



FISCAL YEAR 2017-2018  
**OPERATING BUDGET**  
WEST BASIN MUNICIPAL WATER DISTRICT • CARSON, CA

WATER RECYCLING • WATER CONSERVATION • DESALINATION





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GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**West Basin Municipal Water District  
California**

For the Fiscal Year Beginning

**July 1, 2016**

Executive Director

*California Society of  
Municipal Finance Officers*

*Certificate of Award*

***Operating Budget Excellence Award  
Fiscal Year 2016-2017***

*Presented to the*

***West Basin Municipal Water District***

For meeting the criteria established to achieve the Operating Budget Excellence Award.

*January 31, 2017*



John Adams  
CSMFO President

Craig Boyer, Chair  
Professional Standards and  
Recognition Committee

*Dedicated Excellence in Municipal Financial Reporting*



# GENERAL MANAGER'S MESSAGE

GENERAL MANAGER'S MESSAGE





# GENERAL MANAGER'S MESSAGE

May 22, 2017

## 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 Fiscal Year (FY) beginning July 1, 2017 and ending June 30, 2018 (FY 2017-18). Each year staff makes careful consideration in its budget development to ensure West Basin's mission, strategic goals, and commitments are being financially supported. West Basin balances its budget by appropriately setting water rates and charges to address the many challenges facing the water industry, such as more frequent and severe droughts due to climate change, the impact of water conservation and education on water demand, and the commitment to replace imported water deliveries with drought-resilient supplies such as recycled water.

The following factors were considered in the development of the FY 2017-18 budget including: 1) pass-through increases in MWD's rates and charges; 2) potential implications on water use of a declared end to the current drought; 3) increase in debt coverage and future debt considerations; and 4) increases in staff personnel to ensure that the stated goals and priorities can be achieved.

The total West Basin operating budget is \$205,050,742 and represents an increase of \$13,241,692 (6.9%) from the prior year. This year, several significant changes occurred that impacted revenues, mainly an unanticipated increase in imported water sales. A combination of a tier 1 imported water rate increase of \$36 per acre-foot (AF), and an increase in imported water consumption of 7,000 AF to budgeted water sales of 98,000 AF, has resulted in an \$11.8 million increase in budgeted revenues in FY 2017-18.

The increase in acre-feet sales are expected after Governor Brown announced the end of the drought state of emergency and a transition to a permanent framework for making water conservation a California way of life. Recycled water revenues are expected to increase by \$2.0 million due to an increase of water rates and a modest increase in sales of 1,835 AF. Another



significant change is the expected decline in desalter water sales due to a planned shut-down that will reduce production by 50% in FY 2017-18. An increase in the overall debt coverage to 1.80 from 1.75 is a result of a conscious decision by West Basin to off-set the drop off of fixed revenue in the coming fiscal years. As a result, designated funds are budgeted to increase \$.6 million to \$19.2 million.



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

Highlighted below are accomplishments where West Basin has provided value during the current fiscal year and shaped our objectives for FY 2017-18.



### Water Reliability

- Distributed 1,800 rain barrels to the public during five Rain Barrel Distribution Events held throughout our service area;
- Conducted five greywater education workshops;
- Conducted nearly 100 water saving audits of commercial kitchen facilities through the Cash 4 Kitchens program;
- Constructed the final four of 18 total Ocean Friendly Demonstration Gardens in partnership with the Surfrider Foundation;
- Completed the annual Water Use Report for our customer agencies. This document provides the annual total water use information for the previous fiscal year as well as the recycled water use and connections for each customer;
- Provided monthly updates to the customer agencies regarding the State Water Resources Control Board's mandatory water conservation reporting.



### Water Quality

- Completed laboratory services required to comply with Federal Safe Drinking Water regulations such as analyses of all inorganic, organic compounds, and radioactivity;
- Completed the construction for the disinfected tertiary water Alkalinity Improvement Project. This project addressed the need for nitrified water upgrades to improve the water quality and enhance production capacity;
- Completed the design of the Juanita Millender-MacDonald Carson Regional Water Recycling Plant expansion, intended to deliver approximately 2,000 AFY more recycled water to the Tesoro Refinery for cooling tower applications, as well as improve reliability of the microfiltration system used in the boiler feed treatment system.



### Customer Service

- Received policy direction and strategic priorities from the Board of Directors through monthly committee and board meetings in addition to the recent review of the Strategic Planning document;
- Conducted an informational workshop with customer agencies to review proposed FY 2017-18 budget and water rates and provide updates on various programs and projects;
- Provided regular and timely updates to state and federal legislators regarding the ongoing drought crisis, conservation, and new local water supply projects;
- Developed new and/or improved communication vehicles to showcase West Basin's brand and value.



### Sound Financial and Resource Management

- Refinanced more than \$98 million of refunding revenue certificates of participation and \$32 million of commercial paper resulting in net present value savings of \$17 million at a total interest cost rate of 2.61%;
- Revised Part 4, Chapter 1 (Financial Matters) and Part 7 (Records Management) of the Administrative Code to reflect best practices and improved processes;
- Received Excellence in Budget Recognition for the FY 2016-17 Operating Budget from GFOA and the California Society of Municipal Finance Officers (CSMFO);
- Completed the required biennial actuarial report for the PARS plan;
- Conducted mandatory staff Safety Meetings in accordance with West Basin's Injury/Illness Prevention Program.



### Environmental Stewardship

- Partnered with several environmental organizations in the development and implementation of its water efficiency programs
- Joined the City of Malibu and Los Angeles County Waterworks District #29 on attending the City of Malibu's One Water Expo.

## 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 objectives of the Strategic Plan, consideration of funding for capital projects, and weighing any future risks or financial commitments of West Basin. Each item is carefully considered to ensure that West Basin is focused on meeting its mission of providing a safe and reliable supply of water in a cost-effective manner.

West Basin understands that strong credit ratings allow an agency to obtain low-cost financing for its capital projects. To achieve strong credit ratings, West Basin has internally established budgeted debt coverage goals, enhanced its financial policies, and updated water rates as appropriate. West Basin is an economically strong service area, and it provides an essential and critical service to a community increasing in population. In addition, West Basin has demonstrated consistently high financial performance and the ability to complete large capital water recycling projects in a timely manner.

West Basin establishes its revenues and expenses to meet targeted budget debt coverage at each security interest level and total debt. The long range financial model and financial policies provide the framework of future assumptions that will allow West Basin to continue to maintain a financially sound organization.

In the FY 2017-18 budget, West Basin, considered the impact on imported water sales due to the State Board's decision to lift the conservation provisions of its drought emergency regulations, included the change in rates, both to recycled and imported water, related to the newly negotiated and board approved WRD contract, funding for future Water Reliability Program projects such as the expansion of the Juanita Millender-MacDonald Carson Regional Water Recycling Plant and the continued and increasing need to replace and rehabilitate existing facilities to ensure the health and longevity of West Basin's infrastructure, and the expiration of a local resources program with MWD in the not too distant future.

## Staffing

In the FY 2017-18 Operating Budget, staffing levels increased from fifty-two (52) to fifty-nine (59) full and part-time positions. The increase in staffing levels reflects West Basin's commitment to achieving the goals and strategies set in the Plan. The Plan provides continuous direction for each year's budgeting, implementation, evaluation and reporting, and sets the overall policy direction and strategic priorities established by the Board. It also assists management in determining whether staffing and financial resources are adequate or need to be realigned to achieve strategic objectives.

West Basin is also continuing its intern program to provide opportunities for growth and experience to local college students. West Basin has incorporated eight intern positions in its FY 2017-18 budget.



## 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, polled customer agencies that produce groundwater for projected extractions, monitored the regional water provider (MWD), and also reviewed its current projects to make appropriate assumptions for retail and Barrier imported sales, recycled water sales and the brackish desalter water sales.

On April 7, 2017, Governor Brown issued Executive Order B-40-17 directing the State Board to lift the specific conservation provisions of its drought emergency regulations but to keep in place the temporary requirements for monthly water use reporting and prohibitions against wasteful water use practices while the State Board works to develop permanent reporting and wasteful use regulations. The temporary requirements will remain in effect until late November 2017. The long-term conservation framework, also released on April 7, 2017 includes recommendations to establish permanent water conservation standards and improved urban water management planning to better prepare for more frequent and severe droughts due to climate change. West Basin recognizes the continued need of conservation measures, however, also realizes the recent announcements regarding the end of the drought by the Governor will increase water consumption within its service area in FY 2017-18 has budgeted to take into account the higher water consumption expectation. Staff has budgeted for sales to be at 98,000 AF.

In review of the Barrier sales, staff looks individually at the history of sales to the Dominguez Gap Barrier and the West Coast Basin Barrier. The West Coast Basin Barrier sales have historically included both imported and recycled water sales, however, in consultation with the Water Replenishment District and West Basin's commitment to meet the goal of supplying 100% recycled water, it is expected that West Coast Barrier deliveries in FY 2017-18 will be approximately 15,500 AF based on expected demands from the County of Los Angeles. West Basin intends to fill the request fully with recycled water. Any demands for the West Coast Barrier not met with recycled water will be filled by imported water and charged at MWD's tier 1 commodity rate. The Dominguez Gap Barrier has decreased its pumping recently and it is moving more towards recycled water delivered by Los Angeles Department of Water and Power (LADWP), imported water therefore is expected to decrease from 2,000AF to 800 AF.

## Consideration of Funding for Capital Projects

Planned capital expenditures for FY 2017-2018 are anticipated to be approximately \$81.5 million and more than \$155 million for the following four years. Based on the nature of the projects, staff anticipated using all avenues including the use of 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 approximately an \$8 million grant from the State Water Resources Control Board). Based on the type of projects and the evaluation of the best financing options, staff anticipates the need to enter the capital markets to debt finance approximately \$50 million for larger projects over a two-year period beginning in FY 2018-19.

At this time, West Basin does not anticipate it will need to draw upon its Designated Funds. In addition, West Basin is active in pursuing grants and partnerships with local, state and federal agencies to collaborate on the many important studies and projects that will benefit the water industry.

## Future Risks and Other Considerations

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 long-range financial model, West Basin is able to monitor anticipated rate increases, understand the fiscal impact of future projects and provide a clear picture when circumstances change.

West Basin continues to strive to expand our recycled water program and at the same time explore potential avenues to diversify our water portfolio in order to ensure water reliability to the communities we serve. One such potential avenue is ocean-water desalination. West Basin's Board of Directors has authorized the completion of an Environmental Impact Report (EIR). After completion of the EIR and public comment, the Board will evaluate whether or not to move forward. See more at: <http://www.westbasindesal.org>



## Funding and Rate Projections

As a single enterprise fund, West Basin's major source of funding is the commodity charge on its imported and recycled water sales, representing more than 90% of total revenues. These sales enable West Basin to provide its customers with more reliable, high-quality water. West Basin continues to contribute value to its customers through water recycling, conservation, planning, community outreach, legislative advocacy and effective operations and investments into the future.

The biggest portion of the imported water rate is passed through from Metropolitan Water District's (MWD) commodity rate. MWD adopted a two year budget cycle (with FY 2017-18 being the second year) setting their rates for January 2018 to \$1,015/AF. By utilizing a two year budget and rate adoption cycle, it allows the sub-agencies like West Basin the ability to plan ahead with more clarity. For planning purposes, MWD has indicated future increases to be 3% each year.

For FY 2017-18, West Basin's Board of Directors adopted an increase of \$14/AF on its water reliability service charge that incorporates the Board's decision maintain its debt coverage ratio to help maintain its credit rating; \$14/AF decrease on its readiness to serve charge; a \$6/cubic foot per second increase in its water service charge; and passing through the \$36/AF increase in the MWD commodity charge. In addition, the Board of Directors approved the annual Standby Charge collection that generates \$9.6 million to support the water recycling program. A more thorough discussion of these various funding sources is located in the "Source of Revenue" section.

## In Conclusion

The 2017-18 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 deliver a safe and reliable water supply.

West Basin's budget have been carefully considered by the Board of Directors and communicated to its customers. West Basin 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,



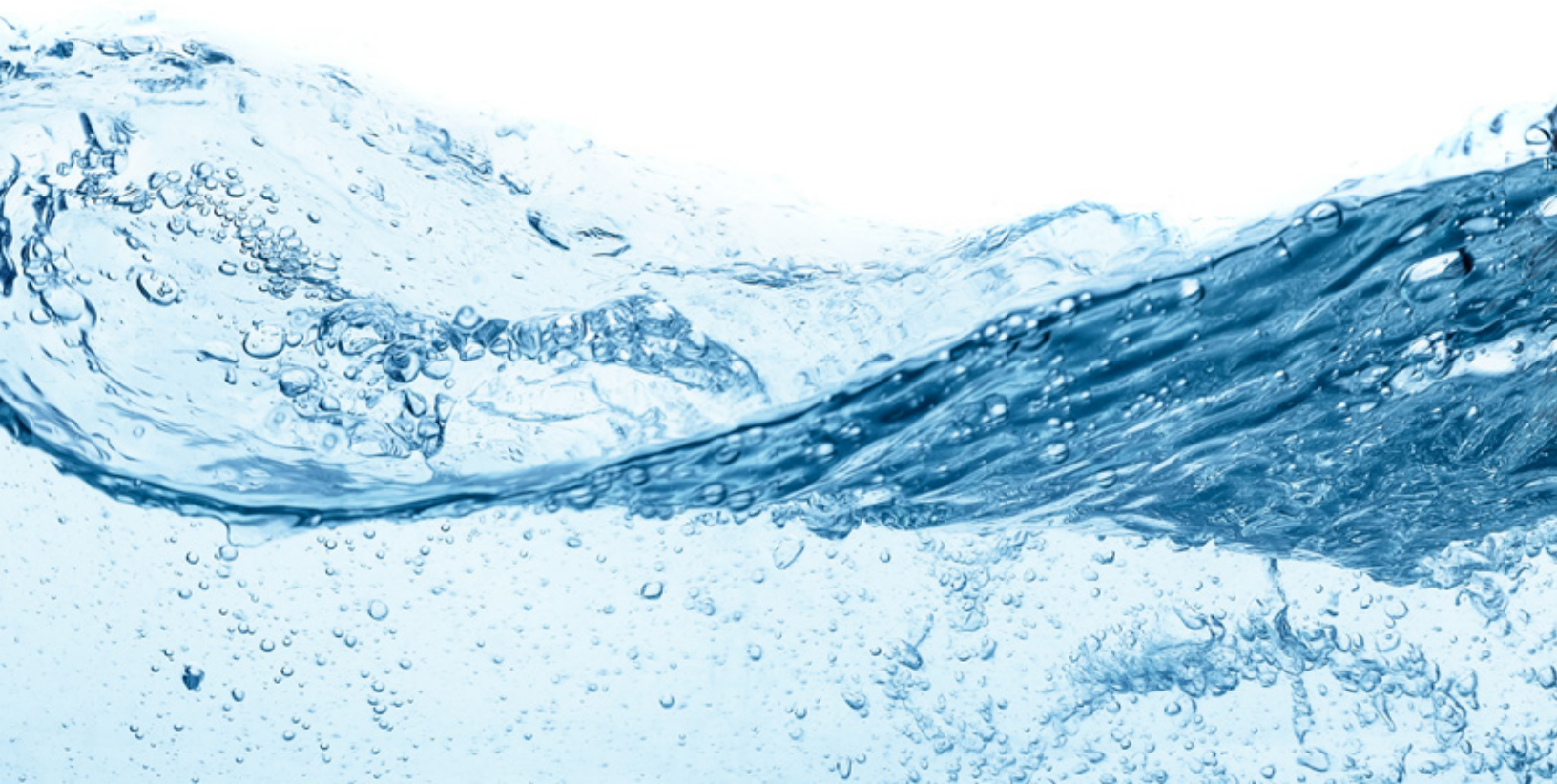
Shivaji Deshmukh  
Assistant General Manager



Fernando Paludi  
Associate General Manager

**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 DELIVER A SAFE AND RELIABLE WATER SUPPLY.**





**ABOUT WEST BASIN  
MUNICIPAL WATER DISTRICT**

**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 and produces recycled water, as well as provides water-efficiency and water education programs to approximately 870,000 residents within a 185 square mile service area.

West Basin is governed by a Board of five directors, who are elected by the public in staggering four-year terms. West Basin is a member agency of the Metropolitan Water District of Southern California (Metropolitan), a cooperative of 26 member agencies including cities and water agencies. West Basin sells the imported water it purchases from Metropolitan to cities, water agencies, and private water companies in coastal Los Angeles County.

Recycled water is the cornerstone of West Basin's efforts to increase water reliability by augmenting local supplies. The District's award-winning Edward C. Little Water Recycling Facility in El Segundo, California is the only facility in the world that produces five types of customer-tailored, "designer" waters. 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 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.

West Basin is currently updating its Strategic Business Plan and intends to have it adopted by the Board of Directors at the end of FY 2016-17. In addition, West Basin is executing its Water Reliability Program with the goal of building a more diverse, locally controlled and reliable water supply. This includes reducing dependence on imported water through continued water conservation, increased water recycling and the continued exploration of ocean water desalination as new, drought-proof supply of drinking water.

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

## BOARD OF DIRECTORS



**DIVISION I**  
Harold C. Williams  
President



**DIVISION II**  
Gloria D. Gray  
Secretary



**DIVISION III**  
Carol W. Kwan  
Past President



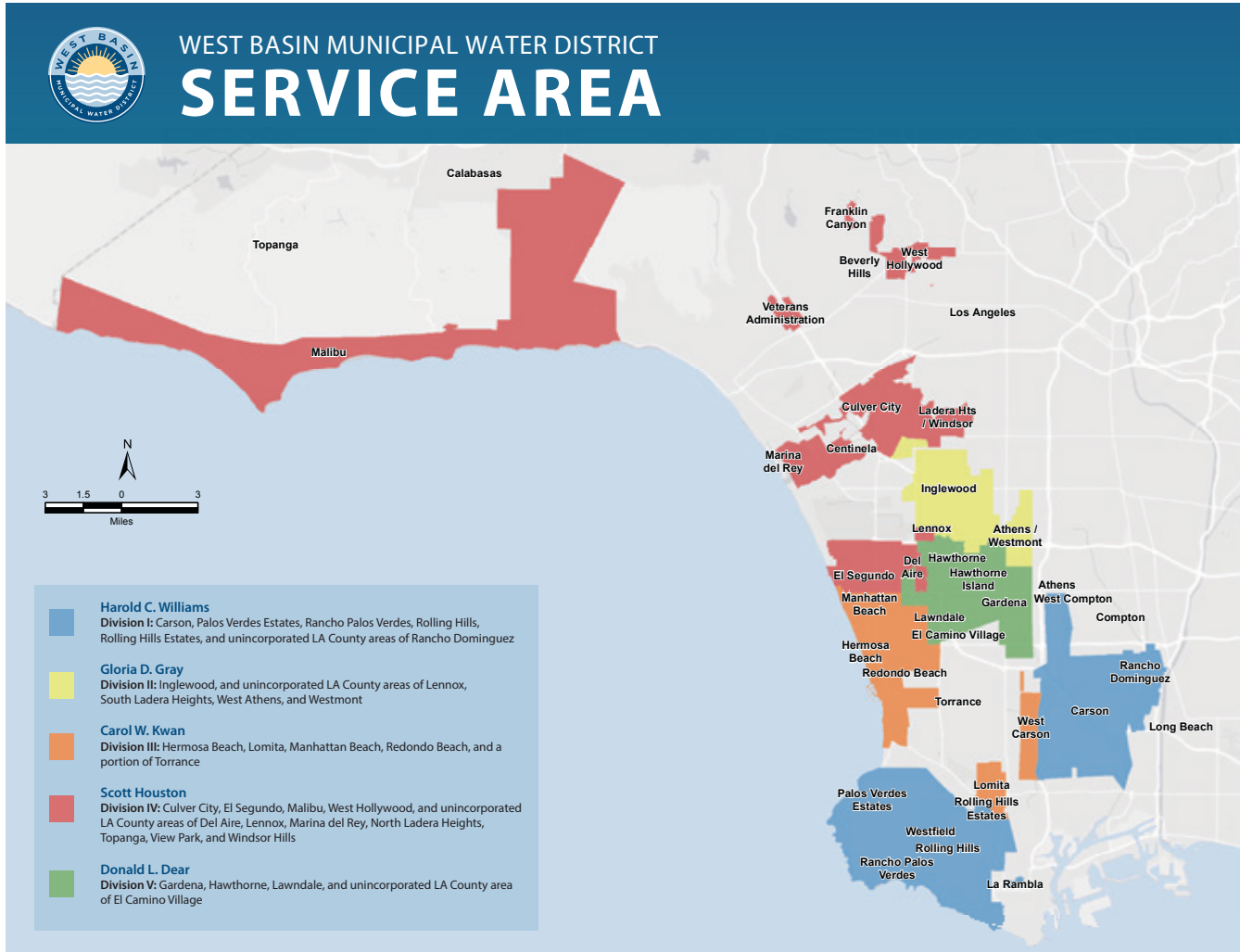
**DIVISION IV**  
Scott A. Houston  
Vice President



**DIVISION V**  
Donald L. Dear  
Treasurer

## Service Area

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



Formed	December 17, 1947
Estimated Population	870,000
Area Served	185 square miles
Water Portfolio	Potable, Recycled & Desalted
Average Residential Parcel Size	9,240 square feet
Lowest Median Income	\$12,410 - Westmont
Highest Median Income	\$245,000 - Manhattan Beach



## Ten Largest Employers Within West Basin Service Area

Employer	Number of Employees
Northrop Grumman Corporation	9,396
Raytheon Company	5,422
Boeing Satellite Systems Inc.	5,042
Sony Pictures Entertainment	3,200
Aerospace Corporation	2,560
DirecTV Operations Inc.	2,384
Palos Verdes Peninsula Unified School District	1,990
Mattel, Inc.	1,791
Accenture	1,211
Chevron Products Company/USA Inc.	1,137

