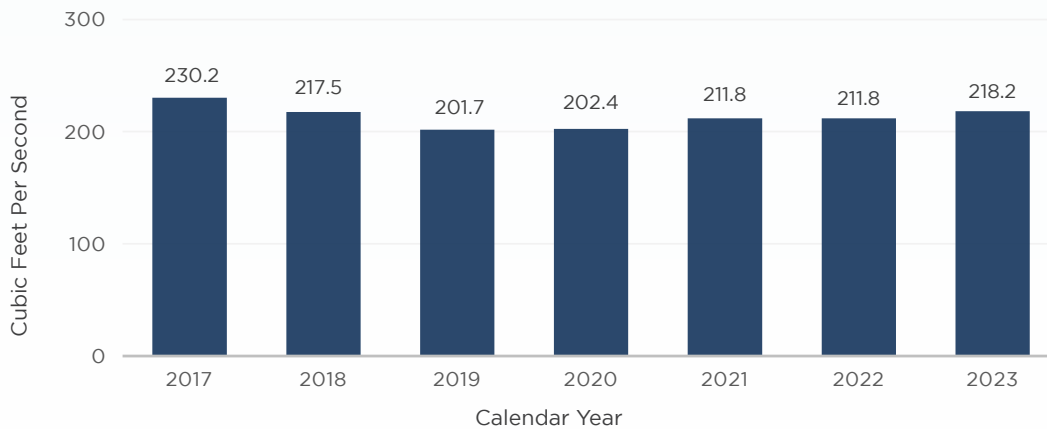
Overall, West Basin estimates water purchases and RTS expenditures to be \$140,739,032.

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 2017 through CY 2023.

Capacity Charge

CY 2017-23



Effective January 1, 2023, MWD will decrease its Capacity Charge from \$12,200 per cfs to \$10,600 per cfs; however, West Basin's peak flow increased from 211.8 to 218.2 in CY 2023. The total cost for West Basin in FY 2022-23 Capacity Charge is \$2,448,440 or a modest increase of \$23,330 from FY 2021-22.

West Basin passes through this charge to its customer agencies using the same methodology MWD uses to calculate their member agencies' share. See the "Source 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.

In FY 2021-22, West Basin was able to attain substantial savings by refunding existing debt and lock in low long-term rates by refunding its 2012A. Through this refunding, West Basin reduced its outstanding long-term debt.

West Basin Municipal Water District

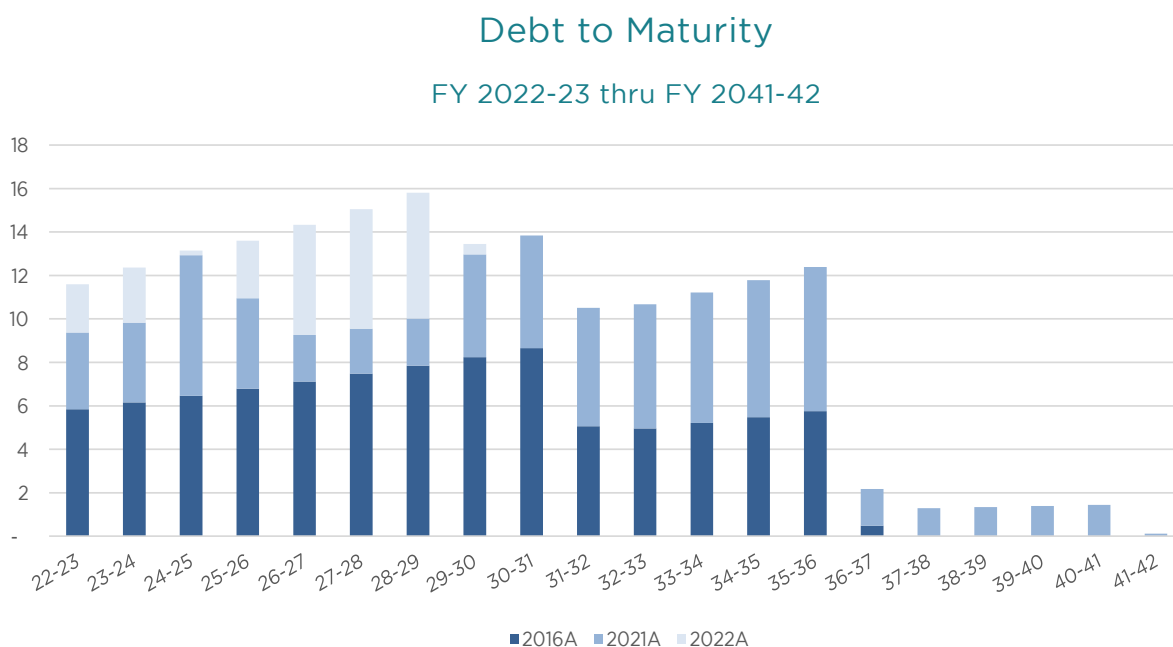
Outstanding Long-Term Debt

As of May 1, 2022, West Basin has approximately \$195.8 million in long-term debt outstanding with the following outstanding debt obligations:

Series Name	2016A	2018	2021A	2022A
Original Amount	\$112,875,000	\$30,000,000	\$74,900,000	\$24,445,000
Type of Debt	Refunding Revenue Bonds	Commercial Paper	Refunding Revenue Bonds	Refunding Revenue Bonds
Purpose	Refunding	New Proceeds	Refunding	Refunding
Interest Range	2.0% - 5.0%	Variable	4.0% - 5.0%	5.00%
Issue Date	2016	2021	2021	2022
Final Maturity	2036	2024	2041	2029
Current Rating	AA- and Aa2	P-1	AA- and Aa2	AA- and Aa2
Annual DS Pmt	\$10.4 Million	\$.09 Million	\$7.0 Million	\$3.4 Million
2022 Principal	\$5.8 Million	None	\$3.5 Million	\$2.2 Million
2022 Interest	\$4.6 Million	\$.09 Million	\$3.5 Million	\$1.2 Million
Lien	Senior	Subordinate	Senior	Senior

For FY 2022-23, debt service is budgeted at \$21,215,387.

The graph below shows West Basin's projected debt profile as of July 1, 2022.





Debt Service Requirements

FY 2022-23 thru FY 2041-42

Refunding Revenue Bonds			
1-Aug	Principal	Interest	Total
2022	11,598,750	9,309,974	20,908,724
2023	12,357,083	8,726,641	21,083,725
2024	13,138,334	8,108,787	21,247,121
2025	13,599,167	7,451,871	21,051,038
2026	14,327,083	6,771,913	21,098,996
2027	15,050,000	6,055,559	21,105,559
2028	15,802,084	5,303,059	21,105,142
2029	13,449,583	4,512,955	17,962,538
2030	13,835,000	3,840,475	17,675,475
2031	10,507,500	3,148,725	13,656,225
2032	10,676,667	2,623,350	13,300,017
2033	11,215,000	2,089,517	13,304,517
2034	11,782,500	1,528,767	13,311,267
2035	12,384,583	939,642	13,324,225
2036	2,172,917	320,413	2,493,329
2037	1,285,833	223,133	1,508,967
2038	1,335,833	171,700	1,507,533
2039	1,390,417	118,267	1,508,683
2040	1,445,417	62,650	1,508,067
2041	120,833	4,833	125,667
Total	\$187,474,583	\$71,312,229	\$258,786,813

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 a portion of its commercial paper line, in addition to expending PAYGO 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 Municipal Water District

West Basin was also able to secure state loans for \$3.9 million, and customer contributions of \$3 million.

In addition, West Basin is working with its municipal advisors to determine the amount and timing for West Basin to issue additional long-term bonds. Both long-term debt annual payments assumptions have been included in the Projected Operating results beginning in FY 2023-24.

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.

Total Debt to Capital Assets

FY 2011-12 thru FY 2020-21

Fiscal Year Ended June 30	Total Debt			Capital Assets			Ratio Total Debt/Capital Assets
	Certificates of Participation & Revenue Bonds	CP	Total LT Debt	Capitalized Assets	Construction-in- Progress	Total Capital Assets	
2012	327,023		327,023	520,501	103,279	623,780	0.52
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	252,323	10,000	262,323	684,790	74,983	759,773	0.35
2021	255,419	—	255,419	692,320	82,130	774,450	0.33

Source: Fiscal Year June 30, 2021, Annual Comprehensive Financial Report

Swap Transactions

West Basin currently has one swap transaction with a total notional amount of \$7,975,000 outstanding as of June 30, 2022. Based on GASB 53, these swaps are currently deemed an investment derivative. The swap was entered into in June 2004 with a synthetic fixed rate of 3.662% and receives 65% of the British Bankers Association – London Interbank offered rate (BBA-LIBOR) with a final termination date of August 2027. West Basin staff is cognizant of the phase-out of LIBOR at the end of CY 2021 and with its municipal advisor is monitoring the transition to the secured overnight financing rate (SOFR) and its impact on the District. SOFR is an influential interest rate that banks use to price U.S. dollar-denominated derivatives and loans. The daily SOFR is based on transactions in the Treasury repurchase market, where investors offer banks, overnight loans backed by their bond assets.



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 1.15 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 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Revenues	\$235,891	\$242,466	\$246,758	\$254,048	\$266,196	\$276,981
O&M	207,070	208,346	212,624	218,334	228,474	239,161
Net Revenues to pay senior debt	28,821	34,120	34,134	35,714	37,722	37,820
Total Senior Debt	21,125	21,941	22,194	22,035	22,038	21,996
Net Revenues to pay subordinate debt	7,696	12,179	11,910	13,679	15,684	15,824
Total Subordinate Debt	90	141	384	621	676	686
All-In Coverage	1.36	1.55	1.51	1.58	1.66	1.67
Remaining Net Revenue	\$7,606	\$12,038	\$11,556	\$13,058	\$15,008	\$15,138

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.

Salaries and Benefits

West Basin has a unique business model with a small workforce of 50 full-time budgeted positions, plus six 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:

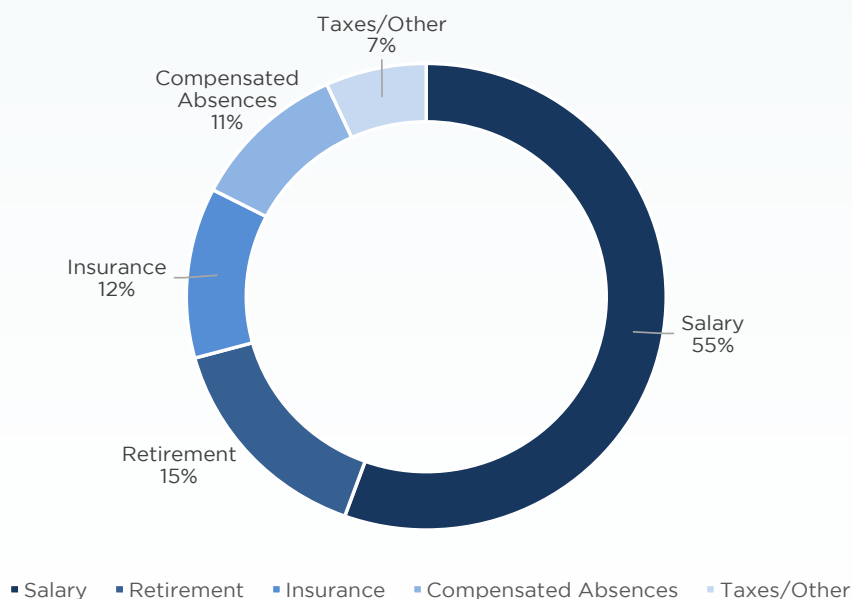
- Retirement – Classic - CalPERS 3% at 60 and Social Security (1).
- Retirement – Tier 2 - CalPERS 2% at 62 and Social Security (2).
- Health Insurance -- Paid family coverage with expense reimbursement.
- Disability Insurance -- Paid short-term and long-term insurance plans.
- Life Insurance -- Up to \$150,000 based upon salary.
- Vacation -- 10-20 days accrued annually, with credit for prior public service.
- Holidays -- 15 paid holidays annually.
- Sick Leave -- 12 days accrued annually.
- Employee Development Program -- \$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 & Benefits

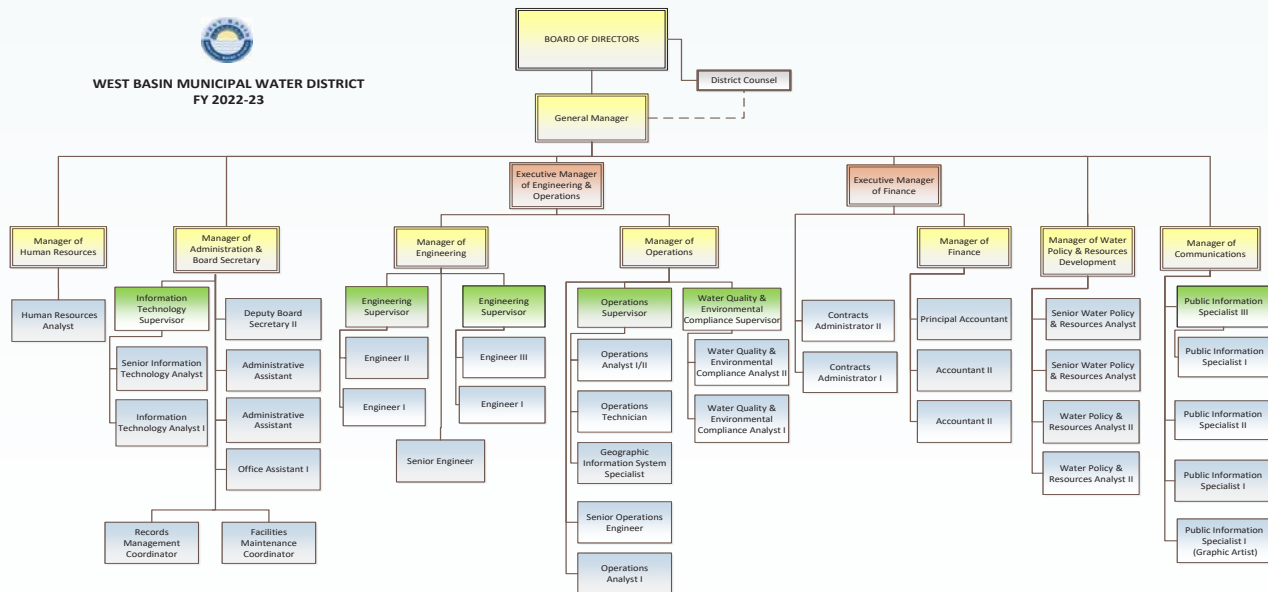


West Basin's benefits package and total payroll comprise 4.53% of its total FY 2022-23 operating budget. The types of benefits included are consistent with the prior year's budget and reflect an anticipated 5.6% average increase in health insurance and no increases in dental insurance. West Basin's pension costs for "Classic" CalPERS members are 16.17%. Pension costs for "Tier 2" CalPERS members are 7.76%. The estimated Other Post-Employment Benefits (OPEB) contribution for FY 2022-23 will be approximately \$385,629. 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 7.0%.

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 4.3% merit increase in the FY 2022-23 budget.

West Basin Municipal Water District

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



*NOTE: There are four (4) positions not budgeted for FY 2022-23 that do not appear on the organization chart.

In the FY 2022-23 Budget, the number of approved positions will decrease by 2 for a total of fifty-four (54) full-time employees. However, only fifty (50) full-time positions have been budgeted. Four positions were not budgeted at a savings of approximately \$.09 million and includes one position in Finance and one in Engineering.

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 six interns in FY 2022-23 to support the various departments.



The following is a table showing the headcount by the department that includes full-time and limited-term (no limited-term positions included in FY 2022-23). The intern positions are not reflected in the table.

Summary of Personnel Head Count by Department (Not Including Interns)

Position	FY 2020-21	FY 2021-22	FY 2021-22	FY 2021-22	FY 2022-23	FY 2022-23	FY 2022-23	FY 2022-23
	Actual	Projected	Approved	Unfunded	Approved	Unfunded	Change in Approved	Change in Unfunded
Office of the General Manager	3	3	3	1	3	1	—	—
Administrative Board Services	9	10	10	—	10	—	—	—
Engineering	7	8	9	1	8	1	(1)	—
Finance	7	6	6	1	6	1	—	—
Human Resources	2	2	2	—	2	—	—	—
Operations	11	8	9	2	10	—	1	(2)
Public Information & Education	8	6	6	1	6	1	—	—
Water Policy and Resource Development	4	5	5	—	5	—	—	—
Total	51	48	50	6	50	4	—	(2)

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 2019-20 and FY 2020-21 actuals to FY 2021-22 projected and FY 2021-22 and FY 2022-23 budget. The variance of the projected budget Full-Time Equivalent (FTE) for FY 2021-22 represents unfilled positions for the year. In FY 2022-23 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 one of its open positions to start later in the fiscal year while. In addition, the District will reassess each departmental need for staff for the upcoming year and does not intend to fill four positions for 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. The following table includes both direct and indirect labor.

Full-Time Equivalent (FTE) by Program (Not including interns)

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Budget	Budget
Recycling Operations	18.55	17.79	16.91	16.30	17.26
Desalter Operations	0.37	0.43	0.08	0.10	0.00
Water Policy/Resource Development	5.44	4.15	4.79	4.81	3.77
Public Information	10.34	13.35	11.57	13.83	13.26
Water Use Efficiency	4.06	4.43	4.42	4.44	4.21
Purveyor WQ Monitoring	0.07	0.08	0.02	0.10	0.16
Technical Planning	2.44	2.93	1.05	1.17	3.08
Capital Projects*	6.11	6.31	7.41	9.26	7.76
Total FTE	47.37	49.47	46.25	50.00	49.50

* Indirect labor costs are not allocated to Capital Projects per the updated Capitalization Policy.



Capital Improvement Program

The Mission Statement in West Basin's Strategic Business Plan is "To provide a safe and reliable supply of high-quality water to the communities we serve". West Basin's existing capital assets include multiple water recycling facilities, a recycled water distribution system, as well as West Basin's Donald L. Dear headquarters building. The West Basin CIP, which includes three major components: New Infrastructure projects, Rehabilitation & Replacement (R&R) projects, and Other projects, is designed to support the District's strategic business plan objectives. For more detailed information on the CIP, see "Appendix - FY 2022-2023 Capital Improvement Program Budget."

New Infrastructure

New infrastructure and equipment are added to the existing recycled water system to:

- Increase recycled water uses by expanding the distribution system, constructing new lateral pipelines, and establishing new customer connections.
- Increase the capacity of the existing recycled water facilities by installing new treatment systems.
- Meet water quality and regulatory requirements by evaluating latest technologies and adding new equipment.

Rehabilitation & Replacement Program

Phase 1 construction of West Basin's recycled water treatment and distribution systems was complete in 1995. With aging infrastructure, the R&R of existing facilities and equipment is critical to maintaining the District's production capacity and water quality goals. West Basin's CIP includes an R&R component that aims to meet such goals, and extend the useful life of existing treatment assets and 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 with the goal of maintaining service to its customers during construction. By undertaking West Basin's planned rehabilitation and replacement program, West Basin will continue to enhance recycled water processes, provide reliability to the customers, and implement cost savings through the efficient operation of upgraded equipment.

Other Projects

West Basin has a number of capital projects that support West Basin's efforts in maintaining existing building assets, and implementing necessary Information Technology (IT) related upgrades. The list of capital investments included in Other Projects also includes Estimated Staff Time for Projects Under Review, which represents West Basin's direct labor and associated allocated costs to support the CIP program.

Master Plan and Project Prioritization

To facilitate West Basin's CIP a comprehensive master planning document was created to serve as a roadmap for the implementation of the CIP, and allows West Basin to effectively plan for changing water supply, demand, and regulatory conditions over a 20-year planning horizon. West Basin's long-term master planning efforts aim to identify capital projects that support the following objectives:

- Provide recycled water to new customers,
- Improve existing recycled water system capacity and reliability,
- Meet the recycled water's quality standards,
- Respond to the regulatory changes, and
- Explore other local sources of water supply

Part of the CIP budget process development includes evaluating and prioritizing capital projects. The major capital projects recommended in the 5-Year CIP have been prioritized with the following process:

- Establish CIP Prioritization Criteria (i.e., Benefit Criteria). Once established, the Benefit Criteria can be revisited from time to time to confirm if business or strategy of the District warrant revision to the Benefit Criteria. Once developed or revised, the Benefit Criteria receive a weighting.
- District staff allocated 100 points between each of the criteria. These points were averaged across participants for each criterion, which then became the criteria weight. The weights are represented in the table below. Projects were then scored on a scale of 1 to 5 for each criterion, with 1 representing the lowest possible benefit towards the criteria and 5 representing the highest possible benefit towards the criteria. Individual criterion scores multiplied by weights are then summed for each project. These final total scores are used to rank the projects.



Criteria	Weight
Safety	30%
Customer Experience	10%
Reliability	20%
Compliance and Stewardship	20%
Schedule	5%
Cost Savings	15%
Total	100%

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. The annual CIP expenditures for fiscal years 2022-23 as originally proposed to the Board of Directors for their review, consideration, and discussion was \$57.9 million. However, with West Basin’s renewed focus on evaluating its contributions to a regional approach to address the availability of local supply of water, the Board requested staff to defer some projects. As a result, three different scenarios were presented to the Board at a workshop held on May 18, 2022. The first scenario was the original proposed CIP budget of \$57.9 million, the second scenario only included CIP projects the Board had previously committed funding, and the third scenario included all projects in the second scenario plus projects that had considerable external funding. CIP Status Reports were also provided as additional references detailing the description, purpose and necessity, anticipated cost and schedule, and current status of each project, as well as the drivers and benefits of each. Ultimately the Board approved the third scenario on June 27, 2022 with anticipated annual CIP expenditures of \$45,614,590 for FY 2022-23. The following is the list of each CIP project anticipated for FY 2022-23.

Capital Projects Schedule

Project Name	FY 2022-23
New Infrastructure - Treatment Assets	\$19,147,396
JMMCRWRP Phase II Expansion Project	\$16,562,327
Title 22 Converted Filter Booster Pump Station	\$2,585,070
New Infrastructure - Customer Development Pipelines & Laterals	\$11,244,358
Palos Verdes Recycled Water Pipeline Project	\$9,337,672
Mills Park Recycled Water Lateral Project	\$989,121
North Gardena Recycled Water Lateral Project	\$914,300
Inglewood Basketball Entertainment Center RW Improvement	\$3,265
R&R Projects	\$13,169,252
ECLWRF Solids Handling Improvement	\$1,519,543
RW Distribution System Cathodic Protection System Improvements	\$991,732
Chevron Nitrified Product Water Tank Rehabilitation	\$10,117
Torrance Refinery Nitrified Product Water Tank Rehabilitation	\$28,923
ECLWRF Title 22 Filters Rehabilitation & Replacement	\$5,217,089
Distributed Control System Replacement	\$878,930
ECLWRF Barrier Basin & Pump Station Rehabilitation	\$295,099
Disinfected Tertiary Product Pumps & VFDs Rehabilitation	\$985,465
ECLWRF Bulk Chemical Storage Improvements	\$173,999
C. Marvin Brewer Desalter Decommissioning	\$176,918
HSEPS R&R Project	\$443,351
Hyperion Force Main R&R Condition Assessment	\$197,800
Ops MF Membrane Replacement	\$402,289
TRWRP MF Replacement Project - Feasibility Study Phase	\$89,718
Ops RO Membrane Replacement	\$10,000
Ops Facility R&R	\$1,567,281
Ops Compliance Laboratory	\$181,000
Other Projects	\$2,053,583
DLD IT Server Room Improvements	\$30,000
DLD Air Conditioning Units Refurbishment	\$114,083
DLD Boiler Replacement	\$79,583
West Basin HQ Conceptual Design Options	\$244,000
IT CIP Projects	\$737,000
Estimated Staff time for Projects Under Review	\$848,917
Total	\$45,614,589



The table below shows staff's actual full time equivalents (FTE) for FY's 2019-20 and FY 2020-21, Projected for FY 2021-22, and budget FTE for FY's 2021-22 and 2022-23.

Personnel - Full Time Equivalents (FTE)

FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
Actual FTE	Actual FTE	Projected FTE	Budget FTE	Budget FTE
6.11	6.31	7.41	9.26	7.76

Project Funding

As essential as it is to prioritize and evaluate each project to understand the nature and useful life, the capital improvement plan 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.

Funding Sources

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

1. PAYGO: Also known as Pay-As-You-Go, PAYGO funds capital improvement projects from rates/revenues and reserves.
2. 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 transfer the project 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 (USACOE).
3. Government Grants and Loans: Examples are the California State Water Resources Control Board (SWRCB) State Revolving Fund Low Interest Loans or the loans issued through the environmental Protection Agency (EPA) referred to as the Water Infrastructure Innovation Act (WIFIA).
4. Municipal Bond and Bank Debt: A public agency may issue short-term or long-term debt through the public market, private placement, direct purchase arrangements or through interim financing.

Determination of the funding source

A review of each individual project allows the District to determine the most appropriate use of funding source. 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 that have a useful life shorter than 15 years are typically funded with PAYGO. The main reason PAYGO funding is utilized is that the District issues debt that often exceeds 15 years and District's Debt Management Policy requires the debt issued will coincide with the life of the asset. The exception would be if the district were to acquire debt or enter a loan that matches the useful life of the capital asset.

Of course, the District takes into consideration the external funding that may be received from grants or customers. The District has been successful to receive grants and contributions that has offset the cost of capital. 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, the quality, and quantity the customer is seeking to lessen its dependence on imported water.

Debt is a broad term 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 costs of the repayment 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 to use during the time the capital project is being constructed and it is awaiting the other sources of funding like customer funding or grants. The repayment of interim financing is either completed by a cash repayment or converting the interim financing to long-term debt. It is still important for the District to ensure that the refunding still matches the long-term nature of the debt with the longer useful life.

To deliver the fit-for-purpose water to some of its refinery customers, the District historically debt financed these capital projects on the customer site with the District's tax-exempt financing. In return, the customers repaid this investment through a customer agreement. However, as these customer agreements come up for renewal, there has been consideration



given to transfer these assets to the refinery for the customer to maintain. Looking forward the District should consider the long-term ownership of these assets when deciding to utilize debt as the desire maybe to transfer the asset to the customer in the future. Before a transfer can be considered, the District will need to evaluate whether there is still outstanding debt related to the asset(s) as the District may not transfer the asset until the tax-exempt bonds are paid off.

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 calculation of the core target includes a 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 looks to achieve its targeted debt service coverage, the District will annually earn net revenues that may be invested back into capital projects. The District will maximize the use of the annual net revenues towards funding capital projects and may opt to use PAYGO for assets with longer term useful life. However, this assumes that the minimum designated funds 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 issuance of debt, however, the District should consider the potential higher operational costs or consequences of failure with 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 cost of financing
- A mix of debt and PAYGO is necessary to meet rate and financial objectives

For FY 2022-23 the following funding approach was presented to the Board of Directors, however, depending on the timing of the receipt of external funding/loans, staff may need to utilize the CP line with the intent of repaying the line once external funding/state loan funds are received.

West Basin Municipal Water District

Funding Sources	FY 2022-23
External Funding	(In millions)
Customer Contributions	\$6.8
Grants	9.8
Refinery Contributions	2.5
State Revolving Fund-Low Interest Loan	9.6
PAYGO Funding	7.7
Use of Reserves	9.2
Total CIP Funding	\$45.6

Proposed 5-Year CIP Projects

While the Board has only approved the FY 2022-23 CIP budget of \$45.6 million, staff has developed the anticipated CIP expenditures over the next five fiscal years totaling more than \$156.4 million. The following table depicts the expenditures for projects anticipated for FY 2022-23 through FY 2026-27 and the financial impact from these CIP projects have been incorporated into the five-year projected operating results table (see page 38) either through draws from the CP line, PAYGO, draws on reserves, or long-term financing. Staff will continue to seek grants, customer contributions, and if available, low interest loans to off-set the cost of future CIP expenditures. Also, having a long-term view allows West Basin to better understand the financial impact of future CIP expenditures that may occur as it addresses its long-term rate management strategy.

Project Name	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
New Infrastructure - Treatment Assets	\$19,147,396	\$269,280	\$532,811	\$1,145,909	—
New Infrastructure - Customer Development Pipelines & Laterals	11,244,358	1,405,398	198,200	—	—
R&R Projects	13,169,252	26,310,674	34,371,563	27,135,153	18,707,435
Other Projects	2,053,583	449,842	316,708	—	—
Total	\$45,614,589	\$28,435,194	\$35,419,282	\$28,281,062	\$18,707,435

Nonrecurring Capital Projects

Approximately 57% (\$25.9 million) of the proposed CIP FY 2022-2023 budget is attributed to two Capital Projects: the JMMCRWRP Phase II Expansion Project, with an estimated FY 2022-2023 expenditure of approximately \$16.6 million; and the Palos Verdes Recycled Water Pipeline Project, with an estimated FY 2022-2023 expenditure of approximately \$9.3 million. The JMMCRWRP Phase II Expansion Project is currently in construction phase, and the Palos Verdes Recycled Water Pipeline is scheduled to begin construction in the fall of 2022. West Basin staff was successful in securing external funding sources (grants, stakeholder contributions, and low interest loans) for both projects. Staff has incorporated into the FY 2022-23 operating budget and the five-year projected operating results, revenues associated to additional recycled water sales, new operations and maintenance cost to operate and main these assets, as well as any on-going debt service.





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 2022-23 Operating Program consists of the following:

<u>Allocated Programs</u>	<u>Page Number</u>
Overhead Program Costs	108
<u>Operating Programs</u>	
Water Recycling Operations	119
Technical Planning	127
Water Policy and Resource Development	132
Public Information & Education	137
Water Efficiency Use	141
Purveyor Water Quality Monitoring	148

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 2022-23 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 CIP. 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 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Adopted Budget	Adopted Budget
Administration	\$4,257,103	\$2,630,806	\$2,153,061	\$2,802,275	\$2,391,320
Board Services	\$527,899	\$1,069,652	\$509,500	\$648,200	\$1,255,300
Building	\$444,584	\$450,726	\$382,910	\$348,700	\$403,800
Finance & Contracts	\$227,995	\$598,542	\$404,947	\$597,500	\$245,300
Human Resources	\$177,858	\$116,544	\$110,156	\$111,600	\$139,410
Total Overhead	\$5,635,439	\$4,866,270	\$3,560,574	\$4,508,275	\$4,435,130

The individual department budgets that comprise the Overhead Budget are shown on the following page by account category, along with the objectives included in the FY 2022-23 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.

