



# 2019- 2020

## WEST BASIN OPERATING BUDGET



### **WEST BASIN MUNICIPAL WATER DISTRICT**

17140 S. AVALON BLVD.  
CARSON, CA 90746  
WESTBASIN.ORG





# Table of Contents

- General Manager’s Message** ..... 1-1
- About West Basin Municipal Water District** ..... 2-1
- Financial Overview & Summary** ..... 3-1
  - Strategic Business Plan ..... 3-5
  - Long-Range Financial Plan ..... 3-8
  - Five-year Forecast ..... 3-10
  - Summary of Financial Policies ..... 3-16
  - Performance Metrics ..... 3-21
- Budget Process and Timeline** ..... 4-1
- Source of Revenue** ..... 5-1
  - Revenue Highlights ..... 5-2
  - Water Rates and Charges ..... 5-4
  - Other Sources of Revenue ..... 5-12
- Use of Funds** ..... 6-1
  - Water Purchases and Charges ..... 6-2
  - Debt Service ..... 6-5
  - Operating Program Expenses ..... 6-11
  - Salaries and Benefits ..... 6-12
  - Capital Improvement Program ..... 6-17
- Operating Program Expenses** ..... 7-1
  - Overhead Program Costs ..... 7-2
  - Water Recycling Operations ..... 7-10
  - C. Marvin Brewer Desalter Operations ..... 7-16
  - Technical Planning ..... 7-18
  - Water Policy and Resource Development ..... 7-21
  - Public Information and Education ..... 7-25
  - Conservation ..... 7-29
  - Purveyor Water Quality Monitoring Program ..... 7-34
- Supplemental Information** ..... 8-1
  - Capital Improvement Program ..... 8-1
- Acronyms** ..... 9-1
- Glossary** ..... 9-2



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**December 19, 2018**



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***Dedicated Excellence in Municipal Financial Reporting***



SECTION 1  
GENERAL  
MANAGER'S  
MESSAGE





# General Manager's Message

June 24, 2019

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

West Basin Municipal Water District (West Basin) staff is pleased to present the operating budget and supplemental information for the Fiscal Year (FY) beginning July 1, 2019 and ending June 30, 2020 (FY 2019-20). Each year, staff takes its budget development into careful consideration to ensure West Basin's mission, strategic goals, and commitments are being financially supported by appropriately setting its rates and charges to cover its program expenditures. West Basin has developed programs and activities to address the many challenges facing the water industry, such as reoccurring and prolonged droughts due to climate change, the impact of environmental and regulatory decisions on water supply, and the commitment to replace imported water deliveries with drought-resilient supplies.

The following objectives were considered in the development of the FY 2019-20 budget: 1) meeting the debt coverage target as reflected in the Strategic Business Plan 2017-2022; 2) having sufficient net revenues and access to a low-cost line of credit to pay for Rehabilitation and Replacement (R&R) projects; 3) addressing the near-term sunset of a substantial fixed revenue source and addressing the stabilization of revenues; and 4) meeting the strategic plan goals set by the Board of Directors (Board). The Capital and the R&R program cost for FY 2019-20 is a supplement to the operating budget.

The projected total operating revenue for FY 2019-20 is \$229.8 million, representing an increase of \$12.3 million (5.7%) from the prior year with increased imported water sales being the largest contributor to the higher budgeted revenues. The combination of a Metropolitan Water District Tier 1 imported water rate increase of \$28 per acre-foot (AF), a decrease in the Readiness-to-Serve Charge (RTS) of \$8/AF, and an anticipated increase in imported water consumption of 10,600 AF results in a \$16.4 million increase in budgeted potable water revenues. Based on historic sales data as well as projected sales, West Basin reduced its budgeted recycled water sales in FY 2019-20 by 4,425 AF, resulting in a decrease of \$6.5 million in revenue.

Another significant change in budgeted operating revenue is the continued phase-in of the Fixed Service Charge. The Fixed Revenue Charge was introduced in FY 2018-19, and is in the second year of a 3-year phase-in, and will generate \$3.9 million in FY 2019-20, a \$1.6 million increase. The Fixed Revenue Charge will ramp up again in FY 2020-21 to meet a target fixed revenue of approximately \$5.5 million.

West Basin is investing in a new Technical Planning Program that will have oversight of a Water Supply Study, an Emergency Response Plan, and an Energy Management Plan during the fiscal year. As a result of the overall lower debt coverage, designated funds are budgeted to decrease \$3.1 million to \$17.6 million.



## Progress toward West Basin's Strategic Business Plan (Plan) Goals and Commitments

Updated and adopted in FY 2017-18, 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, as well as the five goals that set the framework for the strategies and objectives. Highlighted below are a few of the accomplishments where West Basin has provided value during FY 2018-19 and shaped our objectives for FY 2019-20. For a complete listing of West Basin's accomplishments, see Section 7, Operating Program Expenses, and Section 8, Supplemental Information.

### Water Supply Reliability

- Successfully completed five (5) free Rain Barrel Distribution Events and distributed 2,000 rain barrels; and
- Made four (4) new connections at three (3) sites to the recycled water distribution system, adding approximately 22 acre-feet of demand annually.

### Sound Financial and Resource Management

- Implemented tablet data collection for the pipeline distribution system operations; and
- Implemented the new fixed revenue service charge for the FY 2018-19.

### Water Quality

- Scheduled over 100 water quality constituent samples and completed annual customer water quality reports for West Basin purveyors to comply with the Department of Drinking Water requirements;
- Performed approximately 36,341 analyses on recycled water in FY 2018-19;
- Worked with the Los Angeles Department of Water and Power (LADWP) and Los Angeles Sanitation District (LASAN) to develop a scope of work to retain a project to design for the Membrane Bioreactor (MBR) study; and
- Completed preparation for Groundwater Recharge and Regulation (GWRR) compliance for July 1, 2019 deadline.



Students enjoy hands-on learning through West Basin education programs

## Customer Service

- Represented and promoted West Basin's programs at over 100 community events in partnership with the South Bay Environmental Services Center;
- Provided support to obtain Department of Public Health (DPH) approval and site inspections for 18 recycled water site modifications;
- Hosted 20th Annual Water Harvest Festival, promoting water education and conservation; and
- Sponsored 16 Water Bottle Filling Stations.

## Environmental Stewardship

- Installed six (6) electric vehicle charging stations at West Basin headquarters in Carson; and
- Helped purveyors establish sampling plans and approvals from the EPA for the Unregulated Contaminant Monitoring Requirement (UCMR) Program.

## Key Factors Impacting the Budget

The development of the budget incorporates a multitude of decisions, including but not limited to water sales assumptions, achieving the goals and strategies of the District, consideration of funding and timing for capital projects, and weighing any future loss of revenues or financial commitments. Each item is carefully considered to ensure that West Basin is focused on and capable of meeting its mission of providing a safe and reliable supply of water in a cost-effective manner.

### Water Sales Assumptions

As nearly 90% of our revenues are generated from volumetric sales, careful consideration is made when determining sales assumptions. Staff reviewed past history for trends, spoke with customer agencies that produce groundwater for projected extractions, monitored current imported and recycled water usage, and also reviewed its current capital improvement projects to make appropriate assumptions for future retail and barrier imported sales, recycled water sales and the brackish desalter water sales.

Imported retail water sales vary based on hydrologic conditions, water demand, and the availability of water supply. However, even with conditions that brought snowpack levels well above annual averages, consumption has remained relatively flat due to changes in consumer behavior. Consumer usage of imported water since the end of the most recent drought in FY 2016-17 has not returned to pre-drought levels and is not expected to increase in the near future. Projected sales for the end of FY 2018-19 are expected to be flat at 107,000 AF, less than 400 AF change from the previous fiscal year actual sales of 106,601 AF. As a result, West Basin is budgeting for retail sales of 106,000 AF in FY 2019-20.



The West Coast Barrier (Barrier) wells historically have been injected 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 80% is actually delivered with annual sales averaging approximately 15,500 AF. 12,400 AF from recycled water has been budgeted for FY 2019-20 for the Barrier. The balance, 3,100 AF (15,500 less 12,400), has been budgeted as imported barrier water to meet expected total demand for the Barrier.

To meet demands for the Dominguez Gap Barrier the City of Los Angeles recently completed their local recycled water project to reduce the Water Replenishment District (WRD) dependence on imported water. The project has supplied recycled water during FY 2018-19 to the Dominguez Gap Barrier, however, due to operational issues has been unable to meet total demand. West Basin is the Metropolitan member agency that supplies the imported water to WRD, makes up the shortfall with imported water, and has budgeted 3,000 AF in FY 2019-20.

West Basin currently serves recycled water to more than 400 meters (connections). Compared to the FY 2018-19 budget of 41,215 AF, West Basin anticipates a decrease in recycled water sales to 36,790 AF in FY 2019-20, as a result of adjusting budget projections for the production of Barrier water. Expected recycled water sales are comprised of approximately 34% sales to the Barrier, 51% to local refineries, and the remaining 15% will be used in parks, golf courses, schools and street medians.

### Program and Staffing

A new Technical Planning program was added to the FY 2019-20 budget to lead the long-term technical and strategic planning of capital improvement projects and programs that support West Basin's goals, within its service area. A portion of the program was previously funded in the Recycled Operations budget. This program has been expanded for the development and delivery of multi-disciplinary and complex technical and strategic studies associated with the recycled water program, brackish groundwater and the overall water portfolio. In addition to technical and strategic planning efforts, this program will oversee and manage the research and development (R&D) that supports internal and external R&D efforts to advance water reuse and reliability.

West Basin implemented a new alternative work schedule for employees without any decrease in customer service and without any increase in cost. In addition, West Basin conducted and concluded the class and compensation study and presented the diversity report to the Board, gaining its approval. There have been no changes in staffing and remains consistent at 59 positions.



Samples of recycled water produced at the Edward C. Little Water Recycling Facility in El Segundo, Calif. are offered to guests to drink during facility tours.

## Funding for Capital Projects

With more than \$275 million planned in the next five years for capital projects, West Basin is focused on maintaining its strong credit ratings in order to obtain low-cost financing for its Capital Improvement Program (CIP). Rating agencies evaluate a number of factors to determine an agency's credit rating, including achieving targeted debt coverage, maintaining strong cash reserves, having an economically strong service area, and providing an essential and critical service. To meet the ratings criteria of a Aa2 (Moody's) and AA- (Standard and Poors), West Basin has internally established budgeted debt coverage goals (which is based upon net revenue divided by debt services), enhanced its financial policies, and added additional fixed revenues to hedge against future unforeseen fluctuations in water demand.

In the FY 2019-20 budget West Basin plans to continue to take an active approach to rehabilitate and replace critical assets of the aging infrastructure that provides recycled and brackish desalted water to our customers. By undertaking this large rehabilitation and replacement effort, West Basin will enhance the recycled water and desalted processes, provide reliability to the customers, and achieve cost savings through a more efficient operation. To assist in this effort, the budget includes \$19.6 million for identified R&R projects and other smaller capital projects.

Planned capital expenditures for FY 2019-2020 are anticipated to be approximately \$44.6 million and more than \$230 million for the following four years. Based on the nature of the projects, staff anticipates using all avenues to fund the construction, including the use of Pay-As-You-Go (PAYGO) funds, commercial paper line, and the utilization of a low-cost loan through the State of California's Revolving Loan Program. West Basin has also secured a \$8 million grant from the State Water Resources Control Board and \$6 million in contributions from public utility customers.

To supplement West Basin's capital investment, West Basin actively pursues grants and partnerships with local, state and Federal agencies as well as with for-profit entities to collaborate on the many important studies and projects that will benefit the water industry and our service area. All of the capital improvements projects reinforce West Basin's commitment and efforts to increase water reliability by augmenting local water supplies, as well as increasing its drought resiliency and sustainability.

## Future Risks and Other Considerations

### Legislation

In 2018, several bills were passed in the California legislature and United States Congress that will have long term impacts on West Basin. Assembly Bill (AB) 1668 (Friedman) and Senate Bill (SB) 606 (Hertzberg) were negotiated over a two year period and after being signed by Governor Brown, will now require multiple state agencies to work together to formulate a regulatory framework to implement mandatory water demand reductions beginning in 2023. West Basin has always been dedicated to water use efficiency, and these restrictions could impact our agency by reducing water sales/demand, and possibly increasing additional investments in conservation programs.



The impacts of these bills could be slightly offset with the enactment of The America's Water Infrastructure Act of 2018, which included the Water Resources Development Act. In passing this legislation, Congress modified West Basin's Harbor South Bay Water Recycling Project by increasing the total federal project authorization from \$35 million to \$70 million. The Army Corps of Engineers, the implementing federal agency, will hopefully designate up to \$5 million annually until this authority expires. Leveraging these funds, West Basin will be constructing several new laterals, pump stations and treatment facilities that will increase the sale and use of recycled water, which will decrease the regional demand on imported water.

### **Cybersecurity**

As with many industries, cybersecurity is an increasing focus of the water and resource recovery from sewage industry. West Basin has a strong and continued focus on cybersecurity as world-wide security breaches increase at an alarming rate. Significant effort will continue to be directed toward providing an operationally stable and secure network infrastructure, as well as educating employees on cybersecurity topics and how to mitigate that risk. Ongoing initiatives include the development of West Basin's business continuity strategy, including our disaster recovery plan with an off-site disaster recovery capability, increasing measures to defend against cybersecurity threats, and following industry best practices. As the industry changes and as new cybersecurity threats emerge, we will adapt and improve to strengthen our security stance to maintain our operationally stable and secure infrastructure. Over 50% of West Basin recycled water production supports three (3) large oil refineries that are critical to economic reliability and, therefore, the uninterrupted supply of their product is key.

### **Rate Projections**

The largest portion of the West Basin's imported water rate is passed through to its customers from MWD's commodity rate. MWD adopted a two-year budget on April 10, 2018, setting their rate for Calendar Year 2020 to \$1,078/AF; the rate will be effective January 1, 2020.

West Basin has begun the process of developing a comprehensive long range financial plan (LRFP). The LRFP will include many components including a strategic plan, financial policies, demand forecast, operating costs, rates and charges, and a capital program component. West Basin has adopted financial policies and those policies are reviewed annually to ensure they reflect regulatory requirements, best practices, and targeted financial metrics. Another component of the LRFP is to update the Capital Improvement Program (CIP) Master Plan. The CIP Master Plan will provide the cost to construct future capital facilities, identify corresponding operational expenses, and potential savings that need to be considered in LRFP due to the impacts from future debt financing and the need of PAYGO funding. This information along with operating costs and future sales assumptions will be incorporated into West Basin's financial model that will allow staff to perform sensitivity analysis and determine the largest drivers of future water rate increases. The LRFP will assist West Basin in accomplishing its strategic goals in a prudent and fiscally responsible manner.

## In Conclusion

The FY 2019-20 operating budget supports the long-term financial and organizational goals and takes into account the future need to expand and diversify our water portfolio. West Basin is committed to demonstrate the value of its efforts and will continue to work with its customers and other stakeholders to ensure that rate increases are mitigated to the greatest extent possible while still being able to protect and secure a safe and reliable water supply.

West Basin's budget was carefully considered by the Board of Directors and communicated to its customers before adoption. The Board understands the impact the water rates have on its customers and balances those concerns with meeting the objective of diversifying water supply sources and identifying and addressing operational risks. West Basin is aware of the short-term and long-term risks that have an impact on its operations and achieving the successes of local projects to support water reliability and takes these into consideration as it develops the budget and water rates.

Respectfully,



Patrick Sheilds  
General Manager





SECTION 2  
ABOUT  
WEST BASIN  
MUNICIPAL  
WATER  
DISTRICT





## About West Basin Municipal Water District

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

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

Recycled water is the cornerstone of West Basin's efforts to increase water reliability by augmenting local supplies. West Basin's award-winning Edward C. Little Water Recycling Facility in El Segundo, Calif. and its satellites are the only facility network in the world that produces five types of customer-tailored, fit-for-purpose 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 purposes. West Basin provides recycled water to more than 400 industrial, commercial and public facilities in the service area.

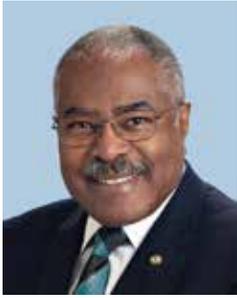
To protect our local groundwater aquifer from seawater intrusion, West Basin currently provides highly purified recycled water to the Water Replenishment District of Southern California (WRD) for injection into the West Coast seawater barrier. The seawater barrier protects and augments \$200 million dollars' worth of local groundwater supplies. While the groundwater pumping is not a direct sale of West Basin, it is another source of water for some customers to pump within our mutual 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 evaluating ocean water desalination as a local, drought-resilient resource.

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.



## Board of Directors



**Harold C. Williams**  
**Treasurer**

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



**Director Gloria D. Gray**  
**Vice President**

**Division 2:** City of Inglewood, and unincorporated Los Angeles County areas of South Ladera Heights, Lennox, Athens, and Westmont



**Carol W. Kwan**  
**Secretary**

**Division 3:** Cities of Hermosa Beach, Lomita, Manhattan Beach, Redondo Beach, and a portion of Torrance



**Scott Houston**  
**President**

**Division 4:** Cities of Culver City, El Segundo, Malibu, and West Hollywood, and unincorporated Los Angeles County areas of Lennox, North Ladera Heights, Del Aire, Marina del Rey, Topanga, View Park, Wiseburn and Windsor Hills

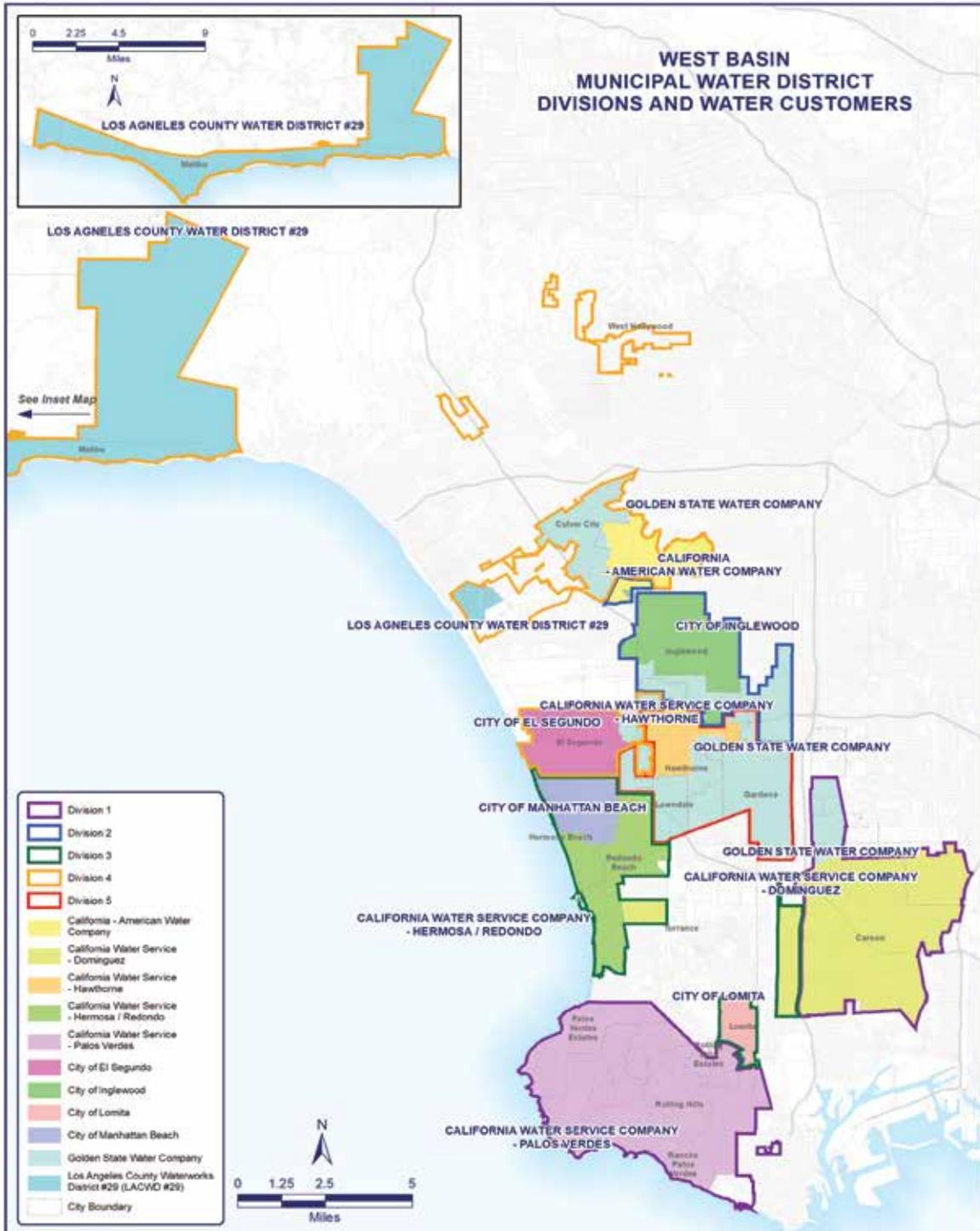


**Donald L. Dear**  
**Past President**

**Division 5:** Cities of Gardena, Hawthorne, Lawndale and the unincorporated Los Angeles County area of El Camino Village

# Service Area

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



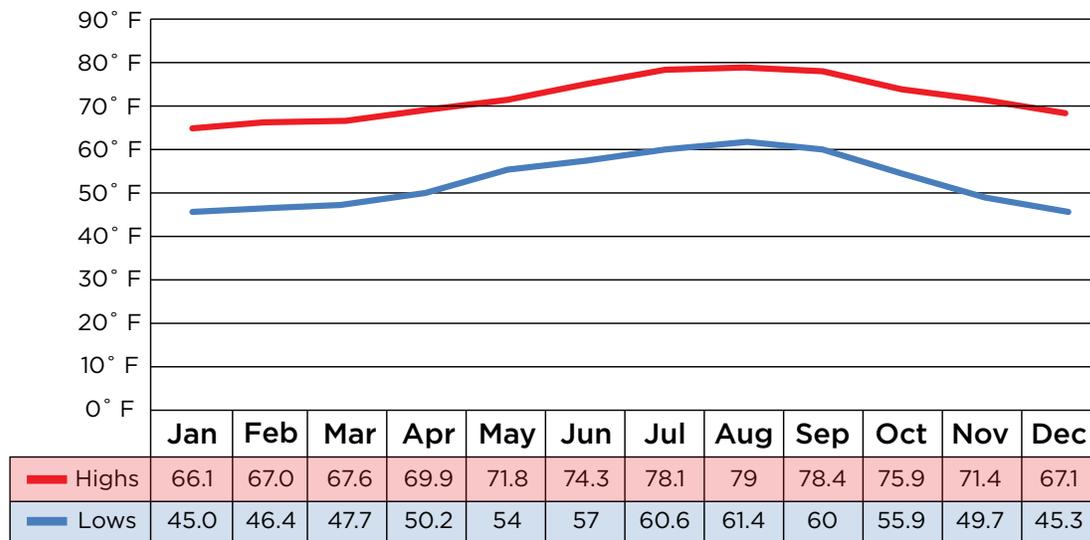


## District Statistics

Formed	<b>December 17, 1947</b>
Estimated Population	<b>885,000</b>
Area Served	<b>185 square miles</b>
Water Portfolio	<b>Potable, Recycled &amp; Desalted</b>
Average Residential Parcel Size	<b>9,240 square feet</b>
Lowest Median Income	<b>\$14,685 - Westmont</b>
Highest Median Income	<b>Over \$250,000 - Manhattan Beach Palos Verdes</b>

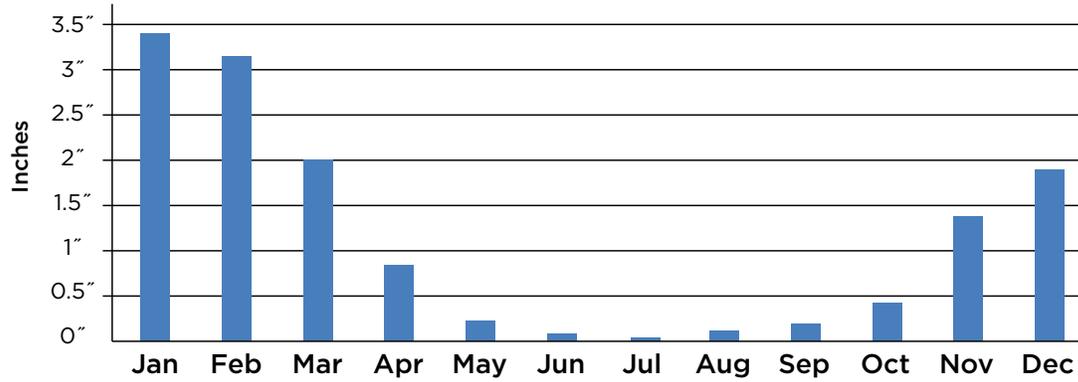
Los Angeles County's average daily temperatures range from mid-40's in December and January to high-70's in August and September. The average annual precipitation is approximately 12 inches, although the region is subject to significant variations in monthly precipitation. The average evapotranspiration (ETo) is almost 43 inches per year which is three and a half times the annual average rainfall.