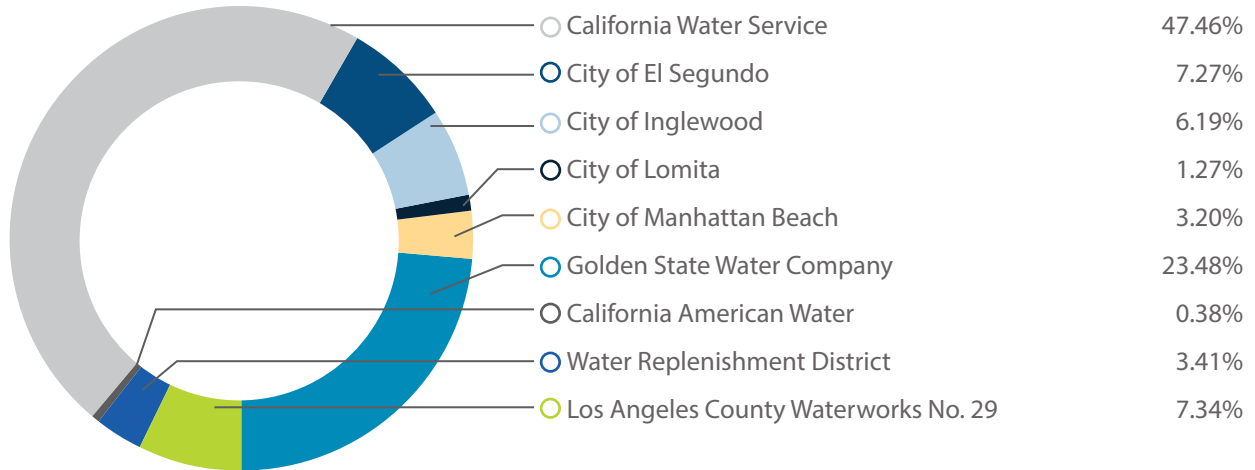
Source: Fiscal Year June 30, 2016 CAFR

CUSTOMERS	Water Purchases		
	Potable	Recycled	Desalted
California American	✓		
California Water Service	✓	✓	✓
City of El Segundo	✓	✓	
City of Inglewood	✓	✓	
City of Lomita	✓		
City of Manhattan Beach	✓	✓	
City of Torrance		✓	
Golden State Water Company	✓	✓	
Los Angeles County Water Works No. 29	✓		
Los Angeles Department of Water & Power		✓	
Water Replenishment District	✓	✓	

# POTABLE AF

## Customer Sales Distribution

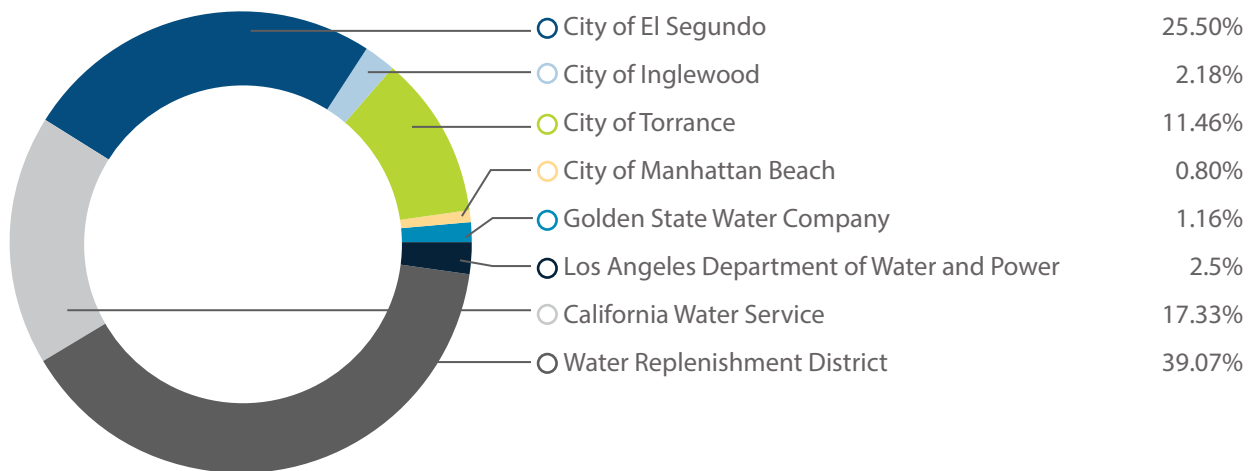
### FY 2015-2016



# RECYCLED WATER AF

## Customer Sales Distribution

### FY 2015-2016



## 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 Metropolitan Water District of Southern California (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. 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 most unique water recycling facility that would convert treated wastewater into different types of high-quality recycled water suitable for groundwater recharge, irrigation, municipal, industrial, and commercial uses.

The benefits generated by the water recycling facility include: more affordable water rates for customers, a reliable, locally-controlled supply of recycled water, reducing energy use by importing less water from hundreds of miles away, reducing wastewater and biosolids discharged to the ocean, and use of wastewater as a sustainable water 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 indoor and outdoor programs for residents and businesses to reduce their consumption of water and maximize water use efficiency.

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 Director's Strategic Business Plan.







# FINANCIAL OVERVIEW & SUMMARY

FINANCIAL OVERVIEW & SUMMARY







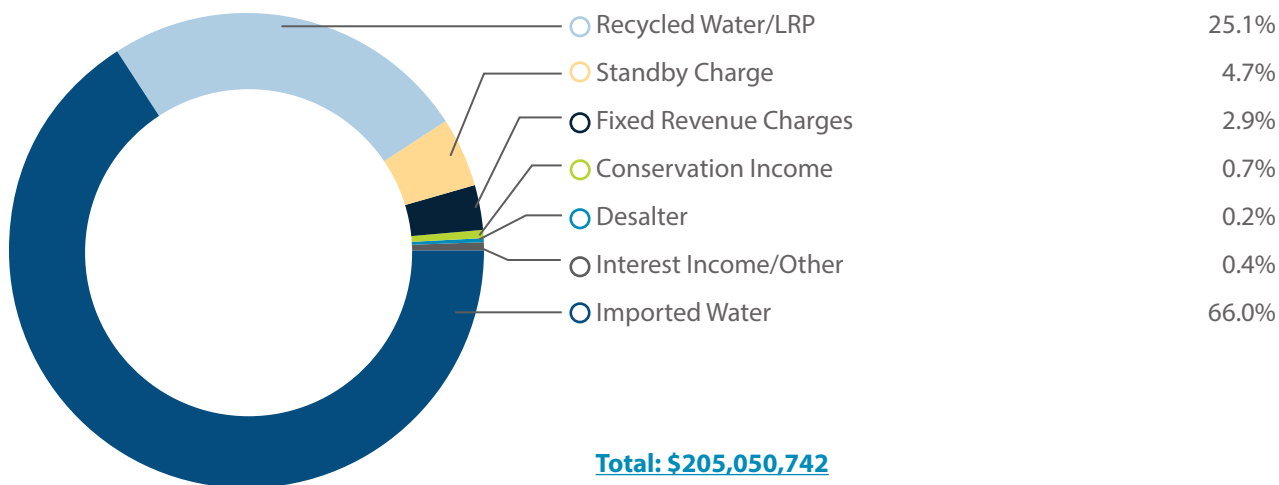
# FINANCIAL OVERVIEW & SUMMARY

## Financial Highlights for Fiscal Year (FY) 2017-18

West Basin's operating budget of \$205 million for FY 2017-18 is \$13.2 million or 6.9% higher than the FY 2016-17 operating budget. Several reasons for the increase in the operating budget include higher revenues from imported water sales of \$11.5 million; an increase in recycled water sales of \$2.0 million (combined with Metropolitan Water District's Local Resources Program); and a decrease in revenues from the

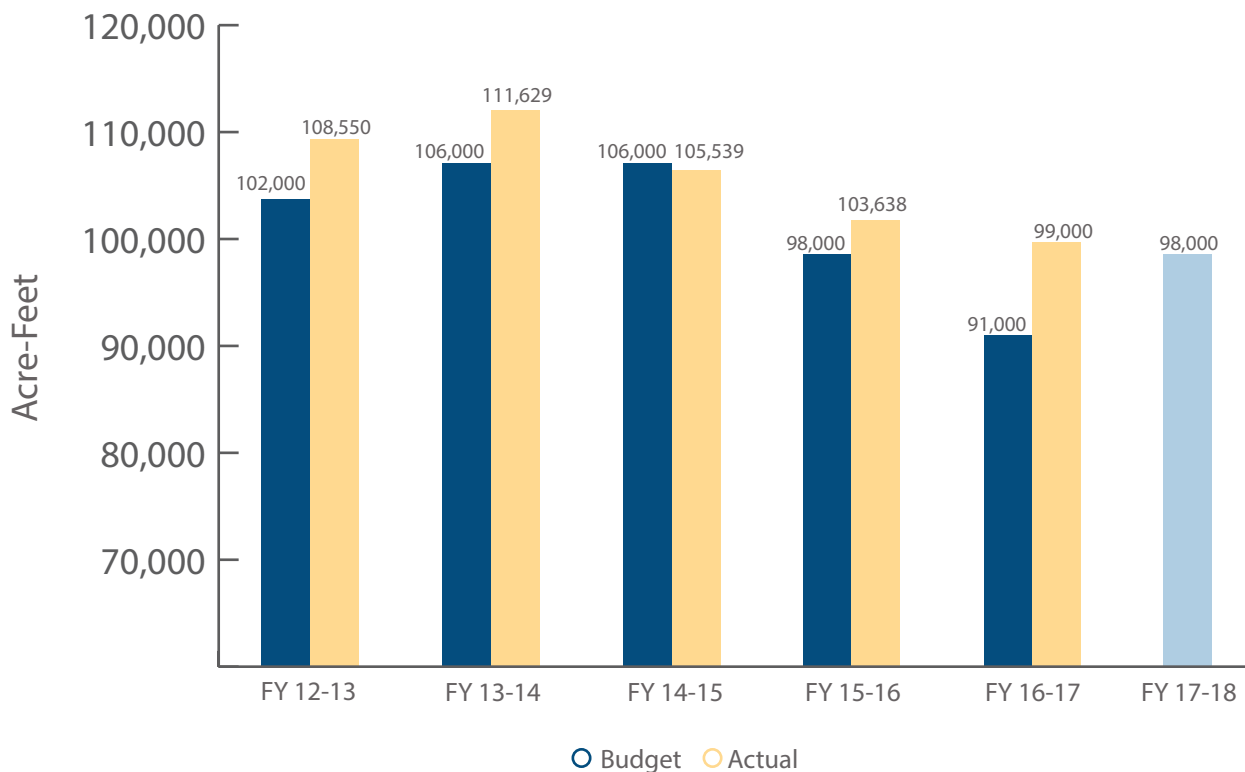
Brewer Desalter due to a planned shut-down during the first six months of the fiscal year resulting in a net change of \$13.2 million. Fixed revenue charges are also increasing by \$.9 million and a drop in other revenue of approximately \$.8 million is budgeted for state and federal grants. More information can be found in section E.

### Source of Funds FY 2017-18



As imported water sales represents two-thirds of West Basin's source of funds, significant attention is given to our water sales assumptions. News of drought rationing and conserving water in a more meaningful way, resulted in an increase in dialogue with our customer agencies to understand their needs and responses to today's water environment. Shown below is our recent five-year history and the proposed fiscal year budget showing the volatility of imported water sales.

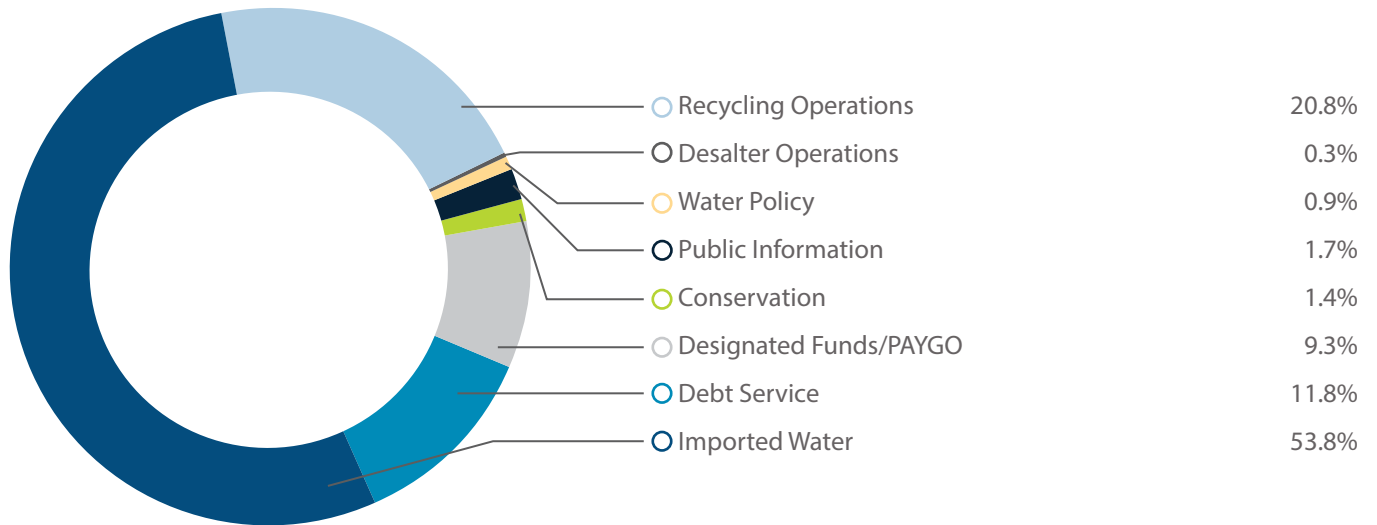
### Imported Water Sales FY 2012-13 thru FY 2017-18



Similar to the revenues, operating expenses for FY 2017-18 are budgeted at \$205 million. Imported water purchases are expected to increase approximately \$7.7 million or 7.5% due to anticipated higher than expected demand as a result of the official end of a four-year drought. West Basin anticipates higher recycled water production of approximately 6%, so recycled water variable production costs are expected to increase approximately \$5.2 million. Recycling operations

budgeted costs also increased as West Basin partners with the City of Los Angeles (City) to pilot a Membrane Bio-Reactor (MBR) as replacement for the City's High Purity Oxygen activated sludge secondary process. This would improve water quality delivered to West Basin and increase the volume and quality of recycled water produced by West Basin. Remaining West Basin program expenses varied slightly and are further described in section F.

### Use of Funds FY 2017-18



**Total: \$205,050,742**





## Staffing and Program Budgets

West Basin focuses on making appropriate personnel increases in departments 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 programs. See the table under “Use of Funds—Personnel Staffing by Program: Full-Time Equivalent (FTE).”

Budget staffing levels for FY 2017-18 consists of 50 full-time budgeted positions, six full-time limited term, three part-time and eight intern positions for an overall position total of 67 as compared to 57 total positions in the FY 2016-17 budget. Six new full-time regular positions were deemed necessary including the conversion of one position from a limited-term status to regular full-time. The new regular positions are:

### OCEAN WATER DESALINATION PROGRAM MANAGER

Oversee and direct the path towards a full-scale desalination facility pending the Board’s certification of the desalination Environmental Impact Report.

### MANAGER OF WATER POLICY & RESOURCES DEVELOPMENT

Oversee a staff of four and their project assignments; this position was vacated upon the promotion of its past incumbent.

### BUYER

An increase in project activity throughout the District requires additional procurement support. In addition, the introduction of centralized procurement also increases the need for the preparation and review of solicitation documents and continued need for customer service.

### OPERATIONS TECHNICIAN

To support the activities of the distribution system and will be dedicated to conducting recycled water site and retrofit inspections and modifications to current sites.

### ADMINISTRATIVE SUPPORT

To support the activities of the Board Services Department.

Along with the new full-time regular positions, one full-time limited position was added to the Technical Resources staff as a Water Resources Engineer II to assist with the development and implementation of a pilot program for MBR technology, and a part-time Tour Guide to conduct tours of the Edward C. Little Water Recycling Facility. Also, West Basin added two intern positions, increasing the number from six to eight interns in FY 2017-18.

Budget	FY 2016-17	FY 2017-18
Total Positions	57	67
Full-time regular	44	50
Full-time limited	5	6
Part-time	2	3
Interns	6	8

## Strategic Business Plan

Originally published in January 2008 and updated in August 2011, West Basin embarked on the development of a Strategic Business Plan (Plan) that provides for a multi-year vision for West Basin. The development of this Plan reassessed West Basin's missions, goals, and objectives through a series of interviews with the Board of Directors, management and key stakeholders. The Plan provides continuous direction for each year's planning, budgeting, implementation, evaluation and reporting, and sets the overall policy direction and strategic priorities established by the Board. It also determines whether staff and financial resources need to be realigned to achieve strategic objectives.

For West Basin, the Plan is a living document and is in the process of being reviewed and updated through a series of interviews and workshops with the Board of Directors, management and key staff to identify changes, if any, that should be made. This will continue to provide guidance and direction on future policy that increases West Basin's value commitment to its service area customers, resident, businesses, and other stakeholders.

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



— **Water Reliability** - West Basin is committed to innovative planning and investments to provide water reliability and drought protection.

*Objective 1:* Prepare a water supply strategy annually that presents different levels of imported water independence and associated costs/water rate implications.

*Objective 2:* Increase diversification of West Basin's supply portfolio.

*Objective 3:* Develop new water infrastructure to ensure regional water supply reliability.

*Objective 4:* Develop an Ocean-Water Desalination Program.



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

*Objective 1:* Maximize customer satisfaction.

*Objective 2:* Meet permit and contractual water quality requirements.



— **Customer Service** - West Basin is committed to providing value by understanding and meeting the needs of our customers and the communities we serve.

*Objective 1:* Actively engage local businesses in the procurement of services.

*Objective 2:* Maintain customer high regard and respect.

*Objective 3:* Support the Board in maintaining a strategic business plan.

*Objective 4:* Promote outreach and education programs.

*Objective 5:* Enhance and promote the image of West Basin.





— **Sound Financial and Resource Management** - West Basin is committed to efficient business operations, financial planning, and asset management.

- Objective 1:* Provide effective overall capital facility asset management.
- Objective 2:* Maintain facilities to manage and minimize risk of failure and liability exposure.
- Objective 3:* Pursue partnerships for facility development.
- Objective 4:* Maintain or improve current bond ratings.
- Objective 5:* Maintain a long-range financial plan.
- Objective 6:* Operate cost-efficiently and effectively.
- Objective 7:* Recruit and hire qualified candidates to fill all West Basin positions.
- Objective 8:* Manage and reward performance.
- Objective 9:* Develop a formal plan for workforce retention, training and succession planning.
- Objective 10:* Conduct Board evaluation of the General Manager.



— **Environmental Stewardship** - Utilize environmentally sustainable and sound business practices in our projects, policies and actions.

- Objective 1:* Establish a process to ensure social and environmental factors are considered in decision-making.
- Objective 2:* Continue to gain environmental community support for West Basin programs.

Within the Operating Program Expenses section, West Basin has identified FY 2015-16 accomplishments and FY 2016-17 strategies to support the Plan goals and objectives identified above.

## Long-Range Financial Plan

With the foundation and direction provided by the Strategic Business Plan, and through West Basin's program, Water Reliability (WR), West Basin is focused on developing more local resources through increasing its efforts in water recycling, developing a full-scale ocean-water desalination facility and expanding its conservation programs (not funded by debt). To further these goals and commitments, West Basin has identified two updates to existing plans; the Recycled Water Master Plan and Water Use Efficiency Master Plan. Each of these Plans will help guide West Basin in determining the financial resources necessary to achieve the stated goals.

In particular, a Capital Improvement Program (CIP) Master Plan will be developed in FY 2017-18 to provide a strategy to implement future Capital facilities and corresponding impacts to the long-range financial plan should be considered due to potential impacts to debt-financing and available 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.

To further its long-range financial planning a financial model has been developed to incorporate future capital and operating costs anticipated and to incorporate future sales assumptions. Also, West Basin has invested much time and effort to develop financial policies to assist with providing long-term fiscal guidance and direction. The financial policies are reviewed each year by the Board of Directors and are summarized later within this section.

The financial model begins with the adopted fiscal year budget and makes certain assumptions such as operating expense increases, water rates, capital project funding, designated funds, and debt coverage. The assumptions are re-evaluated each year and updated as necessary. In addition, the model is updated when West Basin changes its financial policies and when new master plans are developed and approved. The model is also used to perform sensitivity analysis to determine the biggest drivers of potential water rate increases thereby eliminating any surprises. 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 has a financial model that supports its long-term financial planning, the five-year forecast provides a near-term outlook of the anticipated revenues and expenditures.

Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<b>REVENUES</b>						
Water Sales	132,629,514	135,645,877	138,101,666	145,630,972	152,109,790	158,766,545
Water Service Charge	693,680	750,539	818,770	909,744	1,000,718	1,000,718
Capacity Charge	1,932,510	1,914,060	1,914,060	1,914,060	1,914,060	1,914,060
Recycled Water Project Revenues						
Recycled Water Sales	41,881,221	45,858,359	51,073,467	55,681,467	57,708,886	59,828,414
Fixed Revenue Charges	5,949,196	5,949,196	6,896,896	5,906,460	5,906,460	5,906,460
MWD LRP Rebate	9,627,500	10,203,750	8,364,163	1,985,350	1,985,350	1,985,350
Standby Charges	9,650,000	9,650,000	9,650,000	9,650,000	9,650,000	9,650,000
Other Revenues						
Desalted Water Sales	464,455	1,229,850	1,277,273	1,325,405	1,373,777	1,423,544
Interest Earnings/Grants/Other	800,000	1,000,000	1,335,000	1,660,000	1,985,000	1,985,000
Conservation Incentives	1,422,667	1,422,667	1,422,667	1,422,667	1,422,667	1,422,667
<b>Total Revenues</b>	<b>\$205,050,742</b>	<b>\$213,624,298</b>	<b>\$220,853,961</b>	<b>\$226,086,125</b>	<b>\$235,056,709</b>	<b>\$243,882,758</b>
<b>EXPENSES</b>						
Water Purchases/RTS from MWD	108,468,524	111,190,662	112,784,000	116,568,247	121,403,418	126,455,268
Capacity Charge	1,866,925	1,892,250	1,892,250	1,892,250	1,892,250	1,892,250
Program Expenses						
Recycled Operations	42,579,512	41,939,297	46,300,001	47,689,001	49,119,671	50,593,261
Desalter Operations	700,495	1,436,015	1,471,915	1,508,713	1,546,431	1,585,092
Water Policy	1,842,884	1,888,956	1,936,180	1,984,585	2,034,199	2,085,054
Public Information	3,453,150	3,539,479	3,627,966	3,718,665	3,811,631	3,906,922
Conservation	2,813,991	2,884,341	2,956,449	3,030,361	3,106,120	3,183,773
Title 22 Water Quality Monitoring	11,193	11,473	11,760	12,054	12,355	12,664
Designated Funds/Other	19,187,007	21,881,918	21,439,371	21,258,912	23,767,149	25,612,115
2010A CP Line	1,240,000	1,260,000	1,300,000	1,300,000	1,300,000	1,300,000
2011A	5,218,350	5,210,138	5,219,350	5,235,833	5,234,958	4,780,083
2011B	2,993,250	2,993,250	2,993,250	2,993,250	2,993,250	3,392,000
2012A	4,389,900	4,390,017	4,390,688	4,388,458	4,389,396	4,389,042
2013A	-	-	-	-	-	-
2016A	6,165,661	9,925,204	10,256,650	10,231,667	10,171,750	10,421,104
State loan	0	0	726,508	726,508	726,508	726,508
Proposed Debt		2,838,098	3,547,623	3,547,623	3,547,623	3,547,623
Subordinate Debt						
2008B Series	4,119,900	343,200	0	0	0	0
<b>Total Expenses</b>	<b>\$205,050,742</b>	<b>\$213,624,298</b>	<b>\$220,853,960</b>	<b>\$226,086,125</b>	<b>\$235,056,709</b>	<b>\$243,882,758</b>
<b>NET REVENUES</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>
<b>Coverage - All Debt</b>	<b>1.80</b>	<b>1.81</b>	<b>1.75</b>	<b>1.75</b>	<b>1.84</b>	<b>1.90</b>

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, in future years 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.