	FY 2021-22	FY 2022-23
	Budget	Budget
Professional Services	\$370,000	\$370,000
Software License	\$662,900	\$709,245
Legal Services	\$800,000	\$360,000
LAFCO Share	\$85,000	\$75,000
Office Administration	\$611,600	\$661,900
Memberships	\$179,525	\$160,175
Sponsorships	\$93,250	\$55,000
Total	\$2,802,275	\$2,391,320

FY 2022-23 Budget Assumptions

- Professional services include an update of strategic plan, technology support, real estate services, 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.

Reduction in the FY 2022-23 Administration budget as compared to FY 2021-22 is mainly due to anticipated lower legal fees as a result of the Board of Directors' decision to terminate its ocean water desalination program due to the changing water landscape since the program's inception, in addition to a judgment approval received from the Los Angeles Superior Court in April 2022 regarding the standby charge settlement.

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.

	FY 2021-22	FY 2022-23
	Budget	Budget
Director Costs	\$517,500	\$519,200
Professional Services	\$30,000	\$30,000
Office Administration	\$25,700	\$31,100
Sponsorships (Director)	\$75,000	\$75,000
Election Costs	0	\$600,000
Total Costs	\$648,200	\$1,255,300

FY 2022-23 Budget Assumptions

- Estimated Election costs for 3 divisions.
- Conduct Board planning sessions with new General Manager.
- Installation of Board members.
- Director costs include per diem, allowances, travel and health coverage.
- Update bi-annual PARS actuarial report (reimbursed by trust).

Each Board of Director is elected to serve a 4-year term with elections occurring in even years. Three of the five West Basin divisions are scheduled to hold elections and the cost incurred for those elections will be passed-through from Los Angeles County to West Basin in FY 2022-23.

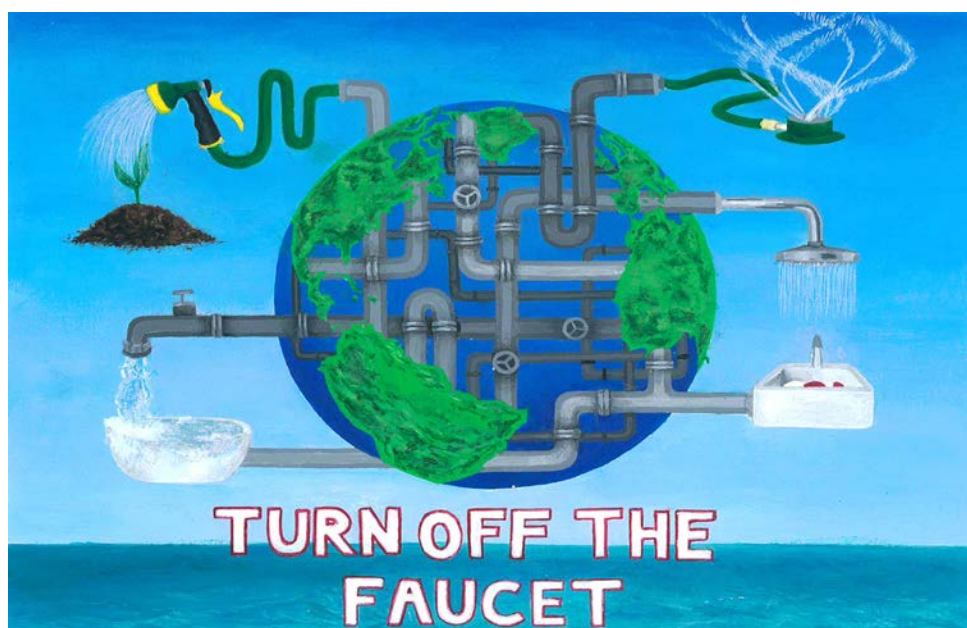
Donald L. Dear Building

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.

	FY 2021-22	FY 2022-23
	Budget	Budget
Utilities	\$122,500	\$168,800
Facility Maintenance	\$52,800	\$69,000
Non-Professional Services	\$175,500	\$165,500
Office Administration	\$900	\$500
Total	\$348,700	\$403,800

FY 2022-23 Budget Assumptions

- Increase in utility costs due to higher electricity unit costs.
- Non-professional services include security services, janitorial, and landscape services.



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.

	FY 2021-22	FY 2022-23
	Budget	Budget
Professional Services	\$544,500	\$197,500
Legal (Bond Counsel)	\$9,000	\$15,000
Office Administration	\$44,000	\$32,800
Total	\$597,500	\$245,300

FY 2022-23 Budget Assumptions

- Develop Capital Funding Policy guiding the use of reserves, external funding, and debt to fund the CIP Budget.
- 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.

Staff completed a refunding of its 2012A Revenue Refunding bonds in FY 2021-22 and does not expect to refund or issue additional debt in FY 2022-23 thereby decreasing its budget for Professional Services in FY 2022-23.



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.

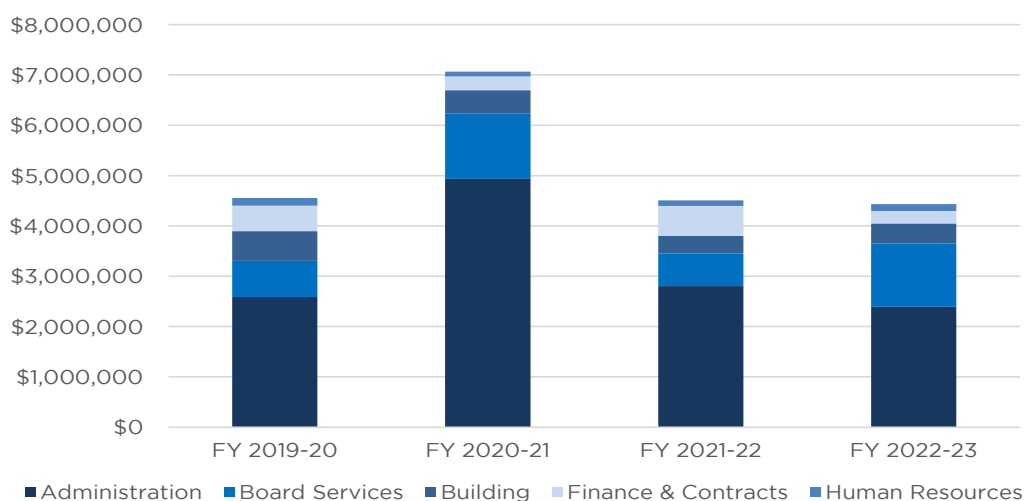
	FY 2021-22	FY 2022-23
	Budget	Budget
Professional Services	\$60,000	\$84,260
Legal Services (Human Resources)	\$10,000	\$10,000
Advertising	\$8,000	\$10,000
Office Administration	\$33,250	\$35,150
Total	\$111,250	\$139,410

FY 2022-23 Budget Assumptions

- Expand efforts towards Diversity Equity Inclusion.
- Conduct Succession Planning Study.
- Evaluate Service Delivery for Safety and Risk Management Support.
- Focus on Essential Employment Development Training.
- Plan for In-Person Employee Morale activity events.

The following graph shows the variability of the Overhead program budget from FY 2019-20 through FY 2022-23.

Budget Trend



West Basin Municipal Water District

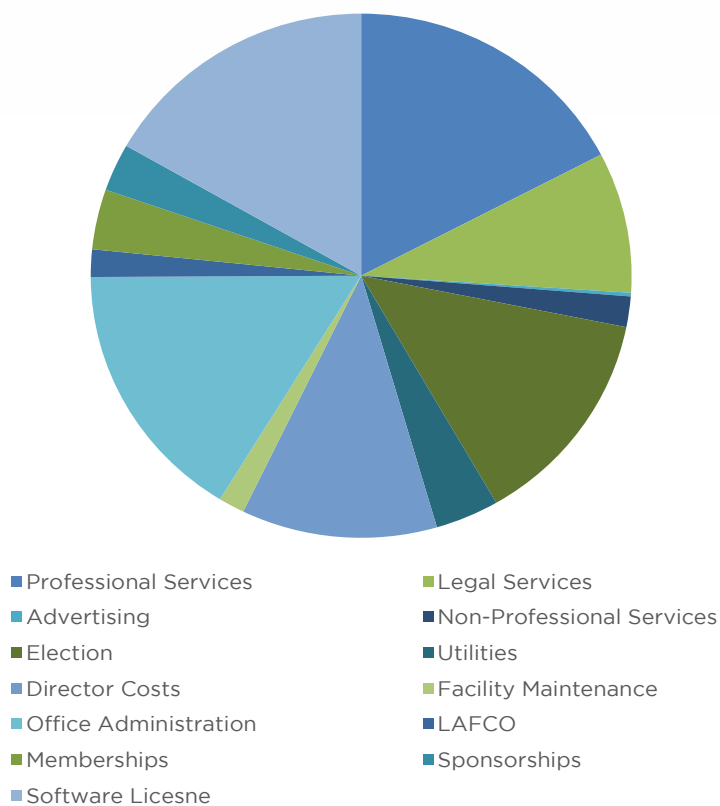
The Overhead program costs are allocated to the District's operating programs based on direct labor hours. The table below shows the amount allocated in the FY 2022-23 budget to each of the operating program budgets.

Program Budget	FY 2022-23
	Overhead Allocation
Recycled Water Operations	\$1,745,172
Public Information and Education	\$1,303,621
Water Use Efficiency / Conservation	\$560,875
Technical Planning	\$241,106
Water Policy and Resources Development	\$569,414
Water Quality Monitoring Program	\$14,942
Total Overhead Costs	4,435,130

The following pie chart shows the breakdown by account for the FY 2022-23 Overhead budget.

Fiscal Year 2022-2023

By Account





Strategic Goals and Objectives

Sound Financial and Resource Management

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 2.1 Provide effective overall capital facility asset management through the application of industry best-practices	<ul style="list-style-type: none"> Participated virtually in the annual ACWA/JPIA Risk Assessment of West Basin's treatment plant, headquarters building, and other West Basin satellite facilities. Conducted a variety of ACWA/JPIA required inspections of the Treatment Plant and other satellite West Basin facilities. 	<ul style="list-style-type: none"> Participate in the Donald L. Dear Building Relocation Committee to provide assistance and feedback regarding communication to all staff. Participate in an in-person ACWA/JPIA Risk Assessment Site visit of West Basin's treatment plant, headquarters building, and other West Basin satellite facilities barring any COVID restrictions.
Strategy 2.4 Maintain or improve current bond ratings	<ul style="list-style-type: none"> Provided the Annual Comprehensive Financial Report to the rating agencies. 	<ul style="list-style-type: none"> Continue to provide appropriate updates to rating firms for ongoing monitoring. Annual surveillance.
Strategy 2.5 Develop a formal Long-Range Financial Plan	<ul style="list-style-type: none"> Updated the five-year forecast by incorporating the refunding of the 2012A bonds, and updated the water rates and charges adopted by MWD. 	<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.
Strategy 2.6 Operate cost-efficiently and effectively, with robust internal controls	<ul style="list-style-type: none"> Decommissioned POTS lines and migrated to SIP technology to reduce telecom cost. Prepared and reported monthly Cash & Investments, Demands, and Water Sales at committee. Reported on a quarterly basis Budget vs. Actual, Debt & Swap report, and the Recycled Water Operating Summary results to the Board. 	<ul style="list-style-type: none"> Create Information Technology Governance Committee. Continue to prepare and report financial information to the Board on a monthly and quarterly basis. Ensure risk management review in key solicitations/ procurements.

West Basin Municipal Water District

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 2.8 Recruit and hire qualified candidates to fill all West Basin positions	<ul style="list-style-type: none"> Completed and/or commenced the recruitment process for 5 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 diversified recruitments efforts. Participate in college/university job fairs and other university sponsored events to boost student interest and diversity in recruitment efforts. Develop and issue a Request for Proposal for the development of a comprehensive Succession Plan to address potential retirements and employee's knowledge transfer and mentorship.
Strategy 2.9 Manage and reward performance	<ul style="list-style-type: none"> Distributed, received, and recorded 100% completed Annual Employee Performance Evaluations for all employees. 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, in compliance with CalPERS regulations.



Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 2.10 Develop a formal plan for workforce retention, training, and succession planning	<ul style="list-style-type: none"> Secured a range of employee professional development training courses for staff to attend. Conducted mandatory staff Safety Meetings in accordance with West Basin's Injury/Illness Prevention. 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. Implemented Diversity, Equity and Inclusion Committee/Team. Kept Executive Management Team and staff updated on Suggestion Box feedback, comments, and potential resolutions. 	<ul style="list-style-type: none"> Conduct employee professional development training specific to software program training, leadership training for executive and senior management, and agency-wide, on-site public speaking and business writing training to further staff professional development. Conduct Earthquake Preparedness Drill (Great California Shakeout) and Emergency Evacuation Drill. Conduct 5th Annual Health and Wellness. Secure Wellness Grant through ACWA JPIA to assist in West Basin's health and wellness initiatives, in addition to securing available grants for future health and safety initiatives. Continue efforts in the creation and implementation of the District's first Diversity, Equity and Inclusion Committee/Team. Conduct CPR/AED Training. Continue review of the Human Resources section and Director Benefits section of the Administrative Code to ensure compliance with applicable laws and benefits administration.

Customer Service

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 4.3 Support the Board in maintaining a Strategic Business Plan	<ul style="list-style-type: none"> Discussed with the Board and included funds in the proposed FY 2022-23 Operating Budget to contract with a consultant to assist with updating the Strategic Business Plan. 	<ul style="list-style-type: none"> Contract with a consultant to work with staff and the Board to update the Strategic Business Plan.
Strategy 4.5 Engage small and/or local businesses in the procurement of services	<ul style="list-style-type: none"> Tracked Small and Local Business Enterprise program spending and presented findings to the Board. 	<ul style="list-style-type: none"> Continue to monitor and track Small and Local Business Enterprise program spending. Develop business outreach resources.

West Basin Municipal Water District

Performance Metrics

Metric	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Target	Target
On time submission of annual bond disclosure	100%	100%	100%	100%	100%
Investment Benchmark – meet or exceed BAML 0-3 Yr US Treasury Index	Met	Met	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	1.75	1.84	1.28	1.70	1.36
Have 100% submittal of Performance evaluations	100%	100%	100%	100%	100%
Conduct and Present on the Annual District Diversity Report	Met	Met	Met	Met	Meet
Achieve Board directed goal for overall spend with Small and or Local Businesses	28%	24%	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.

West Basin Municipal Water District

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.

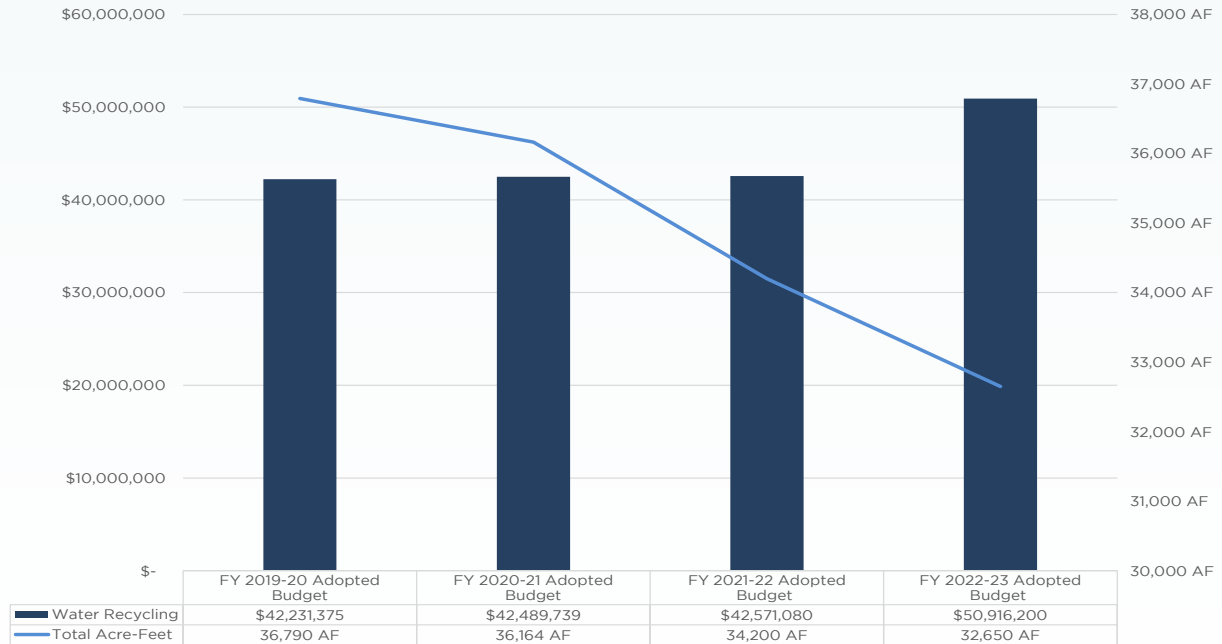


Operating Budget

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Adopted Budget	Adopted Budget
Labor and Benefits	\$3,321,085	\$3,248,736	\$3,035,950	\$3,069,683	\$3,472,956
Overhead Allocation	2,253,293	2,005,437	1,614,370	1,733,213	1,780,964
Chemicals	7,955,638	8,919,640	10,010,774	10,406,976	14,725,212
Consultants	927,162	445,976	470,570	817,100	605,105
Contract Operations	10,349,786	9,642,983	9,964,900	10,039,900	10,788,600
Facility Maintenance	4,044,440	3,438,014	4,148,941	4,013,599	4,404,865
Lab Services	635,049	567,261	622,625	704,289	639,603
Office Administration	715,226	296,881	379,298	331,472	682,068
Permits/Treatment Surcharge	115,561	221,283	230,070	230,070	259,088
Secondary Effluent	283,345	300,596	213,753	366,600	348,900
Software Licenses	22,242	32,315	20,000	20,000	47,000
Solids Management	1,383,715	1,783,169	1,719,555	1,516,178	2,766,627
Utilities	7,930,101	8,128,743	8,382,929	9,322,000	10,701,300
Total Water Recycling Operations	\$39,936,643	\$39,031,034	\$40,813,735	\$42,571,080	\$50,916,200
Total Acre-Feet	34,903 AF	33,920 AF	24,656 AF	34,200 AF	32,643 AF

*In FY 2022-23 the O&M Reimbursement was moved to the Operating Revenues.

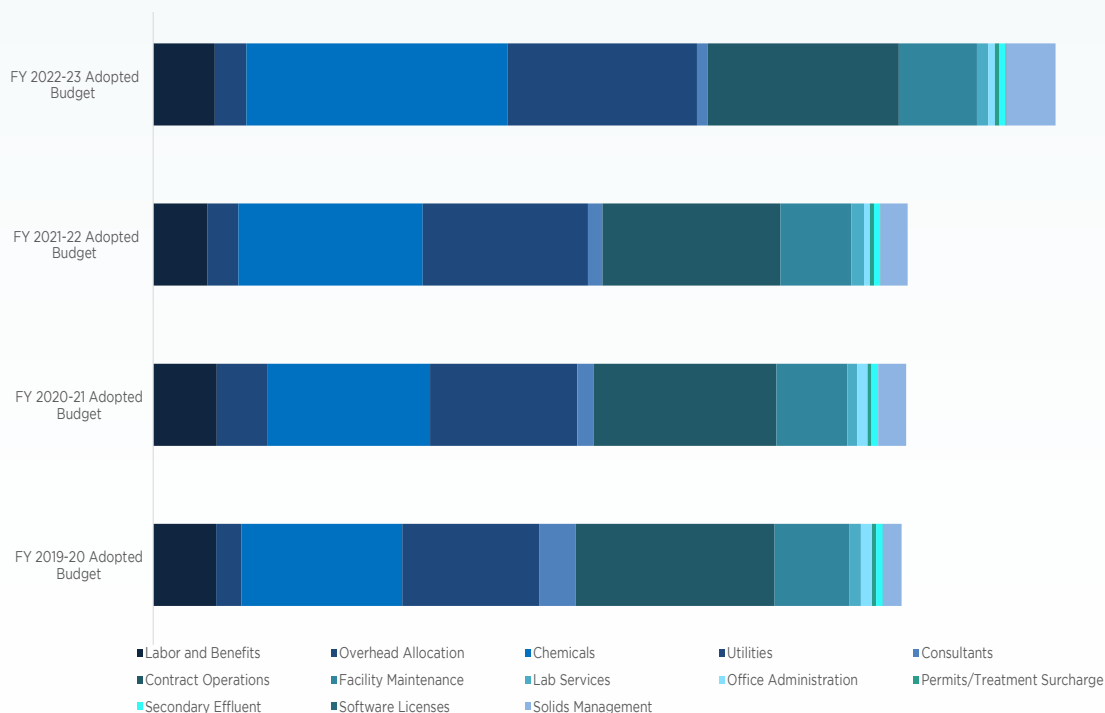
Water Recycling Operations Budget Trends



The Operations department which is responsible for the operations of the ECLWRF projected less recycled water sales in FY 2022-23. 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 adjusts 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, although West Basin expects to sell less recycled water, the cost to produce recycled water will increase by approximately \$8.3M as compared to the FY 2021-22 budget.



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 in the treatment process for recycled water. The 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. Due to the ongoing issues, many vendors are not willing to take on new customers or provide long-term bids due to market volatility.

Estimated +28% Increase

- 25% increase in Ferric Chloride
- 43% increase in Sodium Hydroxide
- 46% increase in Sodium Bisulfite
- 76% increase in Sodium Hypochlorite
- Increased FeCl_3 dosage due to Hyperion Effluent

West Basin Municipal Water District

Utilities account for roughly 21% of the new fiscal year budget, and a majority of the cost is for electricity. Over the last two years, West Basin experienced multiple price increases in electricity from 10% to 16%. As a result, West Basin sought out ways to maintain the cost to produce recycled water. In March 2022, West Basin joined the Direct Access program, an electrical supply service option to purchase electricity 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 rate for the next three years, with an estimated savings of \$2,292,247.

Strategic Goals and Objectives

Water Supply Reliability

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 1.4 Increase supply diversification by promoting water recycling	<ul style="list-style-type: none">• Provided support for retrofit design, plan review, and inspections of 22 sites that are anticipated to be connected to the recycled water system in the upcoming fiscal years.• Coordinated 9 recycled water customer site modifications with DPH approvals and inspections.	<ul style="list-style-type: none">• Add 7 new meter connections to the recycled water distribution system for approximately 112 acre-feet of demand annually.



Sound Financial and Resource Management

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 2.1 Provide effective overall capital facility asset management through the application of industry best-practices	<ul style="list-style-type: none"> Customized Computerized Maintenance Management System (CMMS) software by adding inventory module to help parts audit, acquisitions, and use along for work orders Began implementing chemical optimization plan initiatives for recycling treatment facilities Received approval to participate in a load-curtailement program with NRG/SCE to optimize energy consumption at ECLWRF with an estimated savings of approximately \$2.3M over 3 years. 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 software to include equipment usage; and begin integrating Distribution Assets. Review and update West Basin Level of Service to meet customer expectations and West Basin's Strategic Goals. Continue Optimization of Processes through targeted plans that help protect assets
Strategy 2.2 Maintain facilities to manage and minimize the risk of failure and liability exposure	<ul style="list-style-type: none"> Developed and conducted a desktop study on TRWRP yard piping assessment and inventory. Developed inspection plan and conducted Level 1 condition assessment for West Basin owned refinery onsite assets. 	<ul style="list-style-type: none"> Implement inspection on high priority TRWRP yard piping. Complete analyses on rehabilitation recommendations and remaining asset values of refinery onsite assets.
Strategy 2.6 Operate cost-efficiently and effectively, with robust internal controls	<ul style="list-style-type: none"> Utilized developed dashboards to track and analyze costs compared to the level of service and improve greater efficiency. Developed an RFP and awarded an agreement for the O&M of the recycled water distribution system. Executed Direct Access program agreement to procure electricity at a fixed rate for the next three years. 	<ul style="list-style-type: none"> Continue to explore other energy optimization initiatives to minimize energy consumption. Implement a new Distribution System contract that will include electronic metrics for efficient system management.

West Basin Municipal Water District

Water Quality

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 3.1 Achieve and maintain recycled water client satisfaction	<ul style="list-style-type: none"> Supported existing customer water quality inquiries 	<ul style="list-style-type: none"> Supported existing customer water quality inquiries
Strategy 3.3 Meet permit and contractual water quality requirements	<ul style="list-style-type: none"> Completed special studies per regulatory requirements for ocean discharge. Monitored water quality to ensure it met water quality compliance and contractual requirements. Completed all permit reporting on time. 	<ul style="list-style-type: none"> Complete environmental documentation needed to obtain grants for recycled water projects in the district. Complete 5-yr engineering report. Update T22 Engineering Report and Enroll in the new General Permit for Recycled Water.

Customer Service

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 4.2 Ensure recycled water client and customer agency satisfaction	<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. Maintained quality service to purveyors with frequent communication, scheduled check-ins by staff at West Basin, and maintenance of emergency contact lists. 	<ul style="list-style-type: none"> Promptly respond to recycled water customers' issues and concerns. Assist with new recycled water connections and modifications as needed. Maintain quality service to purveyors with frequent communication, scheduled check-ins by staff at West Basin, and maintenance of emergency contact lists.

Performance Metrics

Metric	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Target	Target
Improve Recycled Water O&M Cost per Unit	\$1,121/AF	\$1,104/AF	\$1,251/AF	\$1,182/AF	\$1,488/AF
Meet all regulatory and environmental permit requirements	100%	100%	100%	100%	100%



Technical Planning

The Technical Planning program was formed to provide strategic planning of capital improvement projects and programs that support West Basin's goals. This program is responsible for the development of multi-disciplinary and complex evaluations, and the delivery of technical and strategic studies associated with the District's recycled water systems, and the District's overall water portfolio. In addition to technical and strategic planning efforts, this program oversees the District's internal and external Research and Development (R&D) efforts to advance water reuse and reliability. The studies undertaken by this Program will vary based on the strategic direction provided by the Board.

Fiscal Year 2022-23 Budget Objectives:

- Update the Emergency Response Plan to document required response emergencies including cyberterrorism, earthquakes, and chemical leaks. It is also intended to ensure the response is in line with federal and state requirements.
- West Basin to conduct a comprehensive analysis of the cost of service and rate study for all types of recycled water produced by West Basin.
- West Basin has partnered with the City of Los Angeles and will contribute funds towards the Membrane bioreactor (MBR) technology at Hyperion.
- Conduct the West Basin interconnection feasibility study to explore the utilization of West Basin's recycled water system to serve as the link for the region's water reuse goals set by multiple agencies within the region.
- Evaluate West Basin's existing infrastructure to be utilized for groundwater augmentation.

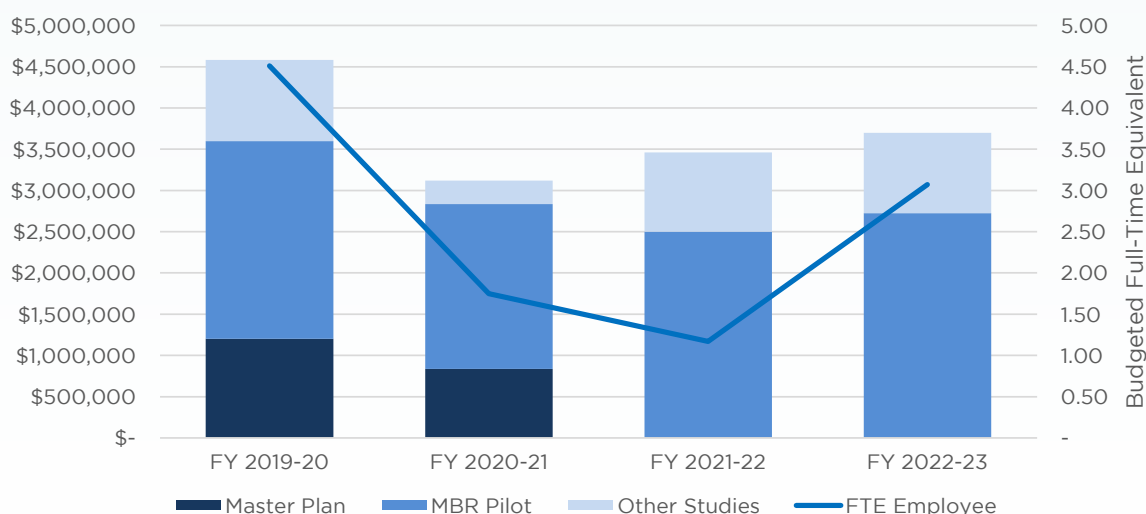
Operating Budget

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actuals	Projected	Adopted Budget	Adopted Budget
Consultants	\$ 446,860	\$ 908,578	\$ 20,000	\$ 961,018	\$ 975,000
Project Share	33,333	33,334	2,500,000	2,500,000	2,725,024
Labor and Benefits	532,959	704,770	274,379	288,575	569,170
Overhead	296,486	331,196	94,290	116,910	238,553
Total Technical Planning	\$1,309,638	\$1,977,878	\$2,888,669	\$3,866,503	\$4,507,747

West Basin Municipal Water District

As mentioned, the Technical Planning program has five main objectives for FY 2022-23. 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

Emergency Response Plan

West Basin plans to update the existing Emergency Response Plan. Document all the proper response for all types of incidents, natural or man-made, that threatens life, property, or the environment. Staff has budgeted \$75,000 to hire consultants to guide staff on best practices for approach, plan, and outreach.

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. West Basin budgeted \$2,725,024 in FY 2022-23.



Cost of Service Study

West Basin budgeted \$250,000 for consultants to conduct a comprehensive cost of service analysis for all types of recycled 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 impact of the increased cost of source water projects potential impacts on each customer agency and helps develop new agreements with current customers.

Interconnection Feasibility Study

Conduct a study to see if West Basin's existing recycled water system may serve as the link between regional water reuse plans, interconnecting existing and planned infrastructure, and synchronizing multi-agency Water Reuse goals. \$450,000 has been budgeted to analyze the many projects locally and how West Basin may serve at the interconnection point and evaluate the feasibility of producing additional recycled water for the region.

Groundwater Augmentation Feasibility Study

West Basin will evaluate the potential utilization of West Basin's existing infrastructure (pipelines and satellite plant treatment facilities) to replenish 10,000 to 20,000 AFY of additional Advanced Treated Recycled Water (ATRW) on the east end of the West Coast Basin. \$200,000 has been budgeted for staff to take the first steps which are the evaluation of conceptual options and estimate of the cost.



Strategic Goals and Objectives

Water Supply Reliability

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 1.3 Increase supply diversification by promoting groundwater development		<ul style="list-style-type: none">Conduct a Groundwater Augmentation Feasibility study to evaluate if West Basin's existing infrastructure will support replenishing additional treated recycled water to the east end of the West Coast Basin.
Strategy 1.4 Increase supply diversification by promoting water recycling	<ul style="list-style-type: none">Started the implementation of Capital and R&R projects identified in the 2021 Recycled Water Master Plan.	<ul style="list-style-type: none">Conduct the Interconnection Feasibility study to propose the utilization of existing recycled water pipelines for interconnection to planned infrastructure with multiple agencies within the region.