## Southern California Average Temperature



Source: Western Regional Climate Center

## Average Precipitation

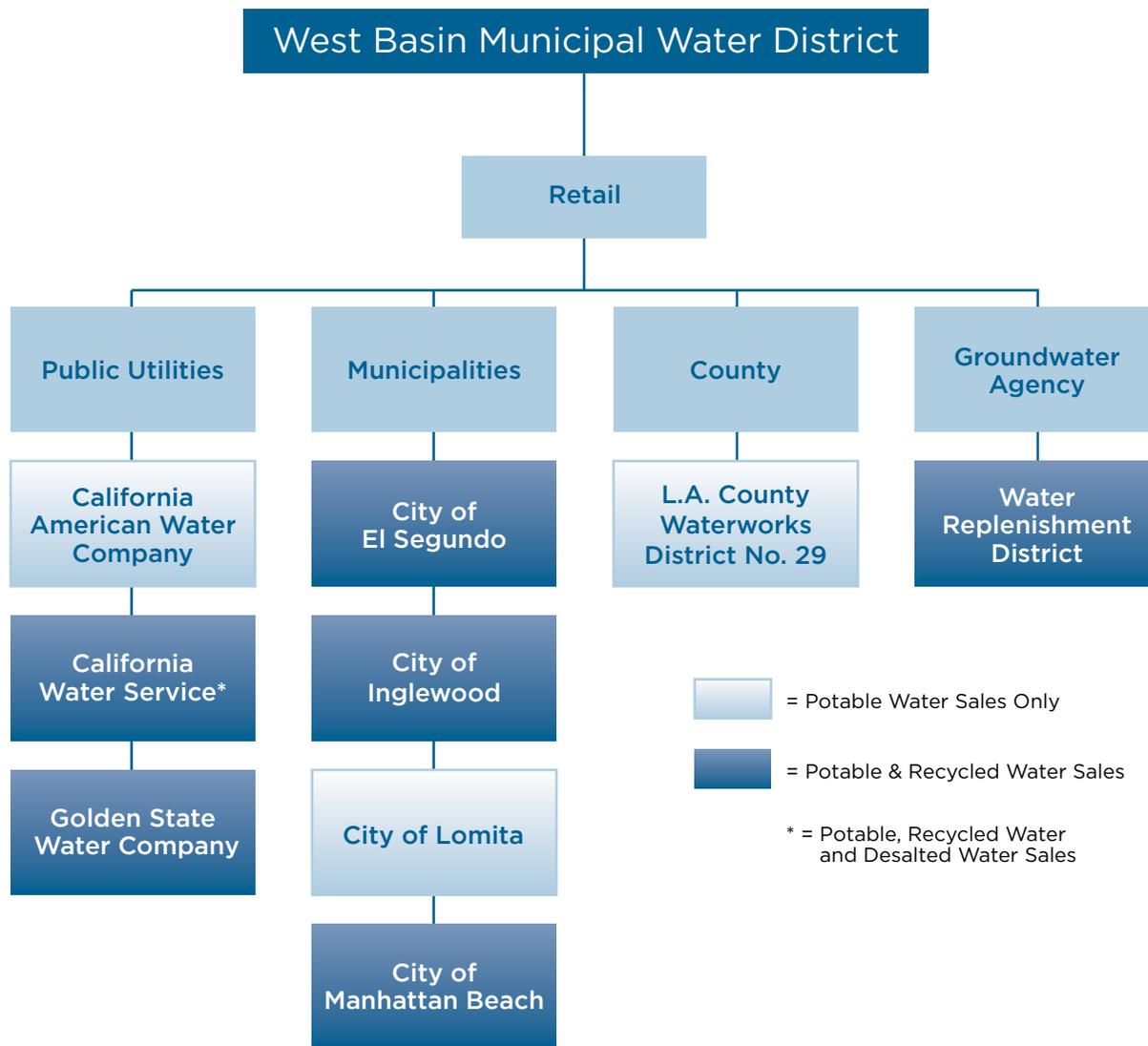


Source: Western Regional Climate Center

## Ten Largest Employers Within West Basin Service Area

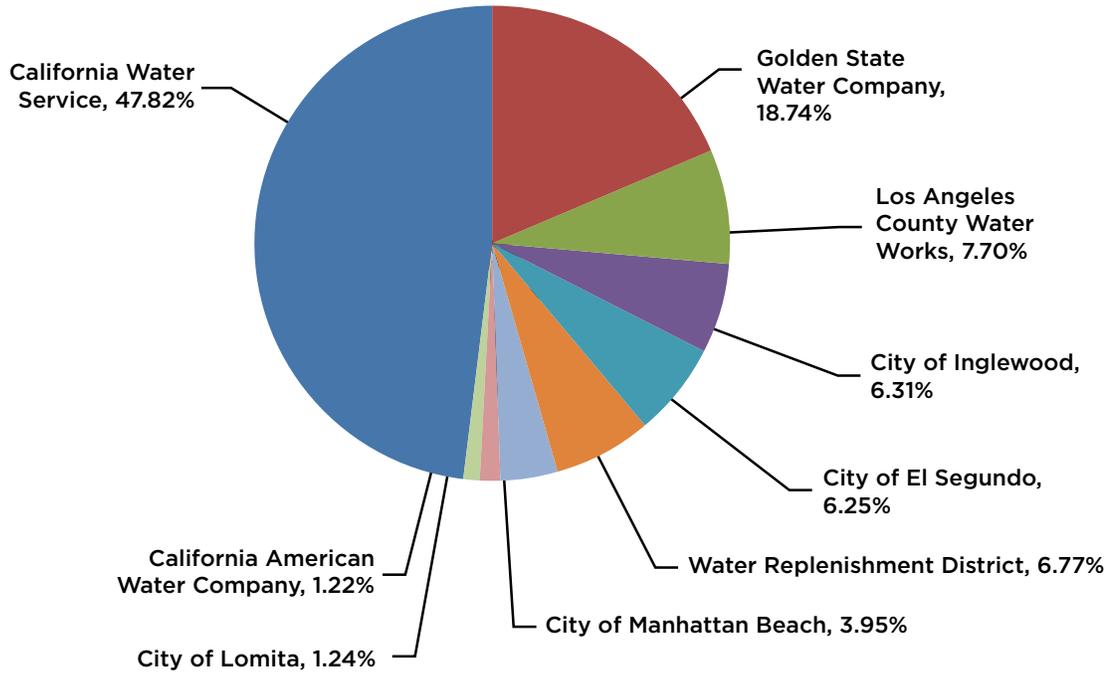
Employer	Number of Employees
Northrop Grumman Corporation	9,461
Space X	5,352
Raytheon	5,037
Boeing	3,500
Sony Pictures Entertainment	3,000
Mattel	1,719
Target	1,701
Accenture	1,636
Westfield	1,550
Palos Verdes Peninsula Unified School District	1,430

Source: Finance Department



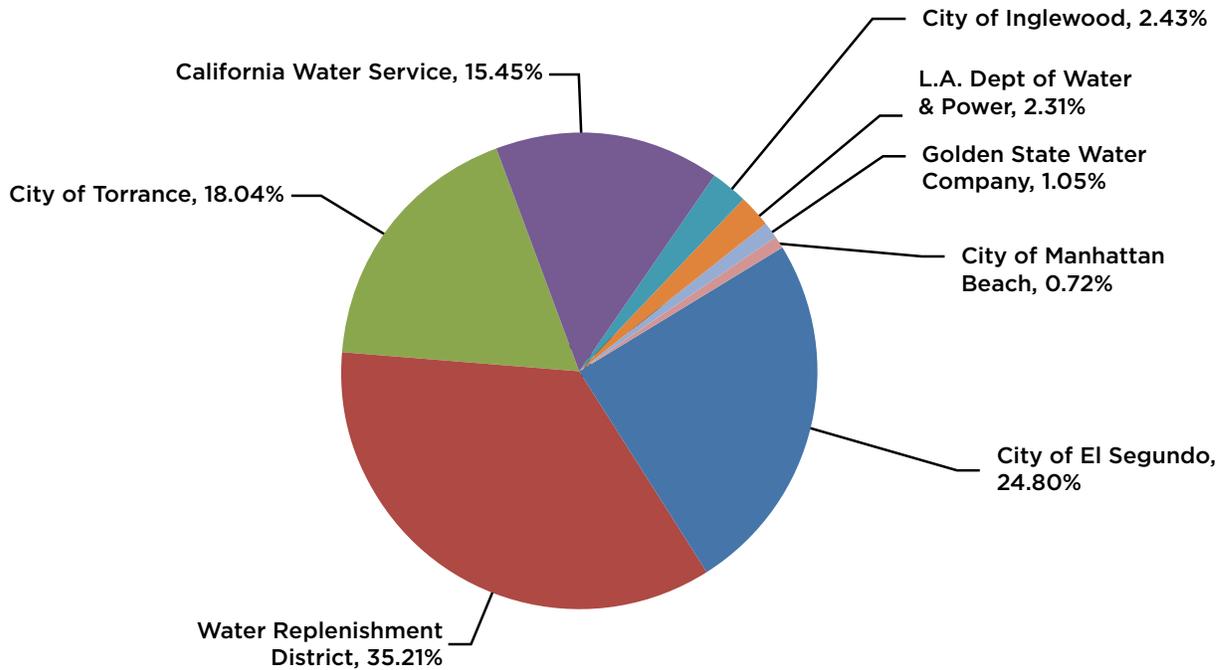
## Potable Water Customer Sales Distribution

FY 2017-2018



## Recycled Water Customer Sales Distribution

FY 2017-2018



## 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. Each year, the aquifer was being over drafted by millions of gallons - more water was taken out than was put back in.

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 water throughout its service area. In 1948, West Basin became a member agency of MWD, an agency that imported water from the Colorado River, and later would also import water from Northern California. For several decades since that time, West Basin served its customer agencies and communities solely as a wholesaler 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 conservation 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.



Construction at the Edward C. Little Water Recycling Plant in El Segundo, Calif. (2018)



The benefits generated by the water recycling program include 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 for residents and businesses to reduce their consumption of water and maximize water use efficiency indoors and outdoors.



Today, West Basin is an international water industry leader, hosting visitors from around the globe. West Basin is focused on providing value to its customers and delivering 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 meeting the goals and objectives of the Board of Directors Strategic Business Plan.





SECTION 3  
FINANCIAL  
OVERVIEW  
& SUMMARY

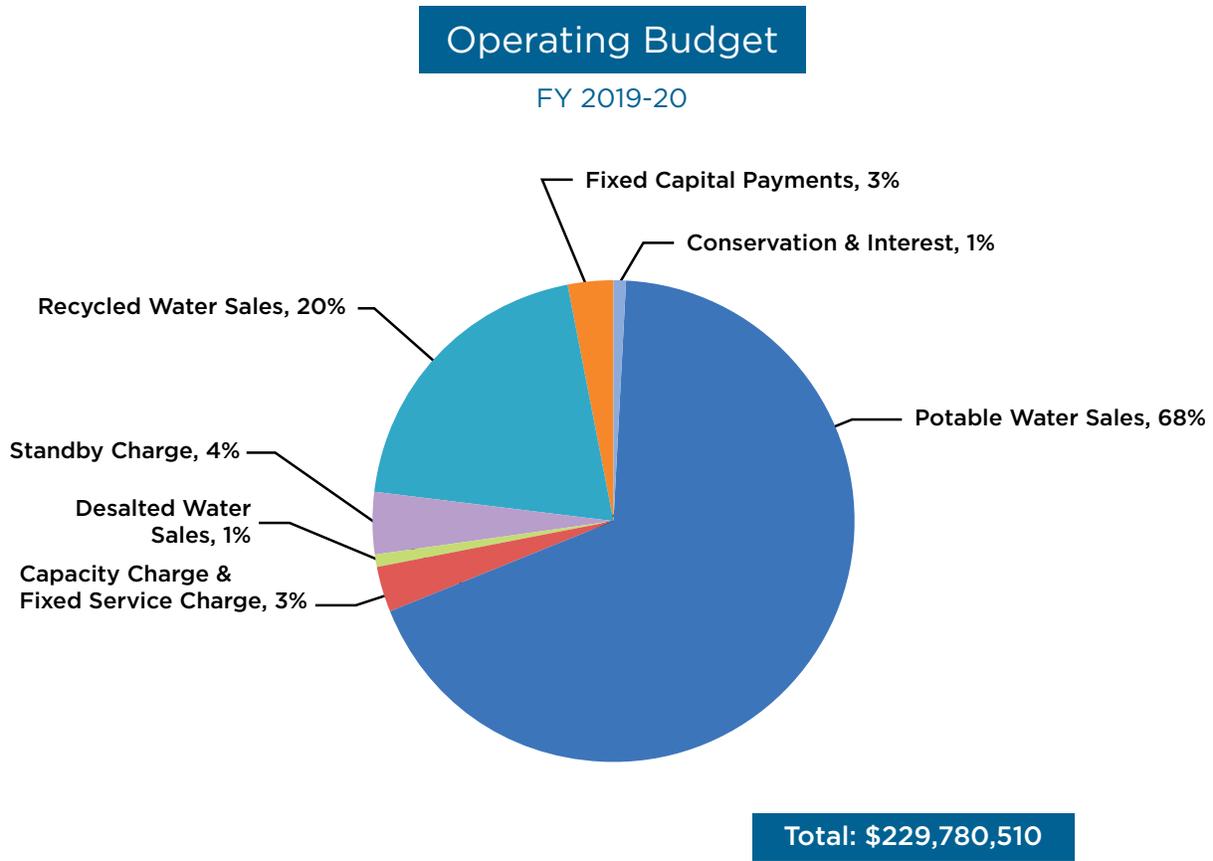


# Financial Overview & Summary

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 taken into account in the FY 2019-20 operating budget, and discussed in detail in the following sections of this document. This section provides the overview and highlights of the FY 2019-20 budget.

## Financial Highlights for FY 2019-20

For FY 2019-20 West Basin’s operating budget is \$229.8 million, and is \$12.3 million or 5.7% higher than the FY 2018-19 operating budget. Several reasons for the increase in the operating budget include higher revenues from imported water sales of \$16.4 million; an increase of \$1.6 million in the Fixed Service Charge; and higher interest income of \$700,000. As a result of adjusting budget projections for the production of barrier water, recycled water sales decreased \$6.5 million. More information can be found in Source of Revenue section.

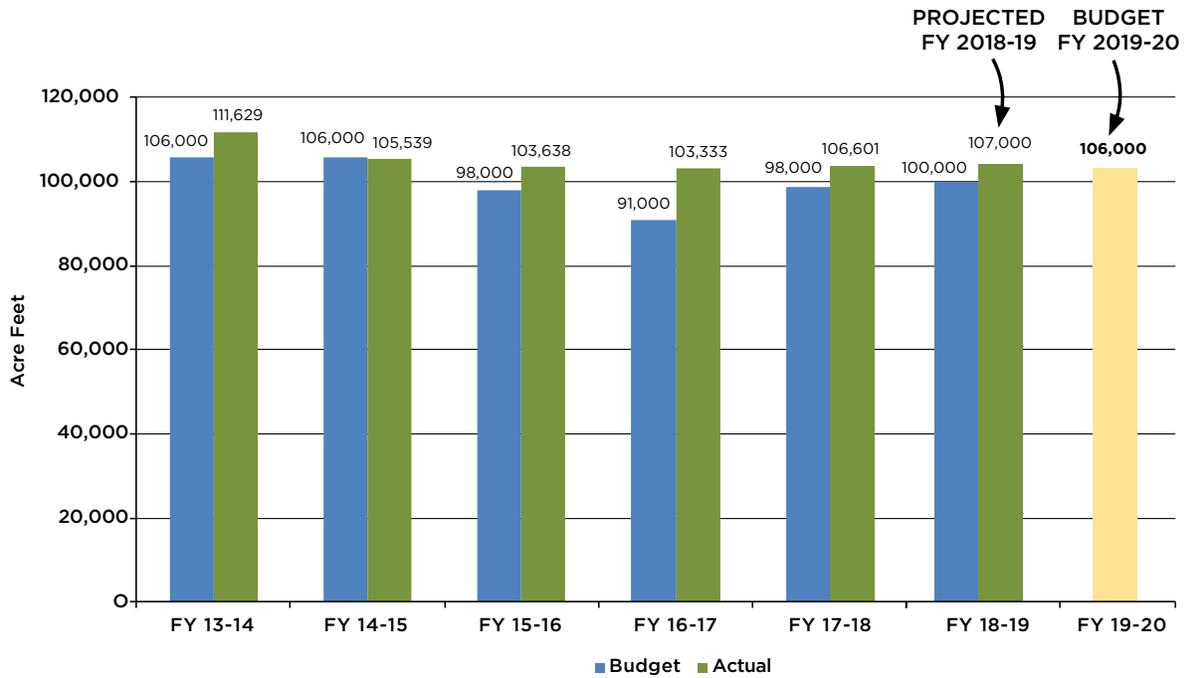




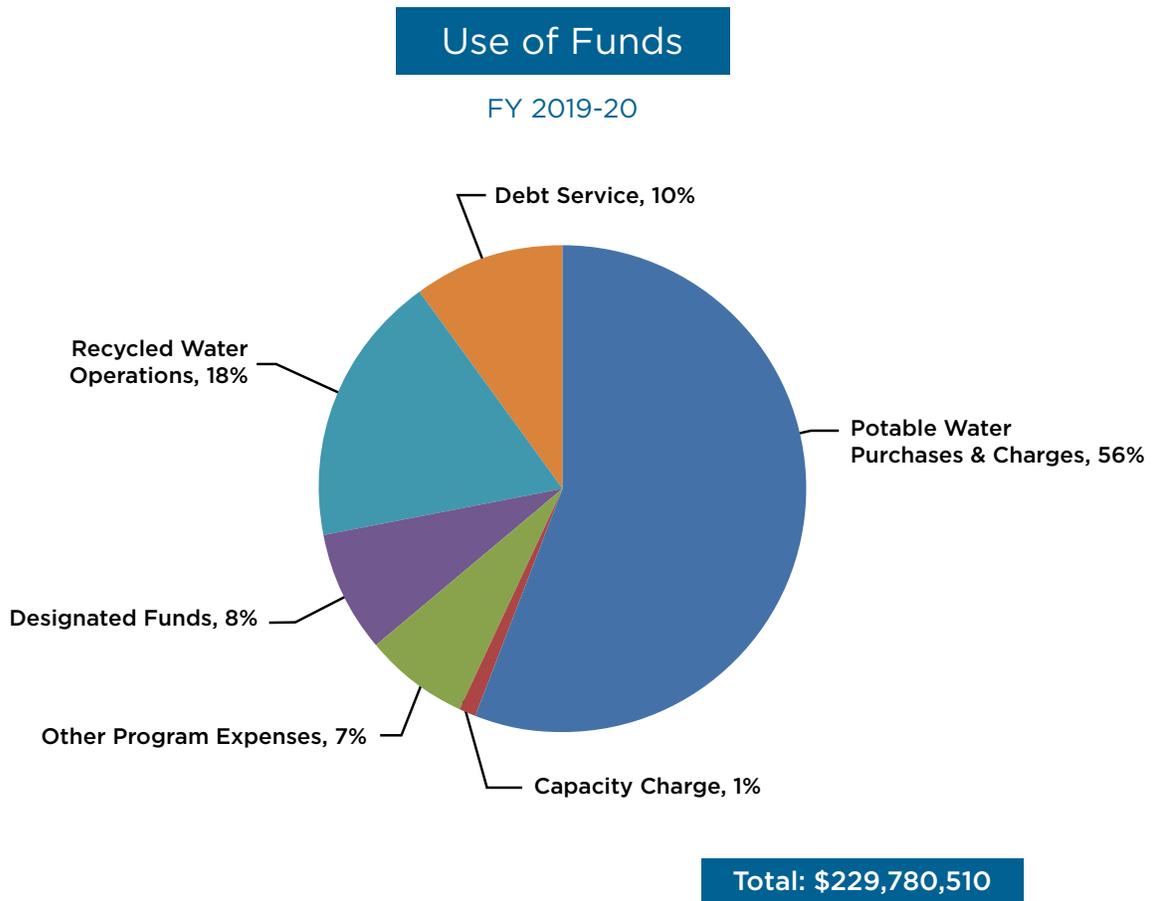
As imported water sales represent approximately two-thirds of West Basin's source of funds, significant attention is given to our water sales assumptions. Imported water sales are largely affected by hydrological conditions as on average 30% of West Basin's water usage is for outdoor usage. Although West Basin does not sell groundwater, a number of its customer agencies have access to this alternate source thereby necessitating dialogue with our customer agencies to understand their anticipated usage of groundwater and imported water. Shown below is our recent five-year history showing the volatility of imported water sales.

### Imported Water Sales

FY 2013-14-FY 2019-20



Similar to the revenues, operating expenses for FY 2019-20 are budgeted at \$229.8 million. Imported water purchases are expected to increase approximately \$12.5 million or 10.7% due to anticipated higher demand. West Basin anticipates lower recycled water production of approximately 10.7%, causing recycled water variable production costs to decrease approximately \$1.9 million or 4.5%. A new operating program, Technical Planning, was introduced to focus on studies and plans that will benefit West Basin. This resulted in an overall increase of \$3.6 million in non-recycling program budgets. All West Basin program expenses are further described in Use of Funds section.





## Staffing and Program Budgets

West Basin focuses on making appropriate decisions regarding department personnel requirements or 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)”.

Budget staffing levels for FY 2019-20 consists of 50 full-time budgeted positions, six full-time limited term, three part-time and eight intern positions for an overall total of 67 positions. The FY 2019-20 budget staffing levels remain unchanged from FY 2018-19.

Budget	FY 2018-19	FY 2019-20
Total Positions	67	67
Full-time regular	50	50
Full-time limited	6	6
Part-time	3	3
Interns	8	8



California Poppies

# 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.

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 staff 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.

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



## Sound Financial and Resource Management

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

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

<b>Strategy 1:</b>	Achieve and maintain recycled water client satisfaction.
<b>Strategy 2:</b>	Increase control over source water quality.
<b>Strategy 3:</b>	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.

- |                    |  |
|--------------------|--|
| <b>Strategy 1:</b> | Build community trust.   |
| <b>Strategy 2:</b> | Ensure recycled water client and customer agency satisfaction.     |
| <b>Strategy 3:</b> | Support the Board in maintaining the strategic business plan.      |
| <b>Strategy 4:</b> | Promote outreach and education programs.                           |
| <b>Strategy 5:</b> | 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.

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

Within the Operating Program Expenses section, West Basin has identified FY 2018-19 accomplishments and FY 2019-20 strategies identified above.

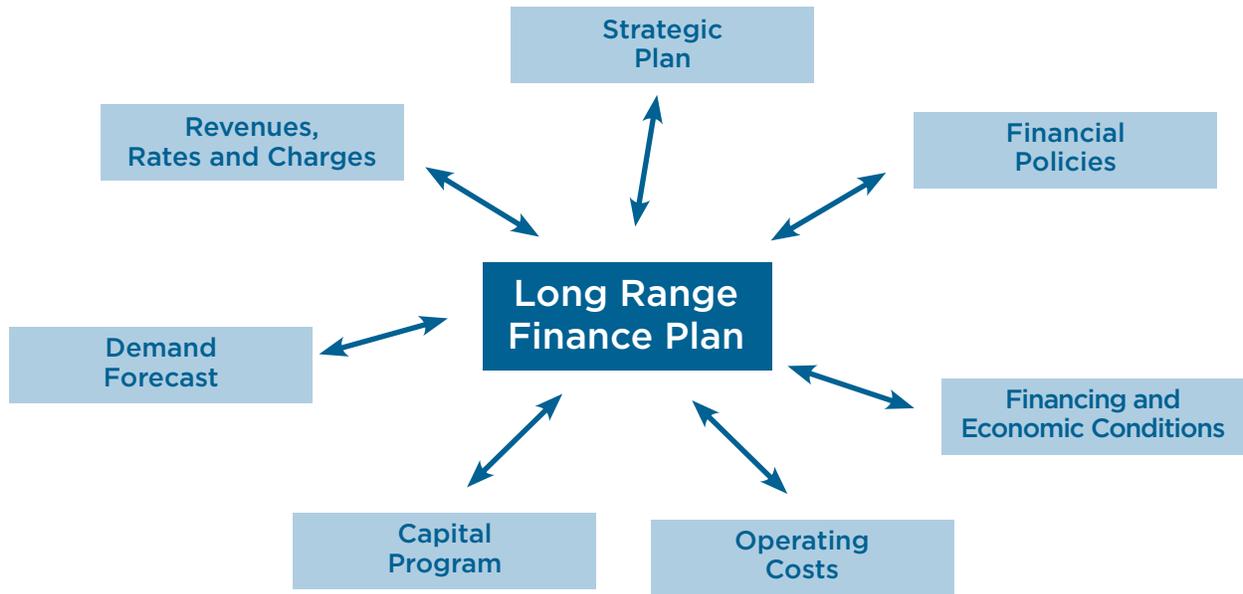


# Long-Range Financial Plan

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 financial model, developing financial policies, setting a target debt coverage, and managing its long term unfunded liabilities.

As we reviewed the financial forecast, staff identified the need to develop a comprehensive long range financial plan (LRFP). In February 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, considering a full-scale ocean-water desalination facility, and expanding its conservation 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 budgets were based on achieving at least the 1.75 target, however, certain revenues are expected to decline and an increase in planned capital projects is anticipated putting pressure on achieving our targets. In order to address these issues, staff has been working with its municipal advisor to review the target debt coverage and other financial metrics, the rating agency's approach to credit, the current assessment of West Basin's credit ratings, and discuss the impact of higher ratings to reduce long-term financing costs.