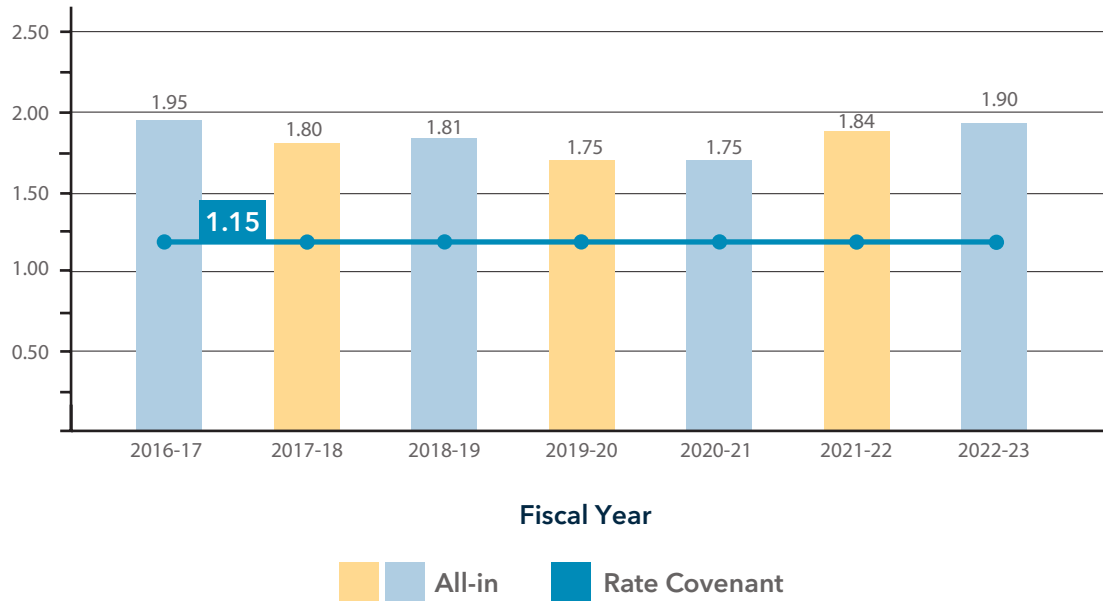


Hyperion  
Treatment Plant

Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<b>Cost (Sales Price) of Water (\$/af)</b>						
MWD Imported - Tier 1 (Jul)	979	1,015	1,056	1,098	1,142	1,187
MWD Treated NonInt - Tier 2 (Jul)	1,073	1,101	1,186	1,228	1,272	1,317
MWD Imported - Tier 1 (Jan)	1,015	1,056	1,098	1,142	1,187	1,235
MWD Treated NonInt - Tier 2 (Jan)	1,101	1,186	1,228	1,272	1,317	1,365
MWD RTS Commodity Charge (Jul)	116	102	105	107	108	107
MWD RTS Commodity Charge (Jan)	102	105	107	108	107	107
MWD Seawater Barrier - Tier 1 (Jul)	979	1,015	1,056	1,098	1,142	1,187
MWD Seawater Barrier - Tier 2 (Jul)	1,073	1,101	1,186	1,228	1,272	1,317
MWD Seawater Barrier - Tier 1 (Jan)	1,015	1,056	1,098	1,142	1,187	1,235
MWD Seawater Barrier - Tier 2 (Jan)	1,101	1,186	1,228	1,272	1,317	1,365
Title 22 Within WB - Recycled Water	1,085	1,144	1,203	1,287	1,346	1,409
Title 22 - LADWP - Recycled Water	1,127	1,186	1,245	1,329	1,388	1,451
Title 22 - Torrance - Recycled Water	1,127	1,186	1,245	1,329	1,388	1,451
Barrier - RW	836	901	970	1,043	1,069	1,096
LPBF - Recycled Water	1,333	1,392	1,451	1,535	1,594	1,657
HPBF - Recycled Water	1,689	1,747	1,816	1,899	1,959	2,022
T-MBR		1,250	1,309	1,393	1,453	1,515
Nitrified - Recycled Water	1,085	1,144	1,203	1,287	1,346	1,409
Reliability Service Charge	237	252	267	306	321	336
MWD LRP Rebate	250	250	250	250	250	250
MWD LRP Rebate - New Rate		340	340	340	340	340
Desalted Water (Jul)	1,095	1,117	1,161	1,205	1,250	1,294
Desalted Water (Jan)	1,117	1,161	1,205	1,250	1,294	1,342
Capacity Charge - MWD	8,000	8,700	8,700	8,700	8,700	8,700
Capacity Charge - MWD (Jan)	8,700	8,700	8,700	8,700	8,700	8,700
Capacity Charge - Cust	6,600	7,300	7,300	7,300	7,300	7,300
Capacity Charge - Cust (Jan)	7,300	7,300	7,300	7,300	7,300	7,300
<b>SALES VOLUME (afy)</b>						
Non-Interruptible (Jul)	50,960	50,333	49,568	49,420	49,680	49,940
Non-Interruptible (Jan)	47,040	46,462	45,755	45,619	45,859	46,099
Non-Interruptible	98,000	96,795	95,323	95,039	95,539	96,039
Seawater Barrier	800	800	-	-	-	-
Recycled Water	39,110	40,815	42,787	43,571	43,571	43,571
Title 22 - Within WB	7,700	7,900	8,100	8,100	8,100	8,100
Title 22 - LADWP	1,050	1,050	1,050	1,050	1,050	1,050
Title 22 - Torrance	5,110	5,115	5,115	5,115	5,115	5,115
Barrier	15,500	17,000	17,000	17,000	17,000	17,000
LPBF	6,450	6,450	6,450	7,234	7,234	7,234
HPBF	2,400	2,400	2,400	2,400	2,400	2,400
T-MBR	-	-	2,240	2,240	2,240	2,240
Nitrified - Recycled Water	900	900	432	432	432	432
Desalted Water	420	1,080	1,080	1,080	1,080	1,080
Capacity Charge-MWD	230.2	217.5	217.5	217.5	217.5	217.5
Capacity Charge-MWD (Jan)	217.5	217.5	217.5	217.5	217.5	217.5
Capacity Charge-Cust	295.6	262.2	262.2	262.2	262.2	262.2
Capacity Charge-Cust (Jan)	262.2	262.2	262.2	262.2	262.2	262.2
<b>FIXED PAYMENTS</b>						
Tesoro	2,136,000	2,136,000	2,136,000	2,136,000	2,136,000	2,136,000
Tesoro - tMBR	-	-	1,116,000	1,116,000	1,116,000	1,116,000
Mobil NH3	(57,600)	(57,600)	(57,600)	-	-	-
Mobil (phase 2)	1,574,460	1,574,460	1,574,460	1,574,460	1,574,460	1,574,460
Chevron Nitrification	1,009,800	1,009,800	841,500	-	-	-
Chevron Boiler Feed	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000
NRG	-	-	-	-	-	-
LADWP	206,536	206,536	206,536	-	-	-
<b>TOTAL FIXED PAYMENTS</b>	<b>\$5,949,196</b>	<b>\$5,949,196</b>	<b>\$6,896,896</b>	<b>\$5,906,460</b>	<b>\$5,906,460</b>	<b>\$5,906,460</b>



## Debt Coverage Projected, Current Budget and 5-year Projection FY 2016-17 thru FY2022-23



West Basin will review its long-range financial model to address its future targeted debt coverages.

## Historical Debt Coverage Comparison with Other Water Agencies FY 2011-12 thru FY 2015-16

Name of Agency	2011-12	2012-13	2013-14	2014-15	2015-16
Central Basin MWD	0.64	0.20	1.03	1.56	1.17
Calleguas MWD	1.66	2.44	2.02	1.64	1.42
Eastern MWD	1.80	2.00	2.10	2.30	2.80
Las Virgenes MWD	2.82	2.92	2.71	2.47	2.61
Inland Empire Utilities Agency	1.69	2.20	2.09	2.75	3.42
San Diego County Water Authority	1.47	1.50	1.50	1.50	1.50
Three Valleys MWD	0.99	2.05	102.86*	0*	-
<b>West Basin MWD</b>	<b>1.52</b>	<b>1.55</b>	<b>1.73</b>	<b>1.45</b>	<b>1.84</b>
Western MWD	1.78	2.75	4.34	2.69	3.40

\* Three Valleys MWD's debt has been fully repaid

## Fund Balance (Designated Funds)

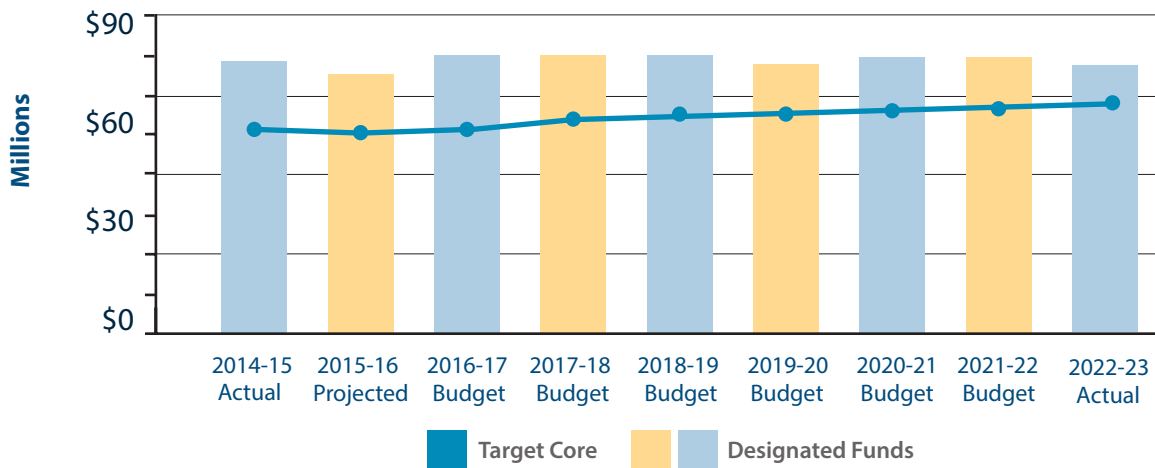
West Basin maintains two major types of funds, restricted and unrestricted. Restricted funds consist of custodial accounts and bond reserves that are subject to the conditions of the respective bond financing documents. The unrestricted reserves are designated by the Board of Directors and reviewed annually as described in the board-approved policy.

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.

The chart below shows the actual, projected and budgeted designated fund levels from FY 2014-15 through FY 2022-23.

**Designated Funds  
Per Fiscal Year**



Below are the actual revenues and expenses for FY 2014-15 and FY 2015-16, the projected revenues and expenses for FY 2016-17, as well as the budgeted revenues and expenses for FY 2017-18 through FY 2022-23.

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

Fiscal Year	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Description:	Actual	Actual	Projected	Budget	Budget	Budget	Budget	Budget	Budget
Designated Funds (Beg Bal)	\$67,388	\$68,669	\$66,686	\$70,230	\$70,529	\$69,970	\$67,152	\$68,545	\$68,434
Imported Water Revenue	136,762	136,330	140,890	135,256	138,310	140,835	148,455	155,025	161,682
Recycled Water Revenue	57,789	56,496	59,202	67,108	71,661	75,984	73,222	75,250	77,370
Other Revenues	2,358	1,846	1,765	2,687	3,653	4,035	4,408	4,782	4,831
<b>Total Revenues</b>	<b>196,909</b>	<b>194,672</b>	<b>201,857</b>	<b>205,051</b>	<b>213,624</b>	<b>220,854</b>	<b>226,085</b>	<b>235,057</b>	<b>243,883</b>
Water Purchases	116,723	114,263	114,881	110,336	113,083	114,676	118,460	123,296	128,348
Program Expenses	41,450	39,065	43,461	51,401	51,700	56,304	57,944	59,630	61,367
Net Debt Service	26,689	25,002	22,345	24,127	26,960	28,434	28,423	28,363	29,556
PAYGO	10,766	18,325	17,626	18,888	22,440	24,258	19,865	23,879	25,000
<b>Total Expenses</b>	<b>195,628</b>	<b>196,655</b>	<b>198,313</b>	<b>204,752</b>	<b>214,183</b>	<b>223,672</b>	<b>224,692</b>	<b>235,168</b>	<b>244,271</b>
<b>Designated Funds (End Bal)</b>	<b>\$68,669</b>	<b>\$66,686</b>	<b>\$70,230</b>	<b>\$70,529</b>	<b>\$69,970</b>	<b>\$67,152</b>	<b>\$68,545</b>	<b>\$68,434</b>	<b>\$68,046</b>

## Summary of Financial Policies

### Budget-Related Policies Summaries

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, quarterly reporting, and is reviewed by the independent external auditors. Each of the financial policies supports the assumptions within our Long-Range Financial Plan.

### Policy Additions and Modifications

In August 2016 the Board adopted a new Disclosures Procedures Policy as part of its 2016A financing transaction. Bond counsel recommended the adoption as a result of the Securities Exchange Commission (SEC) enforcement action during the 2014 Municipal Continuing Disclosure Cooperation initiative. The Disclosures Procedures Policy memorializes and communicates procedures in connection with debt obligations issued by or on behalf of West Basin.

Annually, West Basin reviews its policies to ensure they remain relevant and address any new best practices or regulations that may impact the usefulness of these financial policies. As part of its annual review process, staff, West Basin's financial advisor and bond counsel reviewed the Debt Management, Swap, Standby Charge Policy and Designated Funds Policy. As a result of that review, language was added to the Debt Management Policy to reflect the requirements of Senate Bill (SB) 1029 and expanded the types of debt West Basin can issue. Along with updating the Debt Management, West Basin also reviewed its Standby Charge Policy and changed several definitions to better describe the meaning and intent of each definition, as well as, simplifying the reporting requirement. This information was brought to the Board of Directors in February 2017 for their review and consideration and was re-adopted.



The West Basin Board also considered and re-approved, in March 2017, its Investment Policy with changes made to reflect revised ratings language for negotiable certificates of deposit and municipal obligations, commercial paper, medium term notes and supranationals to reflect changes made by SB 974. In addition, language was removed to reflect the termination of the Temporary Liquidity Guarantee Program and the Student Loan Marketing Association (SLMA), as it is no longer a government sponsored enterprise.

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

## A. 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 60 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.

## B. 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 member.
- 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.

## C. 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 (5%) for future large-scale capital projects.
- Rate Stabilization Fund provides a resource to manage the level of water sales fluctuations from year-to-year.

## D. 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-\$35,000) or a formal process (>\$35,000) 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.

## E. 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.

## F. 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.

## G. 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.

## H. 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.

## I. 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 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.

## J. 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.

## K. 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.

## L. Balanced Budget

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

## M. 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.

## N. 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 (CFO) 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 CFO 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 CFO.
- The District must comply with the specific requirements of each Continuing Disclosure Certificate.
- The CFO 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 supports 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 the Board of Directors and staff can use to measure the success of programs, services and related resources that are funded and within the budget. In addition, staff has provided accomplishments and strategies under the Operating Program Expenses and CIP section to reflect how the use of funds will benefit the agency.

For five years, in consultation with PFM Asset Management, West Basin used the Bank of America / Merrill Lynch (BAML)

1-year Treasury Index to benchmark its portfolio's performance. However, in FY 2014-15, with changes in West Basin's portfolio, commiserate with changing economic conditions overall, West Basin has determined that the BAML 0-3 Treasury Index is more appropriate.

During FY 2014-15, West Basin met with Moody's rating agency and determined that in order to maintain it's critical Aa2 rating, West Basin should evaluate its various rate factors and address financial metrics that are more directly in the agency's control. For West Basin, one of the main factors is to strive to increase its all-in debt coverage ratio of 1.75, up from 1.35 calculated at the end of FY 2013-14. West Basin's covenants require a 1.15, which has been consistently surpassed at the end of each fiscal year. West Basin's Board of Directors deliberated this matter and decided to set a budgetary all-in debt coverage target of 1.75 for FY 2015-16 and has continued using this target for FY 2016-17 and FY 2017-18.

Metric	FY 2015-16 Actual	FY 2016-17 Target	FY 2016-17 Projected	FY 2017-18 Target
On-time submission of annual bond disclosure	100%	100%	100%	100%
Investment Benchmark – meet or exceed BAML 0-3 Yr US Treasury Index	Actual: Exceeded	Actual: On track to meet BAML 0-3 Yr UST Index	Actual: On track to meet BAML 0-3 Yr UST Index	Benchmark: BAML 0-3 Yr UST Index
Maintain AA credit rating from Moody's and Standard & Poor's	Aa2/AA-	Aa2/AA-	Aa2/AA-	Aa2/AA-
On time submission of quarterly debt and swap reports	100%	100%	100%	100%
Achieve internal all-in Debt Coverage target of 1.75	1.84	1.75	1.90	1.75
Improve Recycled Water Cost per Unit	\$1,585	\$1,693	\$1,652	\$1,706
Have 100% submittal of Performance Evaluations	100%	100%	100%	100%

# BUDGET PROCESS AND TIMELINE

BUDGET PROCESS AND 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 (Plan), which is currently being reviewed and updated through a series of workshops with the Board of Directors, management, and key staff. The Plan provides direction for planning, budgeting, implementing, evaluating and reporting. The Plan is a “living” document as it does not have a termination date, but is constantly changing and evolving as the needs of West Basin change and evolve.

## Budget Process

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 device that effectively explains how the budget helps implement long-range goals and strategies;
- An operational guide representing the efforts to control operations and measure performance; and
- A long-term financial plan to guide West Basin's allocation of resources.

The budget is used as a communication tool. Interested parties, such as bond holders, credit rating agencies, and its customers can review the budget to obtain 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 its 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 it includes the financial requirements necessary to achieve these goals and objectives. To ensure completion, the goals are also incorporated into individual staff's performance goals. Furthermore, the high-level goals are included in the monthly board memos to reflect the commitment to meet the Board's directives.

KEY BUDGET DRIVERS	ADDRESSED
1. Pass-through MWD rate increases	✓
2. Discuss sales assumptions	✓
3. Review debt coverage target for current & future years	✓
4. Future debt & cash needs for capital projects	✓
5. Increase in personnel resources to meet goals	✓

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. These enterprise funds activities are financed from revenue collected 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. Another option is cash-basis 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.

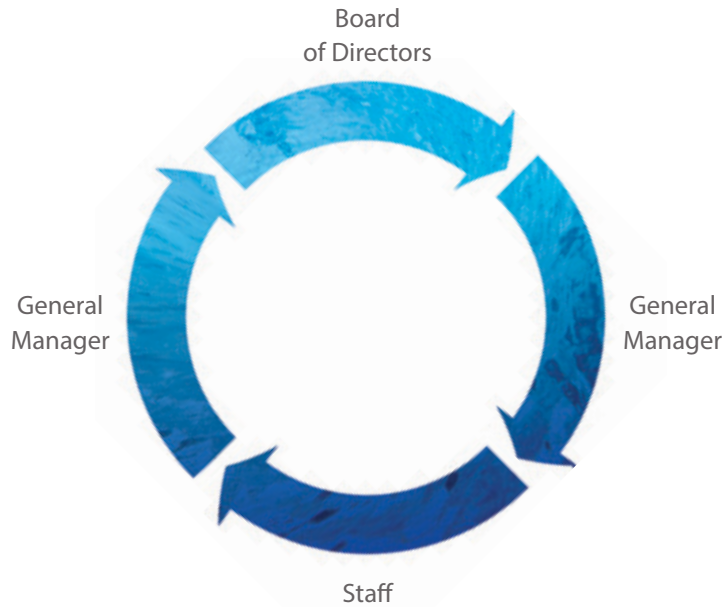
The budget for West Basin is kept on an accrual basis. West Basin also maintains its financial records on an accrual basis. Both the budget and actual transactions are recorded based on a program activity focus. Personnel may work across departments to assist in matters that support the programmatic efforts. By focusing on program activities and not department activities, West Basin has been able to maintain a small and efficient staff.



Ocean Friendly Garden



# Budget Timeline for Fiscal Year 2017-18



January						
Su	M	T	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February						
Su	M	T	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March						
Su	M	T	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

April						
Su	M	T	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May						
Su	M	T	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Dates	Key Activities	Lead Staff
January 9, 2017	Submit staff labor allocations Submit Justification for New Positions/Interns/Limited Term	Department Lead Department Lead
January 13, 2017	Sales Projections (AF) due	Budget Staff
January 20, 2017	Submit operating program and capital budgets	Department Lead
January 31, 2017	Submit FY 16-17 year end projections for all operating programs	Department Lead
February 3, 2017	Discuss Water Rates	Budget Staff
February 15, 2017	Discuss operating/capital budgets	GM/Dept. Lead
February 24, 2017	2nd Meeting to discuss operating/capital budgets	GM/Dept. Lead
March 8, 2017	Board of Directors Workshop Prep	Budget Staff
March 22, 2017	Conduct Board Workshop	GM Office
March 24, 2017	Submit program text to Finance	Department Lead
March 30, 2017	Conduct customer agency workshop	GM Office
April 12, 2017	Finance Committee - Considers draft water rates/charges & standby charge resolutions	Budget Staff
April 24, 2017	Board meeting - Adopt rates/charges and standby charge	Budget Staff
May 17, 2017	Finance Committee - Present draft budget document	Budget Staff
May 22, 2017	Board Meeting - Adopt FY 2017-2018 operating budget	Budget Staff



## January:

Each department manager reviews their department's personnel needs for the next fiscal year and will allocate each of their employee's time to the various program activities to accomplish the goals and objectives provided in the Plan. If a new position is deemed necessary, a request is made to Human Resources and reviewed with the General Manager. Based on their discussion with the requesting department, the General Manager will consider adding the proposed position, if any, to the budget. Human Resources will submit information regarding the proposed position to the Finance Department such as a pay range, position title and whether the position is full-time, part-time, permanent or limited. Water sales projections are discussed by the department managers to aide in the development of water sales assumptions for both imported and recycled water sales. Budget versus actual reports for the current fiscal year are provided to each manager to assist in the preparation of a draft budget. Department managers then submit their proposed programmatic operating and capital improvement program (CIP) budgets for Fiscal Year (FY) 2017-18. The monthly budget versus actual reports also assists each manager in providing their year-end program projections for the current fiscal year.

## February:

Budget staff updates its long-range financial model with the proposed operating and CIP budgets, along with water sales projections and current debt service to recommend the necessary water rates and charges to meet the budget objectives for FY 2017-18 and future fiscal years. Also incorporated into the budget are the anticipated Metropolitan Water District (MWD) water rates to determine the total effect on West Basin's own rates and charges (the changes in the MWD rate is passed through to West Basin's purveyors). The Finance Department reviews the CIP and the projected net revenues to determine if sufficient net revenues are available to meet the PAYGO requirements. Those capital projects not funded by PAYGO are classified as either long-term debt financed or managed through West Basin's Commercial Paper Program. The managers and budget staff meet to discuss the recommended water rates and charges to achieve the budget objectives for FY 2017-18. Water rate and acre-feet options are discussed and presented to the General Manager's office for consideration. Department managers have an initial meeting 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. The General Manager will make changes to the draft budget as needed.