Sound Financial Resource Management

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 2.2 Maintain facilities to manage and minimize risk of failure and liability exposure		<ul style="list-style-type: none">Enhancement and update the West Basin Emergency Response Plan.
Strategy 2.6 Operate cost-efficiently and effectively, with robust internal controls	<ul style="list-style-type: none">Utilized the updated standard drawings specifications, construction documents, and technical specifications.	<ul style="list-style-type: none">Prepare a comprehensive cost of service analysis for all types of recycled water produced by West Basin.



Water Quality

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 3.2 Increase control over source water quality		<ul style="list-style-type: none">Support the study and construction of a full-scale MBR facility to enhance source water quality to West Basin treatment facilities.

Performance Metrics

Metric	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Target	Target
Update/ Maintain CIP Master Plan	In progress	Completed	N/A	N/A	N/A

Water Policy and Resources Development (Water Policy)

The Water Policy 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; and participating in industry organizations. In addition, this budget includes efforts to support MWD'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 2022-23 Budget Objectives:

- Further develop water demand and supply modeling for customer agencies.
- Pursue funding opportunities to promote water conservation programs.
- Initiate Annual Water Supply and Demand Analysis Report.
- Research and analyze legislative proposals with potential impact on West Basin.

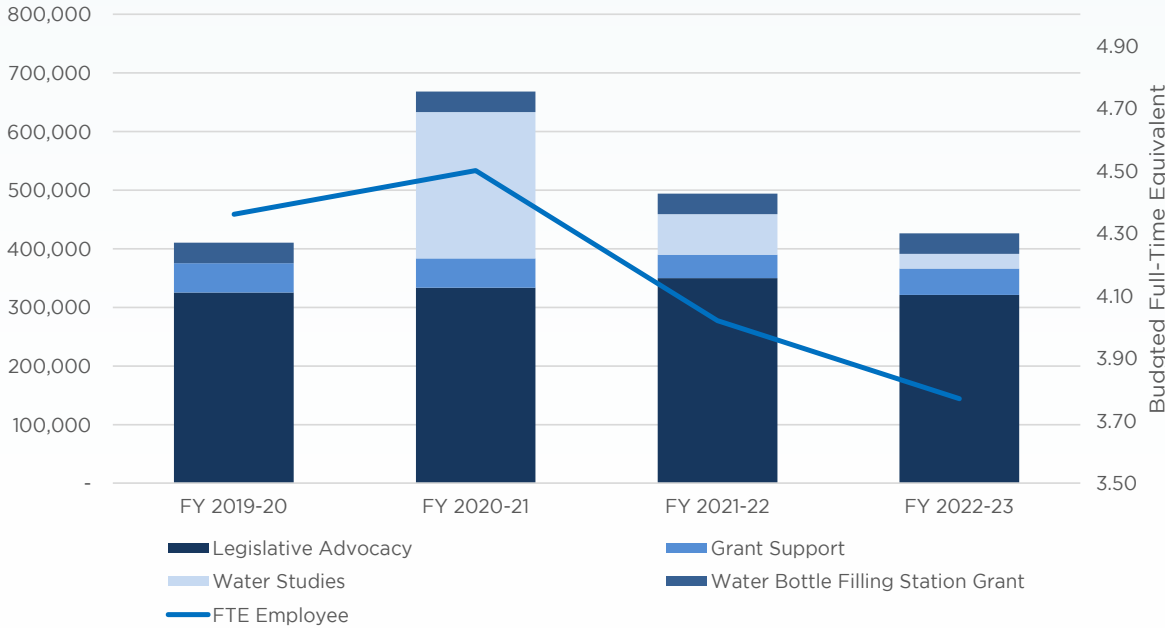
Operating Budget

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actuals	Actuals	Projected	Adopted Budget	Adopted Budget
Labor and Benefits	\$1,038,804	\$807,489	\$759,985	\$1,003,053	\$780,367
Overhead Allocation	906,833	467,840	425,390	589,697	480,651
Consultants	332,465	519,666	480,000	459,065	391,400
Water Bottle Filing Stations	28,000	23,000	35,000	35,000	35,000
Advertising	—	3,247	1,107	—	—
Total Resource Planning	\$2,306,102	\$1,821,242	\$1,701,482	\$2,086,815	\$1,687,418



The projected expenses for consultants are expected to be higher than budget due to closeout expenses from the Urban Water Management Plan captured in FY 2020-21 and the FY 2022-23 Water Policy budget remains fairly consistent with the prior year.

Water Policy Resources Development Budget Trend



In the upcoming fiscal year, West Basin staff will focus their efforts on four key areas. Staff has budgeted \$321,400 to maintain its effort to seek out state and federal funding opportunities, track and analyze legislative proposals with potential impacts on West Basin, coordinate advocacy efforts and adopt official positions on priority legislation.

Staff budgeted \$45,000 to augment staff’s time to work with a consultant to research these opportunities and how West Basin may access them, develop a database for ongoing and one-time grants, and document standard operation guides to pursuing grants.

In FY 2021-22, staff started the development of a retail agency toolkit to support state water use objectives. The Water Policy department has budgeted \$25,000 to complete and publish these tools, conduct one-on-one meetings with retail agencies and coordinate with MWD to develop the 2023 Annual Water Supply and Demand Assessment.

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 able to public facilities within the service area to provide safe and reliable tap water.

Strategic Goals and Objectives

Water Supply Reliability

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2023-23 Strategies
Strategy 1.1 Prepare and periodically update water supply plans	<ul style="list-style-type: none"> Completed the FY 20-21 Water Use Report for our customer agencies that provide total and recycled water use information for each customer. Utilized the 2021 Water Shortage Contingency Plan, subsequently implementing Shortage Level 1 (July 2021) and Shortage Level 3 (November 2021). Developed individual supply and demand models for West Basin's municipal and county retail water suppliers. Models will be used to increase data sharing and coordination of short and long-term water supply planning efforts. 	<ul style="list-style-type: none"> Published the 2021-22 Water Use Report. Complete supply and demand models for West Basin's municipal and county retail water suppliers. Develop a retailer toolkit and outreach strategy to communicate the value and necessity of utilizing developed models for short and long-term planning efforts. Develop and submit Annual Water Supply and Demand Assessment. Work with retail water suppliers to prepare for the implementation of conservation and water efficiency actions aimed at ensuring compliance with California's updated water use objectives.
Strategy 1.3 Increase supply diversification by promoting groundwater development	<ul style="list-style-type: none"> Collaborated with WRD to share data and analysis on regional water demand, in order to identify opportunities to increase groundwater pumping and brackish desalinating, 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. Participated in 2022 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. 	<ul style="list-style-type: none"> 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. Continue to participate in various industry groundwater awareness events and initiatives.
Strategy 1.4 Increase supply diversification by promoting water recycling	<ul style="list-style-type: none"> 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 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 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 2.3 Develop partnerships with public and private entities to facilitate capital asset development and implementation	<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 its financial resources. 	<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.
Strategy 2.6 Operate cost-efficiently and effectively, with robust internal controls	<ul style="list-style-type: none"> Received notification of successful grant award for \$500,000. 	<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.

Customer Service

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 4.1 Build community trust	<ul style="list-style-type: none"> Conducted monthly updates to West Basin's customer agencies and municipalities at West Basin's MWD Caucus meeting and West Basin Water Association meetings. Provided regular and timely updates to West Basin's state and federal legislators regarding the potential drought conditions, regional water use efficiency efforts, and new local water supply projects. 	<ul style="list-style-type: none"> Advocate regional, state, and federal agencies and officials to discuss local water supply development, and West Basin programs and projects. Identify new legislator(s) to honor with our Water Reliability and Legislator of the Year awards. Serve as liaison between MWD and retailers for water quality concerns. Maintain the quality service to the purveyors with more frequent communication, scheduled check-ins by staff at West Basin, and maintenance of emergency contact lists for quick responses

Environmental Stewardship

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 5.2 Continue to gain environmental community support for West basin programs	<ul style="list-style-type: none"> 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 to partner with the community and civic organizations, as well as school districts, to maximize utilization of available sponsorship funds for Water Bottle Filling Station installation projects.

Performance Metric

Metric	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Target	Target
Disperse Budgeted Sponsorship Funds	\$28,000	\$23,000	\$35,000	\$35,000	\$35,000





Public Information and 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, city, county, state, and federal elected officials, educators, chambers of commerce, business leaders, and community and environmental groups. By offering such public programs as free water recycling facility tours, presentations, workshops, water-themed events, District program updates, as well as marketing 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, a student water conservation kit program, solar cup sponsorship, and an annual conservation-themed art contest.

Fiscal Year 2022-23 Budget Objectives:

- Increase awareness of District programs and milestones, including:
 - Drought conditions, local water use, water use efficiency programs.
 - District's 75-year anniversary (1947-2022).
 - K12 Education - water conservation emphasis; water industry careers.
 - Recycled water projects.
- Increase awareness of West Basin as a regional drinking water wholesaler and provider of recycled water through increased accessibility and enhanced media relations practices.
- Resume use of the Edward C. Little Water Recycling Facility and Water Education Center as an educational venue.

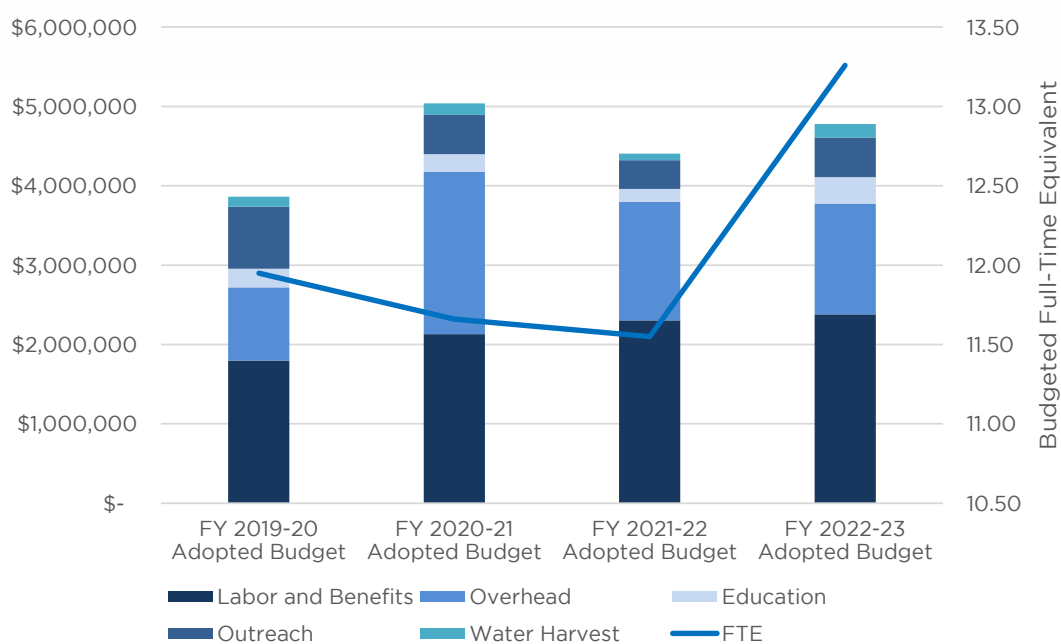
West Basin Municipal Water District

Operating Budget

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actuals	Actuals	Projected	Adopted Budget	Adopted Budget
Labor and Benefits	\$1,651,618	\$2,071,175	\$1,839,814	\$2,302,178	\$2,379,058
Overhead Allocation	1,493,252	1,504,268	1,022,100	1,495,233	1,397,449
Consultants	242,911	43,879	116,840	167,100	230,200
Advertising	38,968	67,269	78,611	110,000	174,000
Program Supplies	104,538	28,110	21,839	52,000	109,000
Sponsorship	19,000	3,500	15,000	23,000	20,500
Non-Professional Services	264,884	6,543	73,095	171,000	220,000
Office Administration	173,599	33,800	73,073	85,540	94,650
Total	\$3,988,770	\$3,758,544	\$3,240,372	\$4,406,051	\$4,624,857

Events like the annual Water Harvest and the ECLWRF 75th-anniversary celebration will be held in-person, which is why the budget has increased in FY 2022-23 compared to FY 2021-22.

Public Information and Education Budget Trend





Strategic Goals and Objectives

Customer Service

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 4.1 Build Community Trust	<ul style="list-style-type: none"> Maintained the high-quality and quantity of public outreach and education programs in the virtual environment demonstrating agency innovation, flexibility, and reliable customer service. Consistently updated District communications platforms (e.g., website, social media, news, and newsletter) to keep the public aware of District activities. Continued to provide accurate and relevant information in public outreach and education programs accompanied by quick follow-up to participant questions and requests. 	<ul style="list-style-type: none"> Publish quarterly newsletters to keep stakeholders informed of West Basin's programs and activities.
Strategy 4.4 Promote outreach and education programs	<ul style="list-style-type: none"> Increased strategic program promotion through partner agency networks, brand toolkits, new creative, media relations and paid advertising methods. Hosted second water industry career-focused education program for high school and early college students. 	<ul style="list-style-type: none"> Create consistent strategic plans with SMART (Specific, Measurable, Achievable, Realistic, and Timely) goals for each Public Information and Education Department program. Conduct the pilot program of water job training.

Environmental Stewardship

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 5.1 Ensure social environmental factors are considered in decision-making	<ul style="list-style-type: none"> Maintained virtual offerings as part of broader education and outreach programming considering the environmental benefits of online programming. 	<ul style="list-style-type: none"> Consider the utility and environmental impacts of promotion items given out during outreach events. Staff tries to only order from vendors who provide more environmentally conscious goods.

West Basin Municipal Water District

Performance Metrics

Metric	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Target	Target
ECLWRF School Tours/ Student #	48 / 2,081	N/A	90 / 2,600	90 / 5,400	90 / 5,400
Water Assembly Presentations/ Student #	0	0	20 / 600	30 / 1,800	30 / 1,800
Art Contest Classroom Presentations/ Student #	0	0	60 / 1,468	20 / 1,200	20 / 1,200
Art Contest Student Submissions	486	486	850	450	450
Solar Cup Teams/Student #	4 teams / 87	4 teams / 87	3 teams / 40	4 teams / 80	4 teams / 80
eNewsletters (quarterly)	4	4	3	4	4
Annual Advertising Campaigns	2	2	2	2	2





Water Use Efficiency

The Water Use Efficiency Program is an essential strategy for West Basin to reduce potable water demand, supporting West Basin's efforts to diversify its water portfolio. The program budget represents the staffing and direct costs to deliver devices, educate customers, and demonstrate water efficiency benefits to service area residents and businesses. 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.

Produced in 2019, West Basin utilizes its 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 programs. The funding partnerships that West Basin has developed with the federal, state, and local agencies help West Basin to provide greater value to the residents and businesses in the West Basin service area.

West Basin continues to participate in the MWD Member Agency Administered (MAA) funding program, whereby West Basin is allocated \$270,000 per year to utilize 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 2022-23 Budget Assumptions:

- Provide up to 1,500 free rain barrels to residents to conserve water and reduce storm water run-off.
- Implement the Grass Replacement + program by providing 25 free residential landscape design assistance packages, free drought-tolerant trees, and increased rebate incentives for residents in priority areas.
- Implement a new residential program through the Southern California Gas Company (SoCalGas) partnership for priority communities. Retrofit up to 100 single-family homes through SoCalGas direct install program with free indoor and outdoor water efficiency devices.
- Administer 50 site assessments to support the commercial, institutional, and industrial (CII) sector to identify water-saving potential and distribute water savings devices and eligible rebates.
- Support and promote the Grass Replacement rebate to advance the adoption of drought-tolerant, climate-appropriate landscapes.

West Basin Municipal Water District

Operating Budget

	FY 2019-2020	FY 2020-2021	FY 2021-2022	FY 2021-2022	FY 2022-2023
	Actual	Actual	Projected	Adopted Budget	Adopted Budget
Budget District Labor and Benefits	\$664,829	\$848,779	\$864,492	\$897,279	\$894,160
Overhead Allocation	474,558	499,708	402,710	552,470	521,497
Consultants	725,093	660,595	659,025	830,425	536,300
Advertising	16,351	9,350	5,733	24,000	—
Program Supplies	98,998	72,850	90,000	113,000	90,000
Office Administration	368	—	4,109	10,000	4,000
Courier	—	27,050	50,000	—	—
Non-Professional	26,857	16,195	15,000	20,000	50,000
Water Use Efficiency	\$2,007,054	\$2,134,527	\$2,091,069	\$2,447,174	\$2,095,957

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 2022-23. During the COVID-19 pandemic, staff created new innovative approaches to execute the Water Use Efficiency programs which included using courier service to deliver rain barrels directly to residents. However, in the FY 2022-23 budget staff has reflected the cost related to the Board's direction of having only in-person distribution events.

During Fiscal Year 2022-2023, the California Department of Water Resources (DWR) will begin to implement 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 through a variety of programs and resources to help meet the needs of retail agencies.

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 MWD's existing rebate. West Basin will increase awareness of a new 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. Additionally, a new potential partnership with SoCalGas will leverage the SoCalGas direct install program and provide residents with free indoor and outdoor water efficiency devices in priority communities. 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.

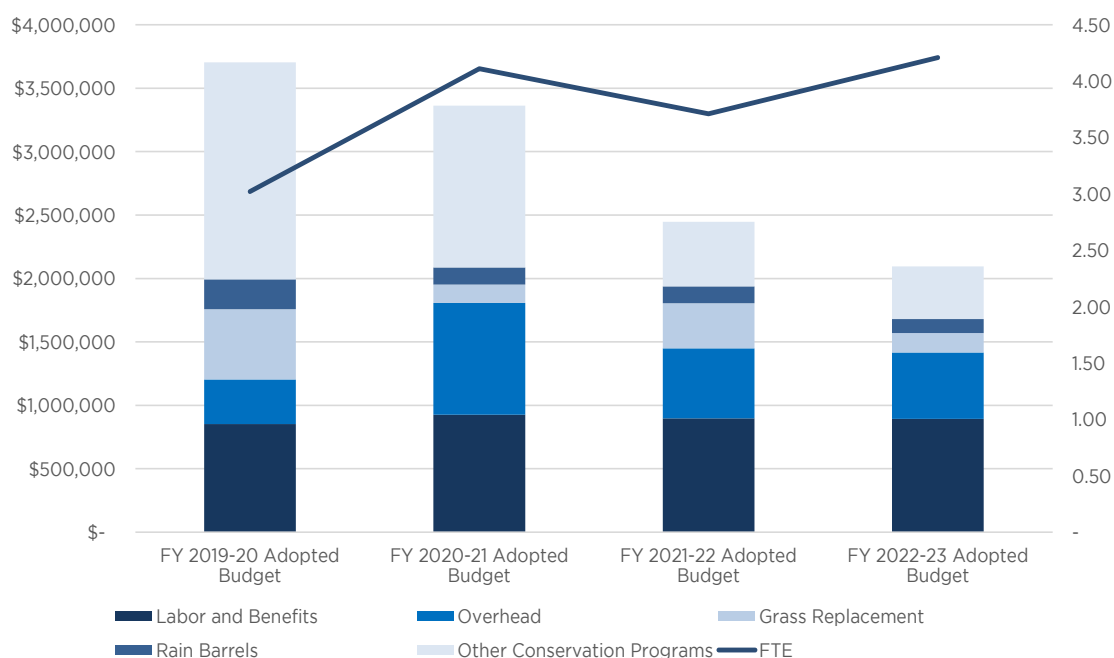
MWD continues to develop and provide water efficiency resources to its Member Agencies. As the Member Agency for the South Bay and North Santa Monica Areas, West Basin provides technical assistance to its retail water agencies in order to participate in MWD's programs.

External Funding

West Basin participates in the MWD MAA funding program, whereby West Basin is allocated a total of \$270,000 per year for developing water use efficiency programs that deliver both conservation devices and education to West Basin's service area. In FY 2022-23, West Basin has allocated \$215,800 of the MWD MAA funding towards the Water Use Efficiency program. The table below shows the anticipated utilization of the MWD MAA by program.

Program	Program Budget	External Funding
Rain Barrel	\$160,000	\$57,500
Grass Replacement +	405,000	55,000
SoCalGas Partnership	156,300	103,300
Total Funding		\$215,800

Sound Financial & Resource Management



Strategic Goals and Objectives

Water Supply Reliability

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 1.2 Increase supply diversification by promoting water use efficiency	<ul style="list-style-type: none"> Continued the Rain Barrel Home delivery program and successfully implemented a hybrid approach to re-engage in-person distribution events, resulting in the distribution of 1,200 rain barrels through home delivery and 300 through an in-person event. Through the Change and Save Program, provided 1,500 free water efficiency kits and 200 clothes washer rebates to residents located in West Basin's service area. Hosted a successful Firescaping Webinar for 87 Malibu/Topanga residents that was made available district-wide on the program website. 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. Installed 300 smart sprinkler timers in Malibu/Topanga and met the water savings goal of the Malibu/Topanga Smart Program. Developed the Grass Replacement + program aimed to provide additional resources such as free residential design assistance, free drought-tolerant trees, and an increased \$5 per square foot rebate incentive. Launched and implemented 5 new webinars through the West Basin Chat series to help promote West Basin 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 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 2.6 Operate cost-efficiently and effectively, with robust internal controls	<ul style="list-style-type: none"> Allocated \$270,000 from Metropolitan for locally administered programs. Implemented the Cash for Kitchens and Change & Save Programs utilizing mostly grant funds from the United States Bureau of Reclamation and the Department of Water Resources. 	<ul style="list-style-type: none"> Allocate \$270,000 from MWD 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 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 4.4: Promote outreach and education programs	<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. Developed creative and effective marketing materials to promote our water use efficiency programs. Coordinated with the Public Information Department to utilize social media to increase 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 focusing on water efficiency.

Environmental Stewardship

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 5.2 Continue to gain environmental community support for West Basin programs	<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. 	<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

Metric	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Target	Target
Distribution of Rain Barrels	1,600	1,000	1,500	2,000	1,500
Secure 25% Outside Funding for Conservation Programs	35%	30%	25%	25%	25%
Remove up to 266,000 square feet of grass through Grass Replacement Rebate Program (Residential, Commercial, Public Agency)	156,795	112,149	200,000	266,000	266,000
Conserve 28 Million gallons per year through the Malibu / Topanga Smart Program (1)	N/A	N/A	28,000,000	28,000,000	N/A
Provide 500 conservation kits through the Change & Save Program (1)	N/A	N/A	1,500	500	N/A
Provide 400 clothes washer rebates at \$500 each (1)	N/A	N/A	250	400	N/A
Implement Water Use Efficiency Classes / Webinars	4	5	5	5	6
SoCalGas Partnership Program (2)	N/A	N/A	N/A	N/A	100
Commercial Water Efficiency Program Site Assessments (2)	N/A	N/A	N/A	N/A	50

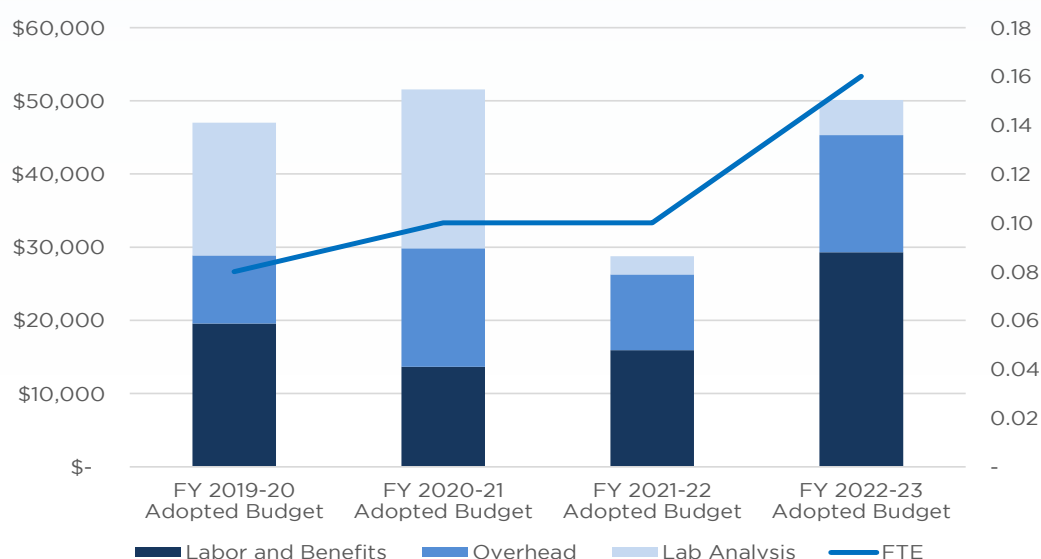
(1) Program Ended in FY 2021-22

(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 MWD, 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 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actuals	Actuals	Projected	Adopted Budget	Adopted Budget
Monitoring Program	\$9,083	\$9,704	\$13,640	\$15,923	\$29,307
Labor and Benefits	8,223	8,921	16,212	10,730	16,018
Overhead	18,433	6,440	21,700	2,515	4,800
Total Title 22 Monitoring	\$35,739	\$25,065	\$51,552	\$29,168	\$50,125



In FY 2022-23 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 UCMR 5 program.

Monitoring program costs include sampling and analytical costs that may vary each year depending on the programmatic requirements. In FY 2022-23 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.

Strategic Goals and Objectives

Water Quality

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 3.3 Meet permit and contractual water quality requirements	<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. Solicited and obtained a new commercial lab contract. 	<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, and radioactive compounds through coordination with laboratories, participating retailers, and regulators. Coordinate with cities and draft monitoring schedules for UCMR 5 program sampling.

Environmental Stewardship

Strategic Business Plan	FY 2021-22 Accomplishments	FY 2022-23 Strategies
Strategy 4.2 Ensure client and customer agency satisfaction	<ul style="list-style-type: none"> Coordinated the samplings required by the Safe Drinking Water Act and other drinking water regulations. Shared information with purveyors to increase awareness about relevant webinars and learning opportunities. Completed annual consumer confidence water quality reports for the Department of Drinking Water for public water systems. 	<ul style="list-style-type: none"> Work with purveyors to plan sampling and reporting required by the EPA for the UCMR 5 program. Draft a budget and send to cities to confirm interest in program participation. Complete annual consumer confidence water quality reports for participating retailers as required by the Department of Drinking Water for public water systems.