Another component of the LRFP is to develop the next Capital Improvement Program (CIP) Master Plan. The CIP Master Plan will 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 CIP Master Plan will evaluate recycled water service opportunities, identify potential required capital facilities to meet West Basin's objectives, and develop implementation schedules, costs, and priorities. The CIP Master Plan will be used to identify and prioritize the construction of new Capital facilities. With West Basin's aging infrastructure, the CIP Master Plan will look at the current condition of exiting equipment and systems to develop 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 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 the luxury of time to determine other options or avenues to accomplish its strategic goals and do so in a very 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 mindful that the decisions made today could have a long-term impact. West Basin wants to be responsive to predictable rate increases and program activity that provides value to its customers. In addition, West Basin 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. In addition, operating expenses, including recycled water operations reflect the changes in expenses based on the volume, cost per acre-foot, including both variable and fixed costs, and timing of new sales. More detailed information regarding capital improvement projects and their related cost and benefits is reflected in the Supplemental Information section.



## West Basin Municipal Water District Projected Operating Results

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
<b>REVENUES</b>						
Water Sales	155,308,064	156,199,366	159,866,969	167,777,326	172,585,111	178,016,031
Fixed Service Charge	3,919,411	5,648,329	5,817,779	5,992,313	6,172,082	6,357,245
Capacity Charge	1,758,096	1,757,952	1,757,952	1,757,952	1,757,952	1,757,952
Recycled Water Project Revenues						
Recycled Water Sales	40,132,918	43,425,219	48,463,965	51,245,521	53,304,684	55,540,280
Fixed Revenue Charges	7,437,196	8,548,260	9,748,260	9,748,260	8,436,210	7,546,210
MWD LRP Rebate	6,898,125	112,500	721,100	721,100	721,100	721,100
Standby Charges	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Other Revenues						
Desalted Water Sales	1,331,700	1,362,946	1,402,994	1,443,026	1,483,073	1,524,323
Interest Earnings/Grants/ Other	1,700,000	2,100,000	2,300,000	2,300,000	2,200,000	2,100,000
Conservation Incentives	1,295,000	1,295,000	1,295,000	1,295,000	1,295,000	1,295,000
<b>Total Revenues</b>	<b>\$229,780,510</b>	<b>\$230,449,572</b>	<b>\$241,374,020</b>	<b>\$252,280,498</b>	<b>\$257,955,213</b>	<b>\$264,858,141</b>
<b>EXPENSES</b>						
Water Purchases/ RTS from MWD	129,003,224	130,844,466	131,656,968	135,193,626	138,952,411	142,823,960
Capacity Charge	1,757,870	1,781,120	1,781,120	1,781,120	1,781,120	1,781,120
Program Expenses						
Recycled Operations	41,238,603	41,573,611	45,148,619	46,544,278	47,940,606	49,378,825
Desalter Operations	1,493,475	1,538,279	1,584,428	1,631,960	1,680,919	1,731,347
Technical Planning	5,846,582	3,350,000	3,450,500	3,554,015	3,660,635	3,770,455
Water Policy & Resource Develp	1,634,517	1,668,103	1,718,146	1,769,690	1,822,781	1,877,464
Public Information	3,864,298	3,980,227	4,099,634	4,222,623	4,349,301	4,479,780
Conservation	3,704,412	3,797,022	3,891,948	3,989,247	4,088,978	4,191,202
Purveyor Water Quality Monitoring	47,005	48,180	49,385	50,619	51,885	53,182
Designated Funds/Other						
Swap Payments	250,000	178,000	110,000	90,000	74,000	44,000
2011A	5,219,350	5,235,833	5,234,958	4,780,083	3,350,229	268,667
2011B	2,993,250	2,993,250	2,993,250	3,392,000	4,797,063	10,497,125
2012A	4,390,688	4,388,458	4,389,396	4,389,042	4,391,292	1,948,583
2016A	10,256,650	10,231,667	10,171,750	10,421,104	10,440,125	10,440,667
State loan	-	340,551	681,101	681,101	681,101	681,101
Proposed Debt	-	-	3,200,598	6,401,196	6,401,196	6,401,196
Subordinate Debt						
2018 Commercial Paper	488,000	606,000	665,000	473,250	502,750	901,000
<b>Total Expenses</b>	<b>\$229,780,510</b>	<b>\$230,449,572</b>	<b>\$241,374,020</b>	<b>\$252,280,498</b>	<b>\$257,955,212</b>	<b>\$264,858,141</b>
<b>NET REVENUES</b>	<b>\$ -</b>					
<b>Coverage - All Debt</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>1.76</b>

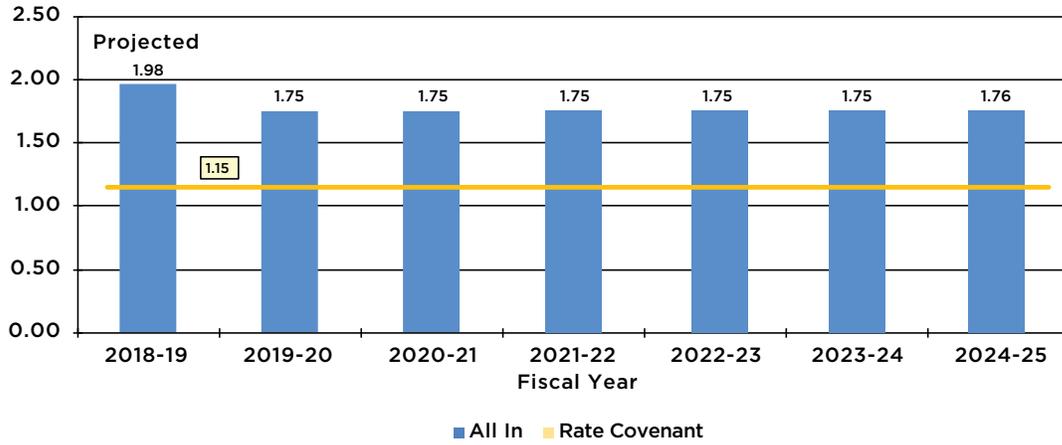


## West Basin Municipal Water District Assumptions

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
<b>COST (SALES PRICE) OF WATER (\$/af)</b>						
MWD Imported - Tier 1 (Jul)	1,050	1,078	1,110	1,144	1,178	1,213
MWD Imported - Tier 2 (Jul)	1,136	1,165	1,197	1,231	1,265	1,300
MWD Imported - Tier 1 (Jan)	1,078	1,110	1,144	1,178	1,213	1,250
MWD Imported - Tier 2 (Jan)	1,165	1,197	1,231	1,265	1,300	1,337
MWD RTS Commodity Charge (Jul)	98	90	92	94	94	94
MWD RTS Commodity Charge (Jan)	90	92	94	94	94	94
Disinfected Tertiary-Within WB	1,166	1,216	1,285	1,360	1,405	1,456
Disinfected Tertiary-LADWP	1,208	1,258	1,327	1,402	1,447	1,498
Disinfected Tertiary-Torrance	1,208	1,258	1,327	1,402	1,447	1,498
Reliability Service Charge	237	237	270	311	321	336
MWD LRP Rebate	250	250	250	250	250	250
MWD LRP Rebate - New Rate	-	-	340	340	340	340
Desalted Water (Jul)	1,148	1,168	1,202	1,238	1,272	1,307
Desalted Water (Jan)	1,168	1,202	1,238	1,272	1,307	1,344
Capacity Charge - MWD (Jul)	8,600	8,800	8,800	8,800	8,800	8,800
Capacity Charge - MWD (Jan)	8,800	8,800	8,800	8,800	8,800	8,800
Capacity Charge - Cust (Jul)	7,200	6,976	6,976	6,976	6,976	6,976
Capacity Charge - Cust (Jan)	6,976	6,976	6,976	6,976	6,976	6,976
<b>SALES VOLUME (afy)</b>						
Non-Interruptible (Retail)	106,000	106,000	103,500	103,400	103,400	103,400
Seawater Barrier (West Coast)	3,100	3,100	3,100	3,100	3,100	3,100
Seawater Barrier (Dominguez Gap)	3,000	1,500	1,500	1,500	1,500	1,500
Recycled Water Total	36,790	37,790	40,287	40,387	40,387	40,387
Disinfected Tertiary - Within WB	8,200	8,600	8,700	8,800	8,800	8,800
Disinfected Tertiary - LADWP	1,050	1,050	1,050	1,050	1,050	1,050
Disinfected Tertiary - Torrance	5,915	5,915	5,915	5,915	5,915	5,915
Barrier	12,400	12,400	12,400	12,400	12,400	12,400
Single Pass RO	1,800	1,800	1,800	1,800	1,800	1,800
Single Pass RO 2	4,050	4,650	5,350	5,350	5,350	5,350
Double Pass RO	2,400	2,400	2,400	2,400	2,400	2,400
T-MBR	-	-	2,240	2,240	2,240	2,240
Nitrified	975	975	432	432	432	432
Desalted Water	1,150	1,150	1,150	1,150	1,150	1,150
Capacity Charge - MWD (Jul)	201.7	202.4	202.4	202.4	202.4	202.4
Capacity Charge - MWD (Jan)	202.4	202.4	202.4	202.4	202.4	202.4
Capacity Charge - Cust (Jul)	244.2	252.0	252.0	252.0	252.0	252.0
Capacity Charge - Cust (Jan)	252.0	252.0	252.0	252.0	252.0	252.0
<b>FIXED PAYMENTS</b>						
Marathon	2,136,000	2,136,000	2,136,000	2,136,000	2,136,000	1,246,000
Marathon (MBR)			1,200,000	1,200,000	1,200,000	1,200,000
TRWRF NH3	(117,600)	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
TRWRF (Phase 2)	1,574,460	1,574,460	1,574,460	1,574,460	262,410	262,410
Chevron Nitrification	1,009,800	1,009,800	1,009,800	1,009,800	1,009,800	1,009,800
Chevron Boiler Feed	2,628,000	2,628,000	2,628,000	2,628,000	2,628,000	2,628,000
LADWP	206,536	-	-	-	-	-
<b>TOTAL FIXED PAYMENTS</b>	<b>\$7,437,196</b>	<b>\$8,548,260</b>	<b>\$9,748,260</b>	<b>\$9,748,260</b>	<b>\$8,436,210</b>	<b>\$7,546,210</b>

## Debt Coverage Projected, Current Budget and 5-year Projection

FY 2018-19 - FY 2024-25



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 in order to maintain its excellent credit ratings of Aa2 and AA- with Moody’s and S&P rating agencies, respectively.

## Historical Debt Coverage Comparison with Other Water Agencies

FY 2013-14-FY 2017-18

Name of Agency	2013-14	2014-15	2015-16	2016-17	2017-18
Central Basin MWD	1.37	1.56	1.20	0.77	1.00
Calleguas MWD	2.02	1.64	1.42	1.93	2.12
Eastern MWD	2.10	2.30	2.80	2.50	2.70
Las Virgenes MWD	2.71	2.47	2.61	2.90	2.69
Inland Empire Utilities Agency	2.09	2.75	3.42	3.67	4.35
San Diego County Water Authority	1.50	1.50	1.50	1.50	1.50
<b>West Basin MWD</b>	<b>1.73</b>	<b>1.45</b>	<b>1.84</b>	<b>2.27</b>	<b>2.31</b>
Western MWD	4.34	2.69	3.40	4.38	5.64



## 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.

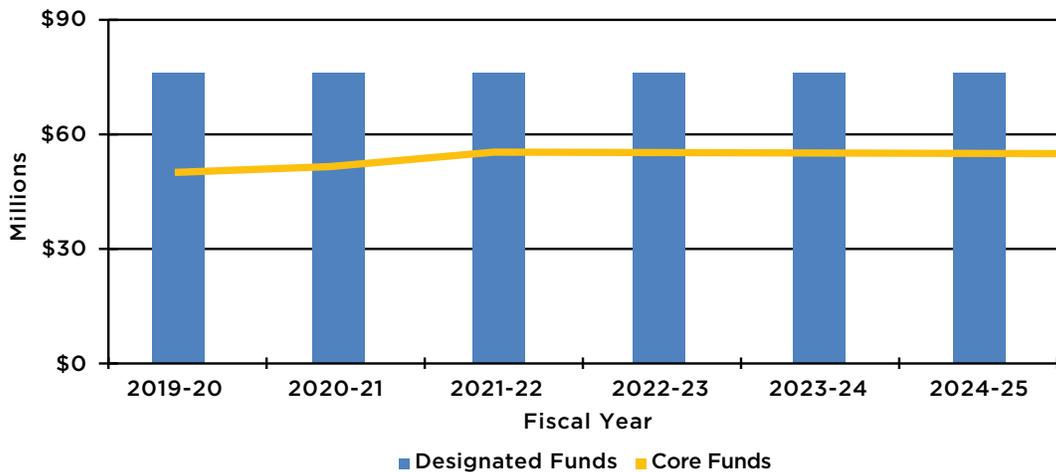
Designated Funds are a strong indicator of an agency’s financial health. West Basin’s Designated Funds Policy is sometimes referred to as a reserve policy and was designed to ensure West Basin has adequate funds to protect its financial health and the furtherance of West Basin’s mission. The Designated Funds Policy is reviewed annually; however, it was substantially changed in FY 2013-14 in conjunction with the Long-Range Financial Plan by combining certain funds, revising target levels to be based on a calculation, and adding a new fund for Standby Charge Defeasance.

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 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 2019-20 through FY 2024-25.

### Budgeted Designated Funds Per Fiscal Year

FY 2019-20-FY 2024-25





Below are the projected revenues and expenses for FY 2018-19, as well as the budgeted revenues and expenses for FY's 2019-20 through FY 2024-25.

## Designated Funds Cash Flow (In 000's)

Fiscal Year	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Description	Projected	Budget	Budget	Budget	Budget	Budget	Budget
Designated Funds (Beg Bal)	\$76,342	\$76,343	\$76,343	\$76,343	\$76,343	\$76,343	\$76,343
Imported Water Revenue	156,717	160,985	163,606	167,443	175,527	180,515	186,131
Recycled Water Revenue	60,139	64,468	62,086	68,933	71,715	72,462	73,908
Other Revenues	2,063	4,327	4,758	4,998	5,038	4,978	4,919
<b>Total Revenues</b>	<b>218,919</b>	<b>229,780</b>	<b>230,450</b>	<b>241,374</b>	<b>252,280</b>	<b>257,955</b>	<b>264,958</b>
Water Purchases	129,969	130,761	132,626	133,438	136,975	140,733	144,605
Program Expenses	45,322	57,828	55,955	59,943	61,762	63,595	65,483
Net Debt Service	23,332	23,598	23,974	27,446	30,628	30,638	31,182
PAYGO	20,295	17,593	17,895	20,547	22,915	22,989	23,588
<b>Total Expenses</b>	<b>218,918</b>	<b>229,780</b>	<b>230,450</b>	<b>241,374</b>	<b>252,280</b>	<b>257,955</b>	<b>264,858</b>
<b>Designated Funds (End Bal)</b>	<b>\$76,343</b>	<b>\$76,343</b>	<b>\$76,343</b>	<b>\$76,343</b>	<b>\$76,343</b>	<b>\$76,343</b>	<b>\$76,443</b>



## 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 West Basin Board also considered and re-approved in February 2019 its Investment Policy with alterations made to reflect the name change of an association referred to in the policy as well as a correction and revision to language relating to a section within the California Government Code.

Listed below, are key financial policies that the Board and staff must comply with when conducting business of the district.

### 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. (AA- Standard & Poor's and Aa2 - Moody's)
- 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 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 CFO 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 Chief Financial Officer 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 Chief Financial Officer.
- The District must comply with the specific requirements of each Continuing Disclosure Certificate.
- The Chief Financial Officer 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.

The following table is a sampling of some of the key performance metrics that reflect the progress made towards strategic goals.

Metric	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Description	Actual	Target	Projected	Target
On time submission of annual bond disclosure	100%	100%	100%	100%
Investment Benchmark - meet or exceed BAML 0-3 Yr US Treasury Index	Exceeded	Meet	On track to exceed	Meet
Maintain AA credit rating from Moody's and Standard & Poor's	Aa2/AA-	Aa2/AA-	Aa2/AA-	Aa2/AA-
Achieve internal all-in Debt Coverage target of 1.75	2.31	1.86	1.98	1.75
Have 100% submittal of Performance evaluations	100	100	100	100
Water Exploration School tours - number of students	2,629	3,250	1,106	3,600
Splash Science Presentation Participants	1,772	1,500	2,203	2,000
Traveling Art Lab - art lesson program	506	1,000	1,237	1,000
Art Contest student submissions	534	500	526	500
Distribution of Rain Barrels	1,800	2,000	2,000	2,000
Water-Use Assessment Surveys	40	50	30	30
Secure 25% Outside Funding for Conservation Programs	25%	25%	25%	25%
Implement Grass Replacement Classes	5	5	5	5
Improve Recycled Water O&M Cost per Unit	\$940/AF	\$1,047/AF	\$1,177/ AF	\$1,121/AF





SECTION 4  
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
- A long-term financial plan to guide West Basin’s allocation of resources

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.

Key Budget Drivers	Addressed
Meet targeted debt coverage ratio	✓
Fund PAYGO projects including Refurbishment & Replacement projects	✓
Stabilization of Revenues	✓
Meet Strategic Plan goals	✓
Negotiate future recycled water agreements	✓



West Basin is not required by law to adopt a budget and therefore does not appropriate funds. However, as a good business practice, West Basin does prepare, adopt, monitor, and report budgeted information.

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 a special district of the State of California and operates as a single enterprise fund. 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 funds 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.



## Timeline for Fiscal Year 2019-20

Date	Key Activities
January 4, 2019	Submit Justifications for Interns/Limited Term/New Positions
January 7, 2019	Discuss Financial Metrics/ Key Assumptions
January 8, 2019	Sales Projections (AF) due for both Potable & Recycled Water
January 9, 2019	Submit Staff Labor Allocation
January 17, 2019	Submit operation program and capital budgets
January 24, 2019	Submit FY18-19 year end projections for all operation programs
February 12, 2019	Discuss operation/capital budgets
February 26, 2019	Prepare Board Workshop Presentation
March 13, 2019	Submit Board Presentation Workshop
March 27, 2019	Board Workshop
April 3, 2019	Customer Agency Workshop
April 4, 2019	Submit program text
April 11, 2019	Finance Committee - Draft rates/charges & standby charge
April 22, 2019	Board Meeting - Adopt rates/charges & standby charge
June 13, 2019	Finance Committee - Present draft budget document
June 24, 2019	Board Meeting - Adopt budget



## Budget Process



Department managers submit justifications for any new positions and submit staff labor allocations. Water sales projections are discussed by the department managers to aid in the development of water sales assumptions for both imported and recycled water sales. Program Managers review their current budget versus actual reports. Managers will then submit their proposed programmatic operating and CIP budgets for FY 2019-20.



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. Staff will recommend the necessary water rates and charges to meet the budget objectives for FY 2019-20 and five years beyond. Program managers meet with budget staff and General Manager to discuss operating program and capital budgets along with explanations for major variances from the prior year budget and/or current year spending levels.



General Manager submits a proposed budget to the Board of Directors in a workshop format. The presentation also discusses the sales assumptions, labor needs, debt service, revenue requirements and debt coverage. At this time, Board members may give direction or request changes to the proposed budget.



Subsequent to the Board workshop, West Basin conducts a customer agency workshop to discuss its goals, the proposed budget and water rates. Any changes requested by the Board of Directors and/or the General Manager are incorporated into the proposed budget, which is then presented to the Board at the Finance Committee. The Board of Directors adopts the annual standby charge, and the water rates and charges. Program managers and budget staff submit budget text to explain and support program costs, water rates and charges, and other budgetary assumptions.



Budget Staff presents the draft budget document to the Board of Directors at the Finance Committee with recommendation to adopt the proposed operating budget. 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 prior year's budget is adopted. Each month 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 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 reports describe why, how much and to which program budget require 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.







SECTION 5  
SOURCE  
OF  
REVENUE





## Source of Revenue

West Basin's revenue is derived from water sales and charges, fixed revenues, conservation income and interest income. The two primary sources are imported and recycled water sold to its customer agencies. Imported sales represent 68% and recycling sales represent 20% of all revenue sources. Total budgeted revenues for Fiscal Year (FY) 2019-20 are \$229,780,510.

Summarized below are the actual and projected revenues for the past three years along with comparative budgets (FY 2018-19 & FY 2019-20) to see the trend of various revenue sources.

Revenues	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Description	Actual	Actual	Projected	Budget	Budget
Imported Water Sales	\$142,176,176	\$152,665,010	\$152,596,700	\$138,941,320	\$155,308,064
Water/Fixed Service Charge	630,618	692,646	2,284,411	2,284,411	3,919,411
Capacity Charge	2,235,084	1,935,822	1,836,150	1,836,150	1,758,096
Recycled Water / LRP	45,401,684	49,444,484	45,639,000	53,502,522	47,031,043
Fixed Revenue Charge	7,075,064	5,908,694	4,749,700	7,509,196	7,437,196
Desalter Water	280,659	75,665	769,800	1,121,175	1,331,700
General Fund Interest	602,085	1,091,376	939,500	939,500	1,677,200
Standby Charge	9,613,891	10,038,300	9,750,000	9,750,000	10,000,000
Conservation Income	393,100	324,258	292,900	1,506,130	1,295,000
Other Income	5,777,390	264,671	60,500	60,500	22,800
<b>Total Revenues</b>	<b>\$214,185,751</b>	<b>\$222,440,926</b>	<b>\$218,918,661</b>	<b>\$217,450,904</b>	<b>\$229,780,510</b>



## Revenue Highlights

West Basin is a wholesaler who purchases imported water from Metropolitan Water District of Southern California (MWD) 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 of treatment facilities and distribution pipelines. The intended users are for industrial, commercial, and landscape irrigation sites. Today more than 400 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 8.0% of its revenues from fixed capital revenue charges and the standby charge. The fixed capital revenue charges are determined by agreements, and the standby charge is approved by resolution. On April 22, 2019 through Resolution 04-19-1098, the annual standby charge was adopted and will generate approximately \$10 million.

In addition, West Basin annually establishes rates and charges through a resolution approved by the Board. Resolution 04-19-1099 was adopted at its April 22, 2019 meeting and includes rates for the following services:

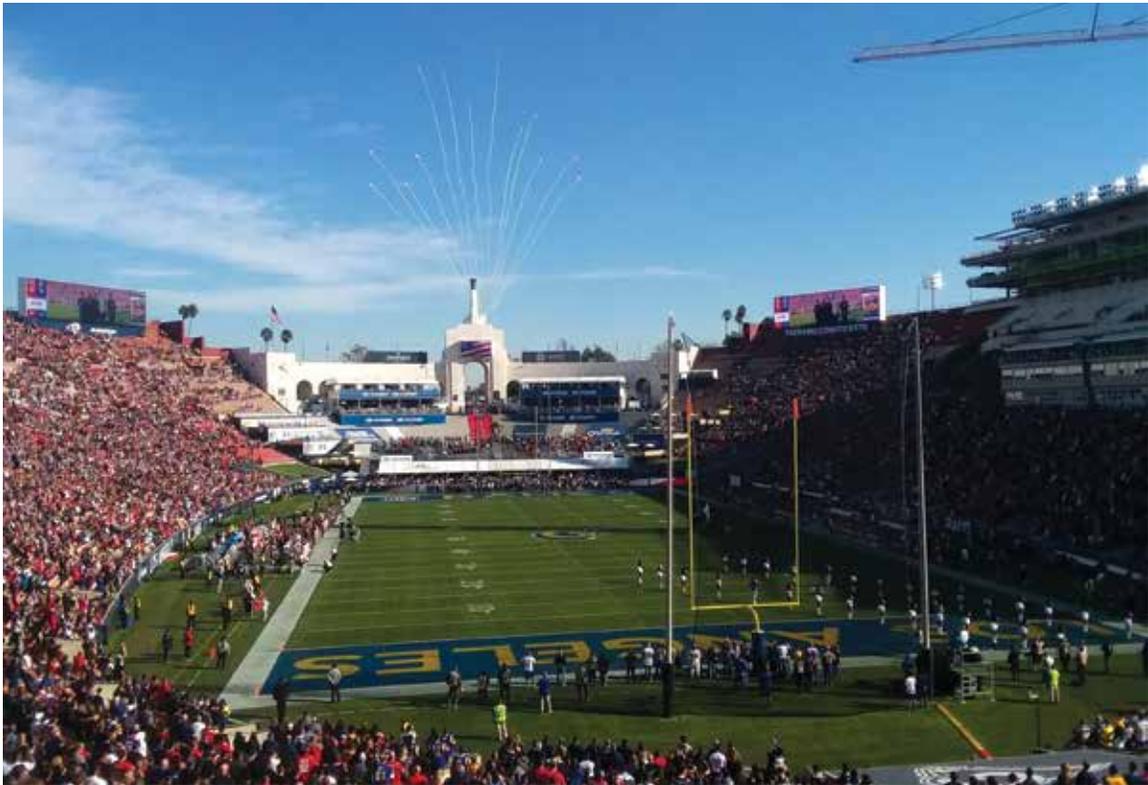
- Two price tiers for non-interruptible service;
- Capacity Charge;
- Fixed Service Charge;
- Recycled Water rates for each class of service; and
- Desalted Water rate.

Although Resolution 04-19-1099 reflects imported water rates for two tiers, Tier 2 pricing is not anticipated for West Basin customers.

During California's most recent drought, West Basin experienced significant reductions in imported water sales, as customer agencies enacted conservation measures to meet state-mandated targets. Imported water sales have rebounded; however, it is likely that it will not return to pre-drought levels in the near future. 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 source of water usage (imported, groundwater, recycled), and a review of potential new recycled water sales from completed capital projects when it replaces imported water. Retail imported water sales were 106,601 AF in FY 2017-18 and are projected to remain relatively flat at 107,000 AF in 2018-19. When developing the sales estimates for the next fiscal year, West Basin typically budgets slightly more conservatively than actual results to allow for changes in customer demands and hydrology, and therefore has budgeted retail imported sales to 106,000 AF for FY 2019-20.