## March:

General Manager submits a proposed balanced budget to the Board of Directors in a workshop format. At the workshop, staff reviews water sales assumptions, operating budgets that meet the goals and objectives of the Plan and demonstrate appropriate all-in bond coverage levels. During the workshop, all staff members who participated in the development of the proposed budget are in attendance to answer questions regarding their respective budget. The presentation also discusses the budget 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. Department managers and budget staff submit budget text to explain and support program costs, water rates and charges, and other budgetary assumptions. Subsequent to the Board workshop, West Basin conducts a customer agency workshop to discuss its goals, the supporting budget and proposed water rates.

## April:

Any changes requested by the Board of Directors and/or the General Manager are incorporated into the proposed budget. The budget staff presents an update of the proposed budget and provides responses to feedback from the Board workshop and customer agency workshop at the Finance Committee. The Board of Directors adopts water rates and annual standby charges.

## May:

The recommendation for approval is taken to the Board of Directors to adopt the proposed operating budget for the next fiscal year beginning July 1.

## Budget Review

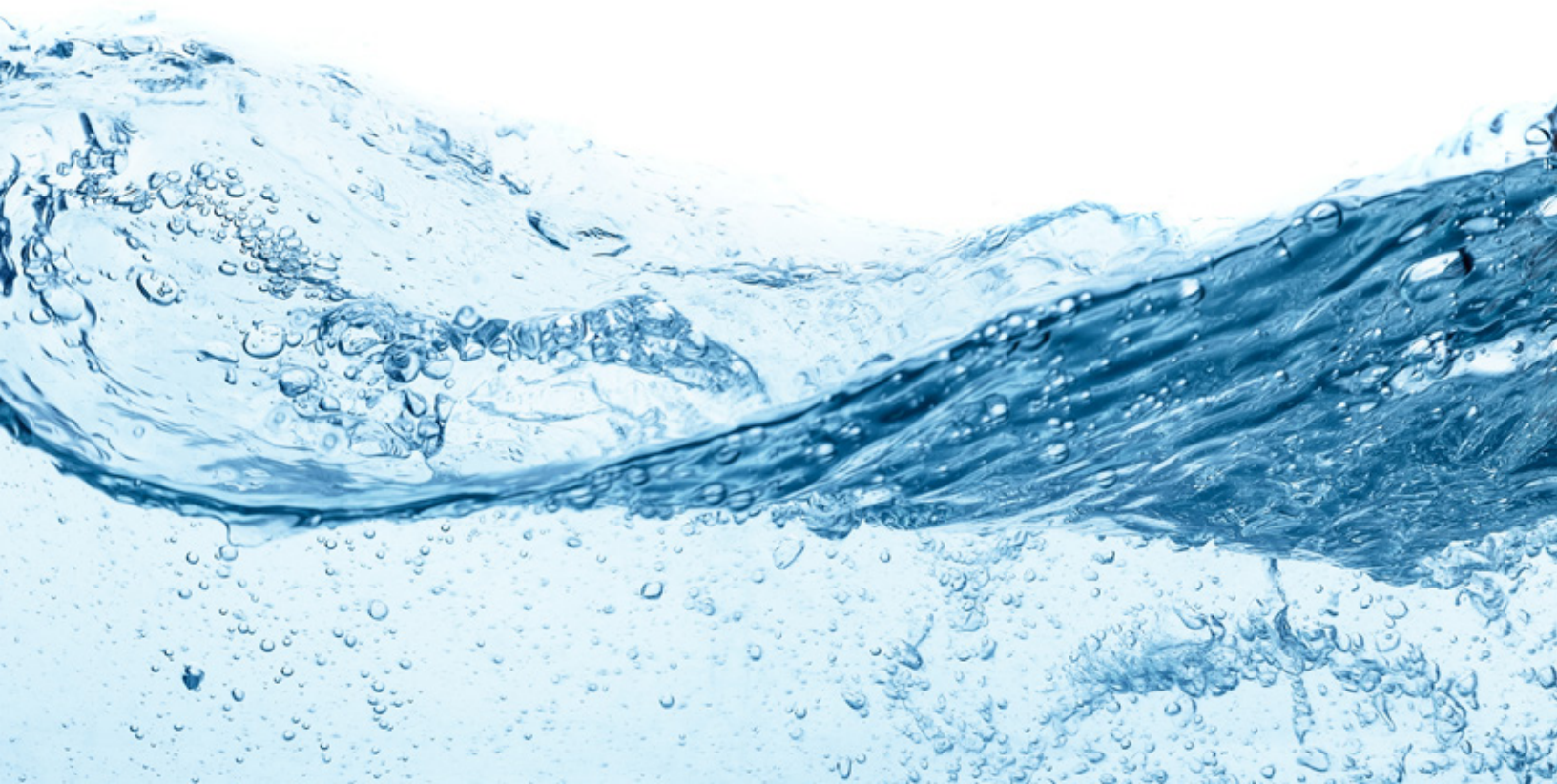
West Basin's budget monitoring process begins shortly after the prior year's budget is adopted. Each month the managers receive a budget versus actual report to review and assist them in monitoring costs. On a quarterly basis, the Finance Department develops an executive level budget versus actual report 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 reflect which program's budget requires an amendment, why the amendment is needed, and how much it needs to be amended from 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.



Water Education Center





**SOURCE OF REVENUE**

**SOURCE OF REVENUE**





## SOURCE OF REVENUE

West Basin Municipal Water District's (West Basin) 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 66.0% and recycling sales represent 25.1% of all revenue sources. Total budgeted revenues for Fiscal Year (FY) 2017-18 are \$205,050,743.

Summarized below are the actual, projected and budgeted revenues for the past three years along with comparative budgets (FY 2016-17 & FY 2017-18) to see the trend of various revenue sources.

REVENUES	FY 2014-15 ACTUALS	FY 2015-16 ACTUALS	FY 2016-17 PROJECTED	FY 2016-17 BUDGET	FY 2017-18 BUDGET
Imported Water Sales	\$133,953,435	\$133,188,144	\$138,033,000	\$120,871,094	\$132,629,514
Water Service Charge	527,238	578,928	625,449	625,449	693,680
Capacity Charge	2,265,450	2,563,104	2,231,780	2,231,780	1,932,510
Recycled Water / LRP	40,386,155	39,538,553	44,500,000	49,535,108	51,508,721
Fixed Revenue Charge	7,662,456	7,302,134	5,051,900	5,051,929	5,949,196
Desalter Water	700,631	815,118	255,036	904,990	464,455
General Fund Interest	209,589	397,817	560,000	926,300	766,000
Standby Charge	9,740,981	9,654,900	9,650,000	9,650,000	9,650,000
Conservation Income	735,542	500,218	350,000	1,378,700	1,422,667
Other Income	727,880	132,772	600,000	633,700	34,000
<b>Total Revenues</b>	<b>\$196,909,356</b>	<b>\$194,671,688</b>	<b>\$201,857,165</b>	<b>\$191,809,050</b>	<b>\$205,050,743</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. Desalted, brackish groundwater is also produced and sold. In the early 1990s, West Basin began constructing recycled water distribution pipelines and facilities for industrial, commercial, and landscape irrigation sites. Today, more than 400 sites throughout the southwestern portion of Los Angeles County benefit from this local resource. To fund the construction of the facilities and pipelines, West Basin obtained funding from a variety of sources including a Standby Charge, grants, fixed revenue charges, and commodity rates.

West Basin receives approximately 7.6% of its revenues from fixed revenue charges and the Standby Charge. The fixed revenue charges are determined by agreements. The Standby Charge generates approximately \$9.65 million, and through Resolution 04-17-1068, the charges were approved by the Board on April 24, 2017.

Annually, West Basin establishes rates and charges through a resolution approved by the Board. Resolution 04-17-1069 was adopted at its April 24, 2017 meeting and includes rates for the following services:

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

Although the resolution reflects non-interruptible rates for two tiers, Tier 2 pricing is not anticipated for West Basin customers.

The acre-foot (AF) assumption for water deliveries is also reviewed annually and is 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 West Basin capital projects to determine where recycled water sales may replace imported water sales. Retail imported water sales were 103,638 AF in FY 2015-16 (West Basin was able to achieve these sales due to one customer's need to supplement their water from potable instead of groundwater) and, due to continued drought conditions, conservation messaging and anticipated groundwater usage by our customer agencies, sales are projected to drop approximately 4.5% to 99,000 AF by end of FY 2016-17. West Basin anticipates a re-bounce in imported sales in FY 2017-18 with the lessening of drought messaging and conservation efforts due to the Governor's executive order lifting the drought emergency in April 2017. As a result, in FY 2017-18 West Basin is budgeting for expected sales of 98,000 AF, which is a 7.7% increase from its FY 2016-17 budget of 91,000 AF.

As expected, budgeted sales of imported water to the West Coast Barrier (Barrier) have decreased significantly from actual AF deliveries due to a shift away from imported water to recycled water deliveries. Imported water sales to the barriers (West Coast and Dominguez Gap) were expected to drop from 3,681 AF in FY 2015-16 to a budget of 2,500 AF in FY 2015-16. West

Basin strives to deliver as much recycled water as possible for injection into the Barrier and as a result expects a 68% decrease in imported sales to the barriers, budgeting for 800 AF in FY 2017-18.

***An AF is equivalent to 325,900 gallons of water that meets the needs 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.***



## Water Rates and Charges

### Non-interruptible Water Revenues

West Basin imported water revenues are comprised of three rate components: MWD's Commodity Rate, Readiness-to-Serve (RTS) Charge, and West Basin's Reliability Service Charge (RSC). West Basin's retail and barrier imported water rate will have a combined overall increase of \$36/AF by January 2018. The Board approved its one-year rate increase for FY 2017-18 at the Board meeting on April 24, 2017. Based on AF assumptions and the rates for the fiscal year described below, West Basin is budgeting \$132,629,514 in imported water sales.

MWD's commodity rate increase has historically become effective on January 1 of each year and last year MWD approved rates for the next two years on April 12, 2016. For Calendar Year (CY) 2017 and 2018 MWD's Board of Directors voted to increase their non-interruptible commodity rate approximately 3.9% and 3.7%, respectively, effective January 1 in those years. West Basin will pass through the MWD Tier 1 commodity rate at \$979/AF from July-December 2017 and \$1,015/AF from January-June 2018.

MWD's Board of Directors also approved an overall RTS charge collection of \$140 million in CY 2018, an increase of 3.7% from the \$135 million collected in CY 2017. 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). However, West Basin's allocated portion in FY 2017-18 has decreased by approximately \$597,000 due to MWD collecting \$153 million in CY 2016 which was effective during the first six months of FY 2016-17. The RTS component of West Basin's imported water rate was determined by dividing West Basin's share of MWD's RTS collection (\$10,051,250) by the budgeted imported water sales, 98,800 AF, approximately \$102/AF, effective January 1, 2018. This represents a \$14/AF or 12.1% decrease in West Basin's RTS of \$116/AF which is effective until December 31, 2017.

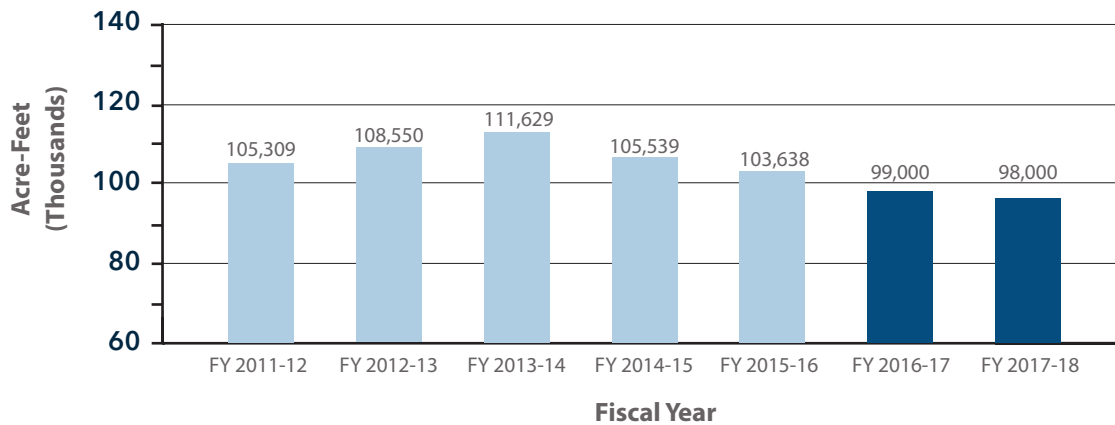
When determining the RSC, West Basin not only looks at the current fiscal year's budget but also considers the following five-years forecast focusing on the all-in debt coverage target of 1.75. This process helps in avoiding large spikes in the RSC from year to year but may also provide an all-in debt coverage in any one year to be higher than 1.75. For FY 2017-18, the all-in debt coverage is budgeted at 1.80 and consequently, the RSC will increase from \$223 to \$237 or \$14/AF. The continued commitment to this target is in response to prior reviews with Moody's rating agency which emphasized that the financial metrics compared to its peers had been lower. This increased RSC also provides West Basin sufficient revenues to support its Water Reliability Program.

### West Basin Municipal Water District FY 2017-18 Water Rates and Charges

<b>Rates Effective July 1, 2017 to December 31, 2017</b>				
	<b>MWD Commodity</b>	<b>MWD RTS</b>	<b>Reliability Svc Charge</b>	<b>Total</b>
<i>Non-Interruptible Retail &amp; Barrier (Tier 1)</i>	\$979/AF	\$116/AF	\$237/AF	<b>\$1,332/AF</b>
<i>Non-Interruptible Retail &amp; Barrier (Tier 2)</i>	\$1,073/AF	\$116/AF	\$237/AF	<b>\$1,426/AF</b>
<b>Rates Effective January 1, 2018</b>				
	<b>MWD Commodity</b>	<b>MWD RTS</b>	<b>Reliability Svc Charge</b>	<b>Total</b>
<i>Non-Interruptible Retail &amp; Barrier (Tier 1)</i>	\$1,015/AF	\$102/AF	\$237/AF	<b>\$1,354/AF</b>
<i>Non-Interruptible Retail &amp; Barrier (Tier 2)</i>	\$1,101/AF	\$102/AF	\$237/AF	<b>\$1,440/AF</b>

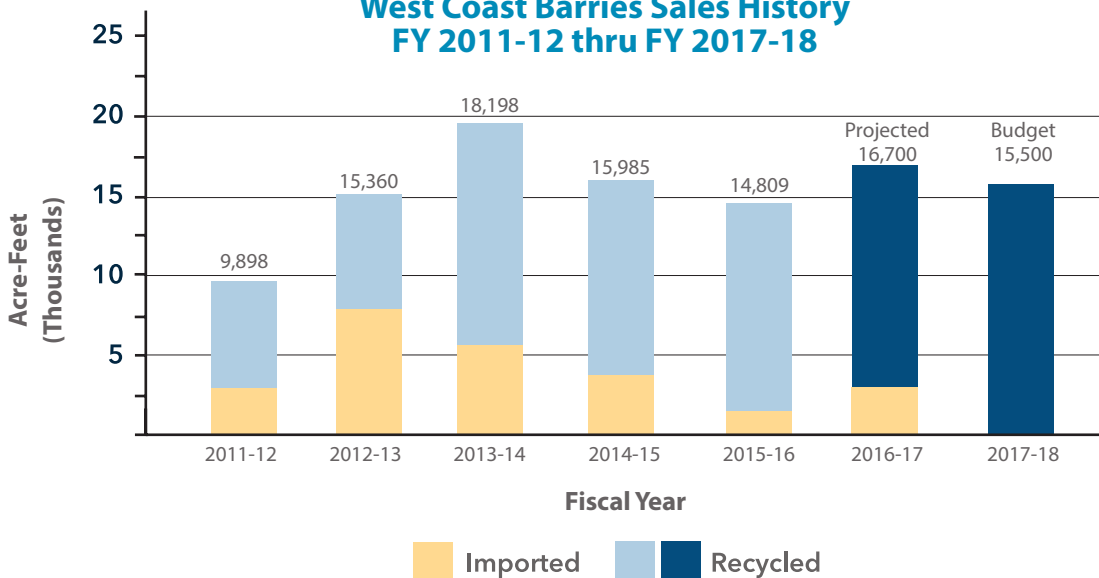
Imported water sales vary based on hydrologic conditions, water demand and on the available water supply. West Basin imported water sales increased annually since experiencing a low of 102,712 AF in FY 2010-11, reaching 111,629 AF in FY 2013-14. However, even with conditions that brought snowpack levels well above annual averages, consumption has decreased due to conservation messaging and changes in consumer behavior. West Basin also anticipates one particular customer to return to its previous levels of groundwater use thereby reducing its imported water use. Projected sales for the end of FY 2016-17 are expected to decline 4.5% to 99,000 AF from the previous fiscal year actual sales of 103,638. West Basin anticipates a re-bounce in imported sales in FY 2017-18 with the lessening of drought messaging and conservation efforts due to the Governor's executive order lifting the drought emergency in April 2017. As a result, in FY 2017-18 West Basin is budgeting for expected sales of 98,000 AF, which is a 7.7% increase from its FY 2016-17 budget of 91,000 AF.

### Retail Sales FY 2011-12 thru FY 2017-18



Based on information received from the Water Replenishment District (WRD) and the County of Los Angeles, West Basin determines the overall demand at the West Coast Barrier (Barrier) and Dominguez Gap Barrier. Historically, the Barrier is injected with a mix of recycled and imported water, with total (imported and recycled) water delivered in FY 2015-16 of 14,809 AF. The graph below shows the decreasing demand for imported water over the years as more recycled water is used for the Barrier. Imported sales to the Barrier were projected to drop from 1,132 AF in FY 2015-16 to a budget of 500 AF in FY 2016-17. West Basin's goal is to deliver 100% recycled water to the Barrier; therefore no imported water is budgeted to be sold in FY 2017-18. Consequently, West Basin expects sales of 15,500 AF of recycled water to the Barrier for FY 2017-18, an increase of 1,500 AF from the FY 2016-17 budget. Imported water demand to the Dominguez Gap Barrier is also expected to drop and will be budgeted at 800 AF for FY 2017-18, a decrease of 1,200 AF from the previous year.

### West Coast Barriers Sales History FY 2011-12 thru FY 2017-18





## Water Service Charge

West Basin collects the Water Service Charge as a monthly fixed amount based on the cubic feet per second (cfs) of each customer's meter capacity. West Basin adopted a rate of \$61/cfs effective at the beginning of FY 2016-17 and will increase the rate to \$67/cfs for FY 2017-18. There has been no change in the number and size of meters remaining at 44 meters ranging from 4 cfs to 160 cfs. West Basin anticipates \$693,680 from this revenue source. The monthly amount to any one customer shall not exceed \$4,600 per meter.

## Capacity Charge

The MWD Capacity Charge was developed to recover the 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. West Basin's combined cubic feet per second (cfs) peak amount from its customers is 262.2 cfs for CY 2017, calculated on each customer's highest overall peak level during the past three (3) years. West Basin's non-coincidental peaking with MWD is 217.5 in CY 2018.

### West Basin Customers

	2014	2015	2016	Peak
California American Water Co.	3.7	2.8	1.3	3.7
Cal Water - Dominguez	51.1	46.5	45.9	51.1
Cal Water - Hawthorne	7.5	6.5	6.0	7.5
Cal Water - Hermosa Redondo	20.7	18.6	17.1	20.7
Cal Water - Palos Verdes	44.2	33.9	34.8	44.2
LA County Waterworks No. 29	18.2	16.9	17.7	18.2
City of El Segundo	20.5	20.6	11.4	20.6
City of Inglewood	15.0	11.5	12.0	15.0
City of Lomita	3.6	3.9	3.8	3.9
City of Manhattan Beach	10.3	7.8	8.2	10.3
Golden State Water Co.	34.3	44.3	43.8	44.3
Water Replenishment District	22.7	2.8	14.3	22.7
	<b>TOTAL</b>			<b>262.2</b>

West Basin models MWD's methodology to calculate its peak charges to the sub agencies and; therefore, 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 changes is structured to coincide with MWD's increase as well. West Basin will increase its current Capacity Charge Rate from \$6,600/cfs to \$7,300/cfs on January 1, 2018, with anticipated revenues of \$1,932,510 during FY 2017-18.

## Recycled Water Charges and Fixed Revenue Charges

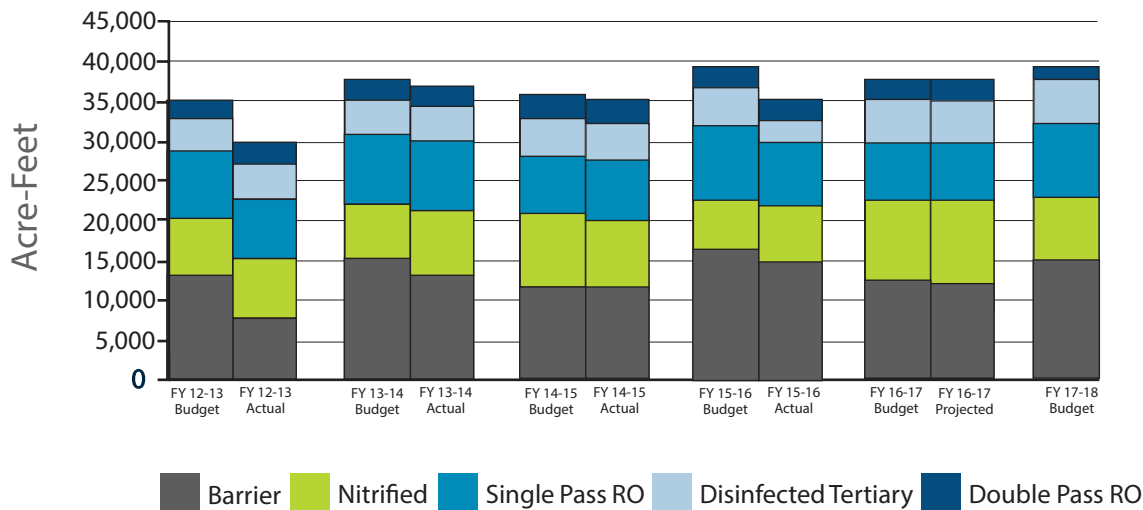
West Basin adopts its recycled water rates to increase according to customer agreements or in line with the West Basin's Non-Interruptible Tier 1 rate increase, depending on the type of recycled water. In addition, West Basin also takes into consideration the increase in the imported water rate when it budgets for increases in the recycled water 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 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. These revenues are estimated at \$51,508,721 for FY 2017-18.