West Basin Municipal Water District

Performance Metrics

Metric	FY 2019-20	FY 2020-21	FY 2021-22	FY 2021-22	FY 2022-23
	Actual	Actual	Projected	Target	Target
Bill Purveyors on Time	✓	✓	✓	✓	✓
Complete Annual Consumer Confidence Reports and send to Cities	✓	✓	✓	✓	✓
Prepare quarterly monitoring schedule for Cities	✓	✓	✓	✓	✓





Program Detail

Overhead Program Costs - Administrative Services

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
Insurance - Liability	121,000	127,200
Insurance - Property	10,000	15,000
Insurance - Crime	2,700	3,000
Consultants	370,000	370,000
Temporary Labor	7,500	7,500
Legal Services	800,000	360,000
Office Supplies - Other	25,000	22,000
Office Supplies - Tech	100,000	142,000
Subscriptions	7,500	9,500
Postage - US Postmaster	6,500	6,500
Postage - Courier	10,000	5,000
Printing	1,000	5,000
Rental Expense	15,000	20,000
Software Licenses	662,900	709,245
Meeting Expense	12,500	10,000
Travel - Mileage	12,000	12,000
Travel - Transportation	15,000	15,000
Travel - Conference	50,000	42,000
Travel - Accommodations	30,000	25,000
Travel - Meals	7,500	5,500
Travel - Misc.	500	500
Memberships	179,525	160,175
Professional Memberships	8,500	8,500
LAFCO	85,000	75,000
Miscellaneous	2,500	5,000
Sponsorships	93,250	55,000
District Sponsorship	25,000	—
Telephone - Office	37,400	44,200
Telephone - Cellular	60,000	62,000
Equipment Lease	44,500	69,500
Total	2,802,275	\$2,391,320

Overhead Program Costs - Board Services

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
FICA Expense	19,100	17,900
Health Ins - Directors	75,700	72,500
Dental Ins - Directors	4,600	4,600
Director Life Expense	500	500
Directors Medical - EAP	200	200
Workers Comp Ins - Dir	2,400	2,500
Health Reimb - Directors	16,000	14,400
Pars - Directors	73,000	73,000
Director Per Diem	190,300	190,100
Director Car Allowance	16,900	23,700
Director Communication	18,800	19,800
Director Transportation	16,500	16,500
Director Registration	16,500	16,500
Director Accommodations	36,000	36,000
Director Meals	5,750	5,750
Director - Other Expenses	250	250
Dir Leg Trip Transportation	6,000	6,000
Dir Leg Trip Accommodations	17,500	17,500
Dir Leg Trip Meals	1,500	1,500
Consultants	30,000	30,000
Photography Services	—	2,000
Office Supp - General	600	500
Courier Service	7,500	10,000
Printing	500	1,000
Rental Expense - General	2,000	—
Meeting Expense	15,000	17,500
Election Expense	—	600,000
Miscellaneous Expense	100	100
Director - Sponsorships	75,000	75,000
Total	\$648,200	\$1,255,300



Overhead Program Costs - Building

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
Utilities - Electricity	100,000	145,000
Utilities - Trash Collection	5,000	6,600
Utilities - Gas	10,000	11,000
Utilities - Water	7,500	6,200
Repairs & Maintenance	52,800	69,000
Landscape	19,500	13,500
Janitorial	43,500	42,500
Security Alarm	1,500	1,500
Security Guard	108,000	108,000
Permits	900	500
Total	\$348,700	\$403,800

Overhead Program Costs - Finance & Contract

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
Office Supplies	—	550
Audit	42,000	42,800
Remarketing Fee	10,000	9,500
Cost of Issuance	350,000	—
Trustee Fees	14,730	17,100
Consultants	127,770	128,100
Legal Services	9,000	15,000
Software Licenses	38,500	29,550
Meeting Expense	3,000	—
Miscellaneous Expense	2,500	2,700
Total	\$597,500	\$245,300

Overhead Program Costs - Human Resources

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
Consultants	\$50,000	\$64,260
Legal - Services	10,000	10,000
Advertising	8,000	10,000
Office Supplies - Other	2,000	3,000
Subscriptions	350	—
Printing	1,500	1,500
Software Licenses	4,000	4,000
Meeting Expense	500	500
Membership	5,950	4,350
Subtotal	\$82,300	\$97,610
Office Supplies - Other	700	650
Meeting Expense	8,600	10,650
Training	10,000	20,000
Miscellaneous Expense	10,000	10,500
Subtotal	\$29,300	\$41,800
Total	\$111,600	\$139,410



Water Policy & Resource Development

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
Water Policy & Resources Development		
Direct Labor	237,589	168,611
Indirect Labor	263,342	205,160
Benefit Allocation	415,773	293,560
Overhead Allocation	548,231	420,813
Consultants	69,100	25,000
Consultants - Federal	183,645	163,000
Consultants - State	166,320	158,400
Sponsorships	35,000	35,000
Subtotal	1,919,000	1,469,544
Grant Application		
Direct Labor	22,380	28,560
Indirect Labor	24,806	34,751
Benefit Allocation	39,164	49,725
Overhead Allocation	41,465	59,838
Consultants	40,000	45,000
Subtotal	167,815	217,874
Total	2,086,815	1,687,418

West Basin Municipal Water District

Water Recycling Operations

FY 2022-23

Description	Administration	Hyperion	Disinfected Tertiary	Barrier	Solids Handling	Chevron Nitrification	Chevron LP BF	Chevron HP BF
Direct Labor	278,075	13,812	77,809	96,832		13,006	7,471	10,616
Indirect labor	338,351	16,806	94,675	117,822		15,826	9,091	12,917
Benefit Allocation	484,141	24,047	135,469	168,589		22,644	13,008	18,483
Overhead Allocation	594,608	27,917	155,030	207,203		25,057	13,158	17,963
Total Labor, Benefits & Overhead	1,695,175	82,582	462,983	590,446	—	76,533	42,728	59,979
Consultants	147,510	—	30,000	157,595	10,000	15,000	30,000	20,000
Secondary Effluent	—		180,900	121,500	—	—	18,750	27,750
Property Insurance	290,000				—			
Software License	47,000							
Permit Fees	35,100	1,050	19,280	85,090	4,205	1,305	1,235	
Leases	3,600							
Utilities	114,000	1,769,000	1,571,000	3,061,000	258,000	306,500	521,361	1,280,639
Sludge Hauling					2,766,627			
Process Chemicals	—	—	3,767,200	5,030,700	1,606,300	1,331,700	348,607	393,405
Outside Lab Services	—		35,996	336,830	11,610	18,376	23,400	33,722
Contract Labor	1,144,300	390,400	1,751,100	2,376,300	1,170,500	370,600	601,100	260,100
Facility Maintenance	205,300	70,300	292,800	1,732,600	532,100	90,800	96,800	62,800
Suez Office Administration	313,065							
Total	3,995,050	2,313,332	8,111,259	13,492,061	6,359,342	2,210,814	1,683,981	2,138,396



Water Recycling Operations

FY 2022-23

TRWRP Nitrification	TRWRP Boilerfeed	JMMCRWRP Nitrification	JMMCRWRP Boilerfeed	Distribution System	Customer Development/ Service	Compliance R&D	FY 22 -23 Total O&M	FY 21-22 Total O&M
14,839	14,459	21,995	22,546	215,279	86,051	4,704	877,494	795,599
18,056	17,593	26,762	27,433	261,944	104,704	5,724	1,067,704	881,838
25,835	25,174	38,294	39,254	374,811	149,819	8,190	1,527,758	1,392,274
29,061	27,917	41,074	43,020	409,716	180,087	9,153	1,780,964	1,733,213
87,791	85,143	128,125	132,253	1,261,750	520,661	27,771	5,253,920	4,802,924
10,000	20,000	5,000	20,000	10,000	130,000	—	605,105	817,100
—	—			—	—	—	348,900	366,600
						—	290,000	250,000
							47,000	20,000
2,183		19,650	41,582	41,245	7,164		259,088	230,070
			20,580	61,806			85,986	81,472
310,300	7,500	245,564	1,236,436	20,000	—	—	10,701,300	9,322,000
							2,766,627	1,516,178
1,037,000	289,200	357,100	564,000	—	—	—	14,725,212	14,725,212
21,846	41,526	21,197	39,395	8,000	—	47,705	639,603	639,603
383,500	657,400	240,600	636,500	707,000	—	99,200	10,788,600	10,039,900
128,800	297,700	75,700	225,800	265,000	—	15,300	4,091,800	3,669,880
							313,065	343,719
	—							
1,981,420	1,398,469	1,092,936	2,916,545	2,374,801	657,825	189,976	50,916,200	46,824,700

West Basin Municipal Water District

Technical Planning

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
Emergency Response		
Direct Labor	44,142	45,660
Indirect Labor	48,927	55,558
Benefit Allocation	77,248	79,497
Overhead Allocation	72,475	89,815
Consultants	75,000	75,000
Subtotal	317,792	345,530
Water Supply Strategy		
Consultants	—	150,000
Subtotal	—	150,000
LADWP/LASan MBR		
Direct Labor	25,486	9,455
Indirect Labor	28,248	11,505
Benefit Allocation	44,599	16,462
Overhead Allocation	35,168	12,013
Outreach	3,306,018	2,725,024
Subtotal	3,439,519	2,774,459
Labor Compliance		
Direct Labor	5,164	—
Indirect Labor	5,724	—
Benefit Allocation	9,037	—
Overhead Allocation	9,267	—
Consultants	80,000	—
Subtotal	109,192	—
Cost of Service Study		
Direct Labor	—	39,796
Indirect Labor	—	48,423
Benefit Allocation	—	69,287
Overhead Allocation	—	67,847
Consultants	—	200,000
Subtotal	—	425,353
West Basin Interconnection Feasibility Study		
Direct Labor	—	23,697
Indirect Labor	—	28,834
Benefit Allocation	—	41,258
Overhead Allocation	—	34,439
Consultants	—	400,000
Subtotal	—	528,228
Groundwater Augmentation Study		
Direct Labor	—	25,200
Indirect Labor	—	30,663
Benefit Allocation	—	43,875
Overhead Allocation	—	34,439
Consultants	—	150,000
Subtotal	—	284,177
Total	3,866,503	4,507,747



Purveyor Water Quality Monitoring Program

FY 2022-23

	FY 2021-22	FY 2022-23
	Annual Budget	Budget
Direct Labor	4,127	7,405
Indirect Labor	4,574	9,010
Benefit Allocation	7,222	12,892
Overhead Allocation	10,337	16,018
Lab Analysis	2,515	4,800
Total	28,775	50,125



Public Information and Education

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
Education		
Direct Labor	201,322	186,398
Indirect Labor	223,145	226,802
Benefit Allocation	352,307	324,527
Overhead Allocation	507,678	446,328
Consultants	50,000	80,000
Program Supplies - Outreach	—	42,500
Printing	10,000	14,000
Meeting Expenses	1,000	1,000
Sponsorships	23,000	20,500
Repairs - Equipment	1,500	1,500
Subtotal	1,369,952	\$1,343,555
Art Contest		
Program Supp - Outreach	7,000	\$11,500
Courier Service	1,500	—
Subtotal	8,500	\$11,500
Water Exploration		
Consultants	38,600	\$96,200
Program Supp - Other	5,000	5,000
Bus Transportation	26,000	60,000
Subtotal	69,600	\$161,200
Education Total	\$1,448,052	\$1,516,255



Public Information and Education

FY 2022-23

	FY 2021-22	FY 2022-23
	Budget	Budget
Direct Labor	395,350	414,707
Indirect Labor	438,204	504,600
Benefit Allocation	691,850	722,024
Overhead Allocation	987,555	951,121
Consultants	75,000	30,000
Event Services	45,000	15,000
Photography Services	50,000	45,000
Advertising	100,000	159,500
Program Supp - Outreach	30,000	40,000
Subscriptions	25,000	19,150
Courier Service	1,000	—
Printing	20,000	40,000
Lease Expense	3,540	—
Meeting Expenses	10,000	—
Misc. Exp	1,000	—
Subtotal	2,873,499	2,941,102
Consultants	3,500	24,000
Event Services	50,000	90,000
Photography Services	—	5,000
Advertising	10,000	14,500
Program Supp - Outreach	10,000	10,000
Postage	500	—
Courier Service	500	500
Printing	8,000	15,000
Lease Expense	1,000	—
Bus Transportation	—	5,000
Meeting Expenses	—	1,500
Misc. Exp	1,000	1,000
Permits	—	1,000
Subtotal	84,500	167,500
Outreach Total	\$2,957,999	\$3,108,602
Public Information & Education Total	\$4,406,051	\$4,624,857

West Basin Municipal Water District

Water Use Efficiency

FY 2022-23

	FY 2021-22	FY 2022-23
	Annual Budget	Budget
Water Efficiency		
Direct Labor	232,554	225,923
Indirect Labor	257,762	274,895
Benefit Allocation	406,963	393,342
Overhead Allocation	552,470	521,497
Consultants	132,500	160,000
Subtotal	1,582,249	1,575,657
Cash for Kitchens		
Consultants - Reimbursed	245,800	—
Advertising	1,000	—
Printing	4,000	—
Subtotal	250,800	—
CWCP - Malibu		
Consultants - Reimbursed	25,000	—
Subtotal	25,000	—
Ocean Friendly		
Consultants - Reimbursed	5,300	—
Landscape Services	20,000	50,000
Subtotal	25,300	50,000



Water Use Efficiency

FY 2022-23

	FY 2021-22	FY 2022-23
	Annual Budget	Budget
Rain Barrel		
Consultants	—	15,000
Consultants - Laborer	6,000	4,000
Advertising	15,000	—
Program Supplies - Outreach	113,000	90,000
Subtotal	134,000	109,000
Grass Removal		
Incentive Rebates	346,825	155,000
Advertising	8,000	—
Subtotal	354,825	155,000
Change & Save Program		
Consultants - Reimbursed	75,000	—
Subtotal	75,000	—
SoCalGas Partnership Program		
Consultants	—	53,000
Consultants - Reimbursed	—	103,300
Subtotal	—	156,300
CII Water Efficiency Program		
Consultants	—	50,000
Subtotal	—	50,000
Total	\$2,447,174	\$2,095,957



ACRONYMS & GLOSSARY







Acronyms

AB – Assembly Bill

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

AF – Acre-Foot

AFY – Acre-Foot per Year

BAML – Bank of America/Merrill Lynch

CEMF – Custom Engineered Microfiltration

CEQA – California Environmental Quality Act

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

EIR – Environmental Impact Report

EPA – Environmental Protection Agency

FTE – Full Time Equivalent

FY – Fiscal Year

GAAP – Generally Accepted Accounting Principles

GASB – Government Accounting Standards Board

GPM – Gallons Per Minute

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

LIBOR – London Interbank Offered Rate

LPBF – Low Pressure Boiler Feed

LRP – Local Resources Program

LRFP – Long Range Financial Plan

MBR – Membrane Bioreactor

MF – Microfiltration

MGD – Million Gallons per Day

OPEB – Other Post-Employment Benefits

PARS – Public Agency Retirement System

PAYGO – Pay-As-You-Go

POTS – Plain Old Telephone Service

R&D – Research and Development

R&R – Rehabilitation and Replacement

RO – Reverse Osmosis

RTS – Readiness-To-Serve

SB – Senate Bill

SIP – Session Initiation Protocol

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.

Best Management Practice – An engineered structure or management activity, or combination of these that eliminates or reduces adverse environmental effects.

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.

C. Marvin Brewer Desalter – A satellite facility for brackish water in the City of Torrance, California that began operations in May 1993.

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.

Colorado River Aqueduct – The 242 mile-long water conveyance system built by MWD 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.

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

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

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

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

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.

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.

Desalting (or Desalination) – Removal of salts from salt water by evaporation or distillation. Specific treatment processes, such as reverse osmosis or multi-stage flash distillation, to de-mineralize seawater or brackish (saline) waters for reuse.

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.

Interest Rate Swap – Contracts that require an exchange of cash flows based on a notional principal amount. Generally a fixed interest rate payment is exchanged against a floating rate payment.

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 MWD’s 26 member agencies. MWD is governed by a 37-member Board of Directors representing its member agencies.

MWD’s Tier 1 Supply Rate – Recovers the cost of maintaining a reliable amount of supply.

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

MWD’s Treatment Surcharge – Recovers the costs of treating imported water.

MWD’s System Access Rate – Recovers a portion of the costs associated with the delivery of supplies.

MWD’s System Power Rate – Recovers MWD’s power costs for pumping supplies to Southern California.

MWD'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.



APPENDIX







2022-2023

CAPITAL IMPROVEMENT PROGRAM BUDGET



WEST BASIN MUNICIPAL WATER DISTRICT

17140 S. AVALON BLVD. CARSON, CA 90746



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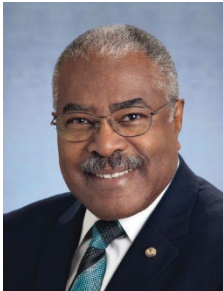


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West Basin Municipal Water District Board of Directors



Harold C. Williams

Immediate Past President

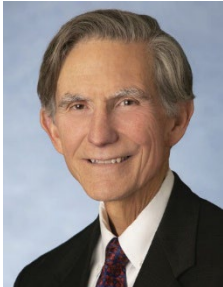
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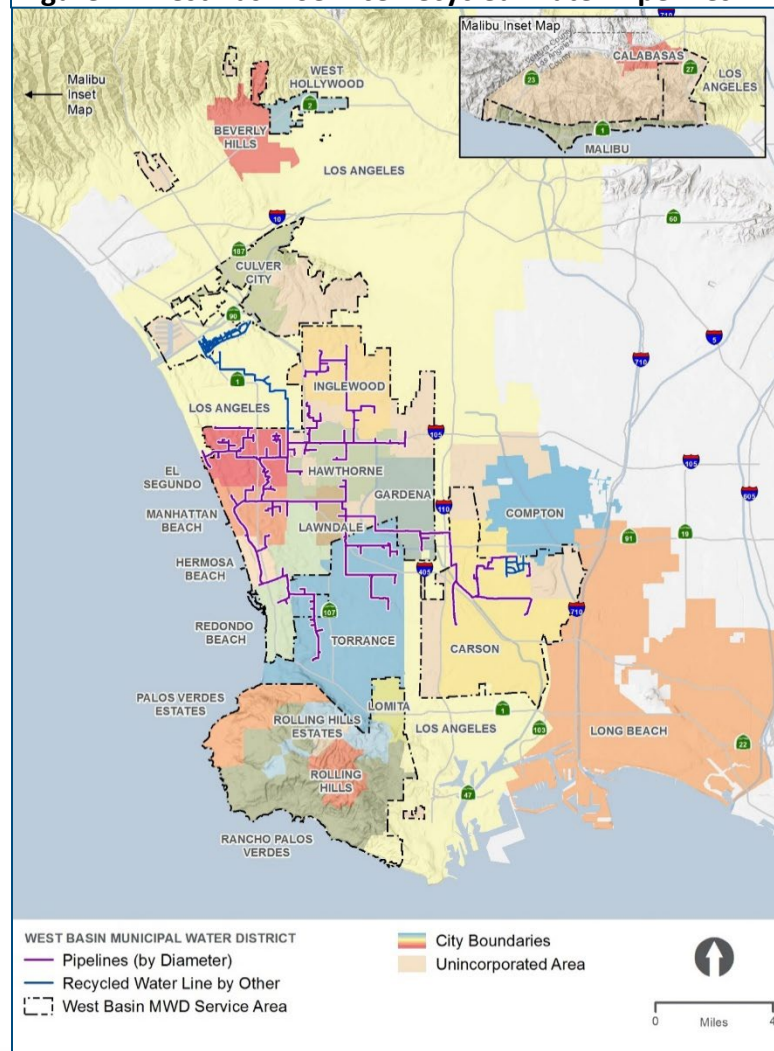
Section 1. Introduction

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 Metropolitan Water District of Southern California (MWD), a 26-member agency that provides the region with imported water. Today, West Basin is the sixth largest water district in California, encompassing a 185-square mile service area, and serving 17 cities and unincorporated areas of Los Angeles County.

1.1 West Basin's 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 its efforts on meeting the region's ongoing water demands by maximizing water education and conservation, as well as 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 per day (MGD) of recycled water. West Basin accomplishes this by pumping and treating effluent from the City of Los Angeles's Hyperion Water Reclamation Plant (HWRP), an effluent that would otherwise be discharged to the Santa Monica Bay. The ECLWRF, along with West Basin's three satellite treatment plants,

Figure 1: West Basin Service Recycled Water Pipelines





produces five types of customer-tailored, fit-for-purpose recycled water. West Basin provides the 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, parks, school districts, and Caltrans. 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 Capital Improvement Program (CIP) Project Categories

West Basin's recycled water program, being the cornerstone of the District's efforts to increase water reliability in the region, represents the overwhelming majority of past, present, and future CIP expenditures by the District. Recycled water program CIP projects have traditionally been categorized as either "New Infrastructure" or "Rehabilitation and Replacement" (R&R) projects. CIP expenditures not directly related to the District's recycled water program are categorized separately. The three CIP components are described as follows:

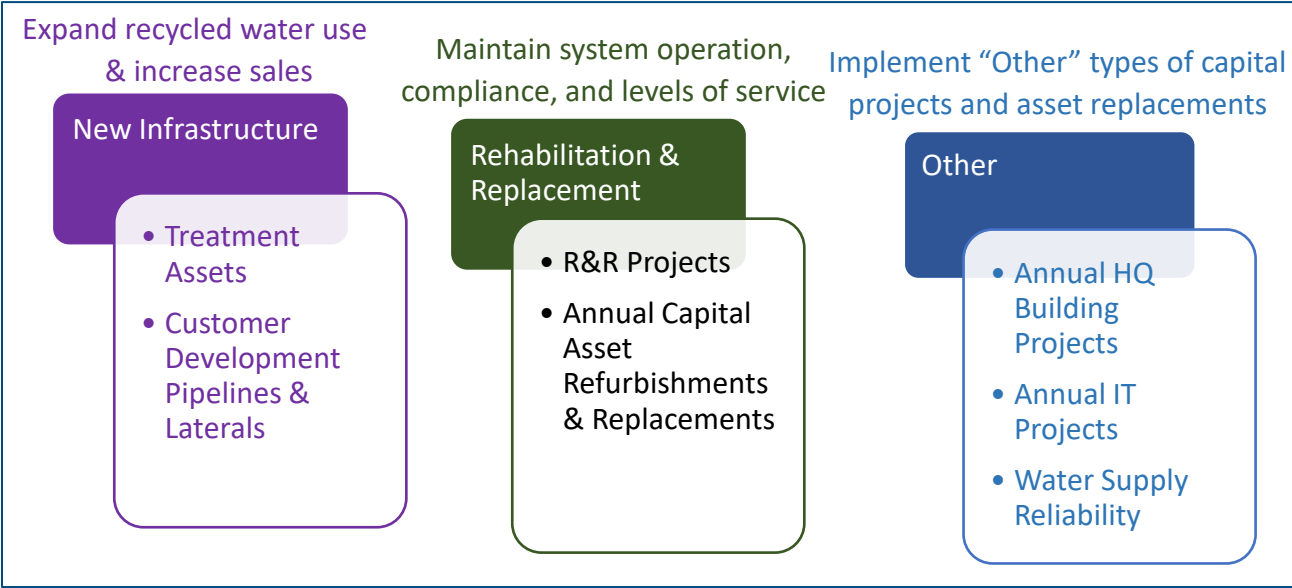
1. New Infrastructure: Projects that call for the construction of new recycled water infrastructure and equipment to: increase recycled water use by expanding the distribution system, constructing new lateral pipelines, and/or establishing new customer connections; increase the capacity and improve reliability 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.
2. Rehabilitation and Replacement: Phase 1 construction of West Basin's recycled water treatment and distribution systems was complete 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, 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 through the efficient operation of upgraded equipment.
3. Other: This component includes capital projects that support West Basin's efforts in exploring other local sources of water supply, maintaining existing building assets, and implementing necessary Information Technology (IT) related upgrades. West Basin project administration costs have also typically been listed under this CIP category.

The three key goals and components of West Basin's CIP, graphically illustrated in Figure 2, 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 long-term financial plan that would ensure West Basin’s goals and objectives are met in a fiscally sustainable and responsible manner.

Figure 2: 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 set by West Basin's Board of Directors (Board). The CIP Budget process, which is concurrent with the Operating Budget preparation, is an essential tool for 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 fresh 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 in consideration of upcoming known and potential future regulations impacting recycled water use. Findings from recent R&R program assessments, past feasibility studies related to expansion projects, and other planning level reports were considered by the master plan and incorporated in the report. Both pending and potential capital projects were scheduled in a 20-year CIP projection based on a weighted prioritization criteria shown in Table 1 below. Three alternative 20-year projections were offered by the 2021 master plan. The intent of the projections was to present potential recycled water expansion options, and provide a temporary guide while West Basin and its regional partners work 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 focus on prioritized R&R projects in the 5-year period between 2020 and 2025.

Table 1: Master Plan Level Project Prioritization Criteria

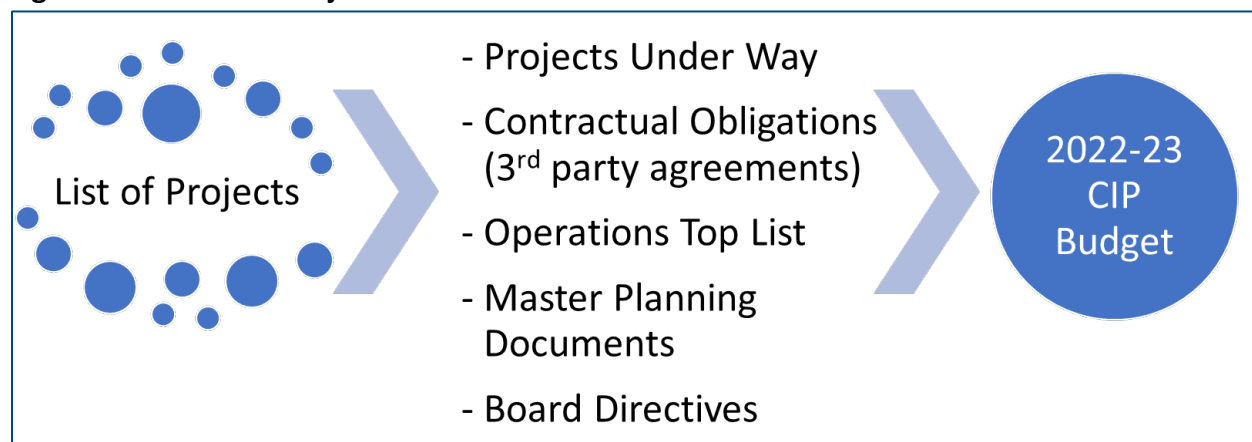
Criteria	Definition
Safety	<ul style="list-style-type: none"> • Reduces immediate, identifiable safety risk to the public and employees • Mitigates likelihood or consequence of safety risk that could result in injury, or death of an employee or member of the public
Customer Experience	<ul style="list-style-type: none"> • Improves water quality for customer • Improves delivery of recycled water to customer (pressure, storage, surge control, etc.)

Criteria	Definition
Reliability	<ul style="list-style-type: none"> Increases reliability by replacing equipment that is at the end of its useful life Increases reliability in meeting permitting requirements Reduces potential for system outages or reduction in production capacity
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

As part of this CIP budget development, West Basin staff re-evaluates District capital projects annually, and determines the need to re-prioritize certain projects based on 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 takes into account available funding opportunities, District contractual commitments, regulatory/permit requirements, and level of service. Capital projects are annually re-evaluated and sometimes re-prioritized in consideration of several factors prior to presenting a capital budget recommendation for the following year to the Board.

Figure 3: Annual CIP Project Considerations





As part of the Fiscal Year (FY) 2022-2023 CIP budget process, and in consideration of the annual 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 projects that are currently underway, and other prioritized projects for FY 2022-2023. The list initially included 46 budgetary line items and was first presented for Board review in April 2022. As shown below in Table 2, the initial project list consisted of 37 Capital Projects and 9 budget estimates for Capital Asset Refurbishments or Replacements. As part of subsequent Board discussions and feedback, some projects were deferred and excluded from the final list of projects shown in Table 2. A more detailed breakdown of Table A projects is provided in Attachment A.
- **Table B - Anticipated 5- Year CIP Projects:** This list of projects, which are currently anticipated to occur within the next five years, includes six additional "New Infrastructure" type projects, and 28 R&R projects. These projects were not proposed to proceed in FY 2022-2023. A breakdown of Table B projects is provided in Attachment B.
- **Table C - Other Potential CIP Projects:** This list includes 13 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 Treatment Assets & Infrastructure
#1	10022	JMMCRWRP Phase II Expansion Project
#2	40039	Inglewood Disinfection Station*
#3	10070	Title 22 Converted Filter Booster Pump Station
		New Infrastructure - Customer Dev. Pipelines & Laterals
#4	10047	Palos Verdes Recycled Water Pipeline Project
#5	10090	Mills Park Recycled Water Lateral Project
#6	10091	North Gardena Recycled Water Lateral Project
#7	10094	Inglewood Basketball Entertainment Center RW Improvement
#8	40101	Nash Street Lateral*
#9	40114	Carson Street Recycled Water Connection*
		R&R Projects
#10	40048	Satellite Facilities Chemical Containment R&R*
#11	10059	ECLWRF Solids Handling Improvement



Count	CIP No.	Project Name
#12	10062	RW Distribution System Cathodic Protection System Imp.
#13	10065-01	Chevron Nitrified Product Water Tank Rehabilitation
#14	10065-02	Torrance Refinery Nitrified Product Water Tank Rehabilitation
#15	10073	ECLWRF Title 22 Filters Rehabilitation & Replacement
#16	10080	Distributed Control System Replacement
#17	10084	TRWRP Retaining Wall and Backflow Preventer Replacement*
#18	10085	ECLWRF Barrier Basin & Pump Station Rehabilitation
#19	10092	Disinfected Tertiary Product Pumps & VFDs Rehabilitation
#20	10093-01	ECLWRF Bulk Chemical Storage Improvements
#21	10093-02	CNTP Bulk Chemical Storage Improvements*
#22	10093-03	TRWRP Bulk Chemical Storage Improvements*
#23	10093-04	JMMCRWRP Bulk Chemical Storage Improvements*
#24	10095	C. Marvin Brewer Desalter Decommissioning
#25	10096	ECLWRF Phase II & III MF Replacement*
#26	10097	ECLWRF RO Pretreatment*
#27	10099	HSEPS R&R Project
#28	10100	Hyperion Force Main R&R Condition Assessment
#29	10104-01	TRWRP MF Replacement Project - Feasibility Study Phase
#30	10107-01	Chevron HP & LP VFD & Pump R&R*
#31	10108	TRWRP Waste Discharge Improvements Project*
#32	10109	TRWRP Fiberglass Pipe (FRP) Replacement*
#33	10111	ECLWRF Title 22 Common Filter Systems*
#34	10103	Ops MF Membrane Replacement
#35	10106	Ops RO Membrane Replacement
#36	10112	Ops Facility R&R
#37	10113	Ops Compliance Laboratory
#38	10116	ECLWRF Title 22 North Leg Valve Replacement*
#39	10117	TRWRP 93MCC2 Replacement*
#40	10118	ECLWRF MF-RO CIP Valve Replacement*
		Other Projects
#41	10044-01	DLD IT Server Room Improvements
#42	10044-02	DLD Elevator Modernization*
#43	10044-03	DLD Air Conditioning Units Refurbishment



Count	CIP No.	Project Name
#44	10044-04	DLD Boiler Replacement
#45	10102	West Basin HQ Conceptual Design Options
#46	10115	IT CIP Projects
--	--	Estimated Staff time for Projects Under Review

* Deferred projects, not included in final FY 2022-2023 CIP budget, are subject to proceed only through separate Board consideration and authorization.

Attachment D of this CIP Budget Book provides detailed data sheets for each of the above projects, including project drivers, description, schedule, estimated expenditures, funding sources, and list of related board actions.

2.3 Board Workshops and Feedback

To engage the Board and customers, West Basin staff presented the proposed FY 2022-2023 CIP budget to the Board in a series of meetings, discussing Project statuses, drivers, goals, scopes of work, funding sources, and other considerations. West Basin staff first presented the proposed FY 2022-2023 CIP budget, as well as the corresponding 5-year CIP projections, at a special board workshop meeting held on April 20, 2022. Board level feedback from this workshop, and other subsequent CIP budget discussions (May 11, 2022 Engineering and Operations Committee and the May 18 Finance and Administration Committee meetings) helped modify the proposed budget for FY 2022-2023. As a result of this process, the revised annual CIP budget was reduced by approximately 21%, allowing only certain CIP projects to proceed contingent upon further consideration and Board authorization.

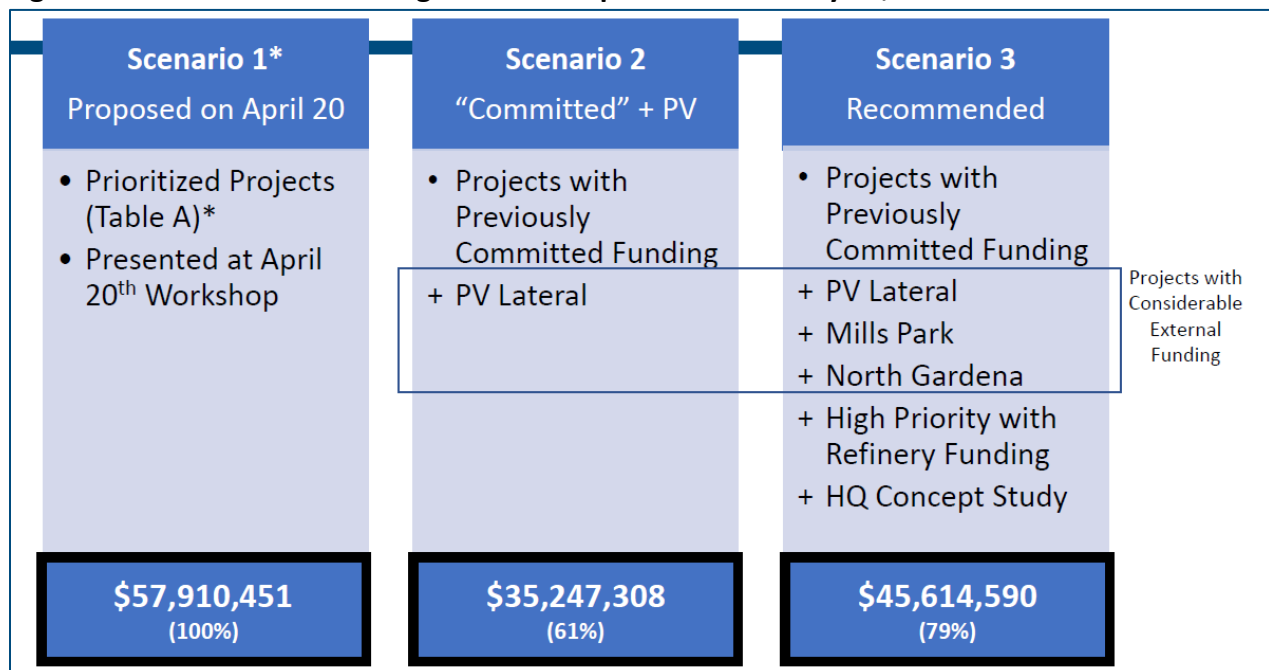
2.4 Future Opportunities

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 the regulation of potable reuse projects, and develop uniform water recycling criteria for direct potable reuse (DPR) by December 31, 2023. In parallel, West Basin and other regional partners are looking to expand the use of recycled water for ground water replenishment, and evaluate DPR opportunities through raw water augmentation. Going forward, these efforts could have an impact on West Basin's recycled water program goals and its projected CIP investments.