Imported water sales to both of the barriers (West Coast and Dominguez Gap) exceeded budgeted sales in FY 2017-18 and are expected to exceed the 1,500 AF budgeted in FY 2018-19 as well, and as a result West Basin obtained input from the customer for FY 2019-20. West Basin strives to deliver as much recycled water as possible for injection into the West Coast Barrier and has invested both time and money to achieve this goal; but sales are ultimately dependent on both the operations by the County of Los Angeles and management by the Water Replenishment District. As such, West Basin staff reviewed historical sales over the past five years and found the average to be less than 16,000 AF therefore has budgeted a total of 15,500 AF in FY 2019-20 into the Barrier (12,400 AF from recycled water), and has budgeted a total of 6,100 AF of imported water deliveries, 3,100 AF for the West Coast Barrier and 3,000 AF for Dominguez Gap.

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.



Los Angeles Memorial Coliseum



# Water Rates and Charges

## Imported Water Revenues

West Basin's imported water rate is comprised of three components:

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

In FY 2018-19, West Basin added a fourth component, the Fixed Service Charge. (See page 5-7 for further information regarding the Fixed Service Charge).

The Board approved its one-year rate increase of \$20/AF and the Fixed Service Charge for FY 2019-20 at the Board meeting on April 22, 2019 per resolution 04-19-1099. Based on AF assumptions and the rates for the fiscal year described below, West Basin is budgeting \$155,778,249 in imported water sales and \$3,919,411 in fixed service charges.

## MWD Commodity Rate

MWD's commodity rate is passed through by West Basin to its customer agencies and rate increases become effective on January 1 of each year. On April 10, 2018 MWD's Board of Directors voted to increase their imported commodity rate for Calendar Year (CY) 2019 and 2020 by approximately 3.4% and 3.2%, respectively. West Basin will pass through the MWD Tier 1 commodity rate at \$1,050/AF from July-December 2019 and \$1,078/AF from January-June 2020.

## Readiness-to-Serve Charge

MWD's Board of Directors also approved in April 2018 an overall RTS charge collection of \$136 million in CY 2020. The RTS is collected from its 26 customer agencies on a monthly basis with rate changes effective January 1 of each FY. The amount collected is allocated to each of its customers based on each agencies 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's allocated portion in FY 2019-20 decreased by approximately \$167,000.

The RTS component of West Basin's imported water rate was determined by dividing West Basin's share of MWD's RTS collection of \$9,791,600 by the budgeted imported water sales (not including the imported water sales to WRD for injection into the West Coast Barrier), 109,000 AF, for a rate of \$90/AF, effective January 1, 2020. This represents a decrease of \$8/AF in West Basin's RTS of \$98/AF which is effective until December 31, 2019.

## Reliability Service Charge

When determining the RSC, West Basin considers both the current year and the five-year forecast in achieving the minimum target of 1.75 on the all-in debt coverage. This process helps in avoiding large spikes in the RSC from year to year but may also provide an all-in debt coverage in any one year to be higher than the minimum. For FY 2019-20, the all-in debt coverage is budgeted at 1.75 and although the RSC will not increase, the phase-in of the Fixed Service Charge translates to a \$15/AF overall rate increase. The continued commitment to this target is in response to prior reviews with credit rating agencies which compared the financial metrics of West Basin to its peers.

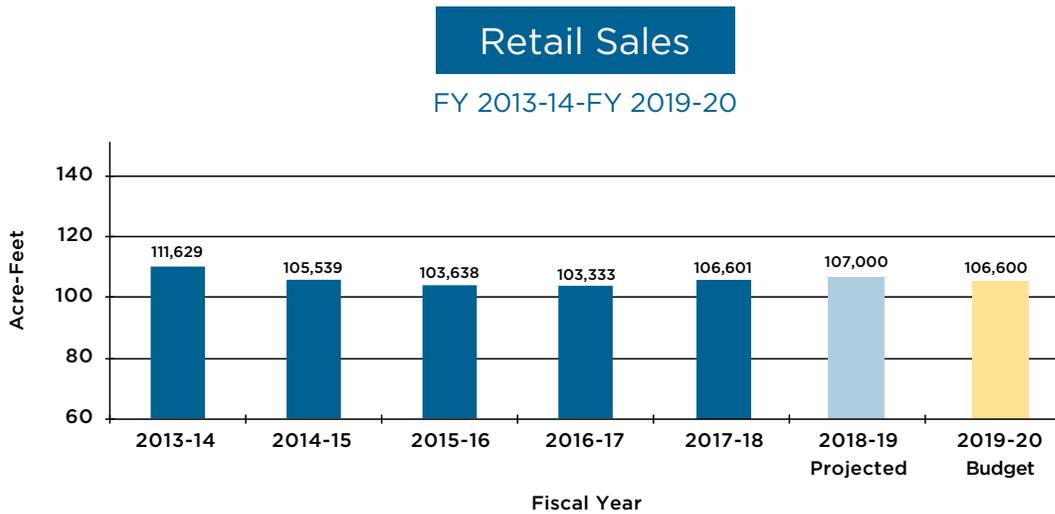
Rates Effective July 1, 2019 to December 31, 2019				
	MWD Commodity	MWD RTS	Reliability Svc	TOTAL
Non-Interruptible Retail & Barrier (Tier 1)	\$1,050/AF	\$98/AF	\$237/AF	<b>\$1,385/AF</b>
Non-Interruptible Retail & Barrier (Tier2)	\$1,136/AF	\$98/AF	\$237/AF	<b>\$1,471/AF</b>
Rates Effective January 1, 2020				
	MWD Commodity	MWD RTS	Reliability Svc	TOTAL
Non-Interruptible Retail & Barrier (Tier 1)	\$1,078/AF	\$90/AF	\$237/AF	<b>\$1,405/AF</b>
Non-Interruptible Retail & Barrier (Tier 2)	\$1,165/AF	\$90/AF	\$237/AF	<b>\$1,492/AF</b>





### Imported Retail Sales

Imported retail water sales vary based on hydrologic conditions, water demand and on the available water supply. However, even with conditions that brought snowpack levels well above annual averages, consumption has remained relatively flat due to changes in consumer behavior. As the chart below shows, consumer usage of imported water since the end of the most recent drought in FY 2016-17 has not returned to pre-drought levels. Projected sales for the end of FY 2018-19 are expected to be flat at 107,000 AF, less than 400 AF change from the previous fiscal year actual sales of 106,601 AF. As a result, West Basin is budgeting for retail sales of 106,000 AF in FY 2019-20, which represents a 6% increase from its FY 2018-19 budget of 100,000 AF.



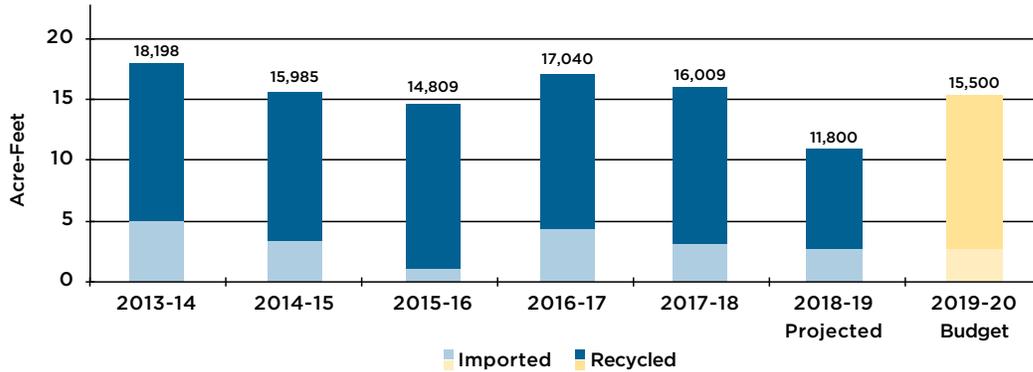
### Imported Barrier Sales

#### *West Coast Barrier*

Historically, the Barrier is injected with a mix of recycled and imported water, with total (imported and recycled) water delivered in FY 2017-18 of 16,009 AF. West Basin has capacity to deliver 17,000 AF of recycled water and is ready to do so, however, historically the amount of recycled water injected into the Barrier has been less than 13,000 AF; as such, West Basin has prudently budgeted sales of recycled water to the Barrier at 12,400 AF for FY 2019-20. Although West Basin’s goal is to deliver 100% recycled water to the Barrier, history has shown actual total sales to the Barrier have averaged 15,500 AF of which 80% or 12,400 AF is derived from recycled water. The remaining 3,100 AF (15,500 less 12,400) has been budgeted as imported barrier water to meet expected demand for the Barrier in FY 2019-20. Imported sales to the Barrier are projected for FY 2018-19 to remain near FY 2017-18 levels of 2,962 AF. The graph below shows the variability in demand for imported and recycled water over the years for the West Coast Barrier.

# West Coast Barrier

FY 2013-14-FY 2019-20



### *Dominguez Gap Barrier*

Budgeted imported water demand to the Dominguez Gap Barrier is expected to increase from 500 AF in FY 2018-19 to 3,000 AF for FY 2019-20; however, this represents a decrease from actual sales of 4,778 AF in FY 2017-18. The City of Los Angeles completed their local recycled water project and has supplied recycled water in FY 2018-19 to the Dominguez Gap Barrier, but due to operational issues has not been able to meet its total demand with West Basin supplying the shortfall with imported water. West Basin has budgeted 3,000 AF in FY 2019-20 to meet expected demands for the Dominguez Gap Barrier.

### Water Service Charge

Historically, West Basin collected a Water Service Charge as a monthly fixed amount based on the cubic feet per second (cfs) of each customer’s meter capacity. This charge was based on the number and size of potable water meters each customer agency has available. On June 30, 2018 the Water Service Charge was eliminated with the introduction of the Fixed Service Charge.

### Fixed Service Charge

In FY 2018-19 West Basin introduced a Fixed Service Charge to its imported water customers. This charge was a result of a study performed to explore rate structure alternatives to promote revenue and rate stability. Because West Basin relies on variable water sales for the majority of its imported water revenue, during periods of reduced sales West Basin’s revenues decline significantly. Incorporating the Fixed Service Charge provides a reliable and stable revenue source making West Basin less vulnerable to demand fluctuations and allows for more rate stability for its customers.

The Fixed Service Charge is now in the second year of phase-in expected over a three year period and represents approximately 70% of the total fixed revenue expected to be received from this charge.



The Fixed Service Charge will increase from \$2,284,411 in FY 2018-19 to \$3,919,411 in FY 2019-20, effective July 1, 2019. The Fixed Service Charge is allocated based on each customer’s 3-year historical rolling average of imported water deliveries, and paid monthly by each customer according to the table below.

Customer Agencies	3-Year Ave Deliveries (AF)	Annual Charge	Monthly Charge
California American Water Co.	747	\$ 26,728	\$ 2,227
CWSC - Dominguez	23,328	834,774	69,565
CWSC - Hawthorne	2,450	87,682	7,307
CWSC - Hermosa Redondo	9,467	338,759	28,230
CWSC - Palos Verdes	16,989	607,921	50,660
City of El Segundo	7,301	261,239	21,770
City of Inglewood	6,734	240,974	20,081
City of Lomita	1,446	51,759	4,313
City of Manhattan Beach	4,098	146,655	12,221
Golden State Water	23,578	843,694	70,308
LA County Waterworks No. 29	8,385	300,046	25,004
WRD - Dominguez Gap Barrier	5,007	179,180	14,932
<b>TOTAL</b>	<b>109,531</b>	<b>\$ 3,919,411</b>	<b>\$ 326,618</b>

### 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 more efficient utilization of MWD’s existing infrastructure and defers capacity expansion costs. As this is a 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 244.2 for CY 2019 and 252.0 cfs for CY 2020, 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 which enables West Basin to pass through a lower rate per cfs and establishing a more equitable distribution of MWD’s charge. West Basin multiplies 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. West Basin will decrease its current Capacity Charge Rate from \$7,200/cfs to \$6,976/cfs on January 1, 2020, with anticipated revenues of \$1,758,096 during FY 2019-20.

Effective 1/1/19 to 12/31/19				
Customer Agencies	Calendar Year			3-YEAR PEAK
	2015	2016	2017	
California American Water Co.	2.8	1.3	3.3	3.3
CWSC - Dominguez	46.5	45.9	43.5	46.5
CWSC - Hawthorne	6.5	6.0	6.1	6.5
CWSC - Hermosa Redondo	18.6	17.1	19.1	19.1
CWSC - Palos Verdes	33.9	34.8	38.3	38.3
LA County Waterworks No. 29	16.9	17.7	15.4	17.7
City of El Segundo	20.6	11.4	14.5	20.6
City of Inglewood	11.5	12.0	12.2	12.2
City of Lomita	3.9	3.8	2.7	3.9
City of Manhattan Beach	7.8	8.2	7.3	8.2
Golden State Water Co.	44.3	43.8	32.7	44.3
Water Replenishment District	2.8	14.3	23.7	23.7
			<b>TOTAL</b>	<b>244.2</b>

Effective 1/1/20 to 12/31/20				
Customer Agencies	Calendar Year			3-YEAR PEAK
	2015	2016	2017	
California American Water Co.	1.3	3.3	4.0	4.0
CWSC - Dominguez	45.9	43.5	52.3	52.3
CWSC - Hawthorne	6.0	6.1	6.7	6.7
CWSC - Hermosa Redondo	17.1	19.1	21.0	21.0
CWSC - Palos Verdes	34.8	38.3	39.3	39.3
LA County Waterworks No. 29	17.7	15.4	16.1	17.7
City of El Segundo	11.4	14.5	12.1	14.5
City of Inglewood	12.0	12.2	13.8	13.8
City of Lomita	3.8	2.7	3.2	3.8
City of Manhattan Beach	8.2	7.3	8.5	8.5
Golden State Water Co.	43.8	32.7	42.2	43.8
Water Replenishment District	14.3	23.7	26.8	26.8
			<b>TOTAL</b>	<b>252.0</b>



### Recycled Water Charges and Fixed Revenue Charges

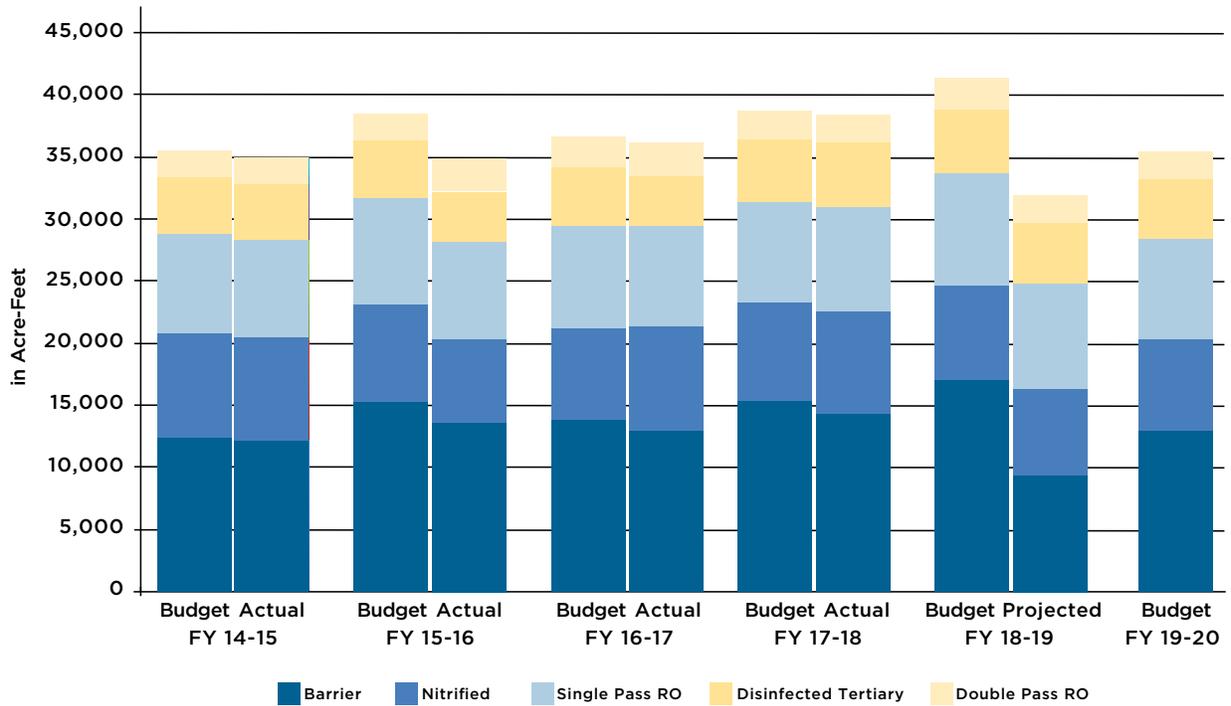
West Basin adopts its recycled water rates to increase according to customer agreements or in line with West Basin’s effective Imported Water Tier 1 rate increase, depending on the type of recycled water. For disinfected tertiary recycled water, West Basin has historically applied a discount of approximately 15-20% on its effective non-interruptible tier 1 rate when setting those rates. This consideration is given in order to continue to attract new customers and expand existing customers to a more reliable source of water at a relatively lower rate. Revenues from recycled water sales consist of commodity charges and incentive payments from MWD’s Local Resources Program (LRP). The LRP provides 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 will expire March 2020, and makes up the majority of the LRP received. A second LRP agreement was entered into in June 2012 and will expire in 2037. Total recycled water revenue including the LRP is \$47,031,043 for FY 2019-20.

Recycled Water Rates (Effective July 1, 2019)				
Volume (AF/Month)	WBMWD Service Area	Outside Service Area	Designer Recycled Water	
0-25	\$1,186/AF	\$1,228/AF	West Coast Barrier Nitrified Low Pressure Boiler Feed High Pressure Boiler Feed	Established by Agreement
25-50	\$1,176/AF	\$1,218/AF		
50-100	\$1,166/AF	\$1,208/AF		
100-200	\$1,156/AF	\$1,198/AF		
200+	\$1,146/AF	\$1,188/AF		

In addition, West Basin anticipates receiving approximately \$7.4 million in fixed capital revenue charges which are collected from users of certain facilities within the recycled water system, including Marathon, Chevron, and Torrance Refining Co. and the Los Angeles Department of Water and Power (LADWP), and are used by West Basin to repay the cost of the treatment and distribution facilities, that were constructed exclusively for delivery of recycled water.

# Recycled Water Historical Sales

FY 2014-15-FY 2019-20



West Basin currently serves recycled water to more than 400 meters with sales projected at 32,250 AF in FY 2018-19. Compared to the FY 2018-19 budget of 41,215 AF, West Basin anticipates a decrease in recycled water sales to 36,790 AF in FY 2019-20, as a result of adjusting budget projections for the production of Barrier water. Expected recycled water sales are comprised of approximately 34% sales to the Barrier, 51% to local refineries, and the remaining 15% will be used in parks, golf courses, schools and street medians.



### Desalter Water Charges

West Basin sells desalinated brackish water produced at the C. Marvin Brewer Desalter to California Water Service Company. Per agreement with the customer, the desalter rate is based on MWD's commodity charges plus West Basin's RTS charge. The current rate for desalted water is \$1,148/AF and will increase 1.7% to \$1,168/AF on January 1, 2020. Deliveries from the Brewer Desalter are budgeted at 1,150 AF for FY 2019-20. Production of desalted water is anticipated for the full 12-months.

Desalted Water Rates			
	FY 2018-19	FY 2019-20	INC (DEC)
MWD (Tier 1)	\$ 1,050	\$ 1,078	\$ 28
RTS	98	90	(8)
<b>TOTAL</b>	<b>\$ 1,148</b>	<b>\$ 1,168</b>	<b>\$ 20</b>

## Other Sources of Revenue

### Standby Charge

This annual Standby Charge is used towards West Basin's debt service obligations for the water recycling facilities. For FY 2019-20, the Standby Charge will be assessed by the same formula as in prior years and the amount assessed per parcel has remained consistent since FY 1992-93. The amount assessed is \$16 per dwelling unit, \$24 or \$120 per parcel depending upon the land use provided by the County of Los Angeles on a given parcel. The table below is an excerpt of the engineer's report that specifies the exact amount of units included in the Standby Charge Program and their weighted benefit calculation. Based on approximately 358,522 benefiting units and previous annual collections, it is estimated that the receipts from the Standby Charge, net of program expenses, are expected to be approximately \$10,000,000. The Board conducted a public hearing on March 27, 2019, 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 04-19-1098) at its April 22, 2019 meeting.

	Parcels =< 1 Acre	Acres >1 Acre	MFR Units	Total Levy
<b>Residential</b>				
SFR, Duplex	141,225	14,991		\$3,749,193
MFR			174,377	2,790,032
Low-use	3	104		1,289
<b>Non-Residential</b>				
Non-residential	12,879	14,936		3,551,056
Low-use	6	0		360
<b>TOTAL</b>	<b>154,113</b>	<b>30,032</b>	<b>174,377</b>	<b>\$10,091,930</b>

### Conservation Income

With the support of a grant from the United States Bureau of Reclamation (Reclamation), West Basin began the process of updating its 2010-2015 Water Use Efficiency Master Plan in 2017. Through the update of the Water Use Efficiency Master Plan, West Basin continues to enhance its Conservation Program offerings across the varying sectors such as residential, large landscape, commercial, industrial and institutional. As a result, West Basin has had greater access to available rebates, state and federal grants, and partnerships with retail water agencies interested in investing in cost-effective programs. For FY 2019-20, West Basin will continue to receive outside funding, and has estimated the total conservation income at \$1,295,000.

### Interest Income

West Basin receives interest income from its general fund. With recent increases in the interest rate environment, and active management of its portfolio, West Basin has assumed a higher return on its portfolio in FY 2019-20 than in recent years. In discussion with its investment manager the General fund interest income is expected to be approximately \$1,677,200. West Basin has adopted an investment policy in accordance with California Government Code 53600 et. seq. and has utilized an investment manager to 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.

### Other Income

West Basin anticipates miscellaneous income to support its efforts for the Purveyor Water Quality Monitoring Program. Overall, West Basin anticipates approximately \$22,800 in FY 2019-20 for other income.





SECTION 6  
USE  
OF  
FUNDS



## Use of Funds

West Basin maintains a single enterprise fund which is divided among four major types of expenses: water purchases (including the Readiness-to-Serve Charge), 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 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Description	Actual	Actual	Projected	Budget	Budget
Imported Water Purchases / RTS	\$116,104,463	\$123,854,127	\$128,156,034	\$114,685,900	\$129,003,224
Capacity Charge	2,175,390	1,866,925	1,813,435	1,813,435	1,757,870
Debt Service	24,863,139	23,531,213	23,331,743	24,085,409	23,597,938
Water Recycling Operations	35,651,178	34,828,243	35,388,667	43,135,898	41,238,603
Desalter Operations	592,014	475,068	1,043,395	1,088,701	1,493,475
Water Policy	1,587,487	1,724,020	1,726,195	1,856,158	1,634,517
Public Information & Education	2,754,077	3,201,324	3,115,351	3,652,265	3,864,298
Conservation	1,413,551	1,532,872	1,241,282	3,088,241	3,704,412
Water Quality Monitoring	9,435	23,631	41,682	34,200	47,005
Technical Planning	-	652,512	2,765,638	3,305,508	5,846,582
Designated Funds	29,035,017	30,750,991	20,295,239	20,705,189	17,592,586
<b>Total Expenditures</b>	<b>\$214,185,751</b>	<b>\$222,440,926</b>	<b>\$218,918,661</b>	<b>\$217,450,904</b>	<b>\$229,780,510</b>

Overall expenditures are budgeted to increase approximately \$12.3 million in FY 2019-20 as compared to FY 2018-19 primarily due to an increase in imported water/RTS purchases and program expenses. Imported water purchases/RTS is increasing significantly (\$14.3M) due to anticipated increases in retail imported water sales. West Basin's second main use of funds is its program expenditures, followed by its Designated Funds. The amount budgeted to be placed into Designated Funds for FY 2019-20 will decrease \$3.1 million as compared to the FY 2018-19. In addition, West Basin plans on investing additional funds to support and upgrade its facilities. See "Capital Improvement Program" in section 8 for further explanation.



# Water Purchases and Charges

## Imported Water Purchase

### Imported Retail

West Basin purchases 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 several years as customer agencies enacted conservation measures to meet state-mandated targets and the public being more efficient minded. Imported water sales have slightly increased during the prior two fiscal years; however, it is unlikely that it will return to pre-drought levels in the near future. West Basin has conservatively budgeted its retail imported sales at 106,000 AF for FY 2019-20.

### Imported Barrier

Through the Water Replenishment District, 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. Actual imported water sales to both Barriers are expected to increase to 6,100 AF in FY 2019-20 from 1,500 AF in FY 2018-19.

## Budgeted Deliveries

	Dominguez Gap		West Coast Barrier	
	FY 18-19	FY 19-20	FY 18-19	FY 19-20
Imported	500	3,000	1,000	3,100

## MWD Non-Interruptible Commodity Rate

As mentioned earlier, West Basin purchases all of its imported water from MWD. On April 10, 2018, the MWD Board approved its biennial budget and water rates. Although the overall average rate increase adopted by MWD was 3.2% for CY 2020, the imported water commodity rate effectively increased 2.7% or \$28 per AF effective January 1, 2020. 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.