### Recycled Water Rates (Effective July 1, 2017)

Volume (AF/ Month)	WBMWD Service Area	Outside Service Area	Designer Recycled Water	Per AF
0-25	\$1,105/AF	\$1,147/AF	West Coast Barrier	\$836/AF
25-50	\$1,095/AF	\$1,137/AF	Nitrified	\$1,085/AF
50-100	\$1,085/AF	\$1,127/AF	Low-Pressure Boiler Feed	\$1,333/AF
100-200	\$1,075/AF	\$1,117/AF	High-Pressure Boiler Feed	\$1,689/AF
200+	\$1,065/AF	\$1,107/AF		

In addition, West Basin anticipates receiving approximately \$5.9 million in fixed revenue charges which are collected from user of certain facilities within the recycled water system, including Tesoro (originally with Arco), 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, as well as a portion of the variable cost for delivering water, that were constructed exclusively for delivery of recycled water.

### Recycled Water Historical Sales



West Basin currently serves recycled water to more than 400 sites with sales projected at 35,800 AF in FY 2016-17. Recycled water sales in FY 2015-16 were 35,003 AF, however, for FY 2017-18 West Basin anticipates an increase in recycled water sales to its highest level at 39,110 AF, as a result of improvements made at its facilities to increase production of Barrier and Nitrified water. Expected recycled water sales are comprised of approximately 40% sales to the Barrier, 47% to local refineries, and the remaining 13% 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 (CWSC), and prior to FY 2013-14 West Basin also received \$250/AF incentive payment from MWD through their Groundwater Recovery Program (GRP). This agreement with MWD expired May 15, 2013 and, as a result, West Basin no longer receives this incentive. To address the affordability of this type of water, West Basin amended its CWSC agreement to restructure the rate. The Desalter Rate is based on MWD's commodity charges plus West Basin's RTS charge. The current rate for desalted water is \$1,095/AF and will increase to \$1,117/AF on January 1, 2018. Deliveries from the Brewer Desalter are budgeted at 840 AF for FY 2016-17 and expected to decrease to 420 AF for FY 2017-18 as a result of the Brewer Desalter being off-line for the first six months of FY 2017-18 to complete well rehabilitation work and the corresponding re-commissioning.

## 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 2017-18, 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, \$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 346,965 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 \$9,650,000. The Board conducted a public hearing on April 24, 2017, to receive comments from property owners, public agencies and other interested parties. After careful consideration the Board voted to adopt the annual Standby Charge (Resolution 04-17-1068) at its April 24, 2017 meeting.

	Parcels =< 1 Acre	Acres >1 Acre	MRF UNITS	Total Levy
<b>Residential</b>				
SFR, Duplex	145,653	15,003		\$3,855,745
MFR			159,011	2,544,176
Low-Use	2	126		1,541
<b>Non-Residential</b>				
Non-residential	12,619	14,535		3,258,525
Low-Use	16	0		1320
<b>TOTAL</b>	<b>158,290</b>	<b>29,664</b>	<b>159,011</b>	<b>\$9,661,307</b>



## Conservation Income

Through the development of the master plan for water use efficiency and West Basin's Water Reliability Program goals, 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 every dollar that West Basin invests in conservation it garners an additional \$3.50 from various partners, thereby enhancing the programs to greater benefit of the residents and businesses throughout the service area. For FY 2017-18, West Basin will continue to receive outside funding from MWD and from many of its customer agencies and anticipates grant funding from the State of California Department of Water Resources (DWR) and the United States Bureau of Reclamation (USBR). For FY 2017-18, West Basin anticipates its partner contributions as follows:

State Grants – DWR	\$ 980,992
Federal Grants – USBR	160,000
MET	182,500
Customer Agencies	<u>99,175</u>
Total	\$1,422,667

West Basin continues to aggressively promote conservation efforts throughout its service area and is always seeking to develop new water use efficiency strategies and programs to help the public conserve water. West Basin remains extremely active in developing and implementing new conservation programs, such as Rain Barrel distributions and Turf Removal, as well as bringing in partners to help defray the cost in order to maximize the public's use of water at the lowest cost possible.

## Interest Income

West Basin receives interest income from its general fund. With a low interest rate environment, West Basin has assumed a relatively conservative portfolio return. For FY 2017-18, general fund interest income is expected to be approximately \$766,000. 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 annual Water Harvest Festival and the Title 22 Water Quality Monitoring Program. Overall, West Basin anticipates approximately \$34,000 in FY 2017-18 for other income.



**USE OF FUNDS**

**USE OF FUNDS**







# USE OF FUNDS

West Basin Municipal Water District (West Basin) maintains a single enterprise fund which is divided among four major types of expenses: water purchases (including the Readiness-to-Serve (RTS) 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 projected and budgeted expenses for the past three years, along with comparative budgets to illustrate the trend of the various expenses.

<b>Expenditures</b>	<b>FY 2014-15 Actual</b>	<b>FY 2015-16 Actual</b>	<b>FY 2016-17 Projected</b>	<b>FY 2016-17 Budget</b>	<b>FY 2017-18 Budget</b>
<b>Imported Water Purchases / RTS</b>	\$114,471,160	\$111,730,757	\$112,649,120	\$100,482,421	\$108,468,524
<b>Capacity Charge</b>	2,234,790	2,532,200	2,231,780	2,175,390	1,866,925
<b>Debt Service</b>	26,711,084	25,001,820	22,343,920	24,896,211	24,127,061
<b>Water Recycling Operations</b>	34,511,305	33,621,539	36,800,000	37,353,466	42,579,512
<b>Desalter Operations</b>	870,052	881,093	622,500	1,150,733	700,495
<b>Water Policy</b>	1,815,915	1,295,547	1,453,085	1,453,085	1,842,884
<b>Public Information</b>	2,905,785	2,477,330	2,975,000	3,175,974	3,453,150
<b>Conservation</b>	1,347,500	1,140,541	1,600,000	2,532,764	2,813,991
<b>Water Quality Monitoring</b>	16,862	7,734	10,000	25,430	11,193
<b>Designated Funds</b>	12,024,903	15,983,127	21,171,760	18,563,576	19,187,008
<b>Total Expenditures</b>	<b>\$196,909,356</b>	<b>\$194,671,688</b>	<b>\$201,857,165</b>	<b>\$191,809,050</b>	<b>\$205,050,743</b>

Overall expenditures are budgeted to increase approximately \$13.2 million in fiscal year (FY) 2017-18 as compared to FY 2016-17 primarily due to an increase in imported water/RTS purchases. Imported water purchases/RTS is increasing significantly (\$8.0M) due to anticipated increases in retail imported water sales, while West Basin's Capacity Charge is dropping partially due to MWD reducing their rate to its member agencies last calendar year and partially due to West Basin's non-coincidental peaking with MWD decreasing to 217.5 cfs in CY 2018 from 230.2 cfs in CY 2017. West Basin's debt service obligation in FY 2017-18 will drop by approximately \$768,000 and program expenses are budgeted to increase \$5.7M primarily due to Recycled Operations expense increasing \$5.2M. See "Operating Program Expenses" for further explanation.

## Water Purchases and Charges

### Imported Water Purchase

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. With increased conservation messaging by the State and local agencies and increased conservation program funding from MWD, sales declined 6,090 AF in FY 2014-15 and would have decreased by a larger amount again in FY 2015-16 had it not been for one customer agency purchasing a higher than normal amount of imported water due to their inability to pump groundwater for an extended period of time. Based on the continuation of the State-mandated directives and the public being more efficient-minded, along with numerous conservation programs, West Basin expects its imported water retail sales to decrease to 99,000 AF for FY 2016-17. With Governor Brown announcing the end of the state's drought and lifting the state of emergency for most of the California, West Basin has conservatively budgeted its retail imported sales at 98,000 AF for FY 2017-18.

Through WRD, West Basin provides imported water to inject into the Dominguez Gap Barrier and the West Coast Basin Barrier (Barrier) when the goal of injecting 100% recycled water into the Barrier cannot be met. Actual imported water sales to both Barriers are expected to decrease from 3,681 AF in FY 2015-16 to a budget of 2,500 AF in FY 2016-17 and anticipate sales to both Barriers in FY 2017-2018 to decline further and has reduced the budget to 800 AF.



Imported Water  
Supplements  
Local Supplies

## MWD Non-Interruptible Commodity Rate

As mentioned earlier, West Basin purchases all of its imported water from MWD. On April 12, 2016, the MWD Board approved its biennial budget and water rates. Although the overall average rate increase adopted by MWD was 4.0% for both calendar year 2017 and 2018, the imported water commodity rate effectively increased 3.7% or \$36 per AF effective January 1, 2018. 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.

	<b>MWD Non-Interruptible Commodity Rate</b>	
	<i>Effective Dates</i>	
	<b><u>1/1/17</u></b>	<b><u>1/1/18</u></b>
Supply Rate Tier 1	\$201	\$209
Supply Rate Tier 2	\$295	\$295
System Access Rate	\$289	\$299
Water Stewardship Rate	\$52	\$55
Treatment Rate	\$313	\$320
Power Rate	\$124	\$132
<b>Total Tier 1</b>	<b>\$979</b>	<b>\$1,015</b>
<b>Total Tier 2</b>	<b>\$1,073</b>	<b>\$1,101</b>

## Readiness-to-Serve (RTS) Charge

The RTS is a fixed charge that MWD bills 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. MWD's aggregate RTS collection was \$153 million for calendar year (CY) 2016 and decreased to \$135 million in CY 2017, and for CY 2018 the RTS collection will slightly increase 3.7% to \$140 million. The RTS is allocated to the MWD's 26 member agencies based on each agency's proportional share of a 10-year rolling average of all firm deliveries, and West Basin's share for CY 2018 was budgeted to remain at the CY 2017 level of 7.31%. Although MWD increased their RTS collection \$5 million from CY 2017 to CY 2018, West Basin expects a decrease of approximately \$597,000 in its share of the RTS for FY 2017-18 due to MWD collecting \$153 million in CY 2016 which was effective during the first six months of FY 2016-17.

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.

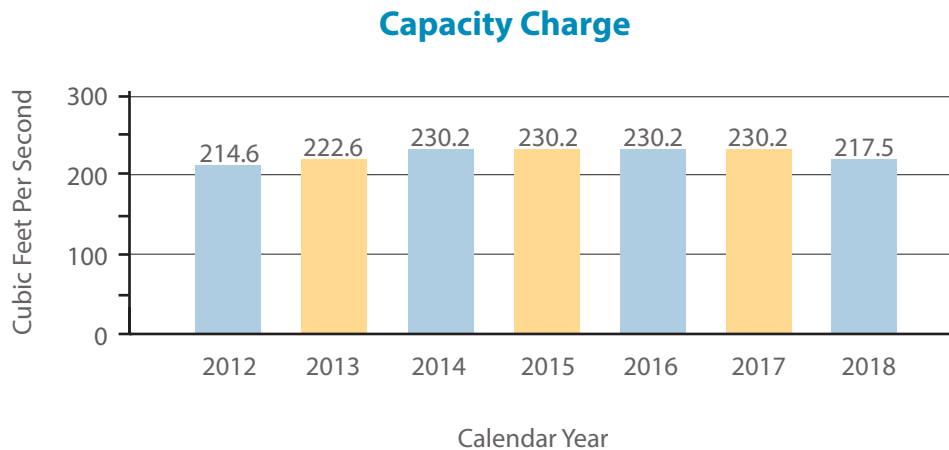
Overall, West Basin estimates water purchases and RTS expenditures to be \$108,468,524.



## 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 2012 through CY 2018.



Effective January 1, 2018, MWD will increase its Capacity Charge from \$8,000 per cfs to \$8,700 per cfs. Even with MWD increasing its Capacity Charge, West Basin will pay less in FY 2017-18 with a decrease of peak flow from 230.2 cfs in CY 2017 to 217.5 cfs in CY 2018. The capacity cost will remain at \$153,467 per month for the first six months of FY 2017-18 and increase to \$157,688 per month for the second six months of FY 2017-18, for a total cost of \$1,866,925.

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 1990s, West Basin's Board of Directors had the vision to drought-proof its service area by constructing treatment facilities and distribution pipelines to bring recycled water to industrial, commercial and irrigation sites that were using potable water. By selling recycled water to these customers, West Basin reduced its reliance on imported potable water. The importance of local control on water availability is even more important today as we continue to face higher costs and lower 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 financial advisors, bond counsel, trustees, and other related parties, to identify, and evaluate potential new construction proceeds 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 1990s, West Basin has received more than \$420 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. In accordance with its Debt Management Policy, West Basin monitors its debt portfolio and takes advantage of favorable market conditions to reduce water rates whenever possible through appropriate refunding opportunities.

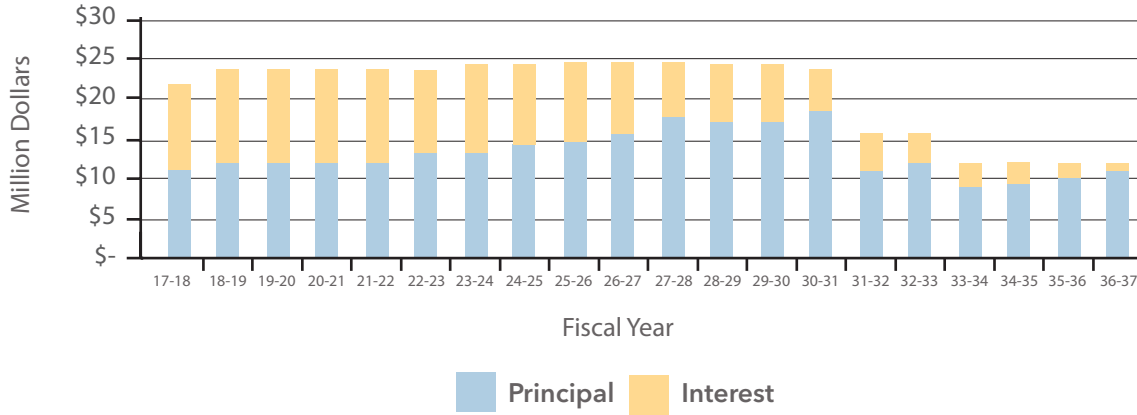
West Basin currently has the following outstanding debt obligations:

Current Outstanding Long-Term Debt						
Series Name	2008B	2010A	2011A	2011B	2012A	2016A
<b>Original Amount</b>	\$128,665,000	\$40,000,000	\$34,190,000	\$60,275,000	\$50,325,000	\$112,875,000
<b>Type of Debt</b>	Certificates of Participation	Certificates of Participation	Refunding Revenue Bonds	Refunding Revenue Bonds	Refunding Revenue Bonds	Refunding Revenue Bonds
<b>Purpose</b>	Refunding	Refunding / New Proceeds	Refunding	Refunding / New Proceeds	Refunding / New Proceeds	Refunding
<b>Interest Range</b>	3.0% - 5.0%	Variable	2.5% - 5.0%	4.0% - 5.0%	3.0% - 5.0%	2.0% - 5.0%
<b>Swap to Fix</b>	N/A	Yes	N/A	N/A	N/A	N/A
<b>Issue Date</b>	2008	2010	2011	2011	2012	2016
<b>Final Maturity</b>	2018	2030	2024	2036	2029	2036
<b>Current Rating</b>	A+ and Aa3	N/A	AA- and Aa2	AA- and Aa2	AA- and Aa2	AA- and Aa2
<b>Annual DS Pmt</b>	\$4.1 Million	\$1.2 Million	\$5.2 Million	\$3.0 Million	\$4.4 Million	\$6.2 Million
<b>2017 Principal</b>	\$3.9 Million	None	\$3.9 Million	None	\$2.4 Million	\$7.7 Million
<b>2017 Interest</b>	\$.2 Million	\$1.2 Million	\$1.3 Million	\$3.0 Million	\$2.0 Million	\$5.5 Million
<b>Lien</b>	Subordinate	Senior	Senior	Senior	Senior	Senior

For FY 2017-18, debt service is budgeted at \$24,127,061.

## Debt to Maturity (on a 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 on February 1st and August 1st each year.



1-Aug	Certificates of Participation		Refunding Revenue Bonds		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2017	3,825,000	311,400	6,785,000	10,655,065	10,610,000	10,966,465
2018	3,960,000	158,400	7,040,000	11,701,300	11,000,000	11,859,700
2019	-	-	11,425,000	11,437,000	11,425,000	11,437,000
2020	-	-	11,835,000	11,024,750	11,835,000	11,024,750
2021	-	-	12,325,000	10,523,250	12,325,000	10,523,250
2022	-	-	12,825,000	9,959,000	12,825,000	9,959,000
2023	-	-	13,670,000	9,330,250	13,670,000	9,330,250
2024	-	-	14,330,000	8,646,750	14,330,000	8,646,750
2025	-	-	15,210,000	7,961,250	15,210,000	7,961,250
2026	-	-	15,730,000	7,200,750	15,730,000	7,200,750
2027	-	-	16,585,000	6,434,250	16,585,000	6,434,250
2028	-	-	17,420,000	5,605,500	17,420,000	5,605,500
2029	-	-	18,290,000	4,734,500	18,290,000	4,734,500
2030	-	-	12,355,000	3,820,000	12,355,000	3,820,000
2031	-	-	12,970,000	3,202,250	12,970,000	3,202,250
2032	-	-	9,230,000	2,553,750	9,230,000	2,553,750
2033	-	-	9,700,000	2,092,250	9,700,000	2,092,250
2034	-	-	10,190,000	1,607,250	10,190,000	1,607,250
2035	-	-	10,705,000	1,097,750	10,705,000	1,097,750
2036	-	-	11,250,000	562,500	11,250,000	562,500
<b>Total</b>	<b>\$7,785,000</b>	<b>\$469,800</b>	<b>\$249,870,000</b>	<b>\$130,149,365</b>	<b>\$257,655,000</b>	<b>\$130,619,165</b>



During FY 2016-17, a refunding opportunity was presented to West Basin and evaluated by management, bond counsel and its financial advisor. This opportunity included refunding \$98 million of its outstanding 2008B Certificates of Participation and \$31.8 million or the entire amount outstanding of its commercial paper. The refunding created the 2016A series, Refunding Revenue Bonds in the amount of \$112,875,000 and achieved a net present value savings of \$17 million at a 2.61% all-in total interest cost.

As of June 30, 2017, West Basin has \$258 million in long-term debt outstanding.

West Basin has several anticipated capital projects in the next three fiscal years 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 \$16 million in construction proceeds, a 1% interest rate and a 25-year term. In addition, West Basin is working with its financial advisors to determine the amount and timing for West Basin to issue additional long term bonds. Using conservative assumptions, West Basin plans to obtain \$50 million in construction proceeds which results in annual level debt service payment of approximately \$3.5 million. Both long-term debt annual payments have been included in the Projected Operating results beginning in FY 2018-19. The impact of these capital expenditures and resulting annual debt payments will be absorbed through thoughtful and reasonable rate increases and will not create an unexpected spike in rates while maintaining its target 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.

Fiscal Year Ended June 30,	OUTSTANDING DEBT			CAPITAL ASSETS			
	Certificates of Participation & Revenue Bonds	State Loan	Total LT Debt	Capitalized Assets	Construction-in-Progress	Total Capital Assets	Debt/Capital Assets
2007	315,290	2,593	317,883	387,074	89,738	476,812	0.67
2008	302,600	2,319	304,919	477,099	18,932	496,031	0.61
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

Source: Fiscal Year June 30, 2016 CAFR



## Swap Transactions

West Basin currently has two swaps transactions, both with the same counterparty, outstanding with a total notional amount of \$20,975,000. 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.

Under GASB 53, these swaps have been determined to be an effective hedge, and have a strong correlation to the 2010A Adjustable Rate COPs.

## 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 credit 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.

In FY 2015-16, West Basin's financial advisor made a presentation to the Board regarding changes made by Moody's to its rate setting analysis and suggested West Basin increase its internal target debt coverage. The Board agreed with the recommendation and directed staff to set the targeted all-in debt coverage at 1.75 beginning with the FY 2015-16 operating budget. The FY 2017-18 operating budget was also developed using the 1.75 as the targeted all-in debt coverage, however, in order to achieve the target in future fiscal years and avoid spiking the rates in certain future fiscal years, West Basin elected to adopt rates to achieve all-in debt coverage of 1.80.

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

<b>Bond Debt Coverage Ratios (in 000's – except coverage)</b>						
<b>Bond Coverage Ratios</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>	<b>FY 2022-23</b>
Revenues	\$205,051	\$213,624	\$220,854	\$226,086	\$235,057	\$243,883
O&M	161,737	164,784	170,980	176,403	182,925	189,714
Net Revenues to pay senior debt	43,314	48,840	49,874	49,683	52,132	54,169
Total Senior Debt	20,007	26,617	28,434	28,423	28,363	28,556
Net Revenues to pay subordinate debt	23,307	22,223	21,440	21,260	23,769	25,613
Total Subordinate Debt	4,120	343	-	-	-	-
<b>All-In Coverage</b>	<b>1.80</b>	<b>1.81</b>	<b>1.75</b>	<b>1.75</b>	<b>1.84</b>	<b>1.90</b>
Remaining Net Revenue	\$19,187	\$21,882	\$21,439	\$21,259	\$23,767	\$25,612

For the future years, as shown in the above chart, the internal target all-in debt coverage of 1.75 is anticipated to be achieved.

## 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 Water Quality Monitoring Program. The Overhead Program costs are allocated to the other program budgets and capital.

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

## Salaries and Benefits

West Basin has a unique business model with a small workforce of 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. West Basin has no field staff, 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:

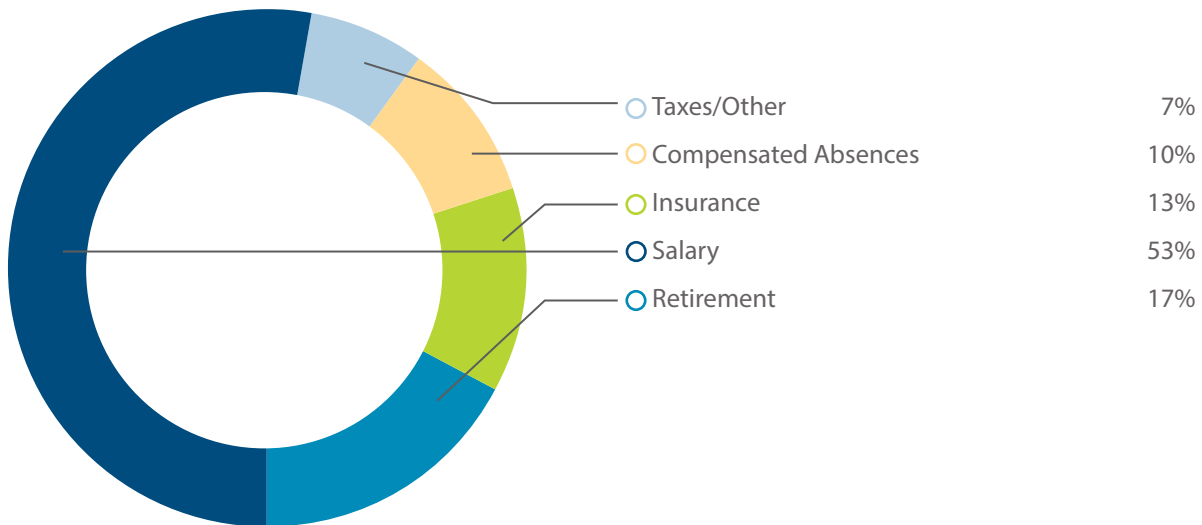
- Retirement – Classic - CalPERS 3% at 60 and Social Security (1).
- Retirement – Tier 2 - CalPERS 2% at 62 and Social Security (2).
- Health Insurance - Paid family coverage with expense reimbursement.
- Disability Insurance - Paid short term and long term insurance plans.
- Life Insurance - Up to \$150,000 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% at 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% at 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.