Section 3. Proposed FY 2022-2023 CIP Budget

The annual CIP expenditures for FY 2022-2023, as originally presented to the Board on April 20, 2022 for review, consideration and discussion, totaled approximately \$57.9 million. Board feedback included a request to defer some projects to: allow additional time for executive team/Board review; and pursue additional external funding. As a result, the Board was presented with three different budget scenarios at an F&A Committee meeting held on May 18, 2022. The first scenario was the originally proposed CIP budget of \$57.9 million. The second scenario only included CIP projects that the Board had previously committed to funding, plus the recently approved Palos Verdes Recycled Water Pipeline Project (PV Lateral) for an estimated budget of \$35.2 million. The third scenario included all of Scenario 2 projects, plus two additional recycled water expansion projects with considerable external funding, plus seven high priority R&R project with secured refinery funding, plus an effort to evaluate the relocation of District headquarters. The Scenario 3 budget was estimated at approximately \$45.6 million. The three scenarios are graphically summarized in Figure 4 below.

Figure 4: FY 2022-2023 CIP Budget Scenarios presented on May 18, 2022



The Board approved Scenario 3 on June 27, 2022, with anticipated annual CIP expenditures of \$45,614,590 for FY 2022-2023.

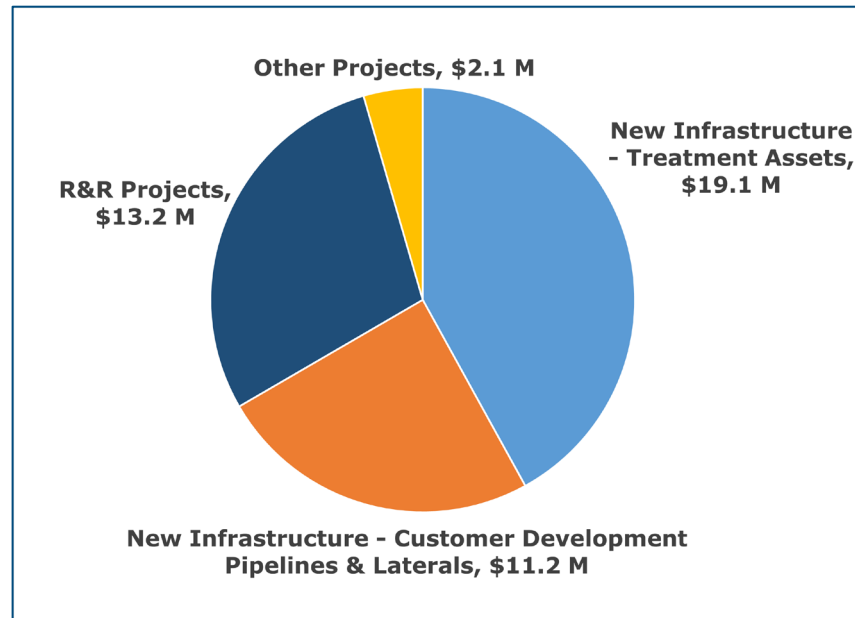
3.1 FY 2022-2023 Budget

The proposed CIP FY 2022-2023 budget of \$45,614,590 includes 29 budgetary line items that consist of 20 Capital Projects, and eight separate budgets for refurbishing or replacing capital assets located at the District's water treatment plants (e.g., membranes, valves...etc.); and at the District headquarters building (e.g., HVAC equipment, servers, etc.). The revised FY 2022-2023

budget also accounts for estimated staff time associated with projects under review. A breakdown of the proposed CIP FY 2022-2023 budget is shown in Figure 5 below.

Figure 5: Summary of FY 22-23 CIP Budget by Category

Approximately 57% (\$25.9 million) of the proposed CIP FY 2022-2023 budget is attributed to two Capital Projects: the JMMCRWRP Phase II Expansion Project (CIP 10022), with an estimated FY 2022-2023 expenditure of approximately \$16.6 million; and the Palos Verdes Recycled Water Pipeline Project (CIP10047), with an estimated FY 2022-2023 expenditure of approximately \$9.3 million.



The JMMCRWRP Phase II Expansion Project is currently in the construction phase, and the Palos Verdes Recycled Water Pipeline is scheduled to begin construction in the fall of 2022. West Basin staff was successful in securing external funding sources (grants, stakeholder contributions, and low interest loans) for both projects. Another approximately 29% (\$13.2 million) of the proposed CIP FY 2022-2023 budget is focused on prioritized R&R projects. The remaining 14% of the CIP FY 2022-2023 budget is attributed to:

- Installing new pumping facilities at the Edward C. Little Water Recycling Facility (ECLWRF) to boost filtration system treatment capacity/redundancy. This project is currently in the construction phase, with its FY 2022-2023 expenditure estimated at approximately \$2.6 million.
- Three pipeline extensions associated with developer or United States Army Corps of Engineers funding. West Basin's FY 2022-2023 expenditure related to these projects is estimated at approximately \$1.9 million.
- Headquarters building and information technology (IT) related asset replacement expenditures estimated at approximately \$1.2 million.
- An estimated staff time budget of approximately \$0.84 million associated with projects under further review.

3.2 5-Year Projections

As summarized in Table 3 below, the implementation of the proposed projects for FY 2022-2023 will ultimately result in total expenditure of approximately \$156.5 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	FY 22-23 Budget	FY 23-24 Budget	FY 24-25 Budget	FY 25-26 Budget	FY 26-27 Budget
New Infrastructure - Treatment Assets	\$19,147,396	\$269,280	\$532,811	\$1,145,909	\$0
New Infrastructure - Customer Development Pipelines & Laterals	\$11,244,358	\$1,405,398	\$198,200	\$0	\$0
R&R Projects	\$13,169,252	\$26,310,674	\$34,371,563	\$27,135,153	\$18,707,435
Other Projects	\$2,053,583	\$449,842	\$316,708	\$0	\$0
Total: \$156,457,562	\$45,614,589	\$28,435,194	\$35,419,282	\$28,281,062	\$18,707,435

Figure 6 below illustrates the 5-year estimated expenditures related to the projects listed in the FY 2022-2023 CIP budget. Total expenditures related to the FY 2022-2023 projects, estimated at approximately \$214.8 million, can be summarized as follows:

- Past/Pending Expenditures (Including current FY 2021-2022): \$30.9 million
- Next 5-year Expenditures (Including FY 2022-2023): \$156.5 million
- Future Expenditure beyond the next 5-years: \$27.4 million

Figure 6: Estimated 5-Year CIP Expenditures by Category

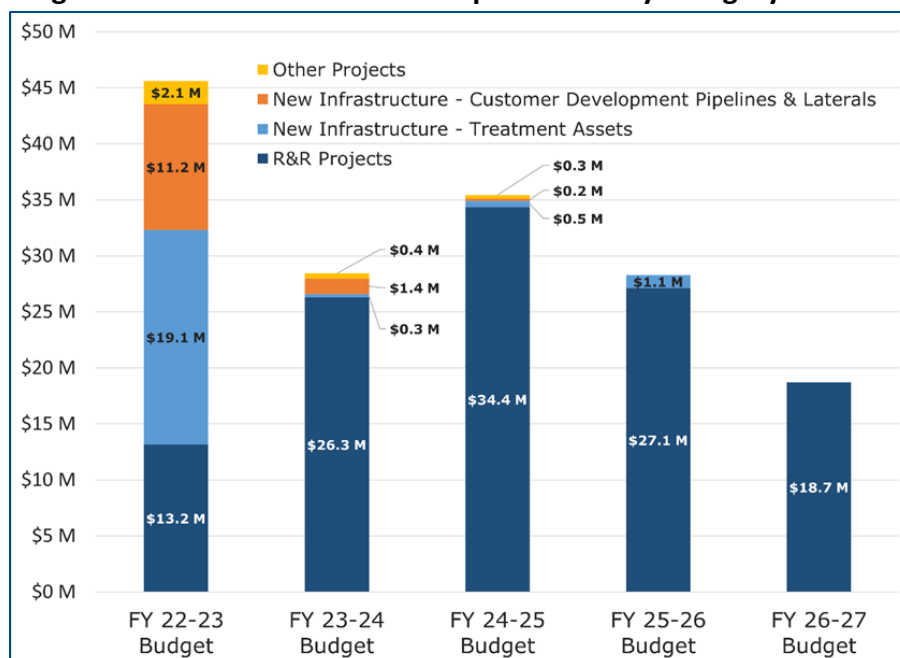


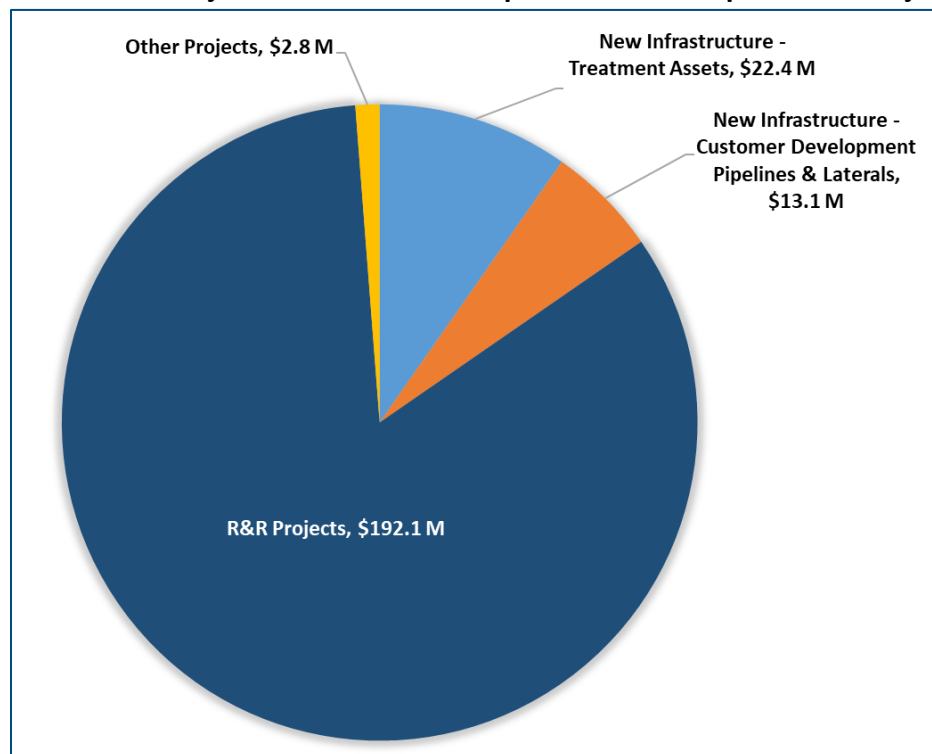
Table 4 below combines the “Proposed” and “Anticipated” 5-year CIP projects for a more complete 5-year projection of CIP expenditures.

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

Category	FY 22-23 Budget	FY 23-24 Budget	FY 24-25 Budget	FY 25-26 Budget	FY 26-27 Budget
Proposed Projects (Table A) Subtotal: \$156,457,562	\$45,614,589	\$28,435,194	\$35,419,282	\$28,281,062	\$18,707,435
Anticipated Projects (Table B) Subtotal: \$73,942,946	\$0	\$2,841,518	\$15,399,619	\$32,181,340	\$23,520,469
Total: \$230,400,508	\$45,614,589	\$31,276,712	\$50,818,901	\$60,462,402	\$42,227,904

As depicted in Figure 7 below, approximately \$192.1 million (83-percent) of the projected CIP expenditure over the next 5 years (\$230.4 million), are related to proposed and anticipated R&R projects. In comparison, of the \$287.6 million CIP expenditures recorded over the 10-year period from FY 2010-2011 to FY 2019-2020, only \$51.1 million (18-percent) were related to R&R projects.

Figure 7: 5-Year Projections related to Proposed and Anticipated CIP Projects



3.3 FY 2022-2023 Project List

Table 5 lists each project included in the FY 2022-2023 CIP budget. Table 6 shows the deferred projects, subject to proceed only through further consideration and Board authorization.



Table 5: FY 2022-2023 CIP Budget Project List

CIP No.	Project Name	FY22-23 Budget
	New Infrastructure – Treatment Assets	\$19,147,396
10022	JMMCRWRP Phase II Expansion Project	\$16,562,327
10070	Title 22 Converted Filter Booster Pump Station	\$2,585,070
	New Infrastructure – Customer Dev. Pipelines & Laterals	\$11,244,358
10047	Palos Verdes Recycled Water Pipeline Project	\$9,337,672
10090	Mills Park Recycled Water Lateral Project	\$989,121
10091	North Gardena Recycled Water Lateral Project	\$914,300
10094	Inglewood Basketball Entertainment Center RW Improvement	\$3,265
	R&R Projects	\$13,169,252
10059	ECLWRF Solids Handling Improvement	\$1,519,543
10062	RW Distribution System Cathodic Protection System Imp.	\$991,732
10065-01	Chevron Nitrified Product Water Tank Rehabilitation	\$10,117
10065-02	Torrance Refinery Nitrified Product Water Tank Rehabilitation	\$28,923
10073	ECLWRF Title 22 Filters Rehabilitation & Replacement	\$5,217,089
10080	Distributed Control System Replacement	\$878,930
10085	ECLWRF Barrier Basin & Pump Station Rehabilitation	\$295,099
10092	Disinfected Tertiary Product Pumps & VFDs Rehabilitation	\$985,465
10093-01	ECLWRF Bulk Chemical Storage Improvements	\$173,999
10095	C. Marvin Brewer Desalter Decommissioning	\$176,918
10099	HSEPS R&R Project	\$443,351
10100	Hyperion Force Main R&R Condition Assessment	\$197,800
10103	Ops MF Membrane Replacement	\$402,289
10104-01	TRWRP MF Replacement Project - Feasibility Study Phase	\$89,718
10106	Ops RO Membrane Replacement	\$10,000
10112	Ops Facility R&R	\$1,567,281
10113	Ops Compliance Laboratory	\$181,000
	Other Projects	\$2,053,583
10044-01	DLD IT Server Room Improvements	\$30,000
10044-03	DLD Air Conditioning Units Refurbishment	\$114,083
10044-04	DLD Boiler Replacement	\$79,583
10102	West Basin HQ Conceptual Design Options	\$244,000
10115	IT CIP Projects	\$737,000
--	Estimated Staff time for Projects Under Review	\$848,917
	Total	\$45,614,589



Table 6: List of Deferred CIP Projects (Under Review)

CIP No.	Project Name	FY22-23 Budget	Total Project Cost
	New Infrastructure – Treatment Assets	\$0	\$2,291,050
10039	Inglewood Disinfection Station	\$0	\$2,291,050
	New Infrastructure – Customer Dev. Pipelines & Laterals	\$0	\$413,466
10101	Nash Street Lateral	\$0	\$175,566
10114	Carson Street Recycled Water Connection	\$0	\$237,900
	R&R Projects	\$0	\$33,651,351
10048	Satellite Facilities Chemical Containment R&R	\$0	\$1,626,778
10084	TRWRP Retaining Wall and Backflow Preventer Replacement	\$0	\$712,397
10093-02	CNTP Bulk Chemical Storage Improvements	\$0	\$1,855,228
10093-03	TRWRP Bulk Chemical Storage Improvements	\$0	\$3,394,137
10093-04	JMMCRWRP Bulk Chemical Storage Improvements	\$0	\$3,205,204
10096	ECLWRF Phase II & III MF Replacement	\$0	\$9,999,914
10097	ECLWRF RO Pretreatment	\$0	\$871,126
10107-01	Chevron HP & LP VFD & Pump R&R	\$0	\$2,413,000
10108	TRWRP Waste Discharge Improvements Project	\$0	\$872,000
10109	TRWRP Fiberglass Pipe (FRP) Replacement	\$0	\$696,680
10111	ECLWRF Title 22 Common Filter Systems	\$0	\$7,153,577
10116	ECLWRF Title 22 North Leg Valve Replacement	\$0	\$528,000
10117	TRWRP 93MCC2 Replacement	\$0	\$194,547
10118	ECLWRF MF-RO CIP Valve Replacement	\$0	\$128,764
	Other Projects	\$0	\$460,710
10044-02	DLD Elevator Modernization	\$0	\$460,710
	Total	\$0	\$36,816,577

3.4 FY 2022-2023 Projects by Phase

Tables 7 through 10 list the FY 2022-2023 CIP projects by the phase they were in June 2022, at the time the FY 2022-2023 budget was approved. Table 11 lists the FY 2022-2023 annual budget for Capital Asset Refurbishments or Replacements. These tables exclude FY 2022-2023 budgets for the deferred projects listed in Table 6. A summary breakdown of the FY 2022-2023 CIP budget by the phase they were in at the time the FY 2022-2023 budget was approved is as follows:

<u>June 2022 Project Status/Phase</u>	<u>FY 2022-2023 Budget</u>
• Construction Phase:	\$20,319,312
• Design Phase Projects:	\$16,048,362
• Planning	\$1,519,543
• Early Planning	\$4,606,137
• <u>Capital Asset Refurbishments or Replacements</u>	<u>\$3,121,236</u>
• Total Budget	\$45,614,590

**Table 7: FY 2022-2023 CIP Projects in Bidding & Construction Phase (as of June 2022)**

CIP No.	Project Name	FY22-23 Budget *
10022	JMMCRWRP Phase II Expansion Project	\$16,562,327
10062	RW Distribution System Cathodic Protection System Improvements	\$991,732
10070	Title 22 Converted Filter Booster Pump Station	\$2,585,070
10084	TRWRP Retaining Wall and Backflow Preventer Replacement	\$0
10094	Inglewood Basketball Entertainment Center RW Improvement	\$3,265
10095	C. Marvin Brewer Desalter Decommissioning	\$176,918
10118	ECLWRF MF-RO CIP Valve Replacement	\$0
Total		\$20,319,312

* Total project costs are shown in Attachment A

Table 8: FY 2022-2023 CIP Projects in Design Phase (as of June 2022)

CIP No.	Project Name	FY22-23 Budget *
10047	Palos Verdes Recycled Water Pipeline Project	\$9,337,672
10048	Satellite Facilities Chemical Containment R&R	\$0
10065-01	Chevron Nitrified Product Water Tank Rehabilitation	\$10,117
10065-02	Torrance Refinery Nitrified Product Water Tank Rehabilitation	\$28,923
10073	ECLWRF Title 22 Filters Rehabilitation & Replacement	\$5,217,089
10085	ECLWRF Barrier Basin & Pump Station Rehabilitation	\$295,099
10092	Disinfected Tertiary Product Pumps & VFDs Rehabilitation	\$985,465
10093-01	ECLWRF Bulk Chemical Storage Improvements	\$173,999
10101	Nash Street Lateral	\$0
10117	TRWRP 93MCC2 Replacement	\$0
Total		\$16,048,362

* Total project costs are shown in Attachment A

Table 9: FY 2022-2023 CIP Projects in Planning Phase (as of June 2022)

CIP No.	Project Name	FY22-23 Budget *
10059	ECLWRF Solids Handling Improvement	\$1,519,543
10093-02	CNTP Bulk Chemical Storage Improvements	\$0
10093-03	TRWRP Bulk Chemical Storage Improvements	\$0
10096	ECLWRF Phase II & III MF Replacement	\$0
10097	ECLWRF RO Pretreatment	\$0
10109	TRWRP Fiberglass Pipe (FRP) Replacement	\$0
10116	ECLWRF Title 22 North Leg Valve Replacement	\$0
Total		\$1,519,543

* Total project costs are shown in Attachment A

**Table 10: FY 2022-2023 CIP Projects in Early Planning Phase (as of June 2022)**

CIP No.	Project Name	FY22-23 Budget *
10039	Inglewood Disinfection Station	\$0
10080	Distributed Control System Replacement	\$878,930
10090	Mills Park Recycled Water Lateral Project	\$989,121
10091	North Gardena Recycled Water Lateral Project	\$914,300
10093-04	JMMCRWRP Bulk Chemical Storage Improvements	\$0
10099	HSEPS R&R Project	\$443,351
10100	Hyperion Force Main R&R Condition Assessment	\$197,800
10102	West Basin HQ Conceptual Design Options	\$244,000
10104-01	TRWRP MF Replacement Project - Feasibility Study Phase	\$89,718
10107-01	Chevron HP & LP VFD & Pump R&R	\$0
10108	TRWRP Waste Discharge Improvements Project	\$0
10111	ECLWRF Title 22 Common Filter Systems	\$0
10114	Carson Street Recycled Water Connection	\$0
--	Estimated Staff Time for Projects Under Review	\$848,917
Total		\$4,606,137

* Total project costs are shown in Attachment A

Table 11: FY 2022-2023 Annual Capital Asset Refurbishments or Replacements

CIP No.	Project Name	FY22-23 Budget
10044-01	DLD IT Server Room Improvements	\$30,000
10044-02	DLD Elevator Modernization	\$0
10044-03	DLD Air Conditioning Units Refurbishment	\$114,083
10044-04	DLD Boiler Replacement	\$79,583
10103	Ops MF Membrane Replacement	\$402,289
10106	Ops RO Membrane Replacement	\$10,000
10112	Ops Facility R&R	\$1,567,281
10113	Ops Compliance Laboratory	\$181,000
10115	IT CIP Projects	\$737,000
Total		\$3,121,236

* Total 5-year costs are shown in Attachment A



3.5 FY 2022-2023 Multi-Phased Projects

There are several proposed and anticipated CIP projects listed in Tables A and B (provided in Attachments A and B, respectively) that are expected to have multiple phases. Table 12 below breaks down the anticipated phases of each project, highlighting which of the phases are included in the FY 2022-2023 budget.

Table 12: Multi-phased CIP Projects

CIP No.	Project Name	FY 22-23 Budget	Total Project Cost
10044	DLD Building Improvements	\$223,666	\$684,376
	Phase 1 - DLD IT Server Room Improvements (10044-01)	\$30,000	\$30,000
	Phase 2 - DLD Elevator Modernization (10044-02)	\$0	\$460,710
	Phase 3 - DLD Air Conditioning Units Refurbishment (10044-03)	\$114,083	\$114,083
	Phase 4 - DLD Boiler Replacement (10044-04)	\$79,583	\$79,583
10059	ECLWRF Solids Handling Improvement	\$1,519,543	\$9,150,492
	Phase 1 - Short-Term Rehabilitation	\$600,000	\$600,000
	Phase 2 - Long-Term Rehabilitation	\$919,543	\$8,550,492
10065	Welded Steel Tank R&R Project	\$39,039	\$8,774,618
	Phase 1 - Chevron Nitrified Product Tank (10065-01)	\$10,117	\$4,396,645
	Phase 2 - Torrance Refinery Nitrified Product Tank (10065-02)	\$28,923	\$4,377,973
10080	Distributed Control System Replacement	\$878,930	\$29,057,400
	Phase 1 - Preliminary Fiber to HSEPS	\$116,197	\$590,164
	Phase 2 - CNTP	\$756,685	\$2,612,074
	Phase 3 - ECLWRF	\$6,048	\$15,467,197
	Phase 4 - JMMCRWRP	\$0	\$4,049,753
	Phase 5 - TRWRP	\$0	\$4,380,112
	Phase 6 - Backup Fiber to HSEPS	\$0	\$1,958,100
10085	ECLWRF Barrier Basin & Pump Station Rehabilitation	\$295,099	\$12,592,862
	Phase 1 - MCC 1,2 and Pumps 1,2,3	\$295,099	\$4,135,469
	Phase 2 - Basin & Pump Station Structure	\$0	\$1,343,430
	Phase 3 - MCC 3; Pumps 4,5,6; VFD 6; Switchboard; Manifold	\$0	\$7,113,963
10092	Disinfected Tertiary Product Pumps & VFDs Rehabilitation	\$985,465	\$7,655,188
	Phase 1 - Critical Replacements	\$961,000	\$1,091,188
	Phase 2 - Overall System R&R	\$24,465	\$6,564,000
10093	Bulk Chemical Storage Improvements	\$173,999	\$17,582,142
	Phase 1A - ECLWRF (10093-01) - Day Tank	\$100,000	\$120,000
	Phase 1B - ECLWRF (10093-01) - Future Tanks	\$73,999	\$9,007,573



CIP No.	Project Name	FY 22-23 Budget	Total Project Cost
	Phase 2 - CNTP (10093-02)	\$0	\$1,855,228
	Phase 3 - TRWRP (10093-03)	\$0	\$3,394,137
	Phase 4 - JMMCRWRP (10093-04)	\$0	\$3,205,204
10099	HSEPS R&R Project	\$443,351	\$9,886,420
	Phase 1 - Onsite Improvements + Two Pumps	\$443,351	\$8,386,420
	Phase 2 - One Constant-Speed Pump	\$0	\$750,000
	Phase 3 - One Constant-Speed Pump	\$0	\$750,000
10100	Hyperion Force Main R&R Condition Assessment	\$197,800	\$2,475,500
	Phase 1 - Condition Assessment & Planning	\$179,500	\$179,500
	Phase 2 - Design	\$18,300	\$366,000
	Phase 3 - Initial Repairs	\$0	\$1,930,000
	Phase 4 - Additional Repairs, If Needed	\$0	TBD*
10104	TRWRP MF Replacement Project	\$89,718	\$14,091,754
	Phase 1 - Feasibility Study Phase (10104-01)	\$89,718	\$605,395
	Phase 2 - Design / Construction (10104-02; Table B)	\$0	\$13,486,359
10107	Chevron HP & LP VFD & Pump R&R	\$0	\$6,665,971
	Phase 1 - VFDs and Pumps (10107-01)	\$0	\$2,413,000
	Phase 2 - Storage Tanks (10107-02; Table B)	\$0	\$4,252,971

* Future project costs to be determined based on condition assessment



Section 4. CIP Project Funding

As essential as it is to prioritize and evaluate each project to understand the 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 common funding sources are as follows:

1. PAYGO: Also known as Pay-As-You-Go, PAYGO funds capital improvement projects from rates/revenues and reserves.
2. 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 (USACOE).
3. Government Grants and Loans: Examples are the California State Water Resources Control Board (SWRCB) State Revolving Fund Low Interest Loans, or the loans issued through the environmental Protection Agency (EPA) referred to as the Water Infrastructure Innovation Act (WIFIA).
4. Municipal Bond and Bank Debt: A public agency may issue short-term or long-term debt through the public market, private placement, direct purchase arrangements or through interim financing.

4.2 Determination of the Funding Source

A review of each individual project allows the District to determine the most appropriate use of funding source. 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 that have a useful life shorter than 15 years are typically funded with PAYGO. The main reason PAYGO funding is utilized is that the District issues debt that often exceeds 15 years; and the District's Debt Management Policy requires the debt issued will



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

Of course, the District takes into consideration the external funding that may be received from grants or customers. The District has been successful in receiving grants and contributions that have offset the cost of capital. 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 is seeking to lessen its dependence on imported water.

Debt is a broad term 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 costs of the repayment 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 to use during the time the capital project is being constructed and is awaiting other sources of funding like customer funding or grants. The repayment of interim financing is either completed by a cash repayment or converting the interim financing to long-term debt. It is still important for the District to ensure that the refunding still matches the long-term nature of the debt with the longer useful life.

To deliver the fit-for-purpose recycled water to some of its refinery customers, the District historically debt financed these capital projects on the customer site with the District's tax-exempt financing. In return, the customers repaid this investment through a customer agreement. However, as these customer agreements have come up for renewal, there has been consideration given to transfer these assets to the refinery for the customer to maintain. Looking forward, the District should consider the long-term ownership of these assets when deciding to utilize debt as the desire maybe to transfer the asset to the customer in the future. Before a transfer can be considered, the District will need to evaluate whether there is still outstanding debt related to the asset(s) as the District may not transfer the asset until the tax-exempt bonds are paid off.

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 calculation of the core target includes a 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 looks to achieve its targeted debt service coverage, the District will annually earn net revenues that may be invested back into capital projects. The District will maximize the use of the annual net revenues towards funding capital projects and may opt to use PAYGO for assets with longer term useful life. However, this assumes that the minimum designated funds 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 issuance of debt, however, the District should consider the potential higher operational costs or consequences of failure with 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 cost of financing
- A mix of debt and PAYGO is necessary to meet rate and financial objectives

For FY 2022-2023 the funding approach shown in Table 13 below was presented to the Board of Directors as it outlines the funding approach for the current year:

Table 13: Funding Approach for FY 2022-2023 CIP Budget (in millions)

Funding Source	FY22-23 Budget (Scenario 3)
External Funding/ Loans	\$28.7
Grants	9.8
SRF Low Interest Loans	9.6
Customer Contribution	6.8
Refinery Contribution	2.5
Available PAYGO Funding	7.7
Draw on Reserves	9.2
Issue Commercial Paper	0.0
Total	\$45.6



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 was identified. This allows West Basin to manage its long-term strategy based on current available information. As noted in Table 13, the District will fully draw on its net revenues identified for FY 2022-2023 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 2022-2023. 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 2022-2023 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 definite course of action that may impact the environment at time of budget approval. Environmental review for the individual projects listed within the FY 2022-2023 CIP Budget will undergo review as they are proposed and may be subject to CEQA. Such reviews would be conducted prior to the design phase of those projects and prior to approval of an agreement for construction services.