Effective Dates	1/1/19	1/1/20
Supply Rate Tier 1	\$209	\$208
Supply Rate Tier 2	\$295	\$295
System Access Rate	\$326	\$346
Water Stewardship Rate	\$69	\$65
Treatment Rate	\$319	\$323
Power Rate	\$127	\$136
<b>Total Tier 1</b>	<b>\$1,050</b>	<b>\$1,078</b>
<b>Total Tier 2</b>	<b>\$1,136</b>	<b>\$1,165</b>

## 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 “Sources of Revenue” section.

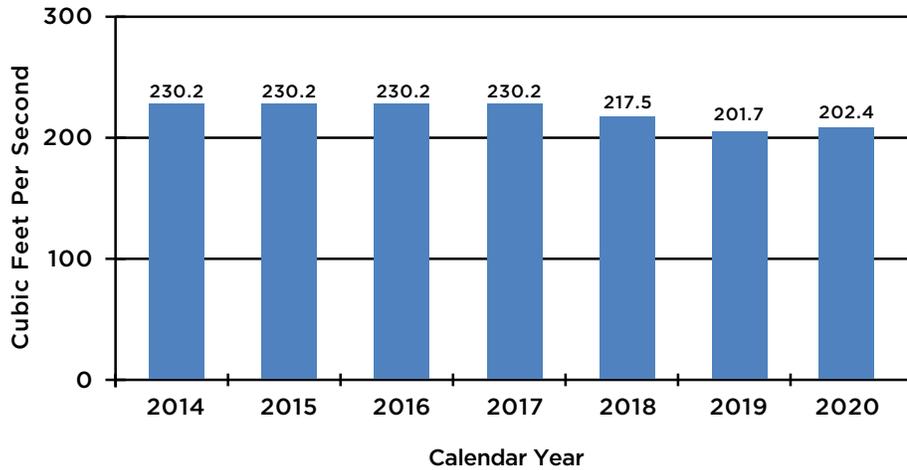
Overall, West Basin estimates water purchases and RTS expenditures to be \$129,003,224.



## Capacity Charge

MWD charges its members agencies a Capacity Charge to recover the cost of providing peak water service capacity within its distribution system and the charge increases as more capital costs are allocated to peak system use. The Capacity Charge is based on individual customer’s cubic foot per second (cfs) peak flow levels during the past three (3) years between May 1 and September 30.

The table below shows West Basin’s cfs peak flow for CY 2014 through CY 2020.



Effective January 1, 2020, MWD will increase its Capacity Charge from \$8,600 per cfs to \$8,800 per cfs. Although MWD is increasing its Capacity Charge and West Basin’s peak flow increased from 201.7 cfs in CY 2019 to 202.4 cfs in CY 2020, West Basin and its customers will pay less in Capacity Charge. The decrease is due to the large drop in the peak flow from CY 2018. The total cost for West Basin in FY 2019-20 is \$1,757,870.

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

## Debt Service

In the early 1990's, 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 delivery of this scarce resource. 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 Agreements or Indentures of Trust 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, evaluate potential new construction funding requirements or refunding opportunities. In addition, West Basin reviews its debt structure to ensure an overall level debt structure is maintained and aligns with the expected service life of the capital assets.

Since the early 1990's, West Basin has received more than \$430 million in construction proceeds through fixed and variable debt issuances using a variety of debt instruments including certificates of participation, revenue bonds, state loans, and commercial paper. West Basin monitors its debt portfolio and takes advantage of favorable market conditions to reduce water rates whenever possible through appropriate refunding opportunities.



As of June 30, 2019, West Basin has \$236 million in long-term debt outstanding with the following outstanding debt obligations:

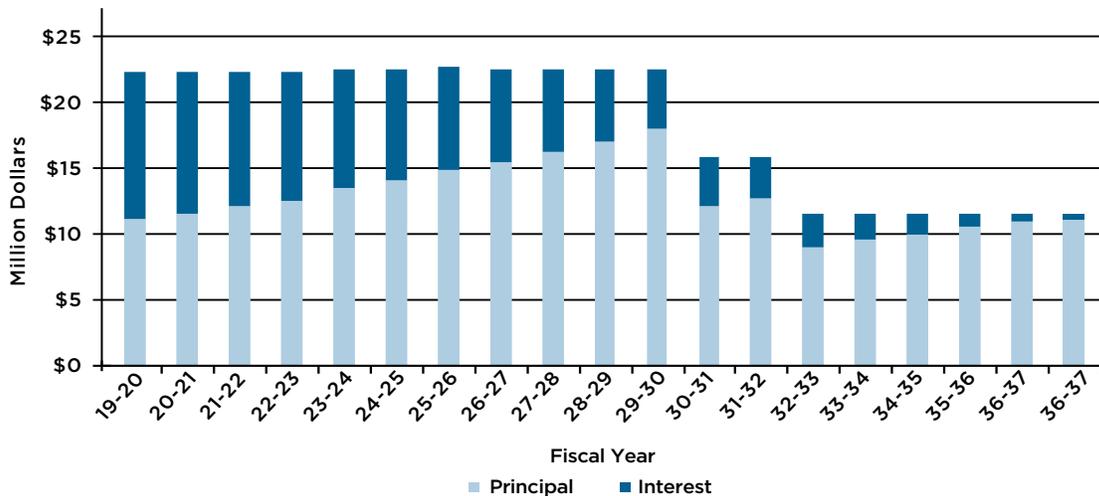
### Current Outstanding Long-Term Debt

Series Name	2011A	2011B	2012A	2016A	2018
<b>Original Amount</b>	\$34,190,000	\$60,275,000	\$50,325,000	\$112,875,000	\$50,000,000
<b>Type of Debt</b>	Refunding Revenue Bonds	Refunding Revenue Bonds	Refunding Revenue Bonds	Refunding Revenue Bonds	Commercial Paper
<b>Purpose</b>	Refunding	Refunding / New Proceeds	Refunding / New Proceeds	Refunding	New Proceeds
<b>Interest Range</b>	2.5% - 5.0%	4.0% - 5.0%	3.0% - 5.0%	2.0% - 5.0%	Variable
<b>Issue Date</b>	2011	2011	2012	2016	2019
<b>Final Maturity</b>	2024	2036	2029	2036	2022
<b>Current Rating</b>	AA- and Aa2	AA- and Aa2	AA- and Aa2	AA- and Aa2	P-1
<b>Annual DS Pmt</b>	\$5.2 Million	\$3.0 Million	\$4.4 Million	\$10.3 Million	\$.5 Million
<b>2019 Principal</b>	\$4.0 Million	None	\$2.5 Million	\$5.0 Million	None
<b>2019 Interest</b>	\$1.0 Million	\$3.0 Million	\$1.9 Million	\$5.3 Million	\$.5 Million
<b>Lien</b>	Senior	Senior	Senior	Senior	Subordinate

For FY 2019-20, debt service is budgeted at \$23,597,938.

#### Debt to Maturity (on cash-basis)

The following graph and table show the scheduled principal and interest cash payments for West Basin’s current debt portfolio. Debt service payments are made semi-annually by February 1st and August 1st each year.





Reverse Osmosis Membranes



## Refunding Revenue Bonds

1-Aug	Principal	Interest	Total
2019	\$11,425,000	\$11,437,000	\$22,862,000
2020	11,835,000	11,024,750	22,859,750
2021	12,325,000	10,523,250	22,848,250
2022	12,825,000	9,959,000	22,784,000
2023	13,670,000	9,330,250	23,000,250
2024	14,330,000	8,646,750	22,976,750
2025	15,210,000	7,961,250	23,171,250
2026	15,730,000	7,200,750	22,930,750
2027	16,585,000	6,434,250	23,019,250
2028	17,420,000	5,605,500	23,025,500
2029	18,290,000	4,734,500	23,024,500
2030	12,355,000	3,820,000	16,175,000
2031	12,970,000	3,202,250	16,172,250
2032	9,230,000	2,553,750	11,783,750
2033	9,700,000	2,092,250	11,792,250
2034	10,190,000	1,607,250	11,797,250
2035	10,705,000	1,097,750	11,802,750
2036	11,250,000	562,500	11,812,500
<b>Total</b>	<b>\$236,045,000</b>	<b>\$107,793,000</b>	<b>\$343,838,000</b>

Over the next three years, West Basin has several anticipated capital projects that will require the issuance of a State Loan, utilization of a State grant, drawing a large 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 certain capital projects that qualify 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. 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. Using conservative assumptions, West Basin plans to obtain \$100 million in construction proceeds in the next five years which results in annual level debt service payment of approximately \$6.4 million. Both long-term debt annual payments have been included in the Projected Operating results beginning in FY 2020-21. The impact of these capital expenditures and resulting annual debt payments have been incorporated into West Basin’s targeted all-in debt coverage of 1.75.



The following table shows the ratio for the last 10-years of the total capital assets compared to debt outstanding. In due course, West Basin has been able to leverage less due to its investment into its capital assets using its net revenues and its commitment to paying its annual debt service.

Fiscal Year Ended June 30	Total Debt			Capital Assets			Total Debt/ Capital Assets
	Certificates of Participation & Revenue Bonds	State Loan	Total LT Debt	Capitalized Assets	Construction-in-Progress	Total Capital Assets	
2009	\$293,400	\$2,036	\$295,436	\$483,019	\$29,362	\$512,381	0.58
2010	294,395	1,743	296,138	496,722	39,395	536,117	0.55
2011	300,050	1,440	301,490	507,066	59,081	566,147	0.53
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	610,271	109,785	720,056	0.39

Source: Fiscal Year June 30, 2018 CAFR

### Swap Transactions

West Basin currently has two swaps transactions, both with the same counterparty, with a total notional amount of \$16,075,000. Based on GASB 53, these swaps are currently deemed an investment derivative. The first 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.

In April 2005, West Basin entered into a forward interest rate swap that became effective August 2007. This second swap required West Basin to pay a fixed rate of 3.515% and receives 65% of the British Bankers Association – London Interbank Offered Rate (BBA-LIBOR) with a final termination date of August 2021.



### 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 or Indentures of Trust 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 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Revenues	\$229,781	\$230,450	\$241,374	\$252,280	\$257,955	\$264,858
O&M	188,590	188,581	193,381	198,737	204,329	210,087
Net Revenues to pay senior debt	41,191	41,869	47,993	53,543	53,626	54,771
Total Senior Debt	23,110	23,368	26,781	30,155	30,135	30,281
Net Revenues to pay subordinate debt	18,081	18,501	21,212	23,388	23,491	24,490
Total Subordinate Debt	488	606	665	473	503	901
<b>All-In Coverage</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>1.76</b>
Remaining Net Revenue	\$17,593	\$17,895	\$20,547	\$22,916	\$22,989	\$23,588

## 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, Water Policy and Resource Development, Public Information, Conservation, and Purveyor Water Quality Monitoring Program. The Overhead Program costs are allocated to the other program budgets and capital. A new program was created in 2018, Technical Planning, to lead the long-term technical and strategic planning of capital improvement projects and programs that support West Basin's goals, achieving long-term water reliability, sound financial and resource management, water quality improvement, and environmental stewardship within its service area.

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.



Sustainable landscaping is encouraged through District conservation programs.



## Salaries and Benefits

West Basin has a unique business model with a small workforce of 59 budgeted positions, not including interns, working to accomplish its many critical goals and objectives. Staff is comprised of various high-level project managers who oversee the work of consultants in the field, which allows for flexibility to implement new programs as they arise or modify existing programs when staff needs change.

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

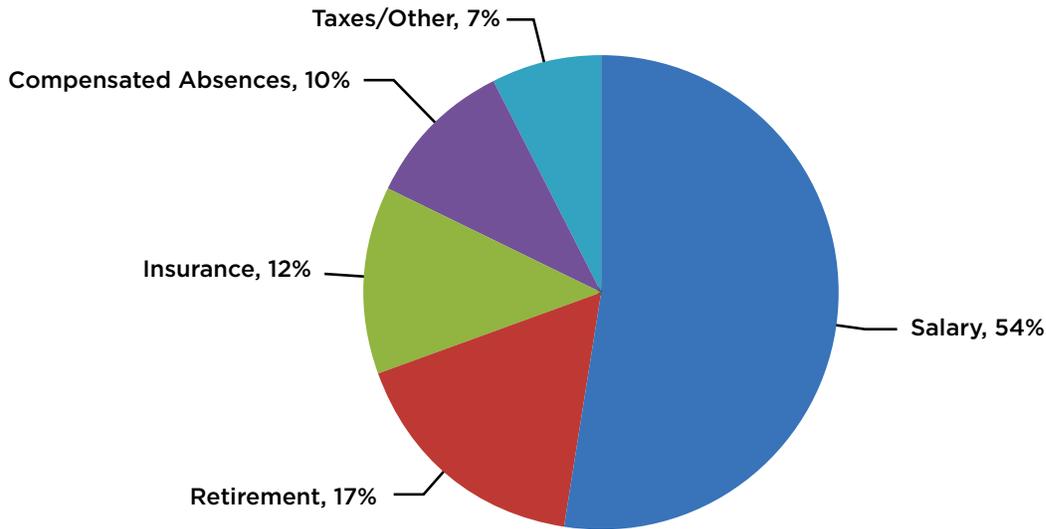
- Retirement - Classic - CalPERS 3% at 60 and Social Security (1).
- Retirement - Tier 2 - CalPERS 2% at 62 and Social Security (2).
- Health Insurance - Paid family coverage with expense reimbursement.
- Disability Insurance - Paid short term and long term insurance plans.
- Life Insurance - Up to \$150,000 based upon salary.
- Vacation - 10-20 days accrued annually, with credit for prior public service.
- Holidays - 14 paid holidays annually.
- Sick Leave - 12 days accrued annually.
- Tuition Reimbursement - 90% tuition and fees paid 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 he/she becomes a new member of CalPERS for the first time on or after January 1, 2013 (and who was not a member of another California public retirement system prior to that date) will be enrolled in the CalPERS 2% @ 62 benefit formula (with Social Security) in accordance with the Public Employees' Pension Reform Act of 2013 (PEPRA). New members will be required to pay at least 50% of the normal retirement cost.

## Salary and Benefits

FY 2019-20

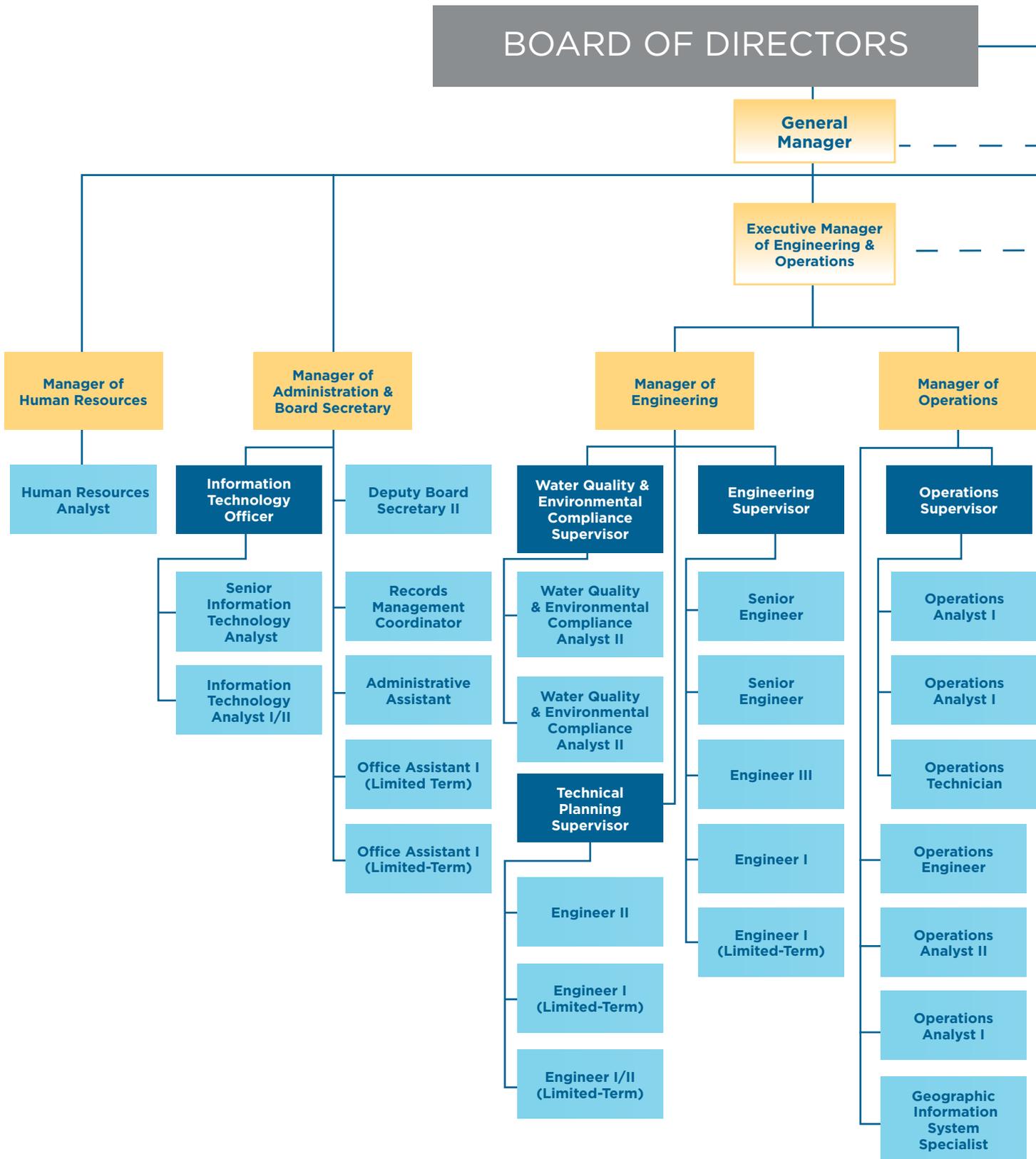


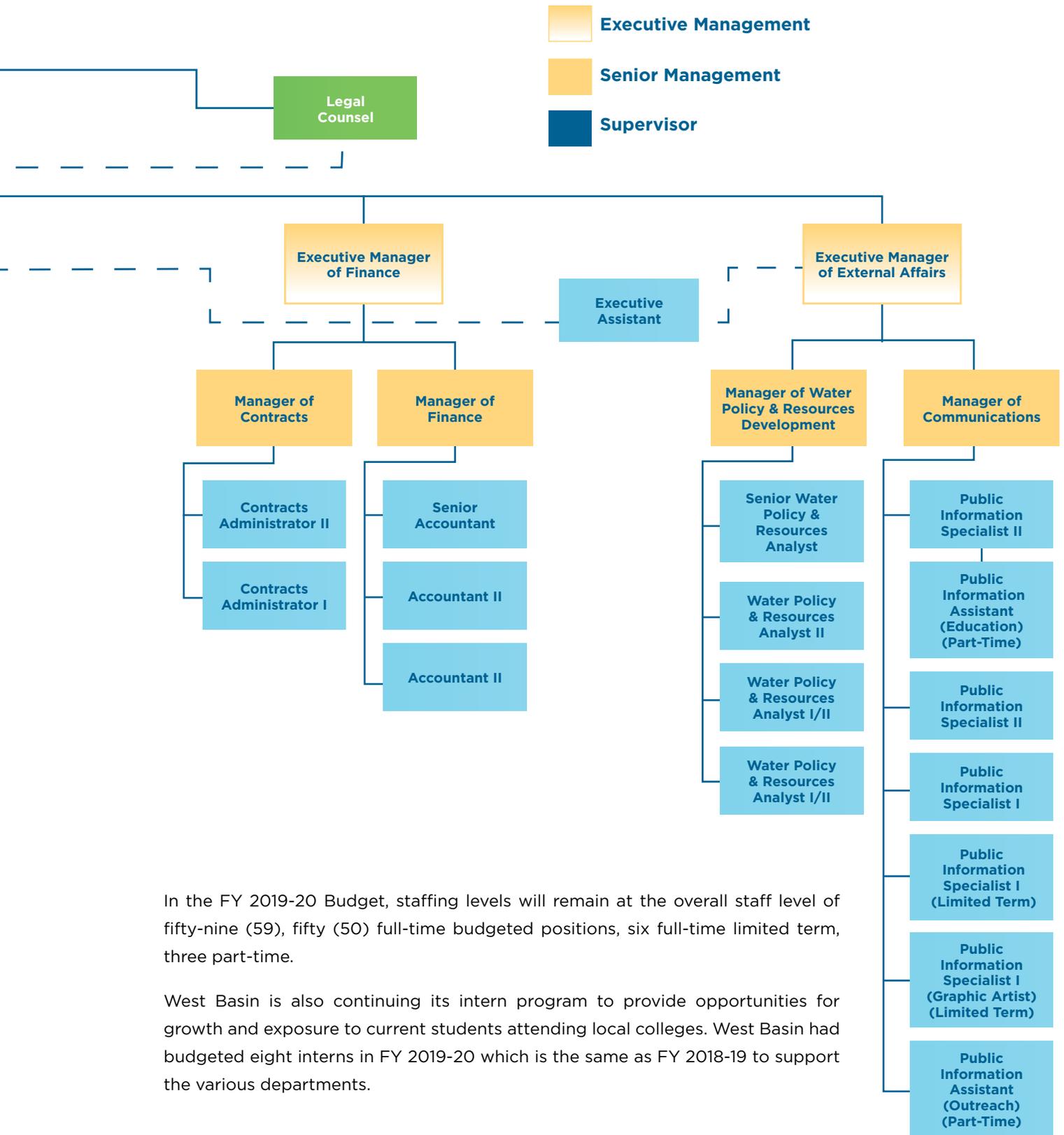
West Basin's benefits package and total payroll comprises 4.73% of its total FY 2019-20 operating budget. The types of benefits included are consistent with the prior years' budget and reflect an anticipated 7.0% average increase in health insurance and 1.07% increase in dental insurance. West Basin's pension costs for "Classic" CalPERS members is 15.206%. Pension costs for "Tier 2" CalPERS members is 7.07%. The estimated Other Post-Employment Benefits (OPEB) contribution for FY 2019-20 will be approximately \$798,900. West Basin participates in the California Employers Benefit Retirement Trust that allows West Basin to calculate its liability based on assumed interest rate of 7.28%.

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 takes into account the regional Consumer Price Index (CPI), and the average salary range increases of survey agencies. Based on these factors, West Basin has included a 4.4% merit increase in the FY 2019-20 Budget.



The organizational chart shows the full-time and part-time budgeted positions for FY 2019-20.





In the FY 2019-20 Budget, staffing levels will remain at the overall staff level of fifty-nine (59), fifty (50) full-time budgeted positions, six full-time limited term, three part-time.

West Basin is also continuing its intern program to provide opportunities for growth and exposure to current students attending local colleges. West Basin had budgeted eight interns in FY 2019-20 which is the same as FY 2018-19 to support the various departments.



Following is a table showing the head count by department that includes the full-time, limited-term and part-time positions. The intern positions are not reflected in the table.

## Summary of Personnel Head Count by Department

(Not including interns)

Position	Actual	Projected	Budgeted		Change from
	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20	FY 2019-20
Office of the General Manager	4	2	4	4	0
Administrative & Board Services	5	7	6	9	3
Finance	10	8	11	8	-3
Human Resources	2	2	2	2	0
Operations	8	8	9	9	0
Public Information & Education	7	7	8	8	0
Technical Resources	12	11	14	14	0
Water Policy and Resource Development	4	3	5	5	0
<b>Total Budgeted Personnel</b>	<b>52</b>	<b>48</b>	<b>59</b>	<b>59</b>	<b>0</b>

### 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 2016-17 and FY 2017-18 actual to FY 2018-19 projected and FY 2018-19 and FY 2019-20 budget. The variance of projected to budget Full Time Equivalent (FTE) for FY 2018-19 represents unfilled positions for a portion of the year. In FY 2018-19 and FY 2019-20 the difference between the budget Full Time Equivalent table and the Summary of Personnel Head Count by Department is due to the part-time positions budgeted at one-half of a FTE each versus one head count for each position.

Each program budget demonstrates the projected level of effort for the current year for staff’s 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 program. The method of allocation of indirect labor to the various operating and capital programs is consistent to prior years. The table below includes both the direct and indirect labor.

## Full Time Equivalent by Program

(Not including interns)

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actual	Actual	Projected	Budget	Budget
Recycling Operations	15.5	18.42	18.33	17.56	18.25
Desalter Operations	0.05	0.13	0.08	0.41	1.34
Water Policy/Resource Development	3.74	4.08	4.76	5.14	4.36
Public Information & Education	9.88	9.87	10.63	11.62	11.85
Conservation	3.44	3.41	1.85	2.99	4.01
Purveyor WQ Monitoring	0.02	0.05	0.07	0.03	0.08
Technical Planning	N/A	N/A	0.71	1.08	4.51
Capital Projects	14.58	14.66	13.77	18.67	13.10
<b>Total FTE</b>	<b>47.21</b>	<b>50.62</b>	<b>50.2</b>	<b>57.50</b>	<b>57.50</b>

Part-time positions are included as 1/2, Interns are not included.

## Capital Improvement Program

West Basin continues to strive for the highest levels of Water Supply Reliability, Water Quality, Customer Service, Sound Financial and Resource Management while always keeping Environmental Stewardship at the forefront of our efforts. Our Capital Improvement Program leads the way in these efforts to increase productivity, accessibility and provide continued high-quality recycled water to our customers. While West Basin continues its carefully researched and methodical testing of ocean-water desalination possibilities, new recycled water customers are developed and increased efficiencies are created. These efforts are described in greater detail within the “Supplemental Section” on the Capital Improvement Program.

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

Anticipated capital improvement expenditures for FY 2019-20 are approximately \$49.3 million.





SECTION 7  
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 from the Plan. The strategies noted under each program support the overall Plan and commitment statements of West Basin.