## Salaries and Benefits



West Basin’s benefits package and total payroll comprises 4.94% of its total FY 2017-18 operating budget. The types of benefits included are consistent with the prior years’ budget and reflect an anticipated 8.0% average increase in health insurance and 1.1% increase in dental insurance. West Basin’s pension costs for “Classic” CalPERS members saw a slight increase of less than 1.0% in its employer rate from 13.504% to 13.545%, beginning July 1, 2017. Pension costs for “Tier 2” CalPERS members is 6.908%. The estimated Other Post-Employment Benefits (OPEB) contribution for FY 2017-18 will be approximately \$450,000. West Basin is set to obtain a new valuation for the two years covering FY 2017-18 and 2018-19 and anticipates results in late 2017. West Basin participates in the California Employers Benefit Retirement Trust that allows West Basin to calculate its liability based on an assumed interest rate of 7.28%.

Current employment expense forecasts do not include a cost-of-living adjustment increase. 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% merit increase in the FY 2017-18 Budget.

The organizational chart shows the full-time and part-time budgeted positions for FY 2017-18.



## Organizational Chart

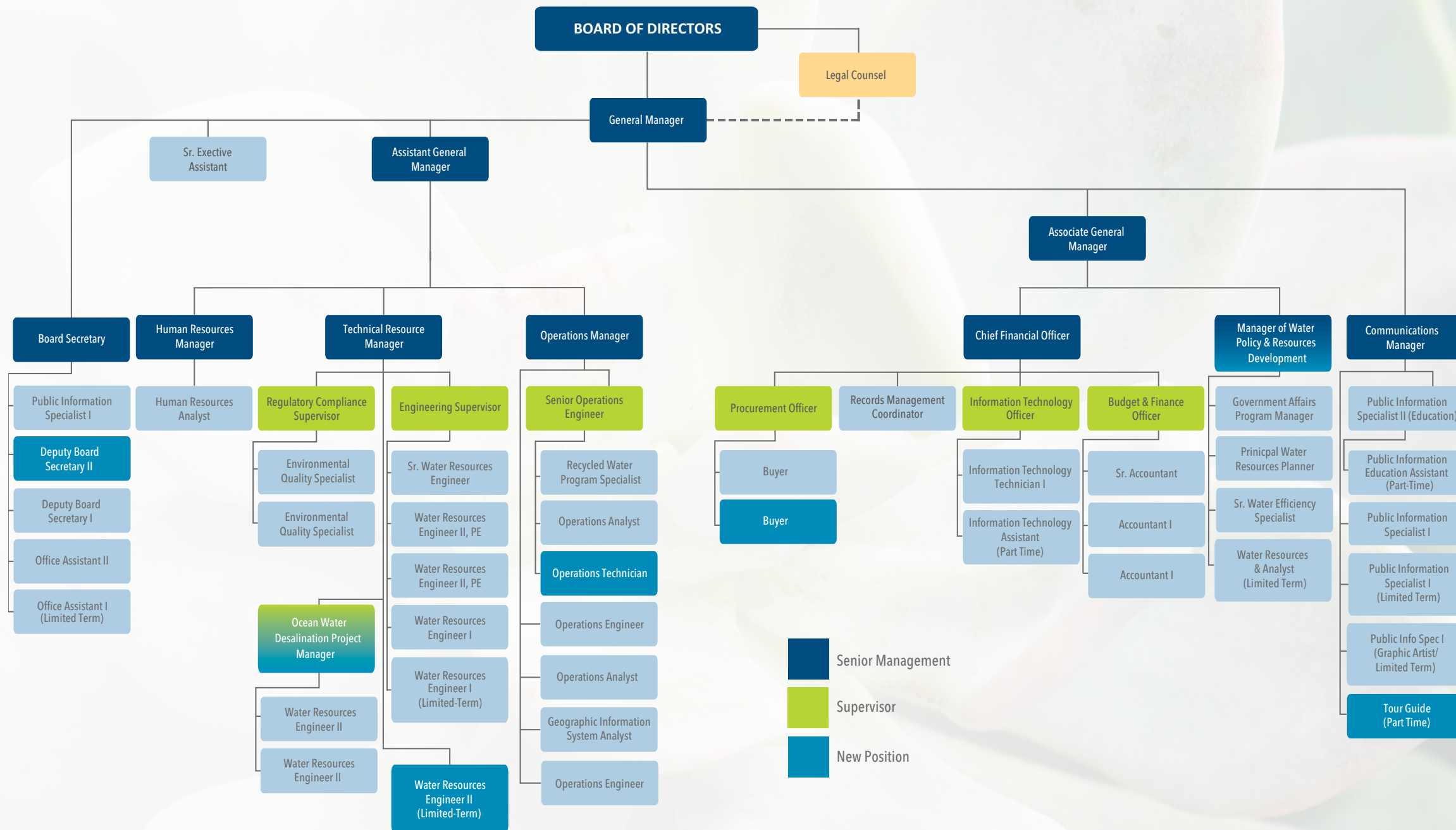
In the FY 2017-18 budget, staffing levels will increase from 52 to 59 full and part-time positions. The change reflects an increase from 45 to 50 full-time regular positions and five to six full-time limited-term positions. The five new full-time positions are:

- Ocean Water Desalination Program Manager - oversee and direct the path towards a full-scale desalination facility pending the Board's certification of the desalination Environmental Impact Report
- Manager of Water Policy & Resources Development - oversee a staff of four and their project assignments; this position was vacated upon the promotion of its past incumbent.
- Buyer - with the introduction of a centralized procurement program, there is an increased need for review of solicitation documents and continued need for customer service.
- Operations Technician - to support the activities of the distribution system and will be dedicated to conducting recycled water site and retrofit inspections and modifications to current sites.
- Administrative Support - to support the activities of the Board Services Department.

Along with the new full-time regular positions, one full-time limited position was added to the Technical Resources staff as a Water Resources Engineer II to assist with the development and implementation of a pilot program for MBR technology, and a part-time Tour Guide to conduct tours of the Edward C. Little Water Recycling Facility.

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 six interns in FY 2016-17 and is increasing the head count by two to eight positions in FY 2017-18.

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		Budgeted		Change from FY 2016-17
	FY 2015-16	FY 2016-17	FY 2016-17	FY 2017-18	
<b>Office of the General Manager</b>					
General Manager	1	1	1	1	0
Assistant General Manager	1	1	1	1	0
Associate General Manager	1	1	1	1	0
<b>Board Services</b>					
Board Secretary	1	1	1	1	0
Deputy Board Secretary II	1	1	0	1	1
Deputy Board Secretary I	0	0	1	1	0
Senior Executive Assistant	0	1	1	1	0
Public Information Specialist I	0	0	0	1	1
Office Assistant II	1	1	1	1	0
Office Assistant I (Limited Term)	1	1	1	1	0
<b>Human Resources</b>					
Human Resources Manager	1	1	1	1	0
Human Resources Analyst	1	1	1	1	0
<b>Public Information &amp; Education</b>					
Public Information Manager	1	1	1	1	0
Public Information Specialist II	1	1	1	1	0
Public Information Specialist II (Limited Term)	1	0	1	0	-1
Public Information Specialist I	2	2	2	1	-1
Public Information Specialist I (Limited Term)	1	2	0	2	2
Graphic Designer (Part-time)	0	0	1	0	-1
Tour Guide (Part-time)	1	0	0	1	1
Education Assistant (Part-time)	1	1	1	1	0
<b>Technical Resources</b>					
Technical Services Manager	1	1	1	1	0
Ocean Water Desalination Program Manager	0	0	0	1	1
Engineering Supervisor	1	1	1	1	0
Senior Water Resources Engineer	1	1	1	1	0
Water Resources Engineer II	3	3	4	4	0
Water Resources Engineer II (Limited Term)	0	0	0	1	1
Water Resources Engineer I	1	1	1	1	0
Water Resources Engineer I (Limited Term)	0	1	1	1	0
Regulatory Compliance Supervisor	1	1	1	1	0
Environmental Quality Specialist	1	1	2	2	0
Environmental Quality Specialist (Limited Term)	1	1	0	0	0
<b>Operations</b>					
Operations Manager	1	1	1	1	0
Senior Operations Engineer	0	1	0	1	1
Operations Engineer	1	1	2	2	0
Operations Analyst	2	2	2	2	0
Operations Technician	0	0	0	1	1
Recycled Water Program Manager	1	0	0	0	0
Recycled Water Program Specialist	1	1	2	1	-1
Geographic Information System Analyst	0	1	1	1	0
<b>Water Policy and Resource Development</b>					
Water Policy & Resources Manager	0	0	0	1	1
Government Affairs Program Manager	1	1	1	1	0
Senior Water Resources Planner	1	1	1	1	0
Senior Water Efficiency Specialist	1	1	1	1	0
Water Res & Conservation Analyst (Limited Term)	1	1	1	1	0
<b>Finance</b>					
Chief Finance Officer	1	1	1	1	0
Information Technology Officer	1	1	1	1	0
Information Technology Technician I	0	1	1	1	0
Information Technology Assistant (Part-time)	0	0	0	1	1
Budget and Finance Officer	1	1	1	1	0
Senior Accountant	1	1	1	1	0
Accountant II	1	1	1	0	-1
Accountant I	0	0	0	2	2
Accountant I (Limited Term)	1	1	1	0	-1
Records Management Coordinator	0	1	1	1	0
Procurement Officer	1	1	1	1	0
Buyer	1	1	1	2	1
<b>Total Budgeted Personnel</b>	<b>45</b>	<b>49</b>	<b>51</b>	<b>59</b>	<b>8</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 2014-15 and FY 2015-16 actual to FY 2016-17 projected and FY 2016-17 and FY 2017-18 budget. The variance of projected to budget Full Time Equivalent (FTE) for FY 2016-17 represents unfilled positions for a portion of the year and several positions that were not expected to be filled at the very beginning of the fiscal year. In FY 2016-17 and FY 2017-18 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 and certain open positions budgeted in both FYs were not expected to be filled at the very beginning of the fiscal year.

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 yeartoyear. 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 (FTE) by Program (Not including interns)

	FY 2014-15 Actual	FY 2015-16 Actual	FY 2016-17 Projected	FY 2016-17 Budget	FY 2017-18 Budget
Recycling Operations	15.58	15.72	14.47	17.25	16.87
Desalter Operations	0.03	0.05	0.04	0.35	0.33
Water Policy/Resource Development	3.8	4.43	3.49	3.54	5.47
Public Information	10.59	8.82	8.37	9.27	11.60
Conservation	2.83	1.91	3.44	3.39	3.02
WQ Monitoring Program	0.02	0.02	0.02	0.08	0.03
Capital Projects	8.23	11.35	13.44	14.35	20.27
<b>Total FTE</b>	<b>41.08</b>	<b>42.30</b>	<b>43.27</b>	<b>48.23</b>	<b>57.59</b>

## Capital Improvement Program

West Basin continues to strive for the highest levels of Water 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 oceanwater 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 2017-18 are approximately \$80 million.

# OPERATING PROGRAM EXPENSES

OPERATING PROGRAM EXPENSES







# OPERATING PROGRAM EXPENSES

## Summary of Program Expenses

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

The Fiscal Year (FY) 2017-18 Operating Program consists of the following:

Allocated Programs	Page Number
Overhead Program Costs	G-2
Operating Programs	
Water Recycling Operations	G-8
C. Marvin Brewer Desalter Operations	G-13
Water Policy and Resource Development	G-15
Public Information	G-20
Conservation	G-23
Water Quality Monitoring	G-27

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 2017-18 and each program budget reflects only the Plan goals and commitment statements that are relevant and qualitative.

## Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

For the program budgets that follow, the strategic goals that are met by the program activity have been highlighted in blue.

## Overhead Program Costs

The Overhead Program includes the cost to support the function of the Finance, Human Resources and Board Services Departments. These expenses support the function of each department and are proportionally allocated to all of the other West Basin operating and capital 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 support the general operations of West Basin and include financial and legal services, insurance, and building expenses. Human Resources include activity costs to support the training and evaluation of salaries and benefits, as well as the cost to recruit, screen and hire new employees. In addition, the Human Resources Department administers the Employee Development Program that recognizes employees, provides for periodic employee meetings, and also administers the safety program. Board Services accounts for expenses directly related to the Board of Directors.

In addition, West Basin maintains memberships to a variety of organizations and the costs are reflected in this budget. The supplemental section further describes these important partnerships, the involvement West Basin's Board and/or staff has in the organization, and the membership fee.

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

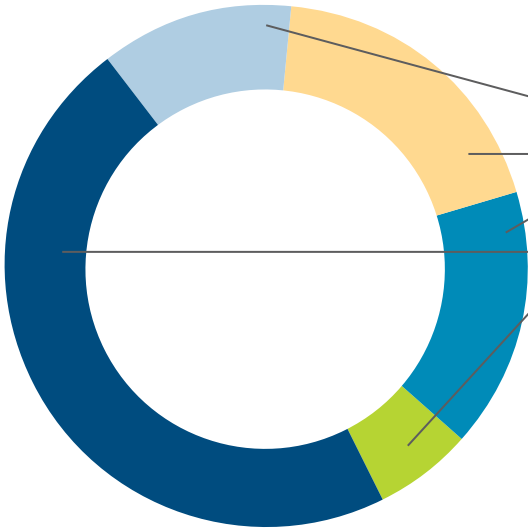
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2016-17	FY 2017-18
	Actual	Actual	Projected	Budget	Budget
General Services	\$1,474,304	\$1,542,110	\$1,923,489	\$1,813,800	\$1,898,845
Building Services	387,941	388,398	402,140	411,700	471,000
Legal Services	569,798	416,850	493,000	428,400	753,000
Board Services	950,228	580,342	820,800	898,920	649,200
Human Resources	78,197	86,450	119,950	97,106	232,912
<b>Total Overhead Allocated</b>	<b>\$3,460,468</b>	<b>\$3,014,150</b>	<b>\$3,759,379</b>	<b>\$3,649,926</b>	<b>\$4,004,957</b>

The Overhead expense between the FY 2016-17 and FY 2017-18 budgets increased about \$345,000 and can be attributed to the following costs:

- Increase in general services for technology support and software licenses.
- Increase in legal services to reflect higher transactional costs and funds designated for special counsel.
- Reduction in Board Services costs for non-election year costs.
- Human Resources budget increased to include funds for a comprehensive classification and compensation study, training and risk management services.



### Overhead



○ Building Services	\$471,000	12%
○ Legal Services	\$753,000	19%
○ Board Services	\$649,200	16%
○ General Services	\$1,898,845	47%
○ Human Resources	\$232,912	6%



Water Treatment Facility Field Trips

# Strategic Goals and Objectives

## Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

## FY 2016-17 Accomplishments



### Customer Service

- Objective 3:** ✓ Overall policy direction and strategic priorities are provided by the Board of Directors through monthly committee and board meetings in addition to the recent review of the Strategic Planning document by the Board of Directors.



### Sound Financial & Resource Management

- Objective 4:** ✓ Board reviewed and re-approved the Designated Funds, Swap, Debt Management and Investment Policies.
- ✓ Provide 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).
- ✓ Refinanced over \$98 million of refunding revenue certificates of participation and \$32 million of commercial paper resulting in net present value savings of \$17million at a total interest cost rate of 2.61%.
- Objective 6:** ✓ Revised Part 4, Chapter 1 (Financial Matters) and Part 7 (Records Management) of the Administrative Code to reflect best practices and improved processes.
- ✓ Approved the annual rates in April 2017 and the annual budget in May 2016 that meets the Board's financial metrics of 1.80 overall debt coverage, meets its Designated Funds Policy limits, and responsibly budgets for its sales assumption.
- ✓ Completed the required biennial actuarial report for the PARS plan.
- ✓ Participated in the Connect to MET event in November 2016 to introduce West Basin to over 150 small business enterprises.
- ✓ Received an Innovation Award from the California Society of Municipal Finance Officers for its work on improved processes in asset management to record and dispose of capital assets.



- ✓ Received an Excellence in Financial Reporting Award for West Basin's Comprehensive Annual Financial Annual Report (CAFR) for FY 2015-16 from the Government Finance Officers Association (GFOA).

Received Excellence in Budget Recognition for the FY 2016-17 Operating Budget from GFOA and the California

- ✓ Society of Municipal Finance Officers (CSMFO).
- ✓ Utilized the E-procurement system (The Network) to facilitate the bidding process on 46 solicitations and increased the vendor audience with over 78 referrals during the fiscal year of calendar year 2016.
- ✓ Issued over 170 new contract requests, changed orders or amendments, and 205 purchases orders during the calendar year 2016.
- ✓ Completed upgrade of Lawson, financial accounting system, upgrade and introduced improved processes and business analytics.
- ✓ Worked with consultant to analyze and review options for a fixed revenue charge for its potable water rates through the water rate restructuring study.
- ✓ Selected and begun implementation of an electronic agenda management system to improve the process and record keeping of the board and committee agenda items.

**Objective 7:**

- ✓ Completed and/or commenced the recruitment process for the following positions: 1) Accountant I, 2) Communications Manager, 3) Engineering Intern, 4) Geographic Information System Specialist; 5) Information Technology Technician I, 6) Manager or Water Policy & Resources Development, 7) Operations Engineer, 8) Operations Intern, 9) Public Information Education Assistant, 10) Public Information Intern, 11) Public Information Specialist I, 12) Public Information Specialist I (Graphic Designer), 13) Records Management Coordinator, 14) Water Resources & Conservation Intern, 15) Water Resources Engineer I (Limited Term), and 16) Water Resources Engineer II.

**Objective 8:**

- ✓ Distributed and received 100% completed Annual Employee Performance Evaluations from Senior Management.
- ✓ Conducted compensation studies/surveys for various classifications within West Basin's class structure to ensure salary equity.
- ✓ Secured Board approval of the updated (July 2016) West Basin Salary Schedule in compliance with CalPERS regulations.
- ✓ Distributed annual Employee Benefit Statements to ensure employee awareness of their covered benefits.



- Objective 9:**
- ✓ Conducted mandatory staff training to review amendments made to the Human Resources section of the West Basin's Administrative Code.
  - ✓ Secured Board approval and resolution to offer elective coverage for State Disability Insurance to all staff.
  - ✓ Secured Board approval and resolution to amend the Director Benefits section of West Basin's Administrative Code.
  - ✓ Submitted the 2016 Workforce Diversity Report to the Board that reflects the demographic breakdown by race and occupational category of West Basin's full-time employees.
  - ✓ Conducted mandatory staff Safety Meetings in accordance with West Basin's Injury/Illness Prevention Program.
  - ✓ Conducted Emergency Evacuation and Earthquake Preparedness Drills in compliance with West Basin's Injury/Illness Prevention Program and Emergency Evacuation Plan.
  - ✓ Successfully secured a Wellness Grant through ACWA/JPIA to assist in West Basin's health and wellness initiatives for its employees.

## FY 2017-18 Strategies



### Customer Service

- Objective 3:**
- Board of Directors will finalize the review of the Strategic Business Plan and deploy to staff to develop the strategies to accomplish the board-directed goals.



### Sound Financial & Resource Management

- Objective 5:**
- Update Long-Range Financial Model for sales assumptions, capital funding and appropriate rates and charges to ensure the District remains financially solvent.
- Objective 6:**
- Increase resources to support technology infrastructure improvements including the replacement of multi-function printers.
  - Incorporate the Board's input on the fixed revenue charge on FY 17/18 budget and rate cycle. Develop scope and post solicitation for an evaluation of the recycled water system rates and charges and recommend changes, if any, to the current rate methodology for imported water, and other charges.
  - Complete the bi-annual actuarial report for the Other Post-retirement Employee Benefit plan.
  - Continue to develop elements of a Small Business Enterprise program from reporting to the solicitation process.
  - Implement improved grant management practices and develop a more comprehensive grant management policy.

- Objective 7:** ● Complete open recruitment for newly approved budgeted positions.
- Objective 8:** ● Conduct a comprehensive classification and compensation study.
- Objective 9:** ● Commence review and update of specified sections of the Human Resources section of the Administrative Code in compliance with applicable changes in California law.
- Conduct employee development training (software program training, leadership training, etc.) for staff per request and recommendation of senior management.
  - Conduct ongoing employee training regarding amendments made to the Human Resources section of the Administrative Code and ongoing training on employee benefits.
  - Implement employee wellness programs and informative brown-bag lunches to include weightloss management, time/stress management, handling difficult conversations, financial wellness and other health and wellness matters.
  - Plan and conduct the second annual Wellness Fair in support of West Basin's wellness initiatives for all staff.
  - Update West Basin's Succession Plan for review and approval of Senior Management and the Board.



Water is Life Art Contest Winners

## Water Recycling Operations

West Basin purchases secondary effluent from the Hyperion Treatment Plant in Los Angeles and treats the secondary effluent at the Edward C. Little Water Recycling Facility (ECLWRF) to meet disinfected tertiary 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 Water Recycling Criteria provided by the California Department of Public Health and are permitted by the Los Angeles Regional Water Quality Control Board.