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Attachment A Proposed 5-Year CIP Projects

FY22-23 Budget Book Capital Improvement Program



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

CIP No.	Project Name	SUMMARY		
		FY 22-23 Total	5-Year Total	Total Project Cost (Past, Pending, Future)
New Infrastructure - Treatment Assets		\$ 19,147,396	\$ 21,095,396	\$ 32,838,049
10022	JMMCRWRP Phase II Expansion Project	\$ 16,562,327	\$ 16,562,327	\$ 27,241,067
10039	Inglewood Disinfection Station	\$ -	\$ 1,948,000	\$ 2,291,050
10070	Title 22 Converted Filters Booster Pump Station	\$ 2,585,070	\$ 2,585,070	\$ 3,305,932
New Infrastructure - Customer Development Pipelines & Laterals		\$ 11,244,358	\$ 12,847,955	\$ 15,286,491
10047	Palos Verdes Recycled Water Pipeline Project	\$ 9,337,672	\$ 10,537,804	\$ 12,903,653
10090	Mills Park Recycled Water Lateral Project	\$ 989,121	\$ 989,121	\$ 997,127
10091	North Gardena Recycled Water Lateral Project	\$ 914,300	\$ 914,300	\$ 922,079
10094	Inglewood Basketball Entertainment Center RW Improvement	\$ 3,265	\$ 3,265	\$ 50,165
10101	Nash Street Lateral	\$ -	\$ 165,566	\$ 175,566
10114	Carson Street Recycled Water Connection	\$ -	\$ 237,900	\$ 237,900
R&R Projects		\$ 13,169,252	\$ 119,694,077	\$ 163,911,979
10048	Satellite Facilities Chemical Containment R&R	\$ -	\$ 1,038,470	\$ 1,626,778
10059	ECLWRF Solids Handling Improvement	\$ 1,519,543	\$ 8,440,507	\$ 9,150,492
10062	RW Distribution System Cathodic Protection System Improvements	\$ 991,732	\$ 991,732	\$ 10,374,614
10065-01	Chevron Nitrified Product Water Tank Rehabilitation	\$ 10,117	\$ 3,767,184	\$ 4,396,645
10065-02	Torrance Refinery Nitrified Product Water Tank Rehabilitation	\$ 28,923	\$ 3,882,055	\$ 4,377,973
10073	ECLWRF Title 22 Filters Rehabilitation & Replacement	\$ 5,217,089	\$ 5,219,252	\$ 5,622,855
10080	Distributed Control System Replacement	\$ 878,930	\$ 18,242,421	\$ 29,057,399
10084	TRWRP Retaining Wall and Backflow Preventer Replacement	\$ -	\$ 610,698	\$ 712,397
10085	ECLWRF Barrier Basin & Pump Station Rehabilitation	\$ 295,099	\$ 4,340,111	\$ 12,592,862
10092	Disinfected Tertiary Product Pumps & VFDs Rehabilitation	\$ 985,465	\$ 7,507,465	\$ 7,655,188
10093-01	ECLWRF Bulk Chemical Storage Improvements	\$ 173,999	\$ 7,044,124	\$ 9,127,573
10093-02	CNTP Bulk Chemical Storage Improvements	\$ -	\$ 1,855,228	\$ 1,855,228
10093-03	TRWRP Bulk Chemical Storage Improvements	\$ -	\$ 3,394,137	\$ 3,394,137
10093-04	JMMCRWRP Bulk Chemical Storage Improvements	\$ -	\$ 3,205,204	\$ 3,205,204
10095	C. Marvin Brewer Desalter Decommissioning	\$ 176,918	\$ 176,918	\$ 538,004
10096	ECLWRF Phase II & III MF Replacement	\$ -	\$ 9,945,944	\$ 9,999,914
10097	ECLWRF RO Pretreatment	\$ -	\$ 871,126	\$ 871,126
10099	HSEPS R&R Project	\$ 443,351	\$ 9,886,420	\$ 9,886,420
10100	Hyperion Force Main R&R Condition Assessment	\$ 197,800	\$ 2,475,500	\$ 2,475,500
10103	Ops MF Membrane Replacement	\$ 402,289	\$ 3,292,400	\$ 11,995,468
10104-01	TRWRP MF Replacement Project - Feasibility Study Phase	\$ 89,718	\$ 605,395	\$ 605,395
10106	Ops RO Membrane Replacement	\$ 10,000	\$ 3,224,223	\$ 4,655,958
10107-01	Chevron HP & LP VFD & Pump R&R	\$ -	\$ 2,413,000	\$ 2,413,000
10108	TRWRP Waste Discharge Improvements Project	\$ -	\$ 872,000	\$ 872,000
10109	TRWRP Fiberglass Pipe (FRP) Replacement	\$ -	\$ 696,680	\$ 696,680
10111	ECLWRF Title 22 Common Filter Systems	\$ -	\$ 7,153,577	\$ 7,153,577
10112	Ops Facility R&R	\$ 1,567,281	\$ 7,567,281	\$ 7,567,281
10113	Ops Compliance Laboratory	\$ 181,000	\$ 181,000	\$ 181,000
10116	ECLWRF Title 22 North Leg Valve Replacement	\$ -	\$ 528,000	\$ 528,000
10117	TRWRP 93MCC2 Replacement	\$ -	\$ 146,652	\$ 194,547
10118	ECLWRF MF-RO CIP Valve Replacement	\$ -	\$ 119,375	\$ 128,764
Other Projects		\$ 2,053,583	\$ 2,820,133	\$ 2,833,293
10044-01	DLD IT Server Room Improvements	\$ 30,000	\$ 30,000	\$ 30,000
10044-02	DLD Elevator Modernization	\$ -	\$ 447,550	\$ 460,710
10044-03	DLD Air Conditioning Units Refurbishment	\$ 114,083	\$ 114,083	\$ 114,083
10044-04	DLD Boiler Replacement	\$ 79,583	\$ 79,583	\$ 79,583
10102	West Basin HQ Conceptual Design Options	\$ 244,000	\$ 244,000	\$ 244,000
10115	IT CIP Projects	\$ 737,000	\$ 1,056,000	\$ 1,056,000
--	Estimated Staff time for Projects Under Review	\$ 848,917	\$ 848,917	\$ 848,917
		\$ 45,614,589	\$ 156,457,562	\$ 214,869,812

Prior Years (thru 6/30/22)	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	Beyond
\$ 11,742,653	\$ 19,147,396	\$ 269,280	\$ 532,811	\$ 1,145,909	\$ -	\$ -
\$ 10,678,741	\$ 16,562,327	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 343,050	\$ -	\$ 269,280	\$ 532,811	\$ 1,145,909	\$ -	\$ -
\$ 720,862	\$ 2,585,070	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 2,438,535	\$ 11,244,358	\$ 1,405,398	\$ 198,200	\$ -	\$ -	\$ -
\$ 2,365,849	\$ 9,337,672	\$ 1,200,132	\$ -	\$ -	\$ -	\$ -
\$ 8,006	\$ 989,121	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 7,780	\$ 914,300	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 46,900	\$ 3,265	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 10,000	\$ -	\$ 165,566	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 39,700	\$ 198,200	\$ -	\$ -	\$ -
\$ 16,769,621	\$ 13,169,252	\$ 26,310,674	\$ 34,371,563	\$ 27,135,153	\$ 18,707,435	\$ 27,448,280
\$ 588,308	\$ -	\$ 1,038,470	\$ -	\$ -	\$ -	\$ -
\$ 709,986	\$ 1,519,543	\$ 875,134	\$ 5,824,034	\$ 221,797	\$ -	\$ -
\$ 9,382,881	\$ 991,732	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 629,462	\$ 10,117	\$ 3,757,067	\$ -	\$ -	\$ -	\$ -
\$ 495,918	\$ 28,923	\$ 3,853,132	\$ -	\$ -	\$ -	\$ -
\$ 403,603	\$ 5,217,089	\$ 2,163	\$ -	\$ -	\$ -	\$ -
\$ 473,967	\$ 878,930	\$ 3,649,683	\$ 2,309,520	\$ 8,336,894	\$ 3,067,394	\$ 10,341,012
\$ 101,699	\$ -	\$ 610,698	\$ -	\$ -	\$ -	\$ -
\$ 302,751	\$ 295,099	\$ 873,862	\$ 1,183,650	\$ 828,125	\$ 1,159,375	\$ 7,950,000
\$ 147,724	\$ 985,465	\$ 92,840	\$ 579,160	\$ 3,291,064	\$ 2,558,936	\$ -
\$ 62,728	\$ 173,999	\$ 237,891	\$ 1,816,551	\$ 2,407,504	\$ 2,408,179	\$ 2,020,721
\$ -	\$ -	\$ 97,373	\$ 1,199,444	\$ 558,411	\$ -	\$ -
\$ -	\$ -	\$ 177,900	\$ 1,325,655	\$ 1,890,583	\$ -	\$ -
\$ -	\$ -	\$ 192,518	\$ 355,951	\$ 2,430,993	\$ 225,743	\$ -
\$ 361,086	\$ 176,918	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 30,000	\$ 463,000	\$ 2,424,136	\$ 7,028,808	\$ 53,970
\$ -	\$ -	\$ 90,686	\$ 523,732	\$ 256,708	\$ -	\$ -
\$ -	\$ 443,351	\$ 1,162,089	\$ 5,827,640	\$ 2,453,340	\$ -	\$ -
\$ -	\$ 197,800	\$ 347,700	\$ 1,930,000	\$ -	\$ -	\$ -
\$ 2,390,268	\$ 402,289	\$ 2,354,511	\$ -	\$ 535,600	\$ -	\$ 6,312,800
\$ -	\$ 89,718	\$ 515,677	\$ -	\$ -	\$ -	\$ -
\$ 661,958	\$ 10,000	\$ 2,049,223	\$ 406,000	\$ -	\$ 759,000	\$ 769,777
\$ -	\$ -	\$ 350,237	\$ 2,062,763	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 850,653	\$ 21,347	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 695,318	\$ 1,362	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 352,822	\$ 6,800,755	\$ -	\$ -	\$ -
\$ -	\$ 1,567,281	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ -
\$ -	\$ 181,000	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 287,000	\$ 241,000	\$ -	\$ -	\$ -
\$ 47,895	\$ -	\$ 146,652	\$ -	\$ -	\$ -	\$ -
\$ 9,388	\$ -	\$ 119,375	\$ -	\$ -	\$ -	\$ -
\$ 13,160	\$ 2,053,583	\$ 449,842	\$ 316,708	\$ -	\$ -	\$ -
\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 13,160	\$ -	\$ 130,842	\$ 316,708	\$ -	\$ -	\$ -
\$ -	\$ 114,083	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ 79,583	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ 244,000	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ 737,000	\$ 319,000	\$ -	\$ -	\$ -	\$ -
\$ -	\$ 848,917	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 30,963,969	\$ 45,614,589	\$ 28,435,194	\$ 35,419,282	\$ 28,281,062	\$ 18,707,435	\$ 27,448,280

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Attachment B Anticipated 5-Year CIP Projects

FY22-23 Budget Book Capital Improvement Program



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

Project Name	SUMMARY		
	FY 22-23 Total	5-Year Total	Total Project Cost (Past, Pending, Future)
New Infrastructure - Treatment Assets	\$ -	\$ 1,300,000	\$ 1,470,000
Well WB-1 Sewer Connection	\$ -	\$ -	\$ 170,000
JMM Phase 2 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	\$ -	\$ 205,000	\$ 222,000
Carson Reclamation Authority	\$ -	\$ 165,000	\$ 170,000
Morningside HS Lateral RW Service Relocation	\$ -	\$ 40,000	\$ 52,000
R&R Projects	\$ -	\$ 72,438,000	\$ 72,512,000
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
Satellite Plant Control Room Upgrade	\$ -	\$ 1,532,000	\$ 1,532,000
All Sites RO CIP Batching System R&R	\$ -	\$ 680,000	\$ 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	\$ -	\$ 3,263,000	\$ 3,263,000
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	\$ -	\$ 4,734,000	\$ 4,734,000
190th Street Disinfection Station Modification	\$ -	\$ 525,000	\$ 525,000
TRWRP Secondary Power Source	\$ -	\$ 176,000	\$ 176,000
TRWRP VFD R&R	\$ -	\$ 1,516,000	\$ 1,516,000
CNTP VFD R&R Project	\$ -	\$ 1,960,000	\$ 1,960,000
Chevron HP & LP Boiler Feed Tanks	\$ -	\$ 4,253,000	\$ 4,253,000
Satellite Plant Surge Protection (Pipes & Tanks)	\$ -	\$ 7,413,000	\$ 7,413,000
TRWRP MF Replacement Project - Design/Construction Phase	\$ -	\$ 13,486,000	\$ 13,486,000
	\$ -	\$ 73,943,000	\$ 74,204,000

Prior Years (thru 6/30/22)	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	Beyond
\$ -	\$ -	\$ 1,300,000	\$ -	\$ -	\$ -	\$ 170,000
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170,000
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 900,000	\$ -	\$ -	\$ -	\$ -
\$ 16,607	\$ -	\$ 70,082	\$ 134,653	\$ 364	\$ -	\$ -
\$ 5,190	\$ -	\$ 29,982	\$ 134,653	\$ 364	\$ -	\$ -
\$ 11,417	\$ -	\$ 40,100	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 1,471,436	\$ 15,264,966	\$ 32,180,976	\$ 23,520,469	\$ 75,000
\$ -	\$ -	\$ -	\$ 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	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 94,000	\$ 1,438,000	\$ -
\$ -	\$ -	\$ -	\$ 662,571	\$ 17,880	\$ -	\$ 75,000
\$ -	\$ -	\$ -	\$ -	\$ 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	\$ -	\$ -
\$ -	\$ -	\$ 556,425	\$ 1,389,424	\$ 2,307,121	\$ -	\$ -
\$ -	\$ -	\$ 211,430	\$ 596,241	\$ 6,605,769	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 3,637,810	\$ 9,848,549	\$ -	\$ -
\$ 16,607	\$ -	\$ 2,841,518	\$ 15,399,619	\$ 32,181,340	\$ 23,520,469	\$ 245,000

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Attachment C Other Potential CIP Projects

FY22-23 Budget Book Capital Improvement Program





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

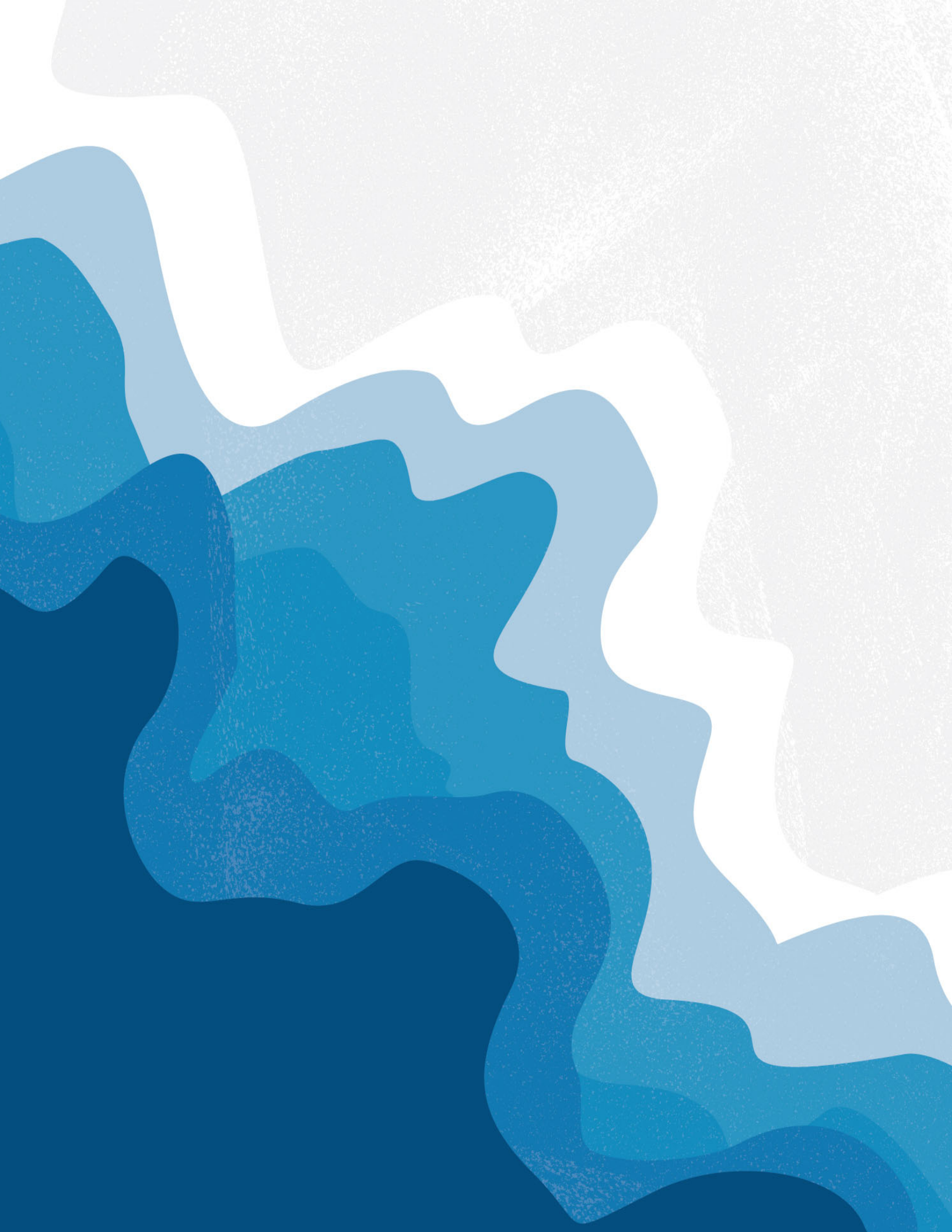
Project Name	Budget	Potential Demand (AFY)
Kenneth Hahn Recycled Water Lateral - Phase 1	\$ 17,600,000	392
Kenneth Hahn Recycled Water Lateral - Phase 2	\$ 13,200,000	208
Kenneth Hahn Recycled Water Lateral - Phase 3	\$ 3,800,000	108
Groundwater Augmentation Project - Phase 1	\$ 92,000,000	10,000
Groundwater 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
	\$ 314,300,000	26,460

Attachment D Table A Project Sheets

FY22-23 Budget

Capital Improvement Program





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D-1 New Infrastructure - Treatment Assets

FY22-23 Budget

Capital Improvement Program



10022: JMMCRWRP Phase II Expansion Project

Ongoing CIP project with previous budget approvals

FY22-23
\$16,562,000

5-yr CIP
\$16,562,000

Total Cost (past, present, future)
\$27,240,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$10,678,741	\$16,562,327	\$0	\$0	\$0	\$0	\$0	\$27,241,067

* Total Estimated Costs through 6/30/2022

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, a new carbon dioxide storage and dosing system, and potable water back up system for critical 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 are reaching end of useful life.
- Critical Process: There is currently limited redundancy for key operating equipment.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/22/17	FY17-18 Annual Budget Approval	\$21,435,289	
5/29/18	FY18-19 Annual Budget Approval	\$8,839,612	
6/24/19	FY19-20 Annual Budget Approval	\$150,000	
6/22/20	FY20-21 Annual Budget Approval	\$117,702	
1/14/21	Design Services Award		\$2,948,026
1/14/21	Equipment Fabrication Award		\$4,748,045
5/6/21	Construction Award		\$20,982,037
5/24/21	FY21-22 Annual Budget Approval	\$22,055,621	

Funding Source(s)

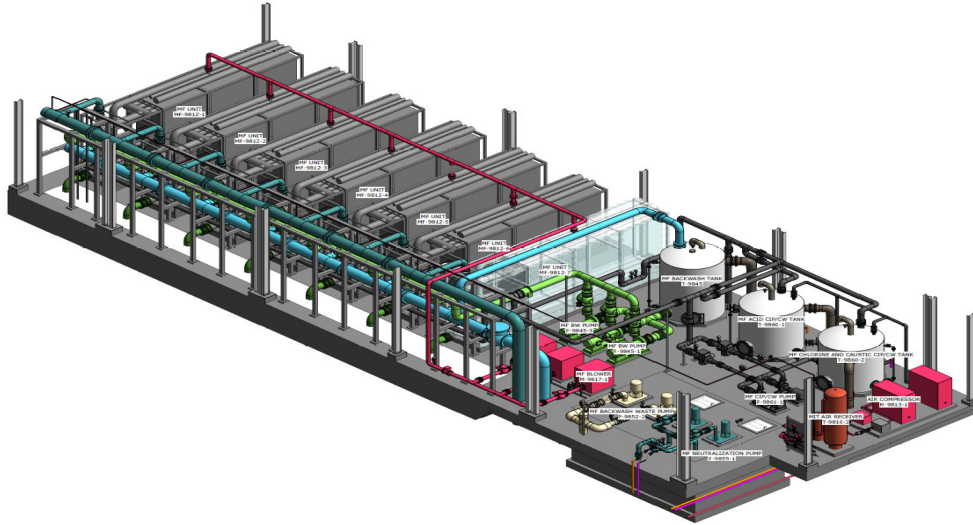
Debt*	Prop 1 Grant*	CalWater**	Refinery***
\$15.1M	\$8.1M	\$4.0M	\$1.9M

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

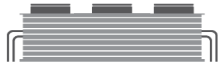
Total External Funding: **\$14.0M**

** Pending

*** Reimbursement from Marathon for past design/studies



End Use



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Completed: Contractor mobilization, submittal approvals, and initial construction activities.
- Current: Potable pipeline installation, CEMF subgrade structure, and sodium hydroxide system relocation.
- Upcoming: Continue construction activities, start-up & commissioning.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2023 Completion

Related Projects

- 10048: Chemical Containment Repair & Rehabilitation Project
- 10073: Title 22 Filters Repair & Replacement Project
- 10093: All Site Chemical Storage Improvements

10039: Inglewood Disinfection Station

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$1,948,000

Total Cost (past, present, future)

\$2,290,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$343,050	\$0	\$269,280	\$532,811	\$1,145,909	\$0	\$0	\$2,291,050

* Total Estimated Costs through 6/30/2022

Project Description

Construction of a new chlorine injection station in the City of Inglewood to provide additional disinfection to the recycled water supply.

Purpose / Benefit

The addition of a supplemental chlorine injection station will improve the water quality for recycled water customers downstream of the new station.

Drivers

- Water Quality: During low flow periods, water quality and odor can be an issue in the area.
- Customer Service: West Basin strives to deliver to best quality of recycled water possible.

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

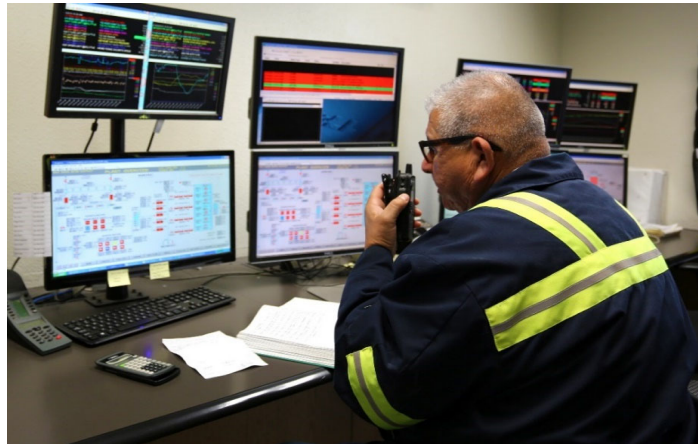
Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/22/17	FY17-18 Annual Budget Approval	\$1,276,799	
5/29/18	FY18-19 Annual Budget Approval	\$1,125,818	
6/24/19	FY19-20 Annual Budget Approval	\$0	
6/22/20	FY20-21 Annual Budget Approval	\$103,578	
5/24/21	FY21-22 Annual Budget Approval	\$78,000	

Funding Source(s)

Debt	--	--	--
\$2.3M	--	--	--

Total External Funding: **\$0.0M**



End Use



Status

- Completed: Feasibility study and 100% design submittal.
- Current: Identifying a new location for the disinfection station.
- Upcoming: Update 100% design, bidding, and construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2026 Completion

10070: Title 22 Converted Filters Booster Pump Station

Ongoing CIP project with previous budget approvals

FY22-23
\$2,585,000

5-yr CIP
\$2,585,000

Total Cost (past, present, future)
\$3,306,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$720,862	\$2,585,070	\$0	\$0	\$0	\$0	\$0	\$3,305,932

* Total Estimated Costs through 6/30/2022

Project Description

The existing capacity of the Title 22 converted filters are restricted to 2.5 MGD due to hydraulic constraints. This project will increase the capacity of the converted filters to 10 MGD. Work includes installation of pumps, VFDs, and ancillary equipment to help support the new system.

Purpose / Benefit

The converted filters have a 10 MGD capacity due to hydraulic conditions so the transfer of water from the pretreatment area to the Title 22 Converted Filters cannot be fully achieved. The installation of the pump station will be able to insert the hydraulic energy necessary to bring the system to its maximum operating capacity and thus make the system more reliable.

Drivers

- Capacity: Achieve and maximize converted filters to design capacity of 10 MGD.
- Reliability: Provide water reliability to Title 22 distribution System for irrigation use.
- Financial: Enhance capacity to deliver water to West Basin's satellite facility for refinery water production at JMMCRWRP and TRWRP.

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*

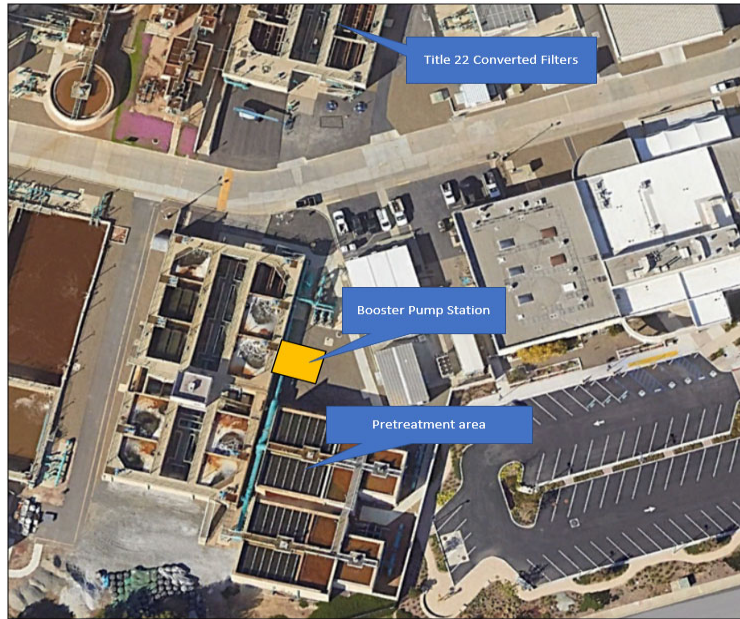
Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
6/24/19	FY19-20 Annual Budget Approval	\$1,159,014	
6/22/20	FY20-21 Annual Budget Approval	\$1,640,815	
5/24/21	FY21-22 Annual Budget Approval	\$1,929,893	
11/22/21	Construction Award		\$2,056,560

Funding Source(s)

Debt	--	--	--
\$3.3M	--	--	--

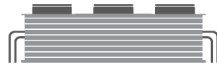
Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier

Status

- Completed: Preliminary design, design, construction services.
- Current: Construction, engineering and construction management services during construction.
- Upcoming: Continue construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2023 Completion

Related Projects

- 10059: Solids Handling System R&R Project
- 10070: Title 22 Converted Filter Booster Pump Station Project
- 10073: Title 22 Filters Repair & Replacement Project

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D-2 New Infrastructure - Customer Development Pipelines & Laterals

FY22-23 Budget

Capital Improvement Program



10047: Palos Verdes Recycled Water Pipeline Project

Ongoing CIP project with previous budget approvals

FY22-23
\$9,338,000

5-yr CIP
\$10,538,000

Total Cost (past, present, future)
\$12,904,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$2,365,849	\$9,337,672	\$1,200,132	\$0	\$0	\$0	\$0	\$12,903,653

* Total Estimated Costs through 6/30/2022

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.
- Green Community Space Support: Use of recycled water helps maintain green areas throughout the year for community enjoyment.

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

Previous Board Actions

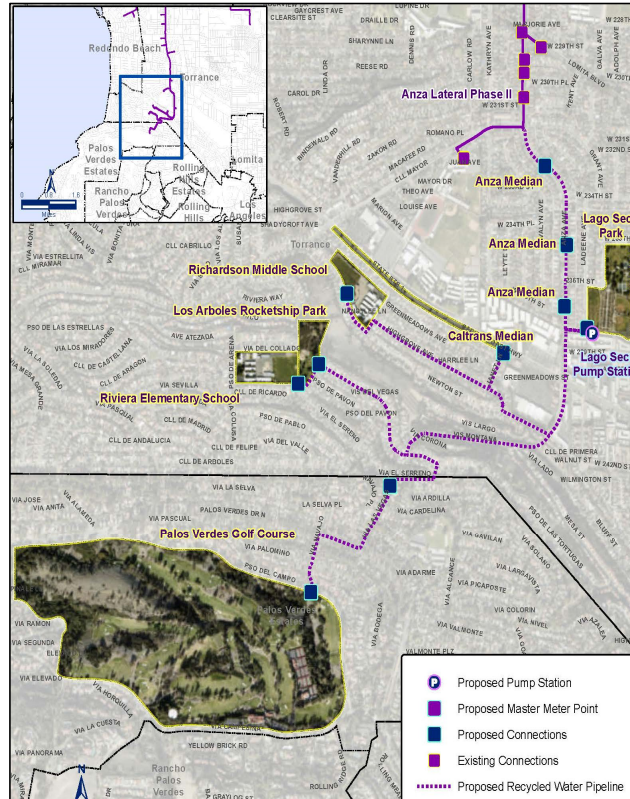
Date	Event	Estimate of Annual Expenditure	Award Amount
5/22/17	FY15-16 Annual Budget Approval	\$250,000	
5/29/18	FY16-17 Annual Budget Approval	\$1,477,196	
5/22/17	FY17-18 Annual Budget Approval	\$911,378	
5/29/18	FY18-19 Annual Budget Approval	\$2,812,986	
6/24/19	FY19-20 Annual Budget Approval	\$8,088,397	
6/22/20	FY20-21 Annual Budget Approval	\$9,720,625	
5/24/21	FY21-22 Annual Budget Approval	\$9,300,962	

Funding Source(s)

Debt	DWR Proposition 84	CalWater / PVGC	WR Subsidy Prop. 68
\$3.9M	\$2.0M	\$3.0M	\$2.1M

Total External Funding: **\$7.1M**

End Use



Status

- Completed: CEQA, feasibility study, preliminary design, construction outreach services procurement.
- Current: Design, construction management procurement services, labor compliance.
- Upcoming: Construction.

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2023 Completion

10090: Mills Park Recycled Water Lateral Project

Ongoing CIP project with previous budget approvals

FY22-23
\$989,0005-yr CIP
\$989,000Total Cost (past, present, future)
\$998,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$8,006	\$989,121	\$0	\$0	\$0	\$0	\$0	\$997,127

* Total Estimated Costs through 6/30/2022

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.