The FY 2019-20 Operating Program consists of the following:

<b>Allocated Programs</b>	<b>Page Number</b>
Overhead Program Costs	7-2
<b>Operating Programs</b>	
Water Recycling Operations	7-10
C. Marvin Brewer Desalter Operations	7-16
Technical Planning	7-18
Water Policy and Resource Development	7-21
Public Information & Education	7-25
Conservation	7-29
Purveyor Water Quality Monitoring	7-34

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 2019-20 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 Finance, Human Resources , Administrative Services and Board Services 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 programs and identified as “Overhead”. Direct labor hours are used as the primary basis for allocating these expenses to each program and provide management with a better understanding of the overall resources required to support each program.

The activity costs of the Finance Department represent the expenses to the accounting, financial and technology services of West Basin. Human Resources include activity costs 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 Human Resources Department administers the Employee Development Program that recognizes employees, provides for monthly and quarterly employee meetings, and also administers the safety, risk management and wellness programs. Board Services accounts for expenses directly related to the Board of Directors.

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

## Operating Budget

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actual	Actual	Projected	Budget	Budget
General Services	\$ 2,031,371	\$ 2,625,269	\$ 2,000,610	\$ 2,678,611	\$ 2,589,170
Legal Services	549,891	901,933	853,000	503,000	505,000
Building Services	405,385	522,508	678,700	562,200	588,000
Board Services	759,313	558,813	1,179,825	1,138,700	719,320
Human Resources	114,122	108,017	197,900	197,900	154,950
<b>Total Overhead Allocated</b>	<b>\$ 3,860,081</b>	<b>\$ 3,814,607</b>	<b>\$4,910,035</b>	<b>\$ 5,080,411</b>	<b>\$ 4,556,040</b>

The Overhead expense between the FY 2018-19 and FY 2019-20 budgets decreased and can be attributed to alternating years for elections.

# Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial &amp; Resource Management</b>		
<p><b>Strategy 2.1</b> - Provide effective overall capital facility asset management through the application of industry best practices</p>	<p>☑ Provided weekly maintenance updates to staff for the Donald L. Dear Headquarters building.</p>	
<p><b>Strategy 2.2</b> - Maintain facilities to manage and minimize risk of failure and liability exposure</p>	<p>☑ Remodeled Donald L. Dear building kitchens</p>	<p>▶ Complete the security standard operation procedures for the Donald L. Dear Headquarters building.</p>



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial &amp; Resource Management</b>		
<p><b>Strategy 2.4</b> - Maintain or improve current bond ratings</p>	<ul style="list-style-type: none"> <li>✓ Reviewed Investment Policies and sought Board approval of appropriate changes to ensure compliance to California code and address best practices.</li> <li>✓ Provided periodic updates to rating agencies about financial activities through submission of annual financial report, response to inquiries and submission of the required annual bond disclosure document to Electronic Municipal Market Access (EMMA).</li> <li>✓ Monitored the District's budget versus actual reports and provide quarterly updates to the Board on the District's ability to achieve targeted debt coverage of 1.75.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Schedule an update with the rating agencies to update on current business operations, the new fixed revenue charge and future plans.</li> </ul>
<p><b>Strategy 2.5</b> - Develop a formal Long Range Financial Plan</p>	<ul style="list-style-type: none"> <li>✓ Updated Long-Range Financial Model for sales assumptions, capital projects and appropriate rates and charges to ensure the District remains financially solvent.</li> <li>✓ Presentation made to Board on development of comprehensive Long-Range Financial plan.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Develop a capital funding policy that outlines the methods and approach to fund the necessary capital expenditures for replacement and rehabilitation and reliability projects.</li> </ul>



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial &amp; Resource Management</b>		
<b>Strategy 2.6</b> - Operate cost-efficiently and effectively, with robust internal controls	<ul style="list-style-type: none"><li>✔ Implemented the new fixed revenue service charge for the FY 18-19.</li><li>✔ Completed the bi-annual actuarial report for the PARS plan.</li><li>✔ Increased resources to support technology infrastructure improvements including the replacement of multi-function printers.</li></ul>	<ul style="list-style-type: none"><li>▶ Prioritize and implement short-term safety and necessary improvements to the Donald L. Dear Headquarters Building.</li><li>▶ Finalize and implement strategic information technology plan to address the immediate and long term infrastructure technology needs from new technology or software to enhanced integration.</li><li>▶ Update the retention schedule for District's records and evaluate electronic data management systems to improve the District records management program.</li><li>▶ Implement improved grant management practices and develop a comprehensive grant management policy.</li></ul>
<b>Strategy 2.8</b> - Recruit and hire qualified candidates to fill all West Basin positions	<ul style="list-style-type: none"><li>✔ Completed and/or commenced the recruitment process for 16 positions.</li><li>✔ 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.</li></ul>	



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial &amp; Resource Management</b>		
<p><b>Strategy 2.9</b> - Manage and reward performance</p>	<ul style="list-style-type: none"> <li>✓ Distributed, received and recorded 100% completed Annual Employee Performance Evaluations for all employees.</li> <li>✓ Commenced a comprehensive classification and compensation study to evaluate the body of work performed by employees; review/update/create class specifications; evaluate West Basin’s labor market competitiveness, and recommend classification and compensation program policies, processes, and procedures.</li> <li>✓ Secured Board approval of West Basin’s updated Salary Schedule in compliance with CalPERS regulations.</li> <li>✓ Distributed annual Employee Benefit Statements to ensure employee awareness of their covered benefits.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Implement findings and recommendations from 2018-19 fiscal year comprehensive classification and compensation study.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
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### Sound Financial & Resource Management

**Strategy 2.10** - Develop a formal plan for workforce retention, training, and succession planning

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>✓ Conducted workers' compensation loss prevention site visit.</li> <li>✓ Secured a range of employee professional development training courses for staff to attend including, but not limited to, project management professional, how to handle difficult conversations, and management and supervisory leadership training.</li> <li>✓ Maintained employee Training and Tracking Log.</li> <li>✓ Conducted mandatory staff Safety Meetings in accordance with West Basin's Injury/Illness Prevention Program to include, but not limited to, refresher course on active shooter training.</li> <li>✓ Conducted Cardiopulmonary Resuscitation (CPR)/ Automated External Defibrillator (AED) Training for applicable employees in accordance with West Basin's health and safety program.</li> <li>✓ Conducted lunch and learn opportunities for all staff to include, but not limited to, matters relating to work-life balance and financial wellness.</li> <li>✓ Developed Electric Charging Station policy.</li> <li>✓ Successfully secured a Wellness Grant through ACWA/JPIA to assist in West Basin's health and wellness initiatives for its employees.</li> <li>✓ Conducted 3rd Annual Health and Wellness Fair for staff securing well over 10 health and wellness vendor participants.</li> <li>✓ Conducted Project Management Professional training for staff.</li> </ul> | <ul style="list-style-type: none"> <li>▶ Conduct review and update of specified sections of the Human Resources section of the Administrative Code in compliance with applicable changes in California law and general operating procedures.</li> <li>▶ Secure Board and General Manager review and approval of Electronic Charging Station policy.</li> <li>▶ Conduct employee professional development training specific to software program training, and leadership training for staff per request and recommendation of the General Manager, Executive Management Team and Senior Management.</li> <li>▶ Implement web-based employee professional development training through Target Solutions.</li> <li>▶ Conduct workplace harassment prevention training for all applicable employees in compliance with Senate Bill 1300.</li> <li>▶ Conduct Defensive Driver Training for all applicable employees in compliance with the Association of California Water Agencies/ Joint Powers Insurance Authority (ACWA/JPIA) requirements and West Basin's safety program.</li> </ul> |
|--|---|



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial &amp; Resource Management</b>		
<b>Strategy 2.10 - Continued</b>		<ul style="list-style-type: none"><li data-bbox="1024 260 1333 489">▶ Conduct 10-hour Occupational Safety and Health Administration (OSHA) Training for new hire and other applicable employees in support of West Basin's safety program.</li><li data-bbox="1024 506 1333 735">▶ Conduct Earthquake Preparedness Drill (Great California Shakeout) in compliance with West Basin's Injury/Illness Prevention Program and Emergency Evacuation Plan.</li><li data-bbox="1024 751 1333 980">▶ Conduct ongoing employee training regarding amendments made to the Human Resources section of the Administrative Code and ongoing training on employee benefits.</li><li data-bbox="1024 997 1333 1255">▶ Implement employee wellness programs and informative brown-bag lunches to include weight-loss management, time/stress management, financial wellness and other health and wellness matters.</li><li data-bbox="1024 1272 1333 1413">▶ Plan and conduct the 4th Annual Health and Wellness Fair in support of West Basin's wellness initiatives for all employees.</li><li data-bbox="1024 1430 1333 1598">▶ Update West Basin's Succession Plan for review and approval of the General Manager, Executive Management Team, and Senior Management.</li><li data-bbox="1024 1614 1333 1728">▶ Offer early prevention health screening in support of West Basin's health and wellness program.</li></ul>



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Customer Services</b>		
<b>Strategy 4.3</b> - Support the Board in maintaining a Strategic Business Plan	<ul style="list-style-type: none"><li>☑ Maintained strategic priorities through Board of Directors monthly committee and board meetings.</li><li>☑ Conducted a Board planning session with the general manager.</li></ul>	<ul style="list-style-type: none"><li>▶ Develop proposed annual budget based on the Strategic Business Plan</li><li>▶ Staff to implement the current year budgeted strategies to accomplish the board-directed goals</li></ul>
<b>Strategy 4.5</b> - Engage small and/or local businesses in the procurement of services	<ul style="list-style-type: none"><li>☑ Developed Small and Local Business Enterprise program from solicitation process to reporting to increase the effectiveness of the business outreach program.</li></ul>	<ul style="list-style-type: none"><li>▶ Monitor and track Small and Local Business Enterprise program spending.</li></ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Environmental Stewardship</b>		
<b>Strategy 5.1</b> - Ensure social and environmental factors are considered in decision-making	<ul style="list-style-type: none"><li>☑ Installed six (6) electric vehicle charging stations at West Basin headquarters in Carson</li></ul>	

## 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 requirements prior to distributing the recycled water to its customers and satellite treatment facilities. The satellite treatment plants provide supplemental treatment for customers that require better water quality for their business processes. In total, West Basin produces five separate types of recycled water at four water recycling facilities. All five types of designer waters meet the treatment and water quality requirements specified in the California Department of Public Health's Water Recycling Criteria and are permitted by the Los Angeles Regional Water Quality Control Board and also per agreement.

West Basin's "Designer" Customer Tailored 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's education program allows students hands-on tours of District facilities.

The Recycled Water Operations budget includes funds to administer, operate and maintain all of the recycled water facilities, research and development costs to evaluate new and potentially more cost-effective processes, regulatory efforts, and promote 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 Refinery’s cooling towers and a separate Satellite Treatment Plant to produce single pass RO water for The Torrance Refinery;
- 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 single pass RO water for Tesoro;
- Three re-disinfection stations to boost the level of chlorine disinfectant within the recycled water distribution system;
- Two booster pump stations to boost service pressures to customers in the cities of Torrance and Carson; and
- Approximately 100 miles of pipelines to deliver recycled water to our customers.

West Basin contracts with Suez, Inc. to operate and maintain the treatment facilities along with California Water Service (Cal Water) 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.

## Personnel - Full Time Equivalents

FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Actual FTE	Actual FTE	Projected FTE	Budget FTE	Budget FTE
15.5	18.42	18.33	17.56	18.25



## Operating Budget

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actual	Actual	Projected	Budget	Budget
Labor and Benefits	\$2,709,512	\$3,973,488	\$3,377,205	\$3,255,278	\$3,543,762
Overhead	1,264,988	1,401,856	1,539,392	1,615,596	1,419,492
Operations:					
Chemicals	6,520,239	6,222,685	7,000,000	8,738,216	10,038,288
Consultants	3,846,708	821,111	2,100,000	2,371,705	2,309,100
Contract Labor-Dist System	1,038,133	773,728	850,000	750,000	750,000
Facility Maintenance	3,596,121	4,460,590	3,500,000	5,307,100	4,228,500
Laboratory Service	560,658	763,188	526,290	721,895	635,157
Office Administration	693,607	750,430	790,780	851,220	864,361
Secondary Effluent	329,009	313,694	250,000	431,338	385,103
Solids Disposal	802,642	850,393	900,000	1,179,200	550,000
Utilities	7,475,104	7,282,705	7,350,000	9,231,000	7,024,612
Contracted Labor	7,712,501	8,132,147	8,150,000	9,628,300	10,483,000
Mobil Reimbursement	(898,044)	(917,772)	(945,000)	(945,000)	(992,772)
<b>Total Recycling Operations</b>	<b>\$35,651,178</b>	<b>\$34,828,243</b>	<b>\$35,388,667</b>	<b>\$43,135,848</b>	<b>\$41,238,603</b>

The major variances between FY 2018-19 and FY 2019-20 budgets are due to the following items:

- Decrease in production results in decreased variable costs.
- Reflects an increase in treatment plant contracted labor.

## Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Supply Reliability</b>		
<b>Strategy 1.4</b> - Increase supply diversification by promoting water recycling	<input checked="" type="checkbox"/> Connected four new customers to the recycled water distribution system, adding approximately 22 acre-feet of demand annually.	<input type="checkbox"/> Connect new customers to the recycled water distribution system, to add approximately 150 acre-feet of demand annually.

## Sound Financial and Resource Management

**Strategy 2.1** - Provide effective overall capital facility asset management through the application of industry best-practices

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>✓ Executed on-call contractor agreements for pump, motor, blower, compressor repairs to maximize “up time” of mechanical equipment.</li> <li>✓ Expanded field data collection program and incorporated into GIS software for field use.</li> <li>✓ Initiated a pipeline condition assessment program to evaluate the health of the pipelines within the treatment facilities.</li> <li>✓ Established permanent benchmarks at each of the treatment facilities to test for efficiency.</li> <li>✓ Completed first iteration of reference drawings for satellite facilities.</li> </ul> | <ul style="list-style-type: none"> <li>▶ Customize the Computerized Maintenance Management System (CMMS) software to make it more user-friendly and improve data reliability and to include mobile capability.</li> <li>▶ Develop and implement the prioritized asset management recommendations to maximize the asset life and optimize maintenance activities.</li> <li>▶ Conduct an operational and financial audit of the recycled water treatment processes and management with the goal of developing performance metrics in a future Request for Proposal for the Operations and Maintenance of the recycled water facilities.</li> <li>▶ Pilot operation monitoring software to optimize microfiltration operations and to minimize operation expenses.</li> <li>▶ Coordinate a condition assessment program for the yard piping within the treatment plants.</li> <li>▶ Develop a preventative maintenance program for the electrical equipment.</li> <li>▶ Begin incorporating distribution system assets into the CMMS asset management software.</li> </ul> |
|--|---|



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial and Resource Management</b>		
<p><b>Strategy 2.2</b> - Maintain facilities to manage and minimize risk of failure and liability exposure</p>	<ul style="list-style-type: none"> <li>☑ Pilot tested the Custom Engineered Microfiltration Pilot on ozonated secondary effluent water.</li> <li>☑ Completed antiscalant demonstration testing.</li> <li>☑ Implemented tablet data collection for the pipeline distribution system operations.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Finish redlining activities and establish protocol to allow ease of reference drawing updates for future CIP and facility modifications.</li> <li>▶ Implement instrumentation upgrades as a result of the dashboard reports.</li> <li>▶ Conduct thorough maintenance of air valves in the distribution system.</li> </ul>
<p><b>Strategy 2.6</b> - Operate cost-efficiently and effectively, with robust internal controls</p>	<ul style="list-style-type: none"> <li>☑ Upgraded ArcGIS on-line system to allow staff has access to water quality data.</li> </ul>	

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Quality</b>		
<p><b>Strategy 3.1</b> - Achieve and maintain recycled water client satisfaction</p>		<ul style="list-style-type: none"> <li>▶ Support existing customer water quality inquiries.</li> </ul>
<p><b>Strategy 3.3</b> - Meet permit and contractual water quality requirements</p>	<ul style="list-style-type: none"> <li>☑ Worked with contract operators to ensure all facilities will meet all regulatory compliances effective July 1, 2019.</li> <li>☑ Conducted monthly/quarterly customer meetings to discuss production issues and planned activities.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Monitor water quality to ensure it meets water quality compliance and contractual requirements.</li> <li>▶ Meet all Groundwater Recharge Regulations.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Customer Services</b>		
<p><b>Strategy 4.2</b> - Ensure recycled water client and customer agency satisfaction</p>	<ul style="list-style-type: none"> <li>☑ Provided support to obtain Department of Public Health (DPH) approval, and site inspections for 18 recycled water site modifications.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Promptly respond to recycled water customers concerns.</li> <li>▶ Assist with recycle water modifications as needed.</li> <li>▶ Provide purveyor workshops as needed to help coordinate between water companies on important water quality and compliance issues.</li> <li>▶ 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 quicker response.</li> </ul>



## C. Marvin Brewer Desalter Operations

The C. Marvin Brewer Desalter (Desalter) began operating in July 1993. The Desalter was initially conceived as a five-year pilot program to see if brackish water could be economically treated to drinking water standards. It originally consisted of two wells that pump brackish water from a saline plume trapped in the West Coast Groundwater Basin and then treated using reverse osmosis and blended with other potable water in a CWS reservoir. The Desalter pilot program was successful and operations continued. A single well was constructed in 2005 to replace the two original wells.

The Desalter is located on a site owned by CWS in the City of Torrance. The site includes a potable water reservoir and pump station that CWS uses to meet demands in its service area. Under the terms of an agreement with CWS, West Basin reimburses CWS to operate and maintain the Desalter. The budget for the Desalter includes staff time to manage the Desalter, operation and maintenance costs incurred by CWS, lab fees for water quality analyses, sewer fees for brine disposal, and the replenishment assessment paid to the WRD.

### Personnel - Full Time Equivalents

FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Actual FTE	Actual FTE	Projected FTE	Budget FTE	Budget FTE
0.05	0.13	0.08	0.41	1.34

### Operating Budget

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actual	Actual	Projected	Budget	Budget
Labor and Benefits	\$5,713	\$25,266	\$14,230	\$78,858	\$217,796
Overhead	4,231	9,632	6,400	32,745	97,768
Operations	474,538	403,915	761,500	641,500	686,700
Replenishment Assessment	107,532	31,412	261,265	335,598	491,211
<b>Total Desalter Operations</b>	<b>\$592,014</b>	<b>\$470,225</b>	<b>\$1,043,395</b>	<b>\$1,088,701</b>	<b>\$1,493,475</b>

The increase in the FY 2019-20 budget is due to the facility assuming full operational as compared to being off-line for most of FY 2018-19 due to the well rehabilitation and upgrade. These upgrades were necessary to address many of the wells ongoing issues and to ensure operational and water quality reliability. The budget assumes a production of 1,150 acre-feet for FY 2019-20.



# Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial &amp; Resource Management</b>		
<b>Strategy 2.1</b> - Provide effective overall capital facility asset management through the application of industry best-practices		▶ Incorporate assets into West Basin's asset management software Hansen.



# Technical Planning

The Technical Planning program was formed in 2018 to lead the long-term technical and strategic planning of capital improvement projects and programs that support West Basin’s goals, within its service area. This program is responsible for the development and delivery of multi-disciplinary and complex technical and strategic studies associated with the District’s recycled water program, brackish groundwater and the District’s overall water portfolio. In addition to technical and strategic planning efforts, this program will oversee and manage the District’s Research and Development (R&D) Program that supports internal and external R&D efforts to advance water reuse and reliability.

## Personnel - Full Time Equivalents

FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Actual FTE	Actual FTE	Projected FTE	Budget FTE	Budget FTE
-	-	0.71	1.08	4.51

## Operating Budget

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actuals	Actuals	Projected	Budget	Budget
Labor and Benefits	\$ -	\$7,129	\$168,780	\$167,316	\$904,046
Overhead	-	2,570	63,525	4,859	359,203
Technical Planning	-	642,813	2,533,333	3,133,333	4,583,333
<b>Total Technical Planning</b>	<b>\$ -</b>	<b>\$ 652,512</b>	<b>\$ 2,765,638</b>	<b>\$ 3,305,508</b>	<b>\$ 5,846,582</b>

# Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Supply Reliability</b>		
<p><b>Strategy 1.1</b> - Prepare and periodically update water supply plans</p>		<ul style="list-style-type: none"> <li>▶ Issue a Request for Proposals to retain a consultant team to develop a long-term Local Water Supply Strategic Plan for the District with a study horizon of 10-20 years.</li> <li>▶ Issue a Request for Proposals to retain a consultant team to prepare a Capital Improvement Master Plan to identify the District's needs to meet water quality and demand requirements.</li> </ul>
<p><b>Strategy 1.3</b> - Increase supply diversification by promoting groundwater development</p>	<ul style="list-style-type: none"> <li>✔ Reviewed technical documents and participated in meetings and workshops for Regional Brackish Reclamation Program Feasibility study.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Assist in Regional Brackish Reclamation Program Feasibility study to review technical documents and provide feedback for the completion of the study.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial and Resource Management</b>		
<p><b>Strategy 2.2</b> - Maintain facilities to manage and minimize risk of failure and liability exposure</p>		<ul style="list-style-type: none"> <li>▶ Release a Request for Proposals to retain a consultant team to develop an Emergency Response Plan.</li> </ul>
<p><b>Strategy 2.6</b> - Operate cost-efficiently and effectively, with robust internal controls</p>		<ul style="list-style-type: none"> <li>▶ Release a Request for Proposals to retain a consultant team to prepare a Districtwide Energy Management Plan.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Quality</b>		
<p><b>Strategy 3.2</b> - Increase control over source water quality</p>	<ul style="list-style-type: none"> <li>☑ Worked with the Los Angeles Department of Water and Power (LADWP) and Los Angeles Sanitation District (LASAN) to develop a scope of work to retain a project to design for the Membrane Bioreactor (MBR) study.</li> <li>☑ Completed the review of the conceptual design of the MBR pilot system.</li> <li>☑ Selected panelists for the Independent Advisory Panel to guide the MBR project.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Work with the LADWP and LASAN to complete the design of the MBR pilot study facility and commence the construction of the pilot facility.</li> </ul>



## Water Policy and Resource Development (Water Policy)

The Water Policy and Resource Development budget supports various activities including, but not limited to, performing analyses and preparing reports related to long term water reliability and regional water demand; pursuing state and federal grants to ensure West Basin’s programs and projects are cost-effective; providing technical and other support to retail customer agencies; tracking and reporting on West Basin’s water supply portfolio; implementing local, state and federal legislative and regulatory advocacy efforts; 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. This budget also includes funds to support efforts 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.

### Personnel - Full Time Equivalents

FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Actual FTE	Actual FTE	Projected FTE	Budget FTE	Budget FTE
3.74	4.08	4.76	5.14	4.36

### Operating Budget

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actuals	Actuals	Projected	Budget	Budget
Labor and Benefits	\$819,937	\$1,036,295	\$933,312	\$946,258	\$838,523
Overhead	398,976	328,045	418,105	462,100	385,794
Planning	58,948	44,656	80,378	94,000	85,000
Government Affairs	309,626	315,024	294,400	353,800	325,200
<b>Total Resource Planning</b>	<b>\$ 1,587,487</b>	<b>\$ 1,724,020</b>	<b>\$ 1,726,195</b>	<b>\$ 1,856,158</b>	<b>\$ 1,634,517</b>



## Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Supply Reliability</b>		
<p><b>Strategy 1.1</b> - Prepare and periodically update water supply plans</p>	<ul style="list-style-type: none"> <li>☑ Completed the annual Water Use Report for our customer agencies that provides the annual total water use information for each customer.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Begin development of West Basin’s Urban Water Management Plan due in 2020.</li> </ul>
<p><b>Strategy 1.3</b> - Increase supply diversification by promoting groundwater development</p>		<ul style="list-style-type: none"> <li>▶ Identify opportunities to maximize local water supplies, by working with West Basin Water Association and retail customer agencies</li> <li>▶ Collaborate with the Water Replenishment District 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.</li> </ul>
<p><b>Strategy 1.4</b> - Increase supply diversification by promoting water recycling</p>		<ul style="list-style-type: none"> <li>▶ Engage in legislative and regulatory advocacy to positively impact and promote the use of recycled water, including potable reuse by actively following key legislations</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial &amp; Resource Management</b>		
<p><b>Strategy 2.3</b> - Develop partnerships with public and private entities to facilitate capital asset development and implementation</p>		<ul style="list-style-type: none"> <li>▶ Analyze new recycled water rate structures designed to meet the needs of West Basin recycled water customers while recovering recycled water production costs including rehabilitation and replacement.</li> <li>▶ Continue leadership role in the Greater Los Angeles County Integrated Regional Water Management Program, including administration on behalf of the Region, of its financial resources.</li> </ul>
<p><b>Strategy 2.6</b> - Operate cost-efficiently and effectively, with robust internal controls</p>	<ul style="list-style-type: none"> <li>✔ Increased state and federal advocacy efforts including support and advocacy for a reauthorization of “WIIN” legislation, Water Infrastructure Improvements for the Nation, and successfully received an increased federal authorization for the Harbor South Bay Water Recycling Project.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Pursue 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. These efforts including partnerships with the State Water Resources Control Board (State Revolving Fund), Department of Water Resources, U.S. Army Corps of Engineers (WRDA), and Bureau of Reclamation (Title XVI).</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Quality</b>		
<p><b>Strategy 3.3</b> - Meet permit and contractual water quality requirements</p>	<ul style="list-style-type: none"> <li>✔ Facilitated discussions between MWD and retailers in relation to concerns over nitrite and ammonia issues.</li> </ul>	



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Customer Services</b>		
<p><b>Strategy 4.1 - Build community trust</b></p>	<ul style="list-style-type: none"> <li>✓ Conducted an informational workshop with customer agencies to review proposed FY 2019-20 budget and water rates, and provide updates on various District programs and projects.</li> <li>✓ Conducted monthly updates to West Basin’s customer agencies and municipalities at West Basin’s Metropolitan Water District Caucus meeting and West Basin Water Association meetings.</li> <li>✓ Assisted in the development of statewide water use efficiency regulations that acknowledge the regional investments in recycled water under the Water Resources Development Act (WRDA).</li> <li>✓ Provided regular and timely updates to West Basin’s state and federal legislators regarding the recurring drought conditions, regional water use efficiency efforts, and new local water supply projects, including proposed recycled water laterals, expansion and new waste water treatment at the Edward C. Little Water Recycling Facility, and the proposed ocean water desalination project.</li> <li>✓ Honored four Legislators with Legislator(s) of the Year awards.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Advocate to regional, state and federal agencies and officials to discuss local water supply development, and West Basin programs and projects.</li> <li>▶ Identify new Legislator(s) to honor with our Water Reability awards.</li> </ul>
<p><b>Strategy 4.2 - Ensure recycled water client and customer agency satisfaction</b></p>	<ul style="list-style-type: none"> <li>✓ Provided purveyor workshops to help coordinate between water companies on important water quality and compliance issues.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provide purveyor workshops as needed to help coordinate between water companies on important water quality and compliance issues.</li> <li>▶ Serve as liaison between MWD and retailers for water quality concerns.</li> <li>▶ 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 quicker response.</li> </ul>

# Public Information & Education

A core task of this program is to convey the value of water. Under the umbrella of West Basin's newly launched Water for Tomorrow Program, staff continues to share information about the District's conservation, water recycling and ocean water desalination activities. Additionally, this program strives to increase awareness of West Basin as an award-winning, innovative and industry-leading water agency dedicated to sustainable water resource management.