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

The Recycled Water Operations budget includes funds to administer, operate and maintain all of the recycled water facilities, 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 boiler feed 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 Tesoro's cooling towers and produce boiler feed 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 (FTE)

FY 2014-15 Actual FTE	FY 2015-16 Actual FTE	FY 2016-17 Projected FTE	FY 2016-17 Budget FTE	FY 2017-18 Budget FTE
15.58	15.72	14.47	16.71	16.87

### Operating Budget

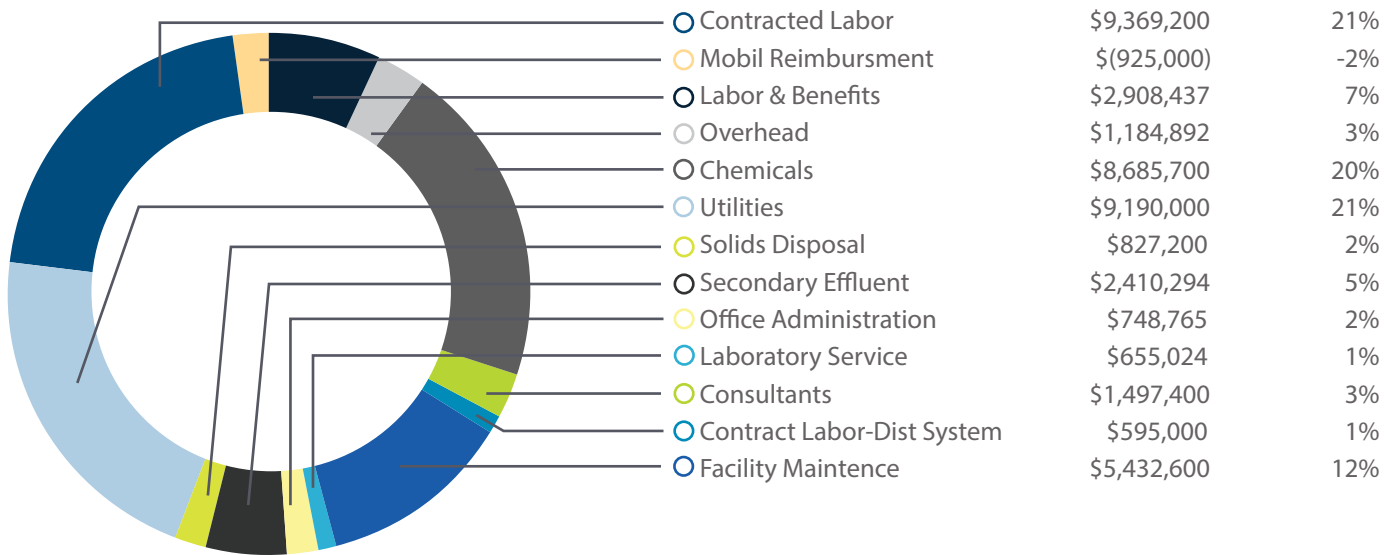
	FY 2014-15 Actual	FY 2015-16 Actual	FY 2016-17 Projected	FY 2016-17 Budget	FY 2017-18 Budget
Labor and Benefits	\$2,809,443	\$2,831,281	\$2,896,000	\$2,818,091	\$2,908,437
Overhead	1,361,439	1,130,836	1,500,000	1,124,280	1,184,892
<b>Operations</b>					
Chemicals	5,828,137	6,024,713	7,340,450	8,143,900	8,685,700
Consultants	1,598,100	1,174,840	2,900,000	1,400,000	1,497,400
Contract Labor-Dist System	564,537	946,392	720,356	750,000	595,000
Facility Maintenance	4,164,396	3,938,315	3,693,950	4,135,700	5,432,600
Laboratory Service	435,905	668,818	788,350	785,900	655,024
Office Administration	860,244	778,908	853,000	708,100	748,765
Secondary Effluent	311,996	289,462	300,800	386,600	2,410,294
Solids Disposal	656,975	672,141	746,900	809,600	827,200
Utilities	9,631,081	8,492,608	7,848,850	8,926,900	9,190,000
Contracted Labor	7,164,597	7,195,705	8,109,344	8,255,700	9,369,200
Mobil Reimbursement	(875,544)	(882,480)	(898,000)	(891,305)	(925,000)
<b>Total Recycling Operations</b>	<b>\$34,511,306</b>	<b>\$33,261,539</b>	<b>\$36,800,000</b>	<b>\$37,353,466</b>	<b>\$42,579,512</b>



The major variances between FY 2016-17 and FY 2017-18 budgets are due to the following items:

- Increase in production results in increase variable costs.
- Contracted Labor: Reflects a contracted labor rate increase, converting temporary employees' positions to full-time positions, and additional support on the distribution system focused on preventative maintenance activities.
- Funding a Membrane Bio-Reactor (MBR) pilot at Hyperion Treatment Plant.

### Water Recycling Operations



Purple Pipeline Project

# Strategic Goals and Objectives

## Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

## FY 2016-17 Accomplishments



### Customer Service

- Objective 2:** ✓ Complete Customer Outreach meetings.



### Sound Financial & Resource Management

- Objective 1:**
- ✓ Developed a Microfiltration Taskforce to implement microfiltration improvements across all water recycling facilities.
  - ✓ Implemented an on-call contractor agreement for pump, motor, blower, compressor repairs.
  - ✓ Decommission temporary Inglewood disinfection station.
  - ✓ Completed JMMCRRP HVAC building improvements.
  - ✓ Initiated pilot program for field data collection.
  - ✓ Installed field monitoring devices for water quality, pressure, and flow.
  - ✓ Initiated Torrance booster pump station.
  - ✓ Completed dashboard reports for major treatment system components.
- Objective 2:**
- ✓ Provided support to obtain DPH approval and inspection of 10 recycled water site modifications.
  - ✓ Connected nine new recycled water sites adding 129 acre-feet of demand annually.
  - ✓ Negotiated and executed new five-year operations and maintenance agreement with California Water Service.



**Objective 6:** ✓ Upgraded ArcGIS online system.

## FY 2017-18 Strategies



### Water Quality

- Objective 1:**
- Continue to support existing customer water quality inquiries.
  - Enhance and increase the water sampling locations throughout the distribution system.



### Customer Service

- Objective 2:**
- Implement a customer service annual survey.
  - Formalize new customer review procedure.



### Sound Financial & Resource Management

- Objective 1:**
- Update the current CMMS software to make it more user-friendly and improve data reliability.
  - Continue to develop and implement the prioritized asset management recommendations to maximize the asset life and optimize maintenance activities.
  - Install a flowmeter to capture all “Westside” LADWP demands.
  - Inspect force main.
  - Install mobile trailers to supplement microfiltration production.
- Objective 2:**
- Continue redlining activities to create updated reference drawings for remaining facilities.
  - Implement instrumentation upgrades as a result of the dashboard reports.
  - Completed ArcFlash study of water recycling facilities.

## 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 California Water Service (CWS) reservoir. The Desalter was successful and operations continued. A single well was constructed in 2005 to replace the two wells.

The Desalter is built 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.

The well had an original capacity of 1,250 – 1,500 gallons per minute (gpm). Currently, the well is experiencing reduced yield with the current production about 600 gpm. Because of the reduced production, a well assessment was conducted and results determined that a multi-phase mechanical and chemical rehabilitation of the well be implemented. The well rehabilitation is forecasted to begin August 2017.

### Personnel Full-Time Equivalents (FTE)

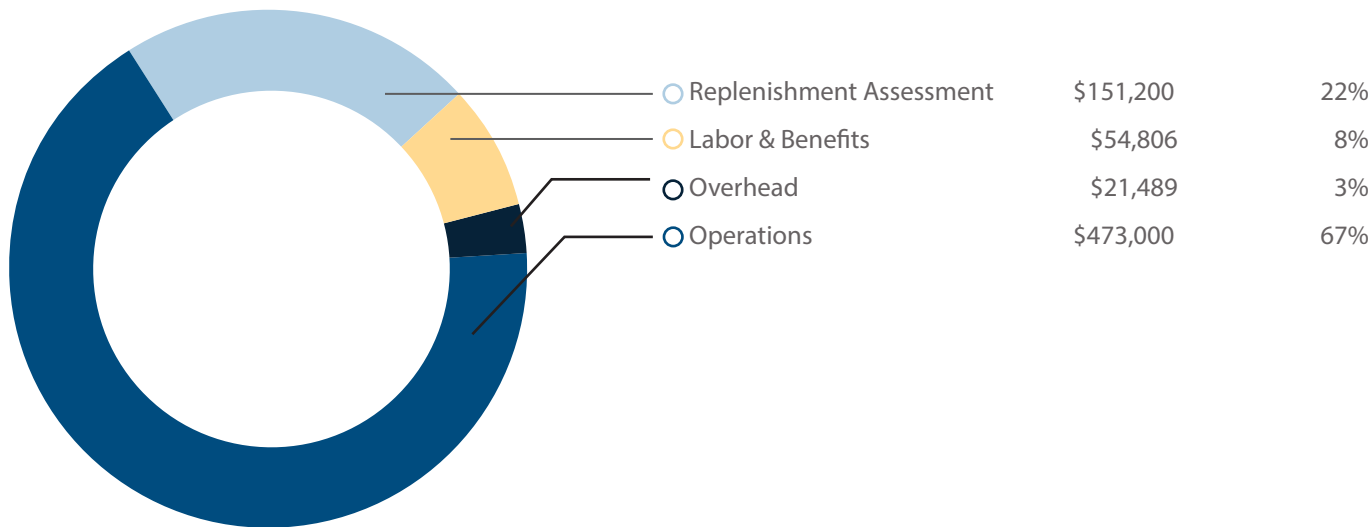
FY 2014-15 Actual FTE	FY 2015-16 Actual FTE	FY 2016-17 Projected FTE	FY 2016-17 Budget FTE	FY 2017-18 Budget FTE
0.03	0.05	0.04	0.35	0.33

### Operating Budget

	FY 2014-15 Actuals	FY 2015-16 Actuals	FY 2016-17 Projected	FY 2016-17 Budget	2017-18 Budget
Labor and Benefits	\$4,774	\$6,025	\$6,200	\$65,949	\$54,806
Overhead	2,577	3,788	3,300	25,384	21,489
Operations	604,321	569,305	473,000	707,600	473,000
Replenishment Assessment	258,381	301,975	140,000	351,800	151,200
<b>Total Desalter Operations</b>	<b>\$870,053</b>	<b>\$881,093</b>	<b>\$622,500</b>	<b>\$1,150,733</b>	<b>\$700,495</b>

The variance between the FY 2016-17 and FY 2017-18 budgets are due to the assumption that the plant will be offline for approximately six months due to the well rehabilitation project and other facility upgrades that will be implemented during FY 2017-18. These upgrades are necessary to address many of the plant's ongoing issues and to ensure operational and water quality reliability. With the anticipated down time, the budget assumes a reduced production of 420 acre-feet per year.

## Desalter Operations



## Strategic Goals and Objectives

### Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

## FY 2016-17 Accomplishments



### Sound Financial & Resource Management

**Objective 2:** ✓ Facility upgrades continue throughout the fiscal year to address water quality and aging equipment issues.

## FY 2017-18 Strategies



### Sound Financial & Resource Management

**Objective 2:** ○ Continue facility upgrades to address water quality and aging equipment issues with an anticipated startup in January 2018.



## 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; pursuing outside funding to increase the cost-effectiveness to rate payers of District projects and programs; providing technical and other support to 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, including CalDesal, WaterReuse, Association of California Water Agencies (ACWA), as well as every aspect related to Metropolitan Water District (MWD) 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 our service territory, and as a member of the Greater Los Angeles County planning area. Implementation of West Basin's various conservation programs is supported by a separate program budget.

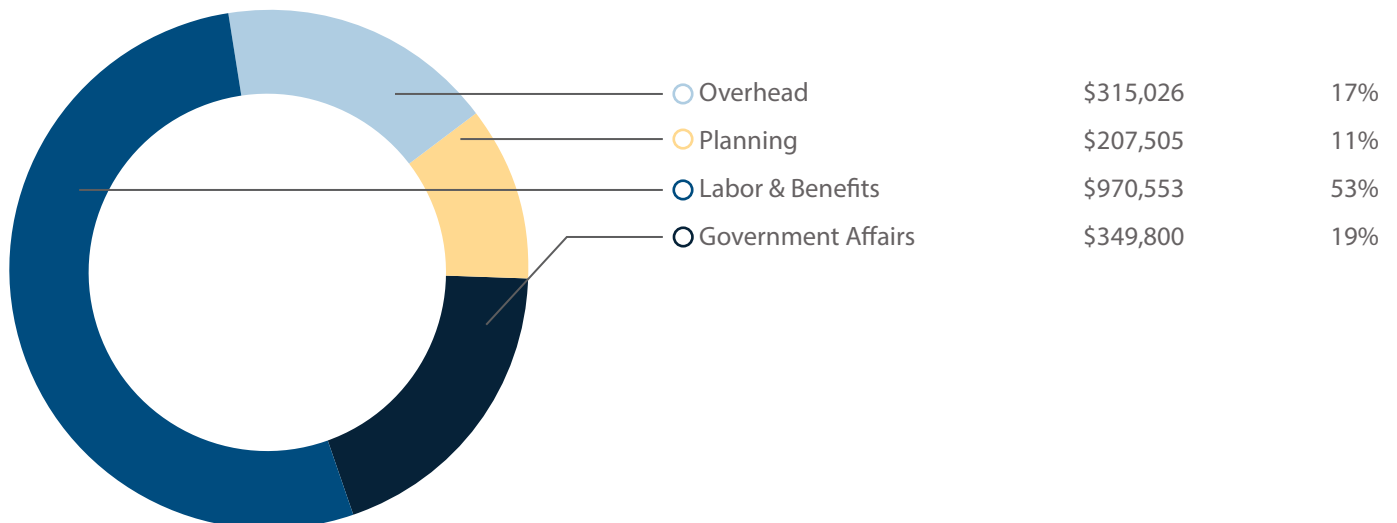
### Personnel Full-Time Equivalents (FTE)

FY 2014-15 Actual FTE	FY 2015-16 Actual FTE	FY 2016-17 Projected FTE	FY 2016-17 Budget FTE	FY 2017-18 Budget FTE
4.80	4.43	3.49	3.46	5.47

### Operating Budget

	FY 2014-15 Actuals	FY 2015-16 Actuals	FY 2016-17 Projected	FY 2016-17 Budget	FY 2017-18 Budget
Labor and Benefits	\$958,221	\$622,298	\$689,000	\$720,612	\$970,553
Overhead	447,914	308,860	401,000	322,750	315,026
Planning	87,898	78,959	39,650	73,123	207,505
Government Affairs	321,882	285,430	323,435	336,600	349,800
<b>Total Resource Planning</b>	<b>\$1,815,915</b>	<b>\$1,295,547</b>	<b>\$1,453,085</b>	<b>\$1,453,085</b>	<b>\$1,842,884</b>

### Water Policy



# Strategic Goals and Objectives

## Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

## FY 2016-17 Accomplishments



### Water Reliability

- Objective 1:**
- ✓ Completed the annual Water Use Report for our customer agencies. This document provides the annual total water use information for the previous fiscal year as well as the recycled water use and connections for each customer.
  - ✓ Provided monthly updates to the customer agencies regarding the State Water Resources Control Board's mandatory water conservation reporting.



### Customer Service

- Objective 1:**
- ✓ Conducted an informational workshop with customer agencies to review proposed FY 2017-18 budget and water rates and provide updates on various District programs and projects.
- Objective 5:**
- ✓ Increased state and federal advocacy efforts related to securing project and program funding for the West Basin service area, including support and advocacy for the "WINN" legislation, Water Infrastructure Improvements for the Nation, which passed in December, 2016; as well as drafting and sponsoring ACA 8, which sought to lower the vote threshold for local agencies to finance water related projects through GO bond indebtedness.
  - ✓ Provided regular and timely updates to West Basin's state and federal legislators regarding the ongoing drought crisis, conservation, 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.
  - ✓ Honored four Legislators with Legislator(s) of the Year awards. This program resulted in award recipients visiting West Basin headquarters and the Edward C. Little Water Recycling Facility for both the award and a water supply update.



## **Sound Financial & Resource Management**

- Objective 1:** ✓ Managed the reporting to MWD for the projects funded through the Foundational Actions Funding Program.
- Objective 6:** ✓ Increased state and federal advocacy efforts related to securing project and program funding for the West Basin service area, including support and advocacy for the “WINN” legislation, Water Infrastructure Improvements for the Nation, which passed in December, 2016; as well as drafting and sponsoring ACA 8, which sought to lower the vote threshold for local agencies to finance water related projects through GO bond indebtedness.
- ✓ Provided regular and timely updates to West Basin’s state and federal legislators regarding the ongoing drought crisis, conservation, 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.
- ✓ Honored four Legislators with “Legislator of the Year” awards. This program resulted in award recipients visiting West Basin headquarters and the Edward C. Little Water Recycling Facility for both.
- ✓ Procured six on-call consultants on behalf of the Greater Los Angeles County Integrated Regional Water Management Program.



## **Environmental Stewardship**

- Objective 2:** ✓ Rehabilitated the Donald L. Dear headquarters demonstration garden with new plantings and removal of invasive plants and updated the demonstration garden at the Edward C. Little Water Recycling Facility with new plantings.
- ✓ Completed three demonstration gardens in the cities of West Hollywood, Gardena and Inglewood.
- ✓ Developed a long-term maintenance plan for the 16 constructed demonstration gardens at city and school facilities as well as the two demonstration gardens at District facilities.





## FY 2017-18 Strategies



### Water Reliability

- Objective 2:**
- Continue to play a leading role in the development of policy and legislative matters; as well as the advocacy activities for CalDesal and WaterReuse.
  - Pursue policies and actions on behalf of West Basin's service area that mitigate the impacts of the current drought and increase resiliency against future droughts.
- Objective 5:**
- Continue to monitor and advocate for long term solutions to California's water crisis, including the Bay Delta Conservation Plan/California Water Fix, legislation and regulations to implement a long-term strategy to make conservation a California way of life, environmental safeguards to protect water supplies and mitigate the impacts of the drought, and increase resiliency against future droughts through the development of new local water resources.



### Customer Service

- Objective 5:**
- Continue to pursue state, federal and other external funding for conservation and reliability projects with the West Basin service area, and support the efforts of our customer agencies and stakeholders, particularly for projects that provide immediate water savings during the drought.
  - Maintain existing and develop new legislative advocacy strategies to correspond to the political "post-drought" climate. This includes ensuring that California's long-term conservation strategies recognize past investments in drought resilient water supplies, past and current conservation efforts, and the diversity of West Basin's retail customer's land use and customer base.
  - Continue our program to honor Legislator(s) of the Year with Water Reliability awards.



### Sound Financial & Resource Management

- Objective 6:**
- Continue grant and state/federal appropriations advocacy efforts related to West Basin pursuing conservation and construction project grants and low interest loans to leverage local funding. 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).
  - Continue to defend West Basin service area and MWD as a whole against litigation, legislation and other efforts intended to work against cooperative regional water management policy.
  - 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.
  - Continue leadership role in the South Bay sub-region of the Greater Los Angeles County Integrated Regional Water Management Program, in preparing to apply for new Proposition 1 funding.
  - Pursue a Local Resources Program (LRP) incentive with MWD for the District's recycled water expansion to the Tesoro Refinery in the City of Carson.

## Public Information & Education

The core mission of the department is to convey the value of water. Under the umbrella of West Basin's Water Reliability Program staff continues to convey information about the District's conservation, water recycling and ocean water desalination activities. Additionally, the department strives to enhance West Basin's reputation as an award-winning, innovative and industry-leading water agency.

### Public Information

Through support and guidance from the Board of Directors, staff develops and implements a wide array of outreach programs to ensure that West Basin is positioned as a valuable utility among key stakeholders. Audiences include state, county and federal elected officials, Chambers of Commerce, cities, partners, customer agencies, community, environmental, educational and business leaders. By offering free public tours, presentations, annual water-themed events, special events, construction outreach, media relations and special tours of ECLWRF, the District continues to provide value to the community and enhance its reputation as a world-class agency dedicated to sustainable water resource management.

### Education

West Basin's water education programs engage students, grades 3 to 12, in learning about the importance of water conservation, ocean water desalination and environmental stewardship. These programs are offered to public and private school students in the service area and include classroom presentations, field trip excursions, a student water conservation kit program and an annual water conservation art contest.

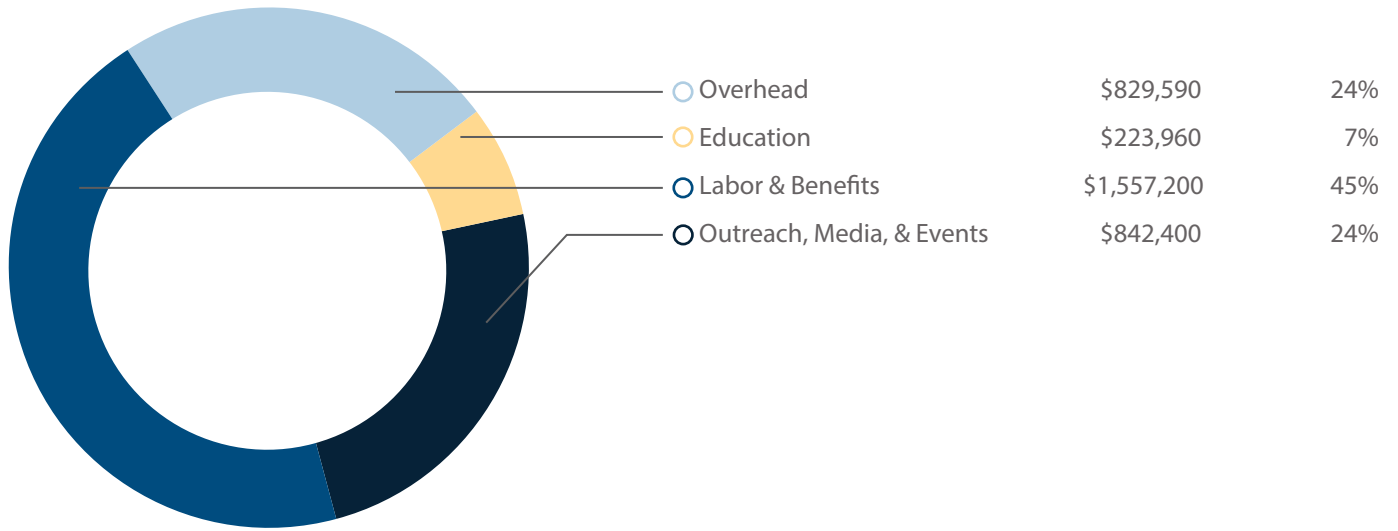
### Personnel Full-Time Equivalents (FTE)

FY 2014-15 Actual FTE	FY 2015-16 Actual FTE	FY 2016-17 Projected FTE	FY 2016-17 Budget FTE	FY 2017-18 Budget FTE
10.59	8.82	8.37	10.71	11.60

### Operating Budget

	FY 2014-15 Actuals	FY 2015-16 Actuals	FY 2016-17 Projected	FY 2016-17 Budget	FY 2017-18 Budget
Labor and Benefits	\$1,454,914	\$1,066,762	\$1,165,000	\$1,393,833	\$1,557,200
Overhead	905,848	678,595	921,616	833,536	829,590
Education	175,783	185,337	151,932	202,960	223,960
Outreach, Media, & Events	369,240	546,636	736,452	745,645	842,400
<b>Total Public Information</b>	<b>\$2,905,785</b>	<b>\$2,477,330</b>	<b>\$2,975,000</b>	<b>\$3,175,974</b>	<b>\$3,453,150</b>

## Public Information



West Basin  
Distributes Free Rain  
Barrels to Residents  
in the Service Area



# Strategic Goals and Objectives

## Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

## FY 2016-17 Accomplishments



### Customer Service

- Objective 4:**
- ✓ Produced the 17th annual Harvest Festival, including a Water Reliability Awards breakfast; Festival attendance reached approximately 1,750 community members, in which West Basin led tours for nearly 400 attendees.
  - ✓ Successfully partnered in Metropolitan Water District's education programs; sponsored three high school Solar Cup teams and engaged over 400 students in the Water is Life art contest.
  - ✓ Served more than 8,000 students in grades 3 to 12 with free water education programs.
  - ✓ Continued to help facilitate the process to update the exhibits, conference rooms and educational facilities at the ECLWRF.
- Objective 5:**
- ✓ Continued Water Reliability Program outreach to reach community members, including new businesses, civic organizations and city officials, as well as individuals in the service area; Increased focus on the exploration of ocean water desalination to diversify water portfolio given the Environmental Impact Report stage of the desalination program.
  - ✓ Develop new and/or improved communication vehicles to showcase West Basin's brand and value; including the redesign and development of the organization's website and e-newsletter.
  - ✓ Offered free, public water education programs: Water 101 Classes, public tours of the ECLWRF and a speakers bureau, all of which reinforce the District's Water Reliability Program messages; Continued active tour program for the Water Education Center and Ocean Water Desalination Demonstration Facility for elected officials, sponsors, media and industry V.I.Ps before facility decommissioning in 2017.
  - ✓ Support the Office of the General Manager in stakeholder engagement and execution of a Recycled Water Taskforce to further the discussion of water reliability issues.