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*

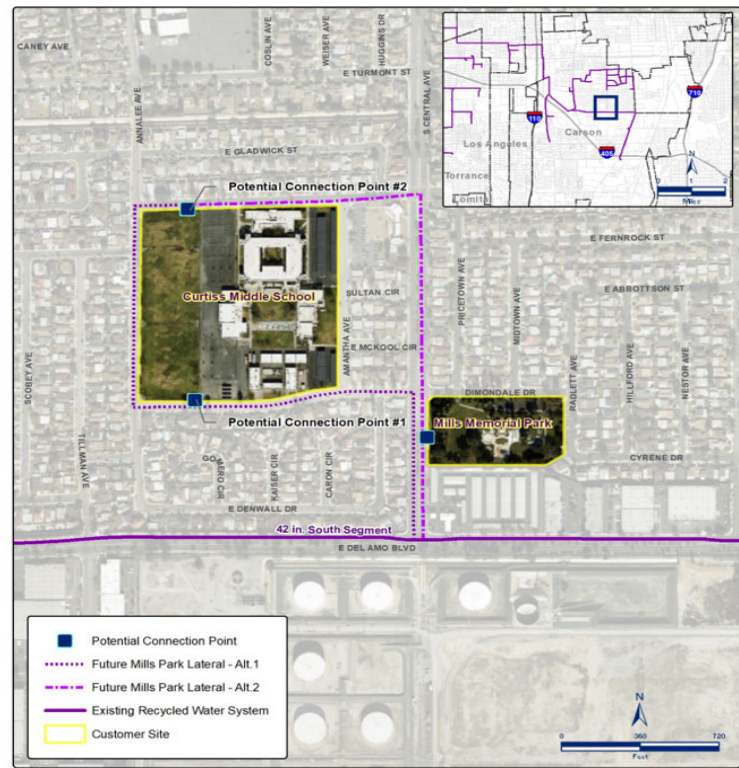
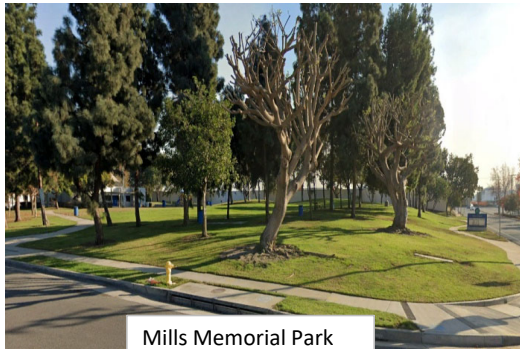
Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/27/15	FY15-16 Annual Budget Approval	\$150,000	
5/31/16	FY17-18 Annual Budget Approval	\$61,240	
5/22/17	FY17-18 Annual Budget Approval	\$0	
5/29/18	FY18-19 Annual Budget Approval	\$0	
6/24/19	FY19-20 Annual Budget Approval	\$0	
6/22/20	FY20-21 Annual Budget Approval	\$657,121	
5/24/21	FY21-22 Annual Budget Approval	\$42,615	

Funding Source(s)

PAYGO	USACOE	--	--
\$1.0M	\$2.0M	--	--

Total External Funding: **\$2.0M**



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 Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning	■				
Design		■	■		
Bidding			■		
Construction			■		
Closeout			■		
Completion			■		

2024 Completion

10091: North Gardena Recycled Water Lateral Project

Ongoing CIP project with previous budget approvals

FY22-23
\$914,0005-yr CIP
\$914,000Total Cost (past, present, future)
\$923,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$7,780	\$914,300	\$0	\$0	\$0	\$0	\$0	\$922,079

* Total Estimated Costs through 6/30/2022

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 the year for community enjoyment.

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

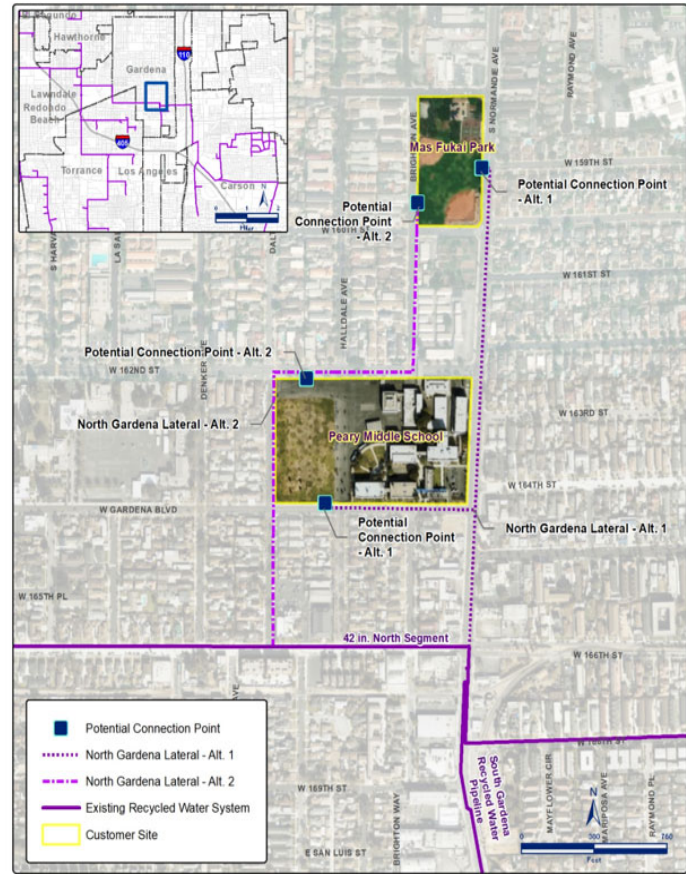
Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
6/22/20	FY20-21 Annual Budget Approval	\$772,294	
5/24/21	FY21-22 Annual Budget Approval	\$11,328	

Funding Source(s)

PAYGO	USACOE	--	--
\$0.9M	\$2.7M	--	--

Total External Funding: **\$2.7M**



End Use



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 Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2024 Completion

10094: Inglewood Basketball Entertainment Center RW Improvement

New Customer Development Project

FY22-23
\$3,0005-yr CIP
\$3,000Total Cost (past, present, future)
\$50,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$46,900	\$3,265	\$0	\$0	\$0	\$0	\$0	\$50,165

* Total Estimated Costs through 6/30/2022

Project Description

This Project will construct a recycled lateral connection to service the future Inglewood Basketball Entertainment Center. The expected use of recycled water at the site is 45 AFY.

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.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
12/22/21	Board Authorized Agreement W2986 with Murphy's Bowl LLC		
1/25/22	Agreement W2986 signed	\$57,652	

Funding Source(s)

--	Developer	--	--
--	\$0.1M	--	--

Total External Funding: **\$0.1M**



End Use



Irrigation
Title 22

Status

- Completed: Design review.
- Current: Inspection services solicitation.
- Upcoming: Construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2022 Completion

10101: Nash Street Lateral

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$166,000

Total Cost (past, present, future)

\$176,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$10,000	\$0	\$165,566	\$0	\$0	\$0	\$0	\$175,566

* Total Estimated Costs through 6/30/2022

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.

Strategic Goals

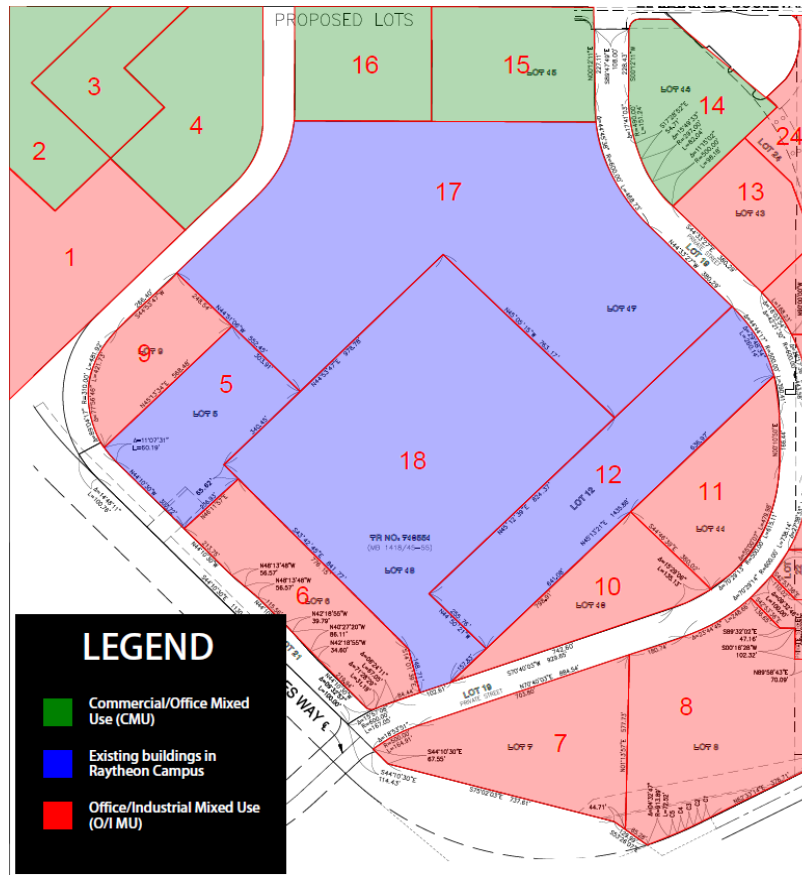
- ✓ Goal 1: Water Supply Reliability
- Goal 2: Sound Financial and Resources Management
- Goal 3: Water Quality
- ✓ Goal 4: Customer Service
- ✓ Goal 5: Environmental Stewardship

Funding Source(s)

--	Developer	--	--
--	\$0.2M	--	--

Total External Funding: **\$0.2M**

End Use



Status

- Current: Design review and final design plans.
- Upcoming: Construction.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2023 Completion

10114: Carson Street Recycled Water Connection

New customer development project

FY22-23

\$0

5-yr CIP

\$238,000

Total Cost (past, present, future)

\$238,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$39,700	\$198,200	\$0	\$0	\$0	\$237,900

* Total Estimated Costs through 6/30/2022

Project Description

The City of Carson's Redevelopment Agency constructed a recycled water pipeline lateral system in 2016 to connect to West Basin's recycled water distribution system, which currently terminates north of Carson Street along Main Street in Carson. The new work will include the testing of pipeline systems constructed by the City of Carson, disconnecting from the potable water system and cross connection testing and verification, along with connecting to West Basin's recycled water distribution system.

Purpose / Benefit

The proposed Project will supply 2 to 3 acre-feet per year of recycled water for the purpose of irrigation of landscape medians and parkways.

Drivers

- Drought Proof Supply: Recycled water supplies a sustainable water source throughout the year.
- Increased Costs Savings to Customers: The cost of recycled water is less expensive than potable water.
- 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.

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

Funding Source(s)

TBD	--	--	--
\$0.2M	--	--	--

Total External Funding: **\$0.0M**



End Use



Status

- Completed: City of Carson and West Basin built recycled water systems that could connect.
- Upcoming: Planning.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

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D-3 Rehabilitation & Replacement Projects

FY22-23 Budget

Capital Improvement Program



10048: Satellite Facilities Chemical Containment R&R

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$1,038,000

Total Cost (past, present, future)

\$1,630,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$588,308	\$0	\$1,038,470	\$0	\$0	\$0	\$0	\$1,626,778

* Total Estimated Costs through 6/30/2022

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.

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*

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/22/17	FY17-18 Annual Budget Approval	\$3,124,564	
5/29/18	FY18-19 Annual Budget Approval	\$0	
6/24/19	FY19-20 Annual Budget Approval	\$790,350	
6/22/20	FY20-21 Annual Budget Approval	\$1,790,068	
5/24/21	FY21-22 Annual Budget Approval	\$2,418,780	

Funding Source(s)

PAYGO	--	--	--
\$1.6M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Boiler Feed

Status

- Completed: Preliminary design report, preliminary design plans and specifications.
- Current: Final design plans and specifications.
- Upcoming: Bid package, solicitation, and construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

Related Projects

- 10093: All Sites Chemical Storage Improvements

10059: ECLWRF Solids Handling Improvement

Ongoing R&R project with previous budget approvals

FY22-23
\$1,520,0005-yr CIP
\$8,441,000Total Cost (past, present, future)
\$9,150,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$709,986	\$1,519,543	\$875,134	\$5,824,034	\$221,797	\$0	\$0	\$9,150,000

* Total Estimated Costs through 6/30/2022

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.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/22/17	FY17-18 Annual Budget Approval	\$357,727	
5/29/18	FY18-19 Annual Budget Approval	\$1,106,000	
6/24/19	FY19-20 Annual Budget Approval	\$964,000	
6/22/20	FY20-21 Annual Budget Approval	\$1,030,010	
5/24/21	FY21-22 Annual Budget Approval	\$1,030,010	

Funding Source(s)

Debt	Refinery	--	--
\$5.3M	\$3.8M	--	--

Total External Funding: **\$3.8M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier



Landfill



Fertilizer

Status

- Completed: Initial feasibility study and sewer study.
- Current: Updating sewer study and feasibility study cost analysis.
- Upcoming: Prepare and issue design RFP.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning	■				
Design		■	■		
Bidding			■		
Construction			■	■	■
Closeout					■
Completion					■

2026 Completion

Related Projects

- 10096: ECLWRF Phase II & III MF Replacement
- 10073: ECLWRF Title 22 Filters R&R
- 10080: ECLWRF Distributed Control System

10062: RW Distribution System Cathodic Protection System Improvements

Ongoing R&R project with previous budget approvals

FY22-23
\$992,0005-yr CIP
\$992,000Total Cost (past, present, future)
\$10,370,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$9,382,881	\$991,732	\$0	\$0	\$0	\$0	\$0	\$10,374,614

* Total Estimated Costs through 6/30/2022

Project Description

This project will rehabilitate cathodic protection stations and anodes on metallic pipelines within the recycled water distribution system. Improvements also include the construction of new cathodic protection systems and the repair of electrically discontinuous pipeline segments. Total of 277 locations across 12 different cities and jurisdictions.

Purpose / Benefit

Rehabilitating existing and installing new cathodic protection systems will ensure the 44 miles of metallic pipelines within West Basin's recycled water distribution system are protected from corrosion for the next 25 years.

Drivers

- Equipment Age: Existing cathodic protection systems have reached end of useful life (e.g., anodes have been consumed) or will do so within the next five years.
- Asset Protection: Cathodic protection systems help to prevent against corrosion and premature pipeline failure.

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*

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/22/17	FY17-18 Annual Budget Approval	\$3,171,960	
5/29/18	FY18-19 Annual Budget Approval	\$3,437,850	
6/24/19	FY19-20 Annual Budget Approval	\$2,467,500	
6/22/20	FY20-21 Annual Budget Approval	\$2,820,906	
5/24/21	FY21-22 Annual Budget Approval	\$6,675,113	

Funding Source(s)

Debt	--	--	--
\$10.4M	--	--	--

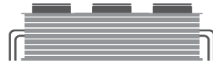
Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier

Status

- Completed: Work on 160 of 277 cathodic protection stations completed.
- Current: Work continuing at pace. Final work permits being sought.
- Upcoming: Work at 117 stations remaining. Minor discontinuous joint repair work.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2023 Completion

10065-01: Chevron Nitrified Product Water Tank Rehabilitation

Ongoing R&R project with previous budget approvals

FY22-23
\$10,0005-yr CIP
\$3,767,000Total Cost (past, present, future)
\$4,397,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$629,462	\$10,117	\$3,757,067	\$0	\$0	\$0	\$0	\$4,396,645

* Total Estimated Costs through 6/30/2022

Project Description

This project will rehabilitate a 650,000-gallon nitrified product water storage tank at West Basin's Chevron Nitrification Treatment Plant. A 2021 inspection of the tank revealed that the tank is in fair condition with heavy corrosion of the roof interior and exterior.

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 and imposed cost implications. Tank failure could result in financial, social, and environmental impact.
- Critical Process: There is no redundancy for this system; additional failures could disrupt nitrified water delivery.

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*

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
9/4/20	Design Engineering Services Award (W2863CR04)		\$319,604
5/24/21	FY21-22 Annual Budget Approval	\$3,619,604	

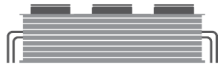
Funding Source(s)

PAYGO	--	--	--
\$4.4M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Cooling Towers

Status

- Completed: Tank inspection, preliminary design report, 60% & 90% design plans.
- Current: 100% design plans, construction bid package.
- Upcoming: Construction solicitation, construction management procurement.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

Related Projects

- 10093-02: CNTP Bulk Chemical Storage Improvements

10065-02: Torrance Refinery Nitrified Product Water Tank Rehabilitation

Ongoing R&R project with previous budget approvals

FY22-23
\$29,0005-yr CIP
\$3,882,000Total Cost (past, present, future)
\$4,378,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$495,918	\$28,923	\$3,853,132	\$0	\$0	\$0	\$0	\$4,377,973

* Total Estimated Costs through 6/30/2022

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.

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*

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
11/23/20	Design Engineering Services Award (W2863CR05)		\$276,876
5/24/21	FY21-22 Annual Budget Approval	\$2,326,876	

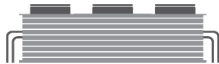
Funding Source(s)

PAYGO	--	--	--
\$4.4M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Cooling Towers

Status

- Completed: Tank inspection, preliminary design report, 60% design plans.
- Current: 90% design plans.
- Upcoming: 100% design plans, construction bid package, construction management procurement.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

Related Projects

- 10084: TRWRP Retaining Wall and Backflow Preventer Replacement
- 10093-03: TRWRP Bulk Chemical Storage Improvements
- 10048: Satellite Facilities Chemical Containment R&R

10073: ECLWRF Title 22 Filters Rehabilitation & Replacement

Ongoing R&R project with previous budget approvals

FY22-23
\$5,217,0005-yr CIP
\$5,219,000Total Cost (past, present, future)
\$5,620,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$403,603	\$5,217,089	\$2,163	\$0	\$0	\$0	\$0	\$5,622,855

* Total Estimated Costs through 6/30/2022

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.

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.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
6/22/20	FY20-21 Annual Budget Approval	\$1,870,185	
5/24/21	FY21-22 Annual Budget Approval	\$561,155	

Funding Source(s)

Debt	--	--	--
\$5.6M	--	--	--

Total External Funding: **\$0.0M**



End Use



Status

- Completed: 3 filter R&R, preliminary design plans and specifications.
- Current: Final design plans and specifications.
- Upcoming: Bid package, solicitation, and construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

Related Projects

- 10070: Title 22 Converted Filter Booster Pump Station Project
- 10111: Title 22 Filters Common Systems

10080: Distributed Control System Replacement

Ongoing CIP project with previous budget approvals

FY22-23
\$879,0005-yr CIP
\$18,242,000Total Cost (past, present, future)
\$29,057,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$473,967	\$878,930	\$3,649,683	\$2,309,520	\$8,336,894	\$3,067,394	\$10,341,012	\$29,057,399

* Total Estimated Costs through 6/30/2022

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 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. Due to this, the DCS Replacement project is considered a highly-ranked CIP project, with the Contract Operator and West Basin's Operations team marking it as a top priority for Safety, Reliability, and Compliance & Stewardship.

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, improve safety and ensure regulation compliance.
- Critical Process: There is currently limited redundancy for key operating equipment.
- Project Ranking: Highly-ranked project within CIP program amongst Operations staff.

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

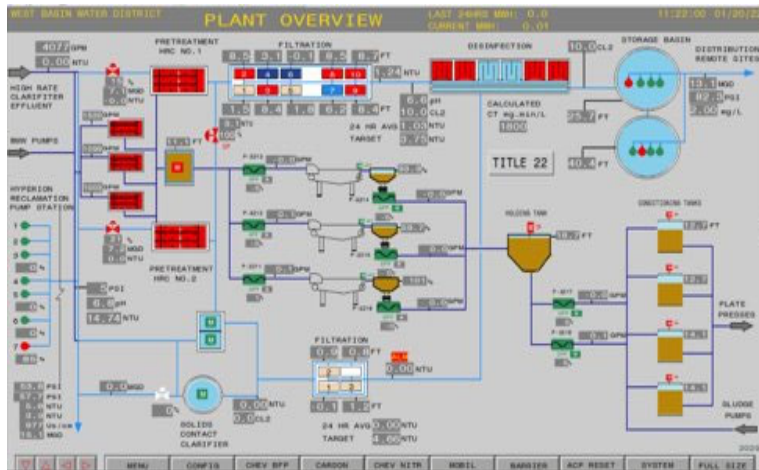
Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
1/27/20	Audit & Study Award		\$478,480
6/22/20	FY20-21 Annual Budget Approval	\$568,308	
5/24/21	FY21-22 Annual Budget Approval	\$643,485	

Funding Source(s)

Debt	Refinery	--	--
\$24.1M	\$4.9M	--	--

Total External Funding: **\$4.9M**



West Basin Municipal Water District
DISTRIBUTED AND PROCESS
CONTROL SYSTEM AUDIT –
TECHNICAL REQUIREMENTS
DOCUMENT

Final | September 2022

End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier

Status

- Completed: Audit and technology review resulting in three technical reports.
- Current: Planning and phase management; communications link between HSEPS and ECLWRF.
- Upcoming: Phase 1 design and construction bidding.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					

2031
Completion

10084: TRWRP Retaining Wall and Backflow Preventer Replacement

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$611,000

Total Cost (past, present, future)

\$712,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$101,699	\$0	\$610,698	\$0	\$0	\$0	\$0	\$712,397

* Total Estimated Costs through 6/30/2022

Project Description

This project will replace a failing backflow preventer and 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.

Purpose / Benefit

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 failed 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.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

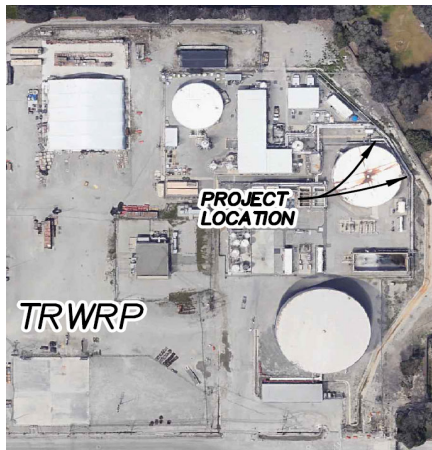
✓ *Goal 1: Water Supply Reliability*✓ *Goal 2: Sound Financial and Resources Management**Goal 3: Water Quality*✓ *Goal 4: Customer Service**Goal 5: Environmental Stewardship***Previous Board Actions**

Date	Event	Estimate of Annual Expenditure	Award Amount
6/22/20	FY20-21 Annual Budget Approval	\$150,000	
5/24/21	FY21-22 Annual Budget Approval	\$585,000	

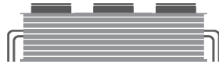
Funding Source(s)

PAYGO	--	--	--
\$0.7M	--	--	--

Total External Funding: --



End Use



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Completed: Design.
- Current: Bidding Phase.
- Upcoming: Construction and Installation.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

Related Projects

- 10048: Satellite Facilities Chemical Containment R&R
- 10065-02: Torrance Refinery Nitrified Product Water Tank Rehabilitation
- 10108: TRWRP Waste Discharge Improvements Project

10085: ECLWRF Barrier Basin & Pump Station Rehabilitation

Ongoing R&R project with previous budget approvals

FY22-23
\$295,0005-yr CIP
\$4,340,000Total Cost (past, present, future)
\$12,593,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$302,751	\$295,099	\$873,862	\$1,183,650	\$828,125	\$1,159,375	\$7,950,000	\$12,592,862

* Total Estimated Costs through 6/30/2022

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 MCC 1,2 and pumps 1,2,3
- Phase 2: Renew basin and pump basin structure
- Phase 3: Replace MCC 3: pumps 4,5,6: VFD 6: switchboard: manifold.

Purpose / Benefit

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

Drivers

- Equipment Age: Many system components are at end of useful life; most system 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.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

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*

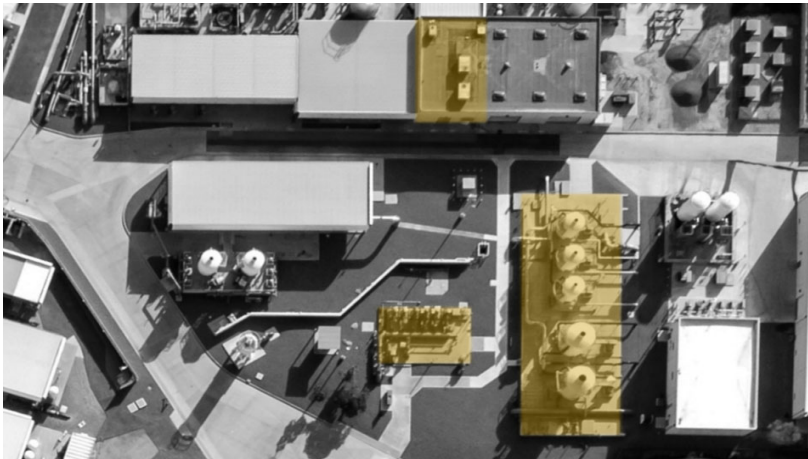
Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
6/22/20	FY20-21 Annual Budget Approval	\$122,000	
5/24/21	FY21-22 Annual Budget Approval	\$867,000	

Funding Source(s)

Debt	--	--	--
\$12.6M	--	--	--

Total External Funding: **\$0.0M**



End Use



Seawater
Barrier

Status

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

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Phase 1																				
Phase 2																				
Phase 3																				

2030 Completion

Sub-Projects

- 10085-01: ECLWRF Barrier Basin & Pump Station Rehabilitation - Phase 1
- 10085-02: ECLWRF Barrier Basin & Pump Station Rehabilitation - Phase 2
- 10085-03: ECLWRF Barrier Basin & Pump Station Rehabilitation - Phase 3

10092: Disinfected Tertiary Product Pumps & VFDs Rehabilitation

Ongoing R&R project with previous budget approvals

FY22-23
\$985,0005-yr CIP
\$7,507,000Total Cost (past, present, future)
\$7,655,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$147,724	\$985,465	\$92,840	\$579,160	\$3,291,064	\$2,558,936	\$0	\$7,655,188

* Total Estimated Costs through 6/30/2022

Project Description

This project will rehabilitate product pumps and variable frequency drives for the disinfected tertiary water (Title 22 recycled water) system.

Purpose / Benefit

Rehabilitating the water delivery infrastructure will ensure that the end users of the disinfected tertiary water will not experience loss of service.

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.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/24/21	FY21-22 Annual Budget Approval	\$500,000	
5/24/21	Design Services Award		\$248,000

Funding Source(s)

Debt	--	--	--
\$7.7M	--	--	--

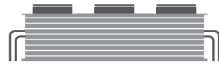
Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Completed: Preliminary design for critical VFD replacement.
- Current: Design criteria development for overall system R&R.
- Upcoming: Procurement and installation of critical VFDs; design and construction of overall system R&R.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2023 Critical Replacements

**2026
Project Completion**

Related Projects

- 10059: ECLWRF Solids Handling Improvements
- 10070: Title 22 Converted Filter Booster Pump Station Project
- 10073: Title 22 Filters Repair & Replacement Project

10093-01: ECLWRF Bulk Chemical Storage Improvements

Ongoing R&R project with previous budget approvals

FY22-23
\$174,000

5-yr CIP
\$7,044,000

Total Cost (past, present, future)
\$9,128,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$62,728	\$173,999	\$237,891	\$1,816,551	\$2,407,504	\$2,408,179	\$2,020,721	\$9,127,573

* Total Estimated Costs through 6/30/2022

Project Description

This project will replace bulk chemical storage tanks and ancillary equipment at the Edward C. Little Water Recycling Facility, including the ongoing *ECLWRF Phase IV Sodium Hypochlorite Day Tank Project*.

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 started failing.
- Equipment Age: Many tanks have reached or are reaching end of useful life.
- Critical Process: Chemicals are critical to treatments processes; additional tank failures could disrupt water delivery to customers.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

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*

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/29/18	FY18-19 Annual Budget Approval	\$2,727,000	
6/24/19	FY19-20 Annual Budget Approval	\$2,575,000	
6/22/20	FY20-21 Annual Budget Approval	\$1,413,000	
5/24/21	FY21-22 Annual Budget Approval	\$607,000	
9/27/21	Day Tank Approval at Regular Board Meeting	\$120,000	

Funding Source(s)

Debt	Refinery	—	--
\$8.3M	\$0.8M	—	--

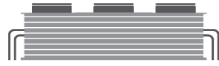
Total External Funding: **\$0.8M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier

Status

- Completed: Phasing plan; *Day Tank* design.
- Current: Procurement of design services; *Day Tank* fabrication.
- Upcoming: Design and construction.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2028 Completion

Related Projects

- 10093-02: CNTP Bulk Chemical Storage Improvements
- 10093-03: TRWRP Bulk Chemical Storage Improvements
- 10093-04: JMMCRWRP Bulk Chemical Storage Improvements

10093-02: CNTP Bulk Chemical Storage Improvements

Ongoing R&R project with previous budget approvals

FY22-23 \$0	5-yr CIP \$1,855,000	Total Cost (past, present, future) \$1,855,000
-----------------------	--------------------------------	--

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$97,373	\$1,199,444	\$558,411	\$0	\$0	\$1,855,228

* Total Estimated Costs through 6/30/2022

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.

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: A temporary tank is being used for a failed 8,000 gal. sodium hypochlorite tank.
- Equipment Age: These tanks were installed in 1994 and are reaching end of their useful lives.
- Critical Process: Chemicals are critical to treatments processes; additional tank failures could disrupt recycled water delivery to customers.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/29/18	FY18-19 Annual Budget Approval	\$2,727,000	
6/24/19	FY19-20 Annual Budget Approval	\$2,575,000	
6/22/20	FY20-21 Annual Budget Approval	\$1,413,000	
5/24/21	FY21-22 Annual Budget Approval	\$607,000	

Funding Source(s)

Debt	--	—	--
\$1.9M	--	—	--

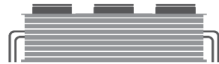
Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Current: Procurement of design services.
- Upcoming: Design and construction.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Related Projects

- 10048: Satellite Facilities Chemical Containment R&R
- 10093: All Sites Bulk Chemical Storage Improvements

10093-03: TRWRP Bulk Chemical Storage Improvements

Ongoing R&R project with previous budget approvals

FY22-23
\$0

5-yr CIP
\$3,394,000

Total Cost (past, present, future)
\$3,394,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$177,900	\$1,325,655	\$1,890,583	\$0	\$0	\$3,394,137

* Total Estimated Costs through 6/30/2022

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.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/29/18	FY18-19 Annual Budget Approval	\$2,727,000	
6/24/19	FY19-20 Annual Budget Approval	\$2,575,000	
6/22/20	FY20-21 Annual Budget Approval	\$1,413,000	
5/24/21	FY21-22 Annual Budget Approval	\$607,000	

Funding Source(s)

Debt	--	—	--
\$3.4M	--	—	--

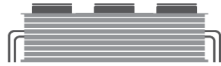
Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Upcoming: Design and construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2026 Completion

Related Projects

- 10048: Satellite Facilities Chemical Containment R&R
- 10093: All Sites Bulk Chemical Storage Improvements

10093-04: JMMCRWRP Bulk Chemical Storage Improvements

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$3,205,000

Total Cost (past, present, future)

\$3,205,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$192,518	\$355,951	\$2,430,993	\$225,743	\$0	\$3,205,204

* Total Estimated Costs through 6/30/2022

Project Description

The project will assess and 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.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/29/18	FY18-19 Annual Budget Approval	\$2,727,000	
6/24/19	FY19-20 Annual Budget Approval	\$2,575,000	
6/22/20	FY20-21 Annual Budget Approval	\$1,413,000	
5/24/21	FY21-22 Annual Budget Approval	\$607,000	

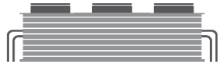
Funding Source(s)

Debt	--	--	--
\$3.2M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Completed: Project has not started as it is phased along with ongoing projects.
- Upcoming: Planning, design and construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2026 Completion

Related Projects

- 10048: Satellite Plant Chemical Containment R&R
- 10080: DCS Replacement

10095: C. Marvin Brewer Desalter Decommissioning

FY22-23
\$177,000

5-yr CIP
\$177,000

Total Cost (past, present, future)
\$540,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$361,086	\$176,918	\$0	\$0	\$0	\$0	\$0	\$538,004

* Total Estimated Costs through 6/30/2022

Project Description

Decommissioning of the C. Marvin Brewer Desalter Facility in Torrance, CA. West Basin Municipal Water District (West Basin) is terminating its current lease agreement with California Water Service Company (CWS) and will vacate the site. West Basin has agreed to sell the existing groundwater extraction well to the Water Replenishment District (WRD).