## Public Information

With guidance from the Board of Directors, staff develops and implements a wide array of communication and outreach programs to ensure that West Basin is positioned as a valuable utility among key stakeholders. Audiences include city, county, state and federal elected officials, chambers of commerce, cities, partners, customer agencies, community and environmental groups, education and business leaders and the general public. By offering free public facility tours, presentations, annual water-themed events, special events and media relations, the District provides value to the service area.

## Education

District education programs engage students, grades three through 12, in learning about water conservation, 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.

## Personnel - Full Time Equivalent

FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
<b>Actual FTE</b>	<b>Actual FTE</b>	<b>Projected FTE</b>	<b>Budget FTE</b>	<b>Budget FTE</b>
9.88	9.87	10.63	11.62	11.85



## Operating Budget

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actuals	Actuals	Projected	Budget	Budget
Labor and Benefits	\$1,280,437	\$1,701,345	\$1,587,000	\$1,629,089	1,797,193
Overhead	778,970	798,017	983,600	1,010,176	922,805
Education	166,620	184,123	132,101	273,750	235,500
Outreach, Media, & Events	528,050	517,839	412,650	739,250	908,800
<b>Total Public Information</b>	<b>\$2,754,077</b>	<b>\$3,201,324</b>	<b>\$3,115,351</b>	<b>\$ 3,652,265</b>	<b>\$ 3,864,298</b>

## Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Customer Services</b>		
<p><b>Strategy 4.1 - Build Community Trust</b></p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Launched new Water for Tomorrow Program on World Water day, March 22, 2019. This program includes communication and outreach strategies to amplify District programs and goals.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Implement a social media strategy to increase awareness of the District.</li> <li><input type="checkbox"/> Retained a social media consultant to develop a strategy to increase District social media presence allowing for digital transparency.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Customer Services</b>		
<p><b>Strategy 4.4</b> - Promote outreach and education programs</p>	<ul style="list-style-type: none"> <li>✓ Produced the 20th annual Water Harvest in 2018 including a reformatted Water Reliability Awards stage ceremony.</li> <li>✓ Launched the annual advertising campaign highlighting the new Water for Tomorrow and other District programs, including conservation, recycled water, and water education.</li> <li>✓ Successfully partnered in MWD's education programs by sponsoring four high school Solar Cup teams and engaged over 500 students in the Water is Life art contest.</li> <li>✓ Served more than 3,000 students in grades three through 12 with free water education programs.</li> <li>✓ Outreached to community members, including civic organizations, city officials and business organizations, as well as individuals in the service area regarding District programs and projects.</li> <li>✓ Offered free, public water education programs including: a speakers bureau; a revised Lunch and Learn series held at the Donald L. Dear headquarters; and operation of the Water Education Center (WEC) in Redondo Beach, Calif.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provide quality education programs for grades three through 12, including the enhancement of educational information on the District website and participation in Solar Cup.</li> <li>▶ Explore the enhancement of signature District events, including Water Harvest festival in 2019.</li> <li>▶ Inform key stakeholders and the public about the environmental impact report and report certification process regarding the potential ocean water desalination project.</li> <li>▶ Promote West Basin activities and programs through direct mailers to constituents.</li> <li>▶ Improve outreach and communication to key stakeholders in the service area to keep them informed about District programs that help achieve the organization's mission and provide resources to the service area community.</li> <li>▶ Offer quarterly Lunch &amp; Learn classes and tours of West Basin's water recycling facility.</li> </ul>



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Environmental Stewardship</b>		
<p><b>Strategy 5.1</b> - Ensure social environmental factors are considered in decision-making</p>	<ul style="list-style-type: none"> <li>✓ Considered sustainable, eco-friendly promotional items for distribution at community and District events</li> </ul>	<ul style="list-style-type: none"> <li>▶ Distribute eco-friendly promotional items.</li> </ul>
<p><b>Strategy 5.2</b> - Continue to gain environmental community support for West Basin programs</p>	<ul style="list-style-type: none"> <li>✓ Continued partnership with the South Bay Chapter of the Surfrider Foundation to provide greater support for its local Teach &amp; Test Program.</li> <li>✓ Sponsored the SEA Lab traveling tidepool vehicle upgrades for improved exhibits</li> </ul>	<ul style="list-style-type: none"> <li>▶ Consider potential partnerships or collaborations with local, environmental non-profit groups to enhance in-class, water and sustainability education programs.</li> </ul>



Students enjoy a tour of the Edward C. Little Water Recycling Facility in El Segundo, Calif.

# Conservation

The Conservation Program is an essential strategy of West Basin to manage demand and diversify its water portfolio. The program budget represents the staffing and direct costs to deliver devices, education and demonstrate water efficiency to the service area residents and businesses. West Basin’s success in delivering this message is through the collaboration with our cities, customer agencies, and other stakeholders.

In Fiscal Year 2018-19, and with the support of a grant from the United States Bureau of Reclamation (Reclamation), West Basin continued the process of updating its 2010-2015 Water Use Efficiency Master Plan. Staff held several workshops with its customer agencies and other stakeholders to evaluate the successes and challenges of its current programs, to meet current water conservation mandates and regulations, and to develop new strategies and programs to achieve urban water supplier water use efficiency targets. The next Water Use Efficiency Master Plan will provide important data that will guide West Basin to develop and implement effective and required programs.

West Basin continues to seek outside funding through partnerships with federal, state and local agencies. Grants are used to leverage West Basin program funding to initiate and expand water use efficiency programs and provide greater value to residents and businesses in the West Basin service area. In total, an estimated 35% of West Basin’s conservation budget is funded by outside grants that help West Basin keep rates low.

## Personnel - Full Time Equivalents

FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Actual FTE	Actual FTE	Projected FTE	Budget FTE	Budget FTE
3.44	3.41	1.85	2.99	4.01



# Operating Budget

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actuals	Actuals	Projected	Budget	Budget
Labor and Benefits	\$ 548,524	\$ 639,081	\$ 354,910	\$ 607,829	\$852,531
Overhead	268,881	245,643	147,700	329,249	350,881
Conservation	596,146	648,148	738,672	2,145,163	2,501,000
Total Conservation	\$1,413,551	\$1,532,872	\$1,241,282	\$3,082,241	\$3,704,412
<b>Total Public Information</b>	<b>\$2,754,077</b>	<b>\$3,201,324</b>	<b>\$3,115,351</b>	<b>\$ 3,652,265</b>	<b>\$ 3,864,298</b>

During Fiscal Year 2018-2019, the California Department of Water Resources (DWR) continued working on developing the details and pilot projects in order to implement AB1668 and SB606, also called “Making Water Conservation a California Way of Life.” By 2022, West Basin’s customer agencies will adopt the new legislative requirements and begin to report on their efforts. West Basin, as the local water supplier, will help support these efforts.

In Fiscal Year 2019-2020, West Basin will continue its popular rain barrel distribution program and grass replacement classes. West Basin has increased its funding to help with the marketing of the Disadvantaged Communities Water-Energy Savings Initiative Program, and the Cash for Kitchens program. In addition, West Basin has included funding to supplement MWD’s \$2 per square foot grass replacement program by adding on additional \$1 per square foot to MWD’s rebate effective July 1, 2019.

# Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Supply Reliability</b>		
<p><b>Strategy 1.2</b> - Increase supply diversification and promotion conservation</p>	<ul style="list-style-type: none"> <li>✓ Successfully completed five (5) free Rain Barrel Distribution Events 2,000 rain barrels.</li> <li>✓ Implemented five (5) Grass Replacement Classes.</li> <li>✓ Provided 30 residents and large landscape facilities with free landscape.</li> <li>✓ Implemented a new Ocean Friendly Garden maintenance program to help maintain and protect West Basin's investment of its demonstration gardens.</li> <li>✓ Launched the new Malibu Smart &amp; Topanga Smart water efficiency program.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Implement West Basin's Water Use Efficiency Strategic Plan.</li> <li>▶ Implement the new Malibu Smart and Topanga Smart Programs.</li> <li>▶ Re-design and launch two new DWR Water-Energy grant funded programs; 1) Cash for Kitchens and 2) Disadvantaged Area Community (DAC) Water and Energy Savings Initiative Program.</li> <li>▶ Implement \$1 per square foot grass replacement rebate in addition to MWD's \$2 per square foot rebate.</li> </ul>



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial &amp; Resource Management</b>		
<p><b>Strategy 2.6</b> - Operate cost-efficiently and effectively, with robust internal controls</p>	<ul style="list-style-type: none"> <li>☑ Allocated \$270,000 from the MWD for locally administered programs</li> </ul>	<ul style="list-style-type: none"> <li>▶ Seek federal and state grant funding for new water efficiency programs.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Customer Services</b>		
<p><b>Strategy 4.4</b> - Promote outreach and education programs</p>	<ul style="list-style-type: none"> <li>☑ Implemented various water efficiency and outreach programs in partnership with its local cities and water retailers.</li> <li>☑ Represented and promoted West Basin's programs at over 100 community events in partnership with the South Bay Environmental Services Center.</li> <li>☑ Continued to enhance West Basin' Water Conservation microsite by adding additional programs and resources to better assist the public in learning about and participating in West Basin's water conservation programs.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Continue to represent and promote West Basin's programs at community events in partnership with the South Bay Environmental Services Center.</li> <li>▶ Support West Basin's retail customer agencies in complying with state mandates and new standards for water use efficiency.</li> <li>▶ Continue to provide the public with water conservation and educational programs</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Environmental Stewardship</b>		
<b>Strategy 5.2</b> - Continue to gain environmental community support for West Basin programs	<ul style="list-style-type: none"><li>✓ Partnered with several environmental organizations in the development and implementation of its water efficiency programs.</li><li>✓ Participated in the monthly Malibu Area Conservation Coalition (MACC) meeting.</li><li>✓ Participated in the monthly South Bay Environmental Services Center Partners' Meeting.</li></ul>	<ul style="list-style-type: none"><li>▶ Outreach to gain environmental and community support in the development and implementation of our water efficiency programs.</li><li>▶ Partner with various agencies in the distribution of rain barrels and with providing free Grass Replacement classes</li></ul>





# 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 includes compliance sample scheduling, contracting wellhead sampling, EPA Unregulated Contaminant Monitoring Rule (UCMR) sample coordination, contracting laboratory analytical services, reviewing water quality data for compliance, maintaining water quality databases, in addition to preparing compliance reports for regulators and water systems. The program is designed for West Basin staff to help ensure purveyor wellhead sampling compliance.

## Personnel - Full Time Equivalents

FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Actual FTE	Actual FTE	Projected FTE	Budget FTE	Budget FTE
0.02	0.05	0.07	0.03	0.08

## Operating Budget

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
	Actuals	Actuals	Projected	Budget	Budget
Labor and Benefits	\$ 3,080	\$ 7,724	\$ 11,800	\$ 5,683	\$ 19,581
Overhead	1,446	3,377	5,900	2,617	9,269
Monitoring Program	4,669	10,813	23,982	25,900	18,155
<b>Title 22 Monitoring</b>	<b>\$9,195</b>	<b>\$21,914</b>	<b>\$41,682</b>	<b>\$34,200</b>	<b>\$47,025</b>

Monitoring program costs will vary each year depending on the lab analyses that are required by state and federal regulations. For the fiscal year 2019-20, the federal regulators have a new temporary water testing program (UCMR4) that has increased the cost of the program. Participating retailers reimburse West Basin for lab sampling and analytical costs.

# Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Quality</b>		
<p><b>Strategy 3.3</b> - Meet permit and contractual water quality requirements</p>	<ul style="list-style-type: none"> <li>☑ Completed laboratory services required to comply with Federal Safe Drinking Water Act and California Title 22 Drinking Water regulations such as analyses of all inorganic, organic compounds, and radioactivity.</li> <li>☑ Completed annual customer water quality reports for participating retailers for compliance with the Department of Drinking Water requirements for a public water system</li> </ul>	<ul style="list-style-type: none"> <li>▶ Complete laboratory services required to comply with Federal Safe Drinking Water Act and California Title 22 Drinking Water regulations such as analyses of all inorganic, organic compounds, and radioactivity.</li> <li>▶ Complete annual customer water quality reports for participating retailers.</li> <li>▶ Coordinate with the contract lab to ensure UCMR sampling in the next fiscal year is completed successfully.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Customer Services</b>		
<p><b>Strategy 4.2</b> - Ensure recycled water client and customer agency satisfaction</p>	<ul style="list-style-type: none"> <li>☑ Helped purveyors establish sampling plans and approvals from the EPA for the Unregulated Contaminant Monitoring Requirement (UCMR) Program.</li> </ul>	





SECTION 8  
SUPPLEMENTAL  
INFORMATION



# Capital Improvement Program (CIP)

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”.

The West Basin Capital Improvement Program (CIP) is designed to support the Strategic Business Plan. CIP includes three major components: New Infrastructure Projects, Refurbishment & Replacement Projects (R&R) and Ocean Water Desalination and Other Projects.

West Basin developed a Comprehensive Capital Implementation Mater Plan (CIMP) which serves as a comprehensive planning document and a roadmap to identify capital projects to support the following objectives for the next five years.

- To provide the recycled water to new customers
- To improve the existing recycled water’s capacity and reliability
- To meet the recycled water’s quality standards set by the State of California
- To respond to the regulatory changes set by the State of California
- To explore other source of the water supply such as Ocean Water Desalination

Existing capital assets include West Basin’s award-winning water recycling facilities, a groundwater desalter (Marvin Brewer Desalter) and its headquarters building (Donald L. Dear Building).

## Personnel - Full Time Equivalents

FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19	FY 2019-20
Actual FTE	Actual FTE	Projected FTE	Budget FTE	Budget FTE
14.58	14.66	13.77	18.67	13.10

Project Description	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
New Infrastructure	\$16,173,975	\$25,459,619	\$30,353,671	\$13,109,231	\$200,000
Rehabilitation & Replacement	24,339,049	28,044,924	46,715,734	44,103,004	22,551,152
Ocean Desal & Other Projects	8,798,277	5,017,202	5,133,518	5,253,324	5,376,724
Total	\$49,311,301	\$58,521,745	\$82,202,923	\$62,465,559	\$28,127,876



### New Infrastructure

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

- To increase additional recycled water users by constructing the new distribution systems and laterals.
- To increase the capacity of the existing recycled water facilities by constructing the expansions and installing new treatment systems.
- To meet the water quality or regulatory requirements by using new technologies and adding new equipment.

### Summary of the new infrastructure:

Below is the summary table to show the new infrastructure projects and the funding plan of each project for FY 2019-20.

Project Description	Fiscal Year 2019-20	Funding Sources			
		PAYGO	Commercial Paper	State Loan/ Customer Contribution	Grant
ECLWRF Pall MF Expansion Project	\$2,406,197		\$2,406,197		
SCADA System Integration System	500,000		500,000		
JMMCRWRP Phase II Expansion - MBR	150,000			150,000	
JMMCRWRP Phase II Expansion - MF	150,000			150,000	
HSEPS Improvements Project	485,000		485,000		
ECLWRF Visitor Center Renovation Project	520,000	520,000			
Phase II/Phase III MF Replacement Project	710,800		710,800		
WB-1 Well to Sewer Connection	37,000		37,000		
Dominguez Tech. Center RW retrofit	12,320	12,320			
Anderson Park	48,025	48,025			
Manhattan Village HOA RW Pipeline	1,488,700		1,488,700		
Kenneth Hahn Park Recycled Water Pipeline Project	685,956		685,956		
Palos Verdes Recycled Water Pipeline Project	8,088,937		3,043,437	3,000,000	2,045,500
Torrance RW Expansion Feasibility Study	691,040	691,040			
Customer Service Connection Projects	200,000	200,000			
<b>Total</b>	<b>\$16,173,975</b>	<b>\$1,471,385</b>	<b>\$9,357,090</b>	<b>\$3,300,000</b>	<b>\$2,045,500</b>

## Project Detail on Major Projects and the Operating Impacts

Below is the summary table to show the new infrastructure projects and the funding plan of each project.

Project		ECLWRF Pall Microfiltration Expansion Project	
Location(s)	ECLWRF		
FY19/20 Budget	\$2,406,197	Total Budget	\$12,129,257

**Project Description:** The Pall Microfiltration Expansion Project (Project) will expand the existing Phase V Microfiltration (MF) System installed in 2013 at the ECLWRF to produce approximately three million gallons per day of additional filtrate for the Barrier treatment process. The Project includes the installation of two additional Pall MF racks and ancillary equipment pre-purchased by West Basin in November 2016. As part of this Project, there are other improvements that were incorporated to support the expanded MF system (Phase IV and Phase V) and improve the feed water quality. The Project also includes a permanent diversion pipeline that will be able to feed the Phase III Clearwell when necessary, an added brine flow meter, Phase V membrane replacement and automatic strainer.

**Justification of Project:** Improves recycled water quality, reliability and increase production for barrier.

**Planned work for FY19/20:** Construction completion.

Project Schedule:	Start Date:	Completion Date:
Construction	November, 2017	August, 2019

**Operating Impacts:**

Increase in AF sold: 2,190

Increase in Annual Operation and Maintenance Cost: Not significant





Project JMMCRWRP Phase II Expansion MBR			
Location(s)	Carson Facility		
FY19/20 Budget	\$150,000	Total Budget	\$20,697,344

**Project Description:** The project will construct a tertiary Membrane Biological Reactor (t-MBR) and replace the Microfiltration system at the Carson facility. The new systems will produce 5.9 MGD of nitrified water and 6.8 MGD of Reverse Osmosis product water respectively to supply the Marathon Carson Refinery.

**Justification of Project:** Improves recycled water quality, reliability and increase supply to the Marathon Carson Refinery.

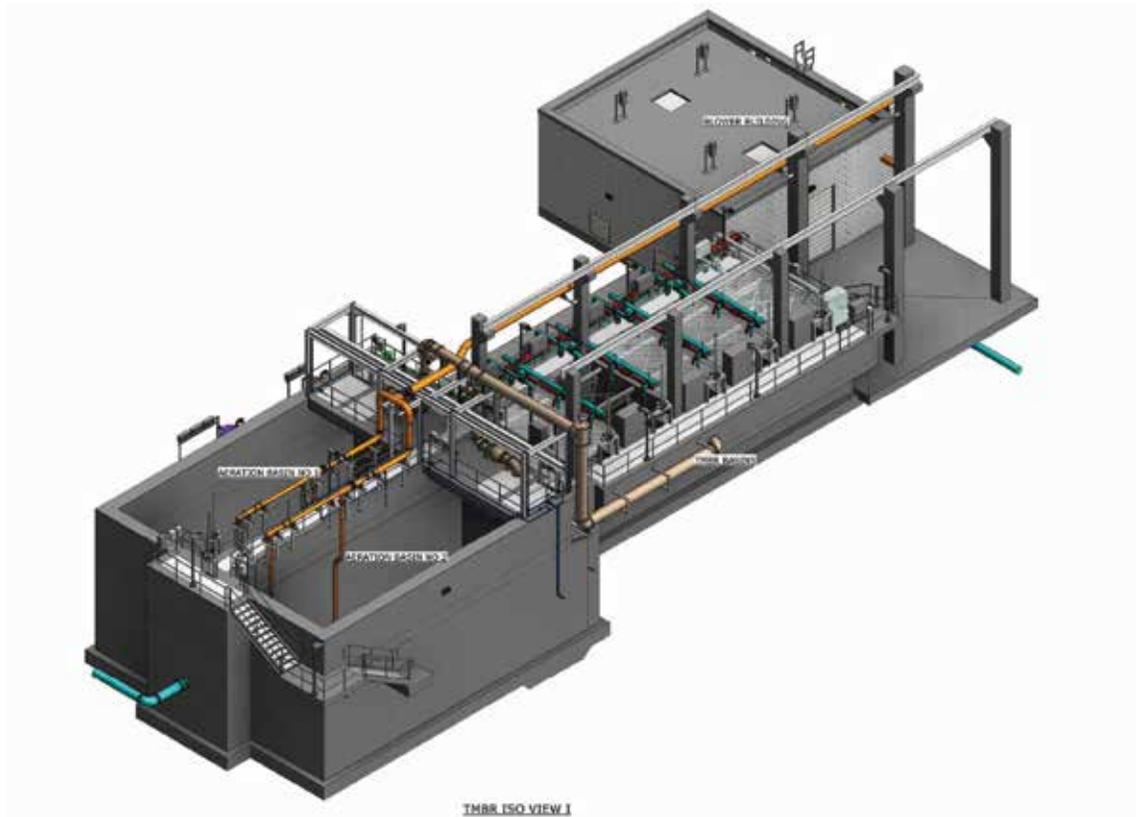
**Planned work for FY19/20:** Final Design.

Project Schedule:	Start Date:	Completion Date:
Construction	November, 2020	June, 2022

**Operating Impacts:**

Increase in AF sold: 2,240

Increase in Annual Operation and Maintenance Cost: \$753,200



<b>Project</b>	<b>JMMCRWRP Phase II Expansion MF</b>		
Location(s)	Carson Facility		
FY19/20 Budget	\$150,000	Total Budget	\$13,248,400

**Project Description:** The project will project will replace the micro-filtration system located at JMMCRWRP. The new system will produce 5.9 MGD of micro-filtered effluent as pretreatment to the reverse osmosis system feeding the boiler feed system.

**Justification of Project:** Improves recycled water quality, reliability and increase production to the Marathon Carson Refinery.

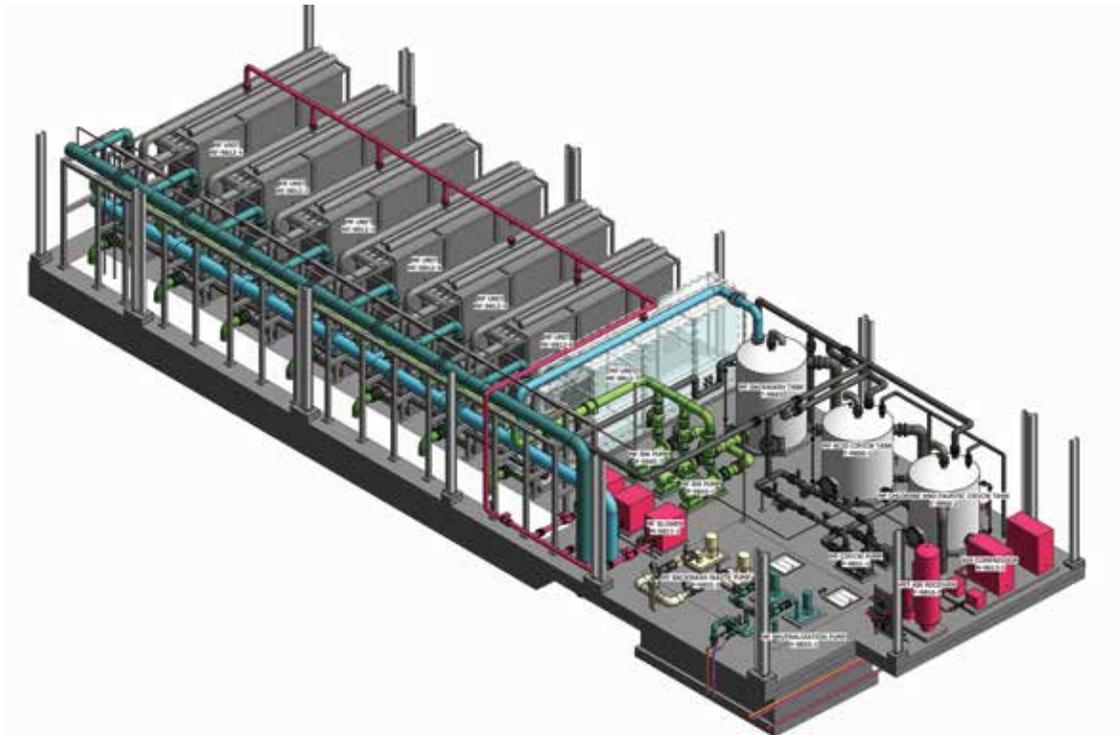
**Planned work for FY19/20:** Final Design.