Purpose / Benefit

Relieve West Basin Municipal Water District of any future costs associated with operating and maintaining the C. Marvin Brewer Desalter Facility. In February 2021, an alternative paths analysis was presented by West Basin staff to the Board. The Board directed staff to initiate steps to decommission the facility.

Drivers

- February 2021: West Basin E&O Committee - Develop a Plan to Divest from the Brewer Desalter.
- March 2021: Brewer Ad-Hoc Committee Created.
- August 2021: WB Board of Directors - Approval of the Sale of Brewer Desalter Water Extraction Well.
- October 2021: WRD Board of Directors - Approval of Purchase Agreement with West Basin.

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

Previous Board Actions

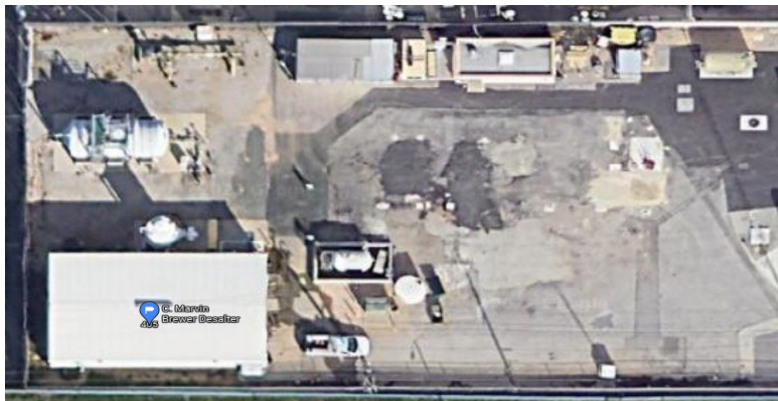
Date	Event	Estimate of Annual Expenditure	Award Amount
August	Approval of the sale		

Funding Source(s)

--	WRD Purchase*	--	--
--	\$1.5M	--	--

*Extraction well sale funds will be utilized for the project

Total External Funding: **\$1.5M**



Status

- Completed: Final design plans and specifications.
- Current: Preparation of bid package.
- Upcoming: Solicitation and demolition.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2022 Completion

10096: ECLWRF Phase II & III MF Replacement

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$9,946,000

Total Cost (past, present, future)

\$10,000,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$30,000	\$463,000	\$2,424,000	\$7,028,808	\$53,970	\$10,000,000

* Total Estimated Costs through 6/30/2022

Project Description

To replace the existing decommissioning 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.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
6/24/19	FY19-20 Annual Budget Approval	\$710,800	
5/24/21	FY21-22 Annual Budget Approval	\$684,042	

Funding Source(s)

--	Refinery	--	--
--	\$10.0M	--	--

Total External Funding: **\$10.0M**



End Use



Refinery
Boiler Feed



Seawater
Barrier

Status

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

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2027
Completion

Related Projects

- 10096: RO Pretreatment R&R

10097: ECLWRF RO Pretreatment

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$871,000

Total Cost (past, present, future)

\$871,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$90,686	\$523,732	\$256,708	\$0	\$0	\$871,000

* Total Estimated Costs through 6/30/2022

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

- Equipment Undersized: RO pretreatment equipment become undersized for upgraded RO trains.
- Equipment Age: RO feed pumps should be upgraded for current hydraulic conditions.
- Critical Process: There is currently limited redundancy; additional failures could disrupt solids delivery.
- Financial: To maximize the production to Barrier Water and Chevron Refinery.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/24/21	FY21-22 Annual Budget Approval	\$160,000	

Funding Source(s)

PAYGO	Agreement	--	--
\$0.8M	\$0.1M	--	--

Total External Funding: **\$0.1M**



End Use



Refinery
Boiler Feed



Seawater
Barrier

Status

- Completed: Initial project budgeting and scoping.
- Current: Gathering project information and operations data.
- Upcoming: Evaluate data and issues.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Related Projects

- 10097: ECLWRF Phase II & III MF Replacement

10099: HSEPS R&R Project

Ongoing R&R project with previous budget approvals

FY22-23
\$443,0005-yr CIP
\$9,886,000Total Cost (past, present, future)
\$9,886,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$443,351	\$1,162,089	\$5,827,640	\$2,453,340	\$0	\$0	\$9,886,420

* Total Estimated Costs through 6/30/2022

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.

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 will not experience loss of service.

Drivers

- Equipment Failure: 1 obsolete VFD has failed and replacement parts are not available. One other is still operating. All four pumps are in need of rehabilitation.
- Equipment Age: Many system are reaching end of useful life.
- Critical Process: There is currently limited redundancy; additional failures could disrupt water delivery.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
6/22/20	FY20-21 Annual Budget Approval	\$269,776	
5/24/21	FY21-22 Annual Budget Approval	\$382,031	

Funding Source(s)

Debt	--	--	--
\$10.8M	--	--	--

Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier

Status

- Completed: Scope of work and RFP for design engineering services.
- Current: Procurement of design engineer.
- Upcoming: Design and construction phases.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning	■				
Design		■			
Bidding			■		
Construction			■	■	
Closeout				■	
Completion				■	

2025 Completion

Related Projects

- 10080: Distributed Control System Replacement Project

10100: Hyperion Force Main R&R Condition Assessment

Upcoming R&R project with previous budget approvals

FY22-23
\$198,000

5-yr CIP
\$2,476,000

Total Cost (past, present, future)
\$2,476,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$197,800	\$347,700	\$1,930,000	\$0	\$0	\$0	\$2,475,500

* Total Estimated Costs through 6/30/2022

Project Description

Rehabilitation of existing 60-inch reinforced concrete pressure pipe from Hyperion Pump Station to Edward C. Little Water Recycling Facility with PVC lining.

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. Rehabilitating the water delivery infrastructure will ensure pipeline integrity is maintained and that recycled water end users will not experience 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 end of useful life.
- Critical Process: There is no redundancy to the SEMF; additional failures to the lining could impact the integrity of the SEFM and subsequently disrupt water delivery.
- Project Ranking: Highly-ranked project in Recycled Water Master Plan.

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*

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/29/18	FY18-19 Annual Budget Approval	\$0	
6/24/19	FY19-20 Annual Budget Approval	\$0	
6/22/20	FY20-21 Annual Budget Approval	\$0	
5/24/21	FY21-22 Annual Budget Approval	\$324,325	

Funding Source(s)

PAYGO	--	--	--
\$2.4M	--	--	--

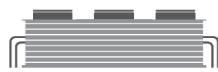
Total External Funding: **\$0.0M**



End Users



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier

Status

- Completed: Initial inspection of pipeline lining.
- Current: Procurement of design engineer.
- Upcoming: Design & construction phases.

Anticipated Schedule

	FY22-23			FY23-24			FY24-25			FY25-26			FY26-27		
Planning															
Design															
Bidding															
Construction															
Closeout															
Completion															

2025 Completion

Related Projects

- 10099: HSEPS R&R Project

10103: Ops MF Membrane Replacement

Ongoing R&R project with previous budget approvals

FY22-23
\$402,0005-yr CIP
\$3,292,000Total Cost (past, present, future)
\$11,995,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$2,390,268	\$402,289	\$2,354,511	\$0	\$535,600	\$0	\$6,312,800	\$11,995,468

* Total Estimated Costs through 6/30/2022

Project Description

This project will replace microfiltration membranes that are used in the advance water treatment process.

Purpose / Benefit

Microfiltration membranes useful life at West Basin are roughly 5 years and they will need to be replaced in a timely manner to maximize production and meeting water quality requirement. 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 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.

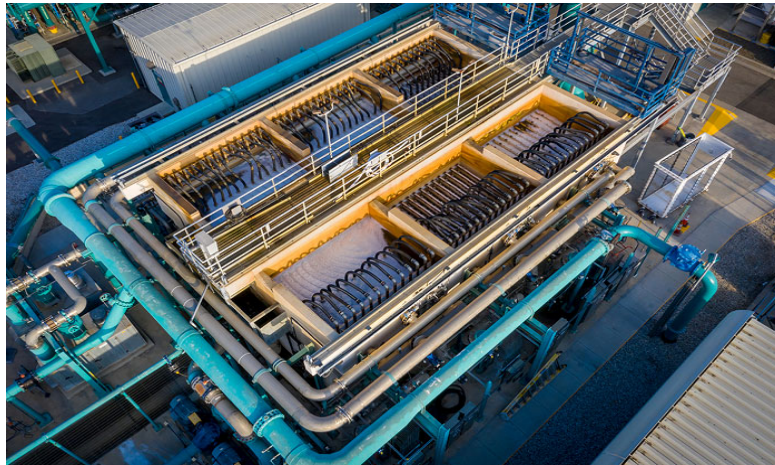
Strategic Goals

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

Funding Source(s)

PAYGO	--	--	--
\$12.0M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Boiler Feed



**Seawater
Barrier**

Status

- Current: Planning.
- Upcoming: Piloting and procurement.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
<i>Planning</i>																				
<i>Piloting</i>																				
<i>Procurement</i>																				

10104-01: TRWRP MF Replacement Project - Feasibility Study Phase

Ongoing R&R project with previous budget approvals

FY22-23
\$90,000

5-yr CIP
\$605,000

Total Cost (past, present, future)
\$606,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$89,718	\$515,677	\$0	\$0	\$0	\$0	\$605,395

* Total Estimated Costs through 6/30/2022

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

- Contractual Obligations: Upgrades to meet water quantity contractual requirements are needed
- Water Quality: Due to leaks in the existing system, pressure integrity testing cannot be performed and backwash processes are reduced.
- Capacity: A new assessment will evaluate the possibility to increase water capacity production.
- Reliability: A new system will reduce system maintenance and improve system reliability.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
6/22/20	FY20-21 Annual Budget Approval	\$250,000	
5/24/21	FY21-22 Annual Budget Approval	\$10,318	

Funding Source(s)

PAYGO	--	--	--
\$0.6M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Boiler Feed

Status

- Upcoming: Planning, RFP development for studies and preliminary design.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Feasibility Study Phase					
Bidding					
Design/Construction					
Closeout					
Completion					

2024 Completion

Related Projects

CIP 10104-2: TRWRP MF Replacement Project - Design/Construction Phase

10106: Ops RO Membrane Replacement

Ongoing R&R project with previous budget approvals

FY22-23
\$10,0005-yr CIP
\$3,224,000Total Cost (past, present, future)
\$4,656,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$661,958	\$10,000	\$2,049,223	\$406,000	\$0	\$759,000	\$769,777	\$4,655,958

* Total Estimated Costs through 6/30/2022

Project Description

This is regular replacements of the reverse osmosis membranes that are used as part of the advanced water treatment processes.

Purpose / Benefit

Reverse osmosis membranes useful life at West Basin are roughly 5 years; and required to be replaced at the end of their useful life to maintain production and maintain water quality requirement for compliance and contractual purposes. West Basin has always pre-qualified RO membranes to ensure membranes are able to treat West Basin's challenging source water quality and produce the three different advanced water treated products.

Drivers

- Equipment Failure: Membrane typical useful life at West Basin is approximately 5 years.
- Critical Process: If aging RO membranes are not replaced in timely manner, it will risk reduction in production and results in 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

Funding Source(s)

PAYGO	--	--	--
\$4.7M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Boiler Feed



Seawater
Barrier

Status

- Current: Planning.
- Upcoming: Piloting and procurement.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
<i>Planning</i>																				
<i>Piloting</i>																				
<i>Procurement</i>																				

10107-01: Chevron HP & LP VFD & Pump R&R

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$2,413,000

Total Cost (past, present, future)

\$2,413,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$350,237	\$2,062,763	\$0	\$0	\$0	\$2,413,000

* Total Estimated Costs through 6/30/2022

Project Description

Rehabilitation of the transfer pumps and VFDs located on Chevron Property. A recent conditions assessment indicated that four pump VFDs are obsolete and are bypassed, and that a main isolation valve actuator is leaking. Equipment rehabilitation or replacement is required.

Purpose / Benefit

Rehabilitate the Chevron on-site low pressure and high pressure boiler feed pump VFDs to extend the useful life of the equipment and ensure the refinery continues to receive and store boiler feed water.

Drivers

- Equipment Age: The VFDs and associated valves are in poor condition. Due to VFD bypass, pump motors are overheating and reducing lifespan.
- Critical Process: There is no redundancy for boiler feed storage onsite; any failures would affect system.
- Project Ranking: Associated with a high priority CIP project in Recycled Water Master Plan.

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*

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/24/21	FY 21-22 Budget at Regular Board Meeting	\$2,000,000	

Funding Source(s)

PAYGO	--	--	--
\$2.4M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Boiler Feed

Status

- Completed: Conditions Assessment and Valuation performed by Chevron Refinery.
- Current: Design.
- Upcoming: Construction, construction management.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Related Projects

- 10107: Chevron HP & LP Boiler Feed Tanks

10108: TRWRP Waste Discharge Improvements Project

Ongoing R&R project with previous budget approvals

FY22-23
\$0

5-yr CIP
\$872,000

Total Cost (past, present, future)
\$872,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$850,653	\$21,347	\$0	\$0	\$0	\$872,000

* Total Estimated Costs through 6/30/2022

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.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/22/17	FY17-18 Annual Budget Approval	\$50,000	
5/29/18	FY18-19 Annual Budget Approval	\$0	
6/24/19	FY19-20 Annual Budget Approval	\$0	
6/22/20	FY20-21 Annual Budget Approval	\$80,000	
5/24/21	FY21-22 Annual Budget Approval	\$66,106	

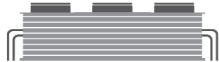
Funding Source(s)

PAYGO	--	--	--
\$0.9M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Upcoming: Planning, request for proposal preparation and design.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2024 Completion

Related Projects

- 10048: Satellite Chemical Containment R&R
- 10065: Torrance Refinery Nitrified Product Water Tank Rehabilitation
- 10109: TRWRP Fiberglass Pipe (FRP) Replacement

10109: TRWRP Fiberglass Pipe (FRP) Replacement

New R&R Project

FY22-23

\$0

5-yr CIP

\$697,000

Total Cost (past, present, future)

\$697,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$695,318	\$1,362	\$0	\$0	\$0	\$696,680

* Total Estimated Costs through 6/30/2022

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.

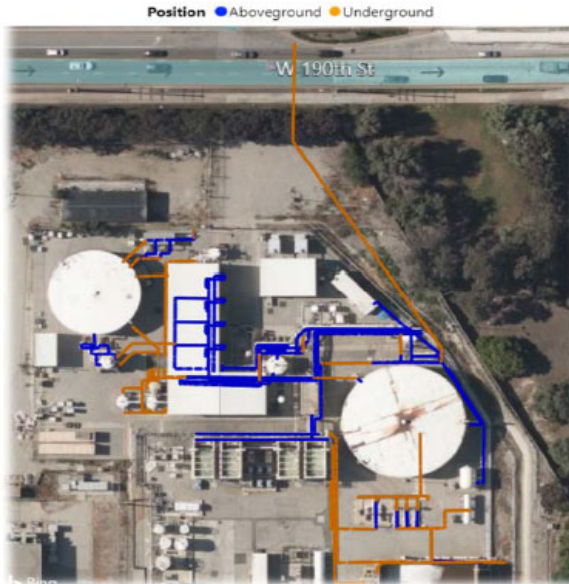
Strategic Goals

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

Funding Source(s)

PAYGO	--	--	--
\$0.7M	--	--	--

Total External Funding: **\$0.0M**



End Use



Refinery
Boiler Feed

Status

- Completed: Risk assessment and project implementation request.
- Current: Project budgeting and scoping.
- Upcoming: Design and construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

Related Projects

- 10048: Satellite Chemical Containment R&R
- 10065: Torrance Refinery Nitrified Product Water Tank Rehabilitation

10111: ECLWRF Title 22 Common Filter Systems

Ongoing R&R project with previous budget approvals

FY22-23

\$0

5-yr CIP

\$7,154,000

Total Cost (past, present, future)

\$7,154,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$352,822	\$6,800,755	\$0	\$0	\$0	\$7,153,577

* Total Estimated Costs through 6/30/2022

Project Description

Rehabilitation and/or replacement of the Title 22 filter common systems including replacement of the backwash supply pumps, backwash supply flow control valve, backwash blowers, chlorine dosing pumps, valves, actuators as well as the installation of a turbidity meter and pressure relief pipe. The Title 22 system has two trains of monomedia anthracite filters where Train 1 contains 10 filters (1-10) and Train 2 contains 4 filters (11-14).

Purpose / Benefit

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

Drivers

- Equipment Age: Many filter system components are reaching end of useful life.
- Critical Process: Title 22 filters are crucial to the delivery of disinfected tertiary water for various uses.

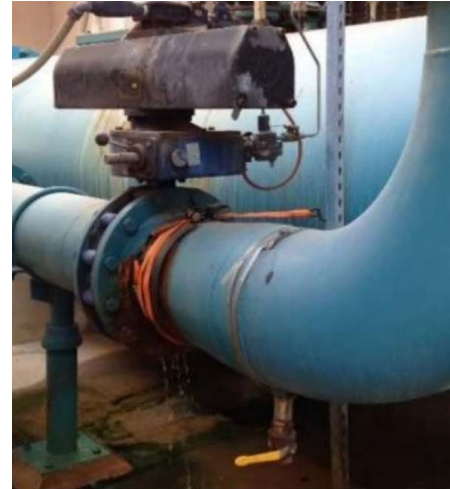
Strategic Goals

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

Funding Source(s)

Debt	--	--	--
\$7.2M	--	--	--

Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Current: Early planning.
- Upcoming: RFP for design services.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2025 Completion

Related Projects

- 10070: Title 22 Converted Filter Booster Pump Station Project
- 10073: ECLWRF Title 22 Filters Rehabilitation & Replacement

10112: Ops Facility R&R

Ongoing R&R project with previous budget approvals

FY22-23
\$1,567,000

5-yr CIP
\$7,567,000

Total Cost (past, present, future)
\$7,567,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$1,567,281	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$0	\$7,567,281

* Total Estimated Costs through 6/30/2022

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

Funding Source(s)

PAYGO	--	--	--
\$7.6M	--	--	--

Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22



Refinery
Cooling Towers



Refinery
Boiler Feed



Seawater
Barrier

Status

- Upcoming: Implementation.

Anticipated Schedule

	FY22-23			FY23-24			FY24-25			FY25-26			FY26-27		
Implementation															

10113: Ops Compliance Laboratory

Ongoing R&R project with previous budget approvals

FY22-23
\$181,000

5-yr CIP
\$181,000

Total Cost (past, present, future)
\$181,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$181,000	\$0	\$0	\$0	\$0	\$0	\$181,000

* Total Estimated Costs through 6/30/2022

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.

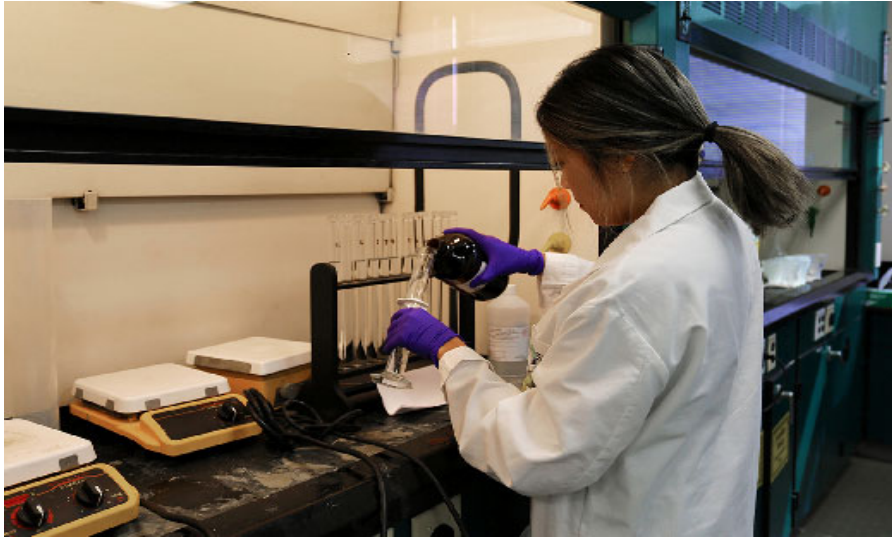
Strategic Goals

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

Funding Source(s)

Debt	--	--	--
\$0.2M	--	--	--

Total External Funding: **\$0.0M**



Status

- Upcoming: Equipment solicitation, purchase, installation.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Bidding																				
Purchase																				
Installation																				

2023 Completion

10116: ECLWRF Title 22 North Leg Valve Replacement

New CIP project

FY22-23 \$0	5-yr CIP \$528,000	Total Cost (past, present, future) \$528,000
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Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$0	\$287,000	\$241,000	\$0	\$0	\$0	\$528,000

* Total Estimated Costs through 6/30/2022

Project Description

This project will replace an inoperable 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.

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.

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

Funding Source(s)

PAYGO	--	—	--
\$0.5M	--	—	--

Total External Funding: **\$0.0M**



End Use



Irrigation
Title 22

Status

- Upcoming: Design and construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

10117: TRWRP 93MCC2 Replacement

Ongoing R&R project with previous budget approvals

FY22-23
\$0

5-yr CIP
\$147,000

Total Cost (past, present, future)
\$195,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$47,895	\$0	\$146,652	\$0	\$0	\$0	\$0	\$194,547

* Total Estimated Costs through 6/30/2022

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 the boiler feed and 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.

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

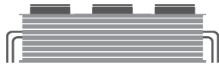
Funding Source(s)

PAYGO	--	—	--
\$0.2M	--	—	--

Total External Funding: **\$0.0M**



End Use



Refinery
Cooling Towers



Refinery
Boiler Feed

Status

- Current: Project in design stage.
- Upcoming: Procurement and construction.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2024 Completion

10118: ECLWRF MF-RO CIP Valve Replacement

FY22-23
\$0

5-yr CIP
\$119,000

Total Cost (past, present, future)
\$129,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$9,388	\$0	\$119,375	\$0	\$0	\$0	\$0	\$128,764

* Total Estimated Costs through 6/30/2022

Project Description

Purchase of seven new check valves to replace failing valves

Purpose / Benefit

Replacing the failing steel check valves with plastic duckbill check valves will help prevent sump overflows and consequent system shutdowns.

Drivers

- Equipment Failure: The existing valves have intermittently failed, causing service interruption to customers.
- Critical Process: The clean-in-place system is a critical component of the MF-RO process and protects membrane life and performance.

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

Funding Source(s)

PAYGO	--	--	--
\$0.1M	--	--	--

Total External Funding: --



End Use



Refinery
Boiler Feed



**Seawater
Barrier**

Status

- Completed: Design.
- Current: Procurement.
- Upcoming: Installation.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Procurement																				
Closeout																				
Completion																				

2024 Completion

Related Projects

- 10085: ECLWRF Barrier Basin & Pump Station Rehabilitation
- 10096: ECLWRF Phase II & III MF Replacement
- 10097: ECLWRF RO Pretreatment System R&R

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D-4 Other Projects

FY22-23 Budget

Capital Improvement Program



10044-01: DLD IT Server Room Improvements

Ongoing R&R project with previous budget approvals

FY22-23
\$30,000

5-yr CIP
\$30,000

Total Cost (past, present, future)
\$30,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000

* Total Estimated Costs through 6/30/2022

Project Description

The existing roof-mounted air conditioning unit is no longer in operation and needs to be replaced in kind. Temporary portable units that do not meet cooling requirements are currently in use.

Purpose / Benefit

Replacement of the roof-mounted unit will provide the required cooling and will maintain server life and reliability.

Drivers

- Equipment Age: The existing air conditioning system cannot meet the server cooling requirements.
- Critical Process: The services provided by the IT server room are critical to West Basin 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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/24/21	FY21-22 Annual Budget Approval		

Funding Source(s)

PAYGO	--	--	--
\$0.03M	--	--	--

Total External Funding: **\$0.0M**



Status

- Completed: Solicitation.
- Upcoming: Installation.

Anticipated Schedule

	FY22-23			FY23-24			FY24-25			FY25-26			FY26-27		
Planning															
Design															
Bidding															
Construction															
Closeout															
Completion															

2023 Completion

Related Projects

- 10044-02: DLD Elevator Modernization
- 10044-03: DLD Air Conditioning Units Refurbishment
- 10044-04: DLD Boiler Replacement

10044-02: DLD Elevator Modernization

Ongoing CIP project with previous budget approvals

FY22-23
\$0

5-yr CIP
\$448,000

Total Cost (past, present, future)
\$461,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$13,160	\$0	\$130,842	\$316,708	\$0	\$0	\$0	\$460,710

* Total Estimated Costs through 6/30/2022

Project Description

Rehabilitation of both elevators in the Donald L. Dear Headquarters, 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.

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

Previous Board Actions

Date	Event	Estimate of Annual Expenditure	Award Amount
5/24/21	FY21-22 Annual Budget Approval	\$605,000	

Funding Source(s)

PAYGO	--	--	--
\$0.5M	--	--	--

Total External Funding: **\$0.0M**



Status

- Completed: Audit and evaluation of current elevators completed.
- Current: Design RFP being written for bidding process.
- Upcoming: Design and construction bidding.

Anticipated Schedule

	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Planning					
Design					
Bidding					
Construction					
Closeout					
Completion					

2025 Completion

Related Projects

- 10044-01: DLD IT Server Room Improvements
- 10044-03: DLD Air Conditioning Units Refurbishment
- 10044-04: DLD Boiler Replacement

10044-03: DLD Air Conditioning Units Refurbishment

Ongoing CIP project

FY22-23
\$114,000

5-yr CIP
\$114,000

Total Cost (past, present, future)
\$114,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$114,083	\$0	\$0	\$0	\$0	\$0	\$114,083

* Total Estimated Costs through 6/30/2022

Project Description

Rehabilitation of the two air conditioning units in the Donald L. Dear building to extend 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.

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 reduce both the release of R-22 and 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 reduce the release of refrigerant R-22.
- Economic Impact: Replacing the coils would reduce the currently increasing repair rate.

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

Funding Source(s)

PAYGO	--	--	--
\$0.1M	--	--	--

Total External Funding: **\$0.0M**



Status

- Completed: Quotes received.
- Current: Procurement.
- Upcoming: Installation and commissioning.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2023 Completion

Related Projects

- 10044-01: DLD IT Server Room Improvements
- 10044-02: DLD Elevator Modernization
- 10044-04: DLD Boiler Replacement

10044-04: DLD Boiler Replacement

Ongoing CIP project with previous budget approvals

FY22-23
\$80,000

5-yr CIP
\$80,000

Total Cost (past, present, future)
\$80,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$79,583	\$0	\$0	\$0	\$0	\$0	\$79,583

* Total Estimated Costs through 6/30/2022

Project Description

Replacement of the boiler and associated equipment at the Donald L. Dear building.

Purpose / Benefit

The current boiler in use at the Donald L. Dear building is over 17 years old. The burner assembly is highly corroded and not burning evenly. Replacing the boiler and associated equipment will increase reliability, save on repair costs, save on utility cost, and reduce environmental impact.

Drivers

- Increase Reliability: A new boiler would have significantly reduced annual repair costs.
- Environmental Stewardship: Replacing the boiler would reduce the methane gas released.
- Economic Impact: A new boiler would result in lower utility costs.

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

Funding Source(s)

PAYGO	--	--	--
\$0.08M	--	--	--

Total External Funding: **\$0.0M**



Status

- Completed: Quotes received.
- Current: Procurement.
- Upcoming: Installation and commissioning.

Anticipated Schedule

	FY22-23			FY23-24			FY24-25			FY25-26			FY26-27		
Planning															
Design															
Bidding															
Construction															
Closeout															
Completion															

2023 Completion

Related Projects

- 10044-01: DLD IT Server Room Improvements
- 10044-02: DLD Elevator Modernization
- 10044-03: DLD Air Conditioning Units Refurbishment

10102: West Basin HQ Conceptual Design Options

New planning project based on Board direction on DLD Building

FY22-23
\$244,000

5-yr CIP
\$244,000

Total Cost (past, present, future)
\$244,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$244,000	\$0	\$0	\$0	\$0	\$0	\$244,000

* Total Estimated Costs through 6/30/2022

Project Description

West Basin has established a long-term vision for the relocation of its 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 of a new headquarters building at the ECLWRF for further evaluation.

Purpose / Benefit

A new headquarter 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: Following Board's direction to relocation in lieu of the refurbishment of 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*

Funding Source(s)

PAYGO	--	--	--
\$0.2M	--	--	--

Total External Funding: **\$0.0M**



Status

- Completed: RFP and scope of work development.
- Current: Solicitation for architectural engineering services.
- Upcoming: Development of conceptual design options.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Planning																				
Design																				
Bidding																				
Construction																				
Closeout																				
Completion																				

2023 Completion

10115: IT CIP Projects

Ongoing CIP project

FY22-23
\$737,000

5-yr CIP
\$1,056,000

Total Cost (past, present, future)
\$1,056,000

Prior Years*	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	Beyond	Total
\$0	\$737,000	\$319,000	\$0	\$0	\$0	\$0	\$1,056,000

* Total Estimated Costs through 6/30/2022

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, conference rooms, data management, and security 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 conference rooms 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

Funding Source(s)

Debt	--	--	--
\$1.1M	--	--	--

Total External Funding: **\$0.0M**



Status

- Completed: Planning.
- Upcoming: Implementation.

Anticipated Schedule

	FY22-23				FY23-24				FY24-25				FY25-26				FY26-27			
Implementation																				
Completion																				

2024 Completion



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