<b>Project Schedule:</b>	<b>Start Date:</b>	<b>Completion Date:</b>
Construction	November, 2020	June, 2022

**Operating Impacts:**

Increase in AF sold: NA

Increase in Annual Operation and Maintenance Cost: Not significant





Project		Manhattan Village HOA RW Pipeline	
Location(s)	City of Manhattan Beach		
FY19/20 Budget	\$1,488,700	Total Budget	\$1,696,700

**Project Description:** The project will deliver water to the Manhattan Village Homeowners Association located in the City of Manhattan Beach.

**Justification of Project:** Increases recycled water usage with new customer connections through customer lateral construction.

**Planned work for FY19/20:** Final Design.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2018	December, 2018
Design	January, 2019	June, 2019
Construction	September, 2019	June, 2020

**Operating Impacts:**

Increase in AF sold: 45 AF

Increase in Annual Operation and Maintenance Cost: Not significant

Project		Palos Verdes Recycled Water Pipeline Project	
Location(s)	Carson Facility		
FY19/20 Budget	\$8,088,937	Total Budget	\$10,610,612

**Project Description:** The project will expand the recycled water distribution system to serve the Palos Verdes Golf Club and several customers within the City of Torrance.

**Justification of Project:** Increases customer connections through distribution system expansions and customer lateral construction.

**Planned work for FY19/20:** 60% to Final Design and Construction.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2018	December, 2018
Design	January, 2019	July, 2019
Construction	October, 2019	July, 2021

**Operating Impacts:**

Increase in AF sold: 200

Increase in Annual Operation and Maintenance Cost: Not Significant

## Rehabilitation & Replacement Program (R&R)

West Basin built the first phase of the recycled water facility in 1995 and expanded its recycling facilities over a 20 year period. Today, West Basin operates its main recycled water treatment facility in El Segundo along with three satellite facilities, and delivers the recycled water through approximately 100 miles of distribution pipeline.

To develop the major repair and replacement projects plan, West Basin conducted equipment assessments at all recycled water facilities. Through the equipment assessments process, the name of the equipment, the location of the equipment, the condition of the equipment and the estimated installation year of the equipment had all been documented.

West Basin's Rehabilitation & Replacement Program (R&R) is intended to address the R&R issues identified from the assessment report.



Guests enjoy a tour of the Edward C. Little Water Recycling Facility in El Segundo, Calif.



## Summary of the Rehabilitation & Replacement Program (R&R)

Below is the summary table to show the projects in this category and the funding plan of these projects.

Project Description	Fiscal Year 2019-20	Funding Sources			
		PAYGO	Commercial Paper	State Loan/ Customer Contribution	Grant
R&R Program Development & Implementation	\$844,800	\$844,800			
Phase III MF Clearwell Rehabilitation Project	502,265	502,265			
RW Distribution System Cathodic Protection Project	2,467,500		2,467,500		
All Sites Chemical Storage Improvements	2,575,205		2,575,205		
ECLWRF SHC Storage Tank	1,317,116	1,317,116			
RO Membrane Replacement	450,000	450,000			
MF Membrane Replacement	1,405,000	1,405,000			
Misc. Facility R&R	1,000,000	1,000,000			
Brewer Desalter Upgrades Project	1,476,158	1,476,158			
Welded Steel Tank R&R	4,737,116		4,737,116		
Chemical Containment R&R Project	790,350	790,350			
Chlorine Contact Basin Rehabilitation Project	3,774,000	3,774,000			
ECLWRF Solids Handling Improvement Project	964,000	964,000			
Barrier Blend Station Modification Project (Reimbursed)	55,774	55,774			
Fire Alarm System Improvements Project	441,586	441,586			
Chevron Tanks	346,183	346,183			
ECLWRF Title 22 Filter 9 R&R Project	32,981	32,981			
ECLWRF Title 22 Converted Filter Booster Pump	1,159,014	1,159,014			
<b>Total</b>	<b>\$24,339,049</b>	<b>\$14,559,228</b>	<b>\$9,779,821</b>	<b>\$ -</b>	<b>\$ -</b>

## Project Detail on near-term Major R&R Projects and the Operating Impacts

Project	RW Distribution System Cathodic Protection Project		
Location(s)	All Recycled Water Distribution System		
FY19/20 Budget	\$2,467,500	Total Budget	\$4,183,000

**Project Description:** The project includes the design and installation of cathodic protection needs throughout the entire recycled water distribution system. As needed, existing systems will be refurbished and new cathodic protection systems will be designed and installed to ensure the distribution system buried pipelines are protected against corrosion that can occur due to soil conditions.

**Justification of Project:** Repair and refurbishment to extend useful life of existing asset.

**Planned work for FY19/20:** Final Design and Construction.

Project Schedule:	Start Date:	Completion Date:
Planning	December, 2017	June, 2018
Design	January, 2019	December, 2019
Construction	January, 2020	June, 2021

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Not significant

Project	All Sites Chemical Storage Improvement		
Location(s)	All Satellites		
FY19/20 Budget	\$2,575,205	Total Budget	\$10,675,972

**Project Description:** The project will assess aging chemical storage structures and appurtenances at all plants and replace or rehabilitate tanks, pumps, and controls as necessary.

**Justification of Project:** Ensure safety and reliable water production.

**Planned work for FY19/20:** Preliminary and 30% level design.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2019	On-going/continuous
Design	April, 2020	On-going/continuous
Construction	June, 2020	On-going/continuous

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Not significant



Project				ECLWRF Sodium Hypochlorite Storage Tank	
Location(s)		ECLWRF			
FY19/20 Budget		\$1,317,116	Total Budget		\$2,196,633

**Project Description:** The project will assess existing sodium hypochlorite tanks at ECLWRF to determine replacement or rehabilitating of tanks, pumps and controls.

**Justification of Project:** Ensure safety and reliable water production.

**Planned work for FY19/20:** Final Design.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2019	December, 2019
Design	January, 2020	April, 2020
Construction	June, 2020	September, 2020

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Not significant

Project				MF Membrane Replacement	
Location(s)		All Facilities			
FY19/20 Budget		\$1,405,000	Total Budget		\$4,861,200

**Project Description:** Provides additional micro-filtration capacity, expands reverse osmosis production and adds additional nitrification process capacity to serve the increase in demand from Marathon Refinery.

**Justification of Project:** Increases the overall capacity of the existing Carson Facility to serve the BP Refinery.

**Planned work for FY19/20:** Preliminary and 30% level design.

Project Schedule:	Start Date:	Completion Date:
Planning	N/A	N/A
Design	N/A	N/A
Construction	On-going	On-going

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Not significant

Project		Welded Steel Tanks R&R	
Location(s)	ECLWRF and West Basin Satellite Facilities		
FY19/20 Budget	\$4,761,961.18	Total Budget	\$16,563,343

**Project Description:** West Basin currently owns and maintains various welded steel tanks within the Edward C. Little Water Recycling Facility, Torrance Regional Water Recycling Plant, Chevron Nitrification Facility and the Juanita Millender-McDonald Carson Regional Water Recycling Plant. These tanks are above ground and play a fundamental role in the storage and conditioning of the system. Changes in water quality and the aging of the tanks require that inspections be done periodically in order to determine the structural internal and external integrity of the tanks. The objective of the Steel Tank R&R Project is to perform a thorough inspection and assessment of the conditions of each tank and determine the construction requirements required to rehabilitate and extend their use life.

**Justification of Project:** The steel tanks provide reliability of recycled water service.

**Planned work for FY19/20:** Microfiltration Filtrate Steel Tank at JMMCRWRP

**Tank 1**

Project Schedule:	Start Date:	Completion Date:
Planning	January 2018	May 2018
Design	August 2018	June 2019
Construction	July 2019	June 2020

**Tank 2**

Project Schedule:	Start Date:	Completion Date:
Planning	June 2019	October 2019
Design	November 2019	May 2020
Construction	June 2020	May 2021

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Not significant



Project Brewer Desalter Upgrades Program			
Location(s)	Brewer		
FY19/20 Budget	\$1,476,158	Total Budget	\$3,063,467

**Project Description:** This project includes rehabilitation of the groundwater well and facility upgrades at the Brewer Desalter Facility.

**Justification of Project:** Increases the overall capacity of the existing Brewer Desalter and provides redundancy and reliability.

**Planned work for FY19/20:** Complete construction phase of electrical upgrade project.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2017	October, 2017
Design	January, 2018	March, 2019
Construction	July, 2019	June, 2020

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Not significant



Project Chlorine Contact Basin Rehabilitation Project			
Location(s)	ECLWRF		
FY19/20 Budget	\$3,774,000	Total Budget	\$6,562,000

**Project Description:** The project provides for the repair and rehabilitation of the six existing chlorine contact basins at ECLWRF. Elements included in the scope of work include the replacement of baffles, slide gates, mud valves, and miscellaneous piping for washdowns.

**Justification of Project:** Ensure safety and reliable water production.

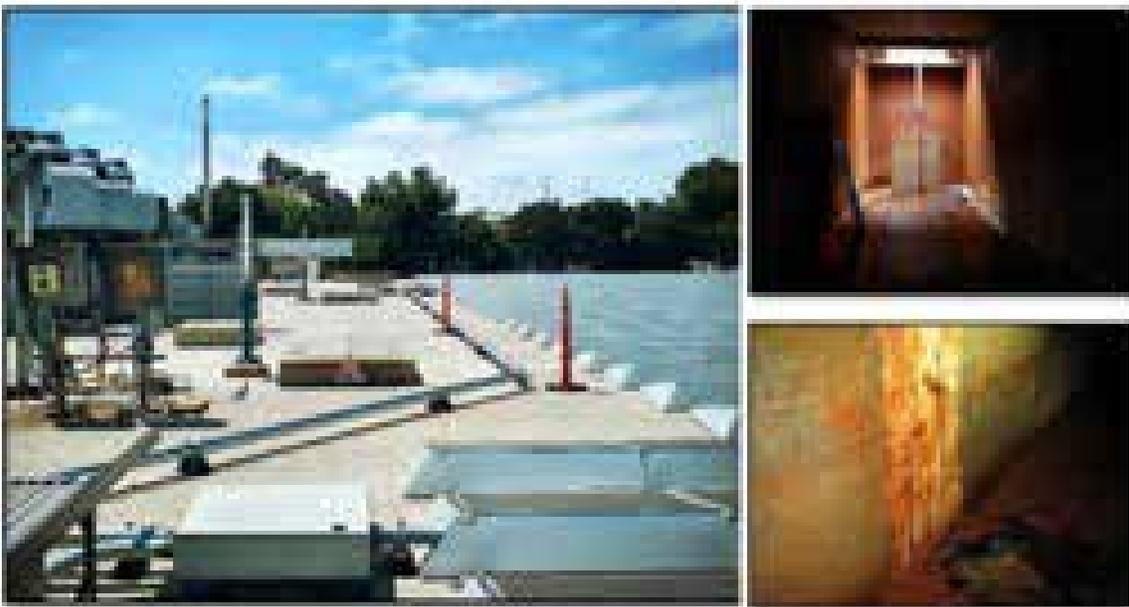
**Planned work for FY19/20:** Final Design and Construction.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2017	February, 2019
Design	March 2019	June, 2019
Construction	July 2019	June, 2020

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Not significant





Project				ECLWRF Solid Handling Improvement Project	
Location(s)		ECLWRF			
FY19/20 Budget		\$964,000	Total Budget		\$12,700,000

**Project Description:** The project will perform condition assessment of the existing solids handling system at ECLWRF to support design and construction of the overhaul of existing filter press and control system.

**Justification of Project:** Increases the overall capacity of the existing Title 22 system.

**Planned work for FY19/20:** Preliminary and 30% level design.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2019	December, 2019
Design	January, 2020	January, 2021
Construction	April, 2021	April, 2022

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Net savings of \$1 million





Project				ECLWRF Title 22 Converted Filter Booster Pump	
Location(s)		ECLWRF			
FY19/20 Budget		\$1,159,014	Total Budget		\$1,370,000

**Project Description:** The project provides for the design and construction of booster pumps on the feed line to the converted filters to rectify hydraulic deficiency between the common effluents piping from the pre-treatment clarifiers to the Title 22 converted filters.

**Justification of Project:** This project will allow the Title 22 system to improve production flexibility, and optimize filtration capability during filter repair and rehabilitation work.

**Planned work for FY19/20:** Final Design and Construction.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2018	September, 2018
Design	January, 2020	July, 2020
Construction	August, 2020	November, 2020

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: Not significant

## Ocean Desal and Other Projects

West Basin is currently conducting an environmental review to evaluate the possible impacts and mitigation measures of a potential ocean water desalination facility to produce drinking water, in accordance with the California Environmental Quality Act (CEQA). The proposed Ocean Water Desalination Project would produce between 20 to 60 MGD of drinking water from the ocean.

West Basin has included the cost of addressing public comments and finalizing the Environmental Impact Report (EIR), potential additional studies that may result from public comments, and site control investigation support.

West Basin also has a number of small capital projects that support the organization and are shown in the table below. The West Basin Project Administration cost represents the direct labor and associated allocated costs to support the CIP program.



## Summary of the Ocean Desal and Other Projects

Below is the summary table to show the new infrastructure projects and the funding plan of each project.

Project Description	Fiscal Year 2019-20	Funding Sources			
		PAYGO	Commercial Paper	State Loan/ Customer Contribution	Grant
Ocean Water Desal EIR Preparation and Certification	\$258,000	\$258,000			
Ocean Water Desal Program Planning and Support Services	1,043,333	1,043,333			
Ocean Water Desal Site Reservation and Support Services	1,000,000	1,000,000			
Ocean Water Desal Legal Services	1,011,000	1,011,000			
Labor Compliance Program	120,000		120,000		
Contract Operator CIP Labor	670,000		670,000		
Project Management System	166,670	166,670			
ION Chrom. Analytical Instrument Replacement	100,000	100,000			
ICPMS Analytical Instrument Replacement	100,000	100,000			
Monitoring Well Pumps Replacement	15,000	15,000			
Stormwater BMPs	20,000	20,000			
DLD Building	100,000	100,000			
Servers and SANs for Virtual Desktop	60,000	60,000			
Servers and SANs for Document Mgmt System	60,000	60,000			
ECL Mitel Phone System	132,000	132,000			
Security System Upgrade (Remote Sites)	94,840	94,840			
Engr/Ops Network	42,220	42,220			
Ecl Signage/HVAC Network	40,940	40,940			
West Basin Project Administration (Allocated)	3,764,274	1,870,115	1,401,095	304,389	188,675
<b>Total</b>	<b>\$8,798,277</b>	<b>\$6,114,118</b>	<b>\$2,191,095</b>	<b>\$304,389</b>	<b>\$188,675</b>

Project		Ocean Water Desalination	
Location(s)	El Segundo Generating Station		
FY19/20 Budget	\$3,312,333	Total Budget	\$3,312,333

**Project Description:** The proposed Ocean Water Desalination project would produce between 20 to 60 MGD of drinking water from the ocean.

**Justification of Project:** Provide a new reliable drinking water supply to meet local demands and reduce dependence on imported water supplies.

**Planned work for FY19/20:** Preliminary and 30% level design.

Project Schedule:	Start Date:	Completion Date:
Planning	July, 2019	June, 2020
Design	N/A	N/A
Construction	N/A	N/A

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: N/A

Project		West Basin Project Admin (Labor, Benefit and Overhead)	
Location(s)	West Basin All Recycled Water Facilities		
FY19/20 Budget	\$3,764,274	Total Budget	On-going

**Project Description:** West Basin allocates all labor, benefit and overhead costs to each operating and capital project. Labor and benefit costs are allocated to the various projects as a percentage of dollars based on the projects actual direct labor to the total actual direct labor. Overhead is allocated similarly; however, the allocation is based on actual direct labor hours.

**Justification of Project:** This is not a project; it is the cost associated for staff working on related capital projects.

**Planned work for FY19/20:** Labor, benefit and overhead costs will be allocated to the capital projects at each month-end.

Project Schedule:	Start Date:	Completion Date:
Planning	N/A	N/A
Design	N/A	N/A
Construction	N/A	N/A

**Operating Impacts:**

Increase in AF sold: N/A

Increase in Annual Operation and Maintenance Cost: N/A



## Strategic Goals and Objectives

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Supply Reliability</b>		
<p><b>Strategy 1.4</b> - Increase supply diversification by promoting water recycling</p>	<ul style="list-style-type: none"> <li>✔ Completed CEQA and preliminary design for expansions of West Basin's recycled water distribution system to the Kenneth Hahn State Park.</li> <li>✔ Completed design and begin construction of the ECLWRF Phase V Microfiltration expansion project, to increase annual Barrier water production and ensure reliability.</li> <li>✔ Completed construction of the Hyperion Effluent Pump Station Expansion and Secondary Electrical Feed Project.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Began construction of the ECLWRF Phase V Microfiltration Expansion Project, to increase annual Barrier water production and ensure reliability to both the Barrier and Chevron Boiler feed systems.</li> <li>▶ Began construction to improve reliability at the JMMCRWRF of the microfiltration system used in the boiler feed treatment system.</li> </ul>
<p><b>Strategy 1.5</b> - Investigate ocean water desalination as a supply opportunity</p>	<ul style="list-style-type: none"> <li>✔ Complete the Final Environmental Impact Report and Response-to-Comments for West Basin Board Certification as part of California's Environmental Quality Act (CEQA).</li> </ul>	<ul style="list-style-type: none"> <li>▶ Evaluate the potential impacts on water rates based on the findings presented in the Preliminary Analysis of the Planning and Development (pAPD) for the ocean water desalination program.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial and Resource Management</b>		
<p><b>Strategy 2.1</b> - Provide effective overall capital facility asset management through the application of industry best-practices</p>	<ul style="list-style-type: none"> <li>✔ Continued R&amp;R Program Development to ensure timely and efficient implementation of Recycled Water R&amp;R projects based on asset condition and need.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Complete design and start construction of the Distribution System Cathodic Protection Project to identify and mitigate system deficiencies and rehabilitate existing cathodic protection system to ensure reliable operation of the recycled water</li> </ul>
<p><b>Strategy 2.2</b> - Maintain facilities to manage and minimize risk of failure and liability exposure</p>	<ul style="list-style-type: none"> <li>✔ Completed construction of the Hyperion Effluent Pump Station Expansion and Secondary Electrical Feed Project. The pump station project will provide additional capacity to serve future recycled water demands and add a second power source to the existing Hyperion Effluent Pump Station to improve reliability and redundancy.</li> <li>✔ Installed a flowmeter to capture all “westside” LADWP demand.</li> <li>✔ Completed the migration of old CMMS software, Hansen 7.7 to the new Infor IPS 8.5.</li> <li>✔ Completed the C. Marvin Brewer Desalter Well Rehabilitation.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Solids handling improvement project new system to allow continuous operations of solids removal process.</li> <li>▶ Chlorine contact basin rehabilitation to repair or replace concrete sections of the basin.</li> </ul>



Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Sound Financial and Resource Management</b>		
<b>Strategy 2.3</b> - Develop partnerships with public and private entities to facilitate capital asset development and implementation	<ul style="list-style-type: none"><li>✔ Completed the Construction of the Carson Mall Lateral Phase II project, partially funded by the US Army Corp of Engineers, to deliver recycled water into new areas within the City of Carson.</li><li>✔ Started construction for Dominquez Tech Center recycled water services.</li></ul>	<ul style="list-style-type: none"><li>▶ Complete final design and begin construction Palos Verdes Recycled Water Pipeline Project.</li><li>▶ Complete preliminary design and CEQA+ future design and construction for the Kenneth Hahn State Park.</li><li>▶ Complete remaining customer pipeline and connection construction projects with grant funding from California's Proposition 84 grant funding.</li></ul>
<b>Strategy 2.6</b> - Operate cost-efficiently and effectively, with robust internal controls	<ul style="list-style-type: none"><li>✔ Completed the design and started the construction of the ECLWRF Phase IV Microfiltration Optimization project, to increase annual Barrier water production and ensure reliability to both the Barrier and Chevron Boiler feed systems. This project will also reduce the operating costs of the Phase IV microfiltration system.</li></ul>	

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Water Quality</b>		
<p><b>Strategy 3.1</b> - Achieve and maintain recycled water client satisfaction</p>	<ul style="list-style-type: none"> <li>☑ Completed the ECLWRF Phase IV Microfiltration Optimization project, to increase annual Barrier water production and ensure reliability to both the Barrier and Chevron Boiler feed systems.</li> <li>☑ Completed the design and started the construction of the ECLWRF Phase V Microfiltration Expansion Project.</li> <li>☑ Began design of the Phase III Clearwell R&amp;R Project to ensure reliable production of the Chevron Boiler Feed System.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Complete construction of the Phase III Clearwell R&amp;R Project to ensure reliable production of the Chevron Boiler Feed System.</li> </ul>
<p><b>Strategy 3.3</b> - Meet permit and contractual water quality requirements</p>	<ul style="list-style-type: none"> <li>☑ Completed the design of the Chlorine Contact Basin Rehabilitation Project to ensure adequate chlorine contact time for disinfected tertiary recycled water.</li> <li>☑ Completed construction of the Reverse Osmosis (RO) Clean-in-Place Waste Discharge project to allow RO cleaning chemicals to be discharged to the sewer.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Complete construction of the Chlorine Contact Basin Rehabilitation Project to ensure adequate chlorine contact time for disinfected tertiary recycled water, per West Basin Title 22 permit issued by the Los Angeles Regional Water Quality Control Board.</li> <li>▶ Complete well to sewer connection project for well monitoring program.</li> </ul>

Strategic Business Plan	FY 2018-19 Accomplishments	FY 2019-20 Strategies
<b>Customer Services</b>		
<p><b>Strategy 4.4</b> - Promote outreach and education programs</p>		<ul style="list-style-type: none"> <li>▶ Complete ECLWRF visitor center renovation project.</li> </ul>





SECTION 9  
GLOSSARY /  
ACRONYM





## Acronyms

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

**AF** - Acre-Foot

**AFY** - Acre-Foot per Year

**BAML** - Bank of America/Merrill Lynch

**CAFR** - Comprehensive Annual Financial Report

**CEQA** - California Environmental Quality Act

**CFO** - Chief Financial Officer

**CFS** - Cubic feet per second

**CIP** - Capital Improvement Program

**CMMS** - Computerized Maintenance Management System

**COP** - Certificate of Participation

**CPI** - Consumer Price Index

**CSMFO** - California Society of Municipal Finance Officers

**CWSC** - California Water Service Company

**CY** - Calendar Year

**DS** - Debt Service

**DWR** - Department of Water Resources

**ECLWRF** - Edward C. Little Water Recycling Facility

**EIR** - Environmental Impact Report

**EMMA** - Electronic Municipal Market Access

**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

**LIBOR** - London Interbank Offered Rate

**LPBF** - Low Pressure Boiler Feed

**LRP** - Local Resources Program

**MF** - Microfiltration

**MGD** - Million Gallons per Day

**MWD** - Metropolitan Water District of Southern California

**OPEB** - Other Post-Employment Benefits

**PARS** - Public Agency Retirement System

**PAYGO** - Pay As You Go

**R&R** - Rehabilitation & Replacement

**RO** - Reverse Osmosis

**RTS** - Readiness-To-Serve

**SRF** - State Revolving Fund

**T-MBR** - Tertiary Membrane Biological Reactor

**WRD** - Water Replenishment of Southern California



## 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 (AF)** - 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 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 (BMP)** - 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 Water Service Company (CWSC)** - 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.

**California Environmental Quality Act (CEQA)** - California state statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible.

**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 (CIP)** – A multi-year plan identifying capital projects to be funded during the planning period.

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

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

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

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

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

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

**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.

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

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

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

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

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

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

**Edward C. Little Water Recycling Facility (ECLWRF)** – 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.

**Finance and Administrative Overhead** - Indirect expenses to support the general operations of West Basin.

**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.

**Full-Time Equivalent (FTE)** - An employee that normally works 40 hours per week and receives full benefits.

**Fund Balance** - See Net Assets

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

**Government Accounting Standards Board (GASB)** - 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 Metropolitan through the Colorado River Aqueduct system and from Northern California.

**Integrated Regional Water Management Plan (IRWMP)** - 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 (JMMCRWRP)** - 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 (LRP)** – 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)** – MWD is one of the world’s largest water agencies. It imports almost 60% of the water used by more than 15 million people in Southern California, including San Diego County. This water is wholesaled to Metropolitan’s 26 member agencies. MWD is governed by a 37-member Board of Directors representing its member agencies.

**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.

**Moody’s** – One of the nationally recognized statistical-rating organizations.

**Net Assets** – Represents the difference between assets and liabilities.

**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.

**Pay-As-You-Go (PAYGO)** – 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 (PARS)** - A retirement plan established to provide benefits to Board of Directors that meets certain minimum requirements.

**Readiness-To-Serve (RTS) 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 (RO)** - 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 Water Project (SWP)** - An aqueduct system that delivers water from Northern California to Central and Southern California.

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

**Tertiary Membrane Biological Reactor (T-MBR)** - A process by which solids are removed from tertiary treated wastewater using a combination of biological treatment and membrane filtration, all of which takes place in a complete-stirred mixed reactor.



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

**Urban Water Management Plan (UWMP)** – 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 Reliability Program (WR)** – A program to decrease dependence on imported water through water recycling, conservation programs and by examining the feasibility of an ocean water desalination facility that can deliver 20 million gallons per day of drinking water to the service area.

**Water Replenishment District of Southern California (WRD)** – 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.





**WEST BASIN  
MUNICIPAL  
WATER DISTRICT**