## FY 2017-18 Strategies



### Customer Service

- Objective 4:**
- Host the annual Water Harvest festival in 2017 to provide the community with informative, water and environmental stewardship related booths, information and devices.
  - Provide quality education programs for grades 3 to 12, including the enhancement of educational information on the District website and participation in Solar Cup.
  - Continue to support the update of the exhibits and educational facilities at the ECLWRF.
- Objective 5:**
- Improve District communications highlighting recycled water accomplishments and strategies for maximizing water reuse.
  - Outreach to key stakeholders throughout the service area to inform and assess support for the District's Ocean Water Desalination Program, a component of the Water Reliability Program, to potentially provide a drought-proof supply of drinking water.
  - Increase positive media coverage and social media presence by providing information and content that is focused on current issues facing the water industry and West Basin.



Water Recycling  
is a Major Pillar of  
West Basin's Water  
Reliability Goals

## Conservation

In Fiscal Year 2016-17, West Basin was awarded funding from the United States Bureau of Reclamation (Reclamation) to update its 2010-2015 Water Use Efficiency Master Plan (Plan). In the coming fiscal year, staff will be evaluating the successes and challenges of its current programs, identifying current and future water conservation regulations and developing new strategies and programs. The next Plan will provide the next 3 to 5-year roadmap for long-term water efficiency and customer agency support.

West Basin's goal is to reduce imported water use by 20% as called for in the Governor's 2009 Conservation Water Act and the SBx7-7 legislation by 2020. Together with the water recycling program, West Basin is planning on meeting and exceeding the 20% imported water reduction goal. Additional goals will be developed as part of the next Water Efficiency Strategic Plan. In 2017, the State Water Resources Control Board and various stakeholders will be developing new long-term water conservation legislation, in order to make water conservation a California way of life beyond 2020.

West Basin continues to obtain outside funding through partnerships with federal, state and local agencies. Grants are used to increase the cost-effectiveness of programs and provide the public with greater value. For every dollar invested, approximately three dollars' worth of water conservation devices and programs are delivered to the public due to grants and local partnerships, helping to keep rates lower.

### Personnel Full-Time Equivalents (FTE)

FY 2014-15 Actual FTE	FY 2015-16 Actual FTE	FY 2016-17 Projected FTE	FY 2016-17 Budget FTE	FY 2017-18 Budget FTE
2.83	1.91	3.44	3.31	3.02

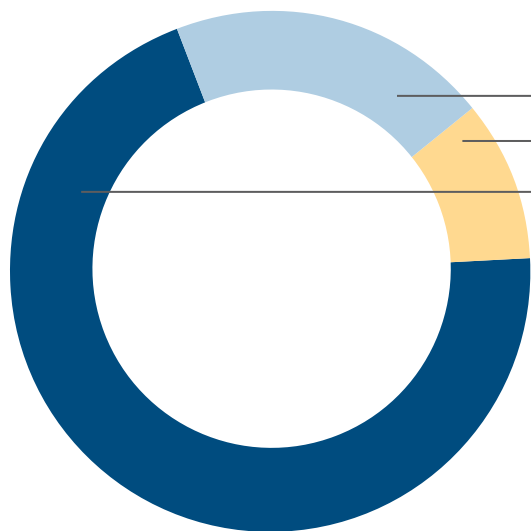
### Operating Budget

	FY 2014-15 Actuals	FY 2015-16 Actuals	FY 2016-17 Projected	FY 2016-17 Budget	FY 2017-18 Budget
Labor and Benefits	\$293,853	\$221,881	\$506,500	\$539,022	\$556,437
Overhead	149,004	127,055	311,790	242,942	294,028
Conservation	568,582	791,605	781,710	1,750,800	1,963,526
<b>Total Conservation</b>	<b>\$1,011,439</b>	<b>\$1,140,541</b>	<b>\$1,600,000</b>	<b>\$2,532,764</b>	<b>\$2,813,991</b>

As we continue to see legislation and messaging about conserving water as a new way of life, West Basin continues to find grants and programs that support more water use efficiency. Due to the popularity of the rain barrel distribution, West Basin has increased its funding support as other local incentives have been reduced. In addition, West Basin is increasing funding towards rainwater/greywater workshops and just received noticed of two grants that will support residential outdoor water use surveys and to aide disadvantaged area communities by providing a spectrum of services and devices to help those in need.



## Conservation



Labor & Benefits

\$556,437

20%

Overhead

\$294,028

10%

Conservation

\$1,963,526

70%

## Strategic Goals and Objectives

### Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

## FY 2016-17 Accomplishments



### Water Reliability

#### Objective 2:

- ✓ Successfully completed five free Rain Barrel Distribution Events and distributed 1,800 rain barrels.
- ✓ Implemented five free greywater public workshops.
- ✓ Provided residents and large landscape facilities with free landscape surveys.
- ✓ Conducted over 40 Cash for Kitchens Audits, and staff hired a separate vendor to conduct another 45 audits in Division IV, ensuring coverage in all of the West Basin service area through our partnership with the South Bay Environmental Services Center.

- ✓ Signed up several new car washes for West Basin's Ocean Safe Car Wash Coupon Program, and maintained the current participants.
- ✓ Conducted nine Smart Sprinkler Exchange Events.
- ✓ Constructed the remaining four Ocean Friendly Demonstration Gardens, completing all 18 demonstration gardens in partnership with the Surfrider Foundation.
- ✓ Conducted 12 California Friendly Landscape Training Classes.
- ✓ Assisted the City of Malibu and the Los Angeles County Waterworks District #29 with developing a new water efficiency program in Malibu/Topanga and the partners were awarded \$1 million from the Department of Water Resources through the Proposition 84 Integrated Regional Water Management Program (IRWMP).
- ✓ Awarded over \$800,000 from the Department of Water Resources (DWR) for two new water efficiency programs: 1) Cash for Kitchens – Direct installation of plumbing devices in restaurants, and 2) a washer machine direct installation program for Disadvantaged Communities.
- ✓ Applied to the United States Bureau of Reclamation (Reclamation) for two new water efficiency programs: 1) Cash for Kitchens – Direct installation of plumbing devices in restaurants, and 2) a Greywater Voucher Program.



### Customer Service

#### **Objective 4:**

- ✓ West Basin implemented various water efficiency and outreach programs in partnership with its local cities and water retailers.
- ✓ Represented and promoted West Basin's programs at over 100 community events in partnership with the South Bay Environmental Services Center.
- ✓ Developed a new Water Conservation Microsite to better assist the public in learning about and participating in West Basin's water conservation programs.
- ✓ Assisted the City of Malibu with hiring a new vendor to implement conservation outreach and hold the One Water Expo in Malibu.



### Environmental Stewardship

#### **Objective 2:**

- ✓ Partnered with several environmental organizations in the development and implementation of its water efficiency programs.
- ✓ Joined the City of Malibu and LA County Waterworks District #29 on attending the City of Malibu's One Water Expo.
- ✓ Partnered with the City of Culver City and the Surfrider Foundation to construct a rain garden at a street median in Culver City.

## FY 2017-18 Strategies



### Water Reliability

#### Objective 2:

- Focus on updating West Basin's long-term Water Use Efficiency Plan.
- Launch the new "Comprehensive Water Conservation Program" in the City of Malibu and in Topanga.
- Launch two new DWR grant funded programs: 1) Cash for Kitchens and 2) Disadvantaged Area Community (DAC) Water and Energy Savings Initiative Program.
- Continue to seek federal and state grant funding for new water efficiency programs.
- Continue working with the energy sector on the water-energy nexus and the embedded energy savings in water conservation.



### Customer Service

#### Objective 4:

- West Basin implemented various water efficiency and outreach programs in partnership with its local cities and water retailers.
- Represented and promoted West Basin's programs at over 100 community events in partnership with the South Bay Environmental Services Center.
- Developed a new Water Conservation Microsite to better assist the public in learning about and participating in West Basin's water conservation programs.
- Assisted the City of Malibu with hiring a new vendor to implement conservation outreach and hold the One Water Expo in Malibu.



### Environmental Stewardship

#### Objective 2:

- Continue to gain environmental and community support in the development and implementation of our water efficiency programs.
- Continue to partner with environmental agencies in the distribution of rain barrels and with providing free rainwater/greywater public workshops.

## Water Quality Monitoring Program

West Basin administers the Water Quality Monitoring Program for several of its potable water purveyors. Program activities include compliance sample scheduling, contracting wellhead sampling and laboratory services, reviewing water quality data for compliance, maintaining water quality databases, and preparing compliance and non-compliance reports.

### Personnel Full-Time Equivalents (FTE)

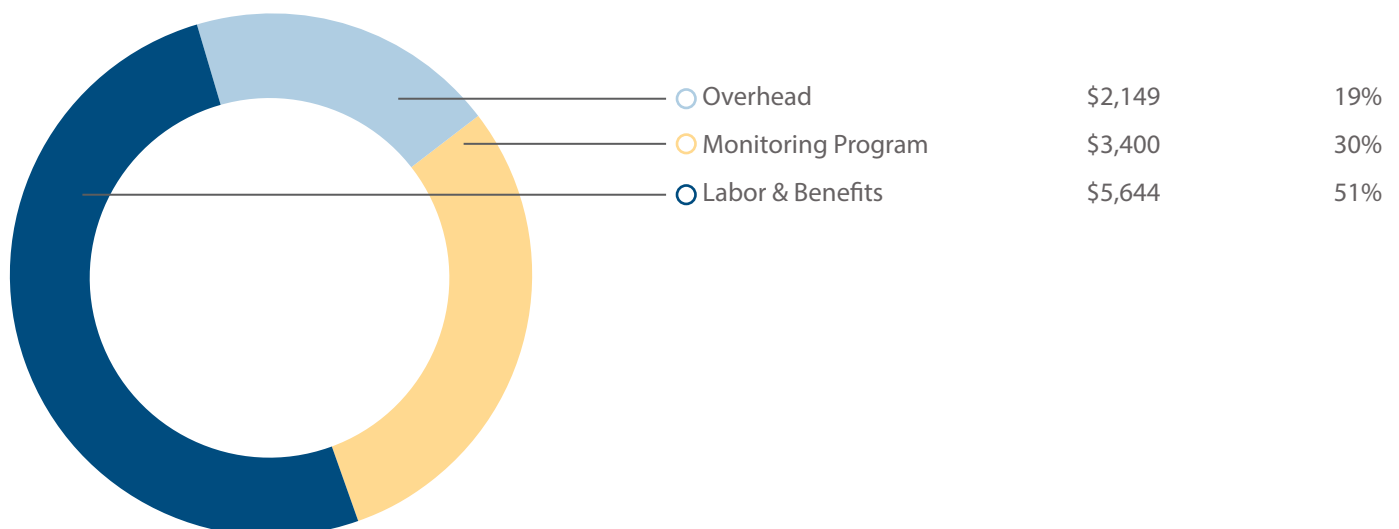
FY 2014-15 Actual FTE	FY 2015-16 Actual FTE	FY 2016-17 Projected FTE	FY 2016-17 Budget FTE	FY 2017-18 Budget FTE
0.02	.02	.02	0.08	.03

### Operating Budget

	FY 2014-15 Actuals	FY 2015-16 Actuals	FY 2016-17 Projected	FY 2016-17 Budget	FY 2017-18 Budget
Labor and Benefits	\$3,890	\$2,926	\$2,050	\$14,666	\$5,644
Overhead	1,899	1,551	850	6,070	2,149
Monitoring Program	11,073	3,257	7,100	4,694	3,400
Title 22 Monitoring	\$16,862	\$7,734	\$10,000	\$25,430	\$11,193

Monitoring program costs will vary each year depending on the lab analyses that are required by state and federal regulations. Participating retailers reimburse West Basin for all lab sampling and analytical costs.

### Water Quality Monitoring





# Strategic Goals and Objectives

## Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

## FY 2016-17 Accomplishments



### Water Quality

- Objective 1:** ✓ Maximize Customer Satisfaction: Completed annual customer water quality reports for participating retailers.
- Objective 2:** ✓ Met permit and contractual water quality requirements: 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.



### Customer Service

- Objective 2:** ✓ Maintain customer high regard and respect: Provided purveyor workshops to help coordinate between water companies on important water quality and compliance issues.

## FY 2017-18 Strategies



### Water Quality

- Objective 1:** ● Maximize Customer Satisfaction: Complete annual customer water quality reports for participating retailers.
- Objective 2:** ● Meet permit and contractual water quality requirements: 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.



### Customer Service

- Objective 2:** ● Maintain customer high regard and respect: Provide purveyor workshops to help coordinate between water companies on important water quality and compliance issues.

# SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION





# SUPPLEMENTAL INFORMATION

## Capital Improvement Program (CIP)

To effectively respond to the needs of West Basin's various water supply systems, West Basin administers a Capital Improvement Program (CIP) that focus on the installation of new infrastructure and equipment, or the restoration of existing assets. The majority of West Basin's infrastructure is included in its Recycled Water system, but West Basin also owns a groundwater desalter (Marvin Brewer Desalter), its headquarters building (Donald L. Dear Building), and other assets in support of its imported water supplies. A comprehensive recycled water Capital Implementation Master Plan (CIMP) is used as a guide to best meet long-term planning and reliability objectives for the recycled water system. In general, the West Basin's CIP Projects seek to support the following:

- The addition of future recycled water customers.
- Safeguarding recycled water system capacity and reliability.
- Preserving water quality obligations.
- Responding to changing regulatory requirements.

## New Infrastructure

New infrastructure and equipment are added to the recycled water system for reasons that may include the following:

- Increasing customer connections through distribution system expansions and customer lateral construction.
- Increasing system capacity through expansion of existing treatment systems or inclusion of new treatment systems.
- Addressing water quality or regulatory requirements with new treatment technologies, unit processes, or equipment.

## Rehabilitation & Replacement Program (R&R)

With an aging infrastructure, the rehabilitation and replacement of existing equipment and systems is critical to long-term achievement of quality and capacity goals. For this reason, West Basin's capital improvement program includes an R&R

component intended to extend the useful life of existing facilities and equipment.

In this fiscal year, West Basin has continued to take an active approach to replace and refurbish critical parts of the aging infrastructure that provides recycled water to our customers. By undertaking this large replacement and refurbishment effort, West Basin hopes to continue to enhance the recycled water process, provide reliability to the customers and implement cost savings through a more efficient operation. To assist in this effort, West Basin is working with a consultant to identify, prioritize and plan for these improvements.



Treatment Plant Expansions



## Project Implementation

Each project delivered by West Basin is subject to rigorous planning and detailed design before construction. This not only ensures that projects stay on schedule and within budget, but it also guarantees high-quality deliverables.

### Planning

Feasibility studies are undertaken in order to assess the practicality of the proposed project. In general, these studies will assess five areas of feasibility: technical, economic, legal, operational, and schedule feasibility.

### Design

Once a project has been identified as feasible, it may move into the design phase. The designers will define the project through detailed specification documents and construction drawings. The final deliverable from the design phase is the Ready-To-Advertise bid package. This package is a complete design (design analysis, specifications, and drawings,) including annotated design submittal review comments, that answer, and/or incorporate, review comments resulting from the final design submittal.

### Construction

The majority of West Basin's construction projects are considered Public Works Construction Projects. Public works in general means:

- Construction, alteration, demolition, installation, or repair work done under contract and paid, in-whole or in-part, out of public funds.
- It can include pre-construction and post-construction activities related to a public works project.
- For a full definition of public works, refer to Labor Code section 1720.

Anyone working on a public works' project must be paid prevailing wages as determined by DIR. Projects of \$30,000 or more must meet DIR's apprenticeship requirements. Failure to comply with public works requirements can result in civil penalties, criminal prosecution, or both.

## Types of Projects

### Recycled Water Pipelines & Laterals

New pipeline alignments and customer laterals are necessary to expand the system. West Basin works ceaselessly to find ways to partner with potential customers and begin the planning, design and construction of new laterals which will result in increased recycled water demand, thereby further lowering our future reliance on imported water. West Basin's fiscal budget has benefited from funds for the construction of recycled water pipelines and customer connections that will be funded through state (California's Proposition 84) and federal programs (United States Bureau of Reclamation, Army Corp of Engineers), and even local partnerships (cities, water retailers, and customers). Examples of these types of projects included in this fiscal year's budget are shown below. These projects are in various stages of the implementation process.

- El Segundo Recycled Water Project
- Kenneth Hahn Park Recycled Water Pipeline Project
- Palos Verdes Recycled Water Pipeline Project
- Torrance Recycled Water Expansion Feasibility Study
- Caltrans (405) & Main Street Recycled Water Project
- Dominguez Tech Center Recycled Water Project
- Hollywood Park Recycled Water Project
- Northrop Grumman
- Shell Refinery Recycled Water Lateral Project
- Anderson Park Recycled Water Project

### Treatment Plant Expansion and Reliability

Within each of West Basin's treatment facilities, there are more than 30 unit-treatment systems dedicated to producing West Basin's five designer waters. Treatment plant expansions range from the addition of new unit processes for redundancy or reliability, or a wholesale facility expansion intended to increase the treatment capacity of the system. Examples of these types of projects included in this fiscal year's budget are shown below. These projects are in various stages of the implementation process.

- Recycled Water Distribution System Cathodic Protection Project
- JMMCRWRP Tesoro Expansion
- Facility-Wide Power Monitoring Project
- HSEPS Improvements Project
- Inglewood Disinfection Station
- Pall MF Expansion Project
- Phase IV MF Optimization Project
- ECLWRF Clean-In-Place Waste Discharge Project

- Recycled Water Distribution System SCADA Project
- Secondary Effluent Flow Meter Installation
- TRWRP Dechlorination System Project

## Replacements and Refurbishments of Existing Facilities

Because West Basin has a substantial range of assets of varying ages, replacement and rehabilitation projects are a critical part of ensuring the health and longevity of West Basin's infrastructure. These types of projects can include, but are not limited to: simple replacement or rehabilitation for equipment such as pipes, pumps, tanks, instrumentation, or treatment process elements.

The District's existing infrastructure requires repair and maintenance on a regular basis. Replacement or refurbishment cost to the existing capital assets under certain circumstances may be capitalized. The criteria for determining whether the expenditure is an expense or capital asset requires knowledge of the effect the repair will have on the capital asset. To be considered as a capital asset, these conditions must be met:

- Total repair or refurbishment cost of one job has to be \$10,000 or more, and;
- After the repair or refurbishment, the remaining useful life of the existing asset must be extended by at least three years.

When the above conditions are not met, the cost of repair or refurbishment will be considered as operations and maintenance expenses.

Examples of these types of projects included in this fiscal year's budget are shown below. These projects are in various stages of the implementation process.

- Chlorine Contact Basin Rehabilitation Project
- Phase III Clearwell Rehabilitation
- Chemical Containment R&R Project
- TRWRP Waste Discharge Capacity Increase Project
- Solids Handling System Rehabilitation Project
- Facility-Wide Surge Tank Project
- Welded Steel Storage Tank Rehabilitation Project
- MF Membrane Replacement
- RO Membrane Replacement
- Misc. Facility R&R
- Brewer Desalter Well Rehabilitation Project

## Project Financing

During the budget development process, West Basin staff reviews its upcoming capital improvement projects and determines how each project will be funded. West Basin recognizes that funding for the capital improvement projects can be significant and may need to come from multiple sources. When determining the source of funding, West Basin considers several factors such as the useful life of the future asset, the anticipated cost of the project, if there are potential outside funding through grants or customers, and the associated timing. West Basin continues to work with its customers inside and outside its service area to find mutually beneficial ways to finance and expand the recycled water system.

Understanding that some capital assets have a short useful life, West Basin has determined that these projects will be funded through West Basin's PAYGO designated fund. Another financing option is for West Basin to pay for construction upfront and immediately invoice the customer either monthly, as cost are incurred, or at the completion of construction, when all costs have been reflected. A third financing option is for West Basin to issue debt either through long-term debt or to obtain a state loan. The term of the financing generally matches or is less than the estimated useful life of the capital project. More recently West Basin has utilized its Commercial Paper program to finance capital projects as the interest rate is low, and then when the market is favorable, will refund the line with long-term debt.

Expansion projects will often be debt financed as they typically have a long useful life and are expensive to construct. Repayment for these financings may come through commodity rates, a local resource program or through a fixed payment from a customer.

Costs for ocean-water desalination have been included through FY 2017-18 and include the cost for compliance and reporting, permitting, site option analysis and the environmental impact report development and approval, however; the full cost of the project will be incorporated into future CIP once final commitment and approval by the West Basin Board of Directors for ocean-water desalination is made.

The recycled water acre-feet, that will be produced from the reliability projects and the revenue from the sale of the recycled water, have been included in the Projected Operating Results in the Fiscal Year (FY) 2017-18 budget and the next five years as shown in the "Financial Highlights and Forecast" section. Similarly, the additional annual operating costs and debt service have also been increased for the projected recycled water sales related to these projects. Typically the additional cost may be minimal for certain projects or West Basin determines the additional variable costs associated with new acre-feet and includes those in the annual operating costs.

## Financing Sources for Fiscal Year 2017-2018

The total amount of CIP expected to be expended in FY 2017-18 is \$81,336,974. The CIP projects outlined to begin in FY 2017-18 will be submitted individually to the Board of Directors for authorization and funding during the fiscal year.

The following table depicts the sources of funds that will be used to pay for the anticipated CIP projects during FY 2017-18. West Basin anticipates spending approximately \$18.6 million from its designated funds to pay for the various replacement and refurbishment (R&R) projects and toward the ocean-water desalination costs. The PAYGO designated fund will also be used on the Chlorine Contact Basin Rehabilitation and Welded Steel Storage Tank Rehabilitation projects in FY 2017-18. It is also anticipated that both the MF and RO membranes will be replaced in FY 2017-18 and will also be funded through PAYGO. The Commercial Paper program will allow West Basin to finance the cost of the numerous customer development projects and most of the expansion and reliability projects. Last fiscal year, West Basin received confirmation from the State Water Resources Control Board awarding a low-interest loan to assist in funding an expansion at the Tesoro Refinery. In addition to the state loan, West Basin has been notified that it will receive a grant for approximately \$8 million.

FY 2017-18	Project Cost	Project Administration	Total
PAYGO	\$17,580,799	\$1,307,336	\$18,888,136
Commercial Paper	36,877,330	2,742,257	39,619,587
State Loan/Grant	21,435,289	1,593,962	23,029,251
<b>Total</b>	<b>\$75,893,418</b>	<b>\$5,643,555</b>	<b>\$81,536,974</b>

## Personnel - Full-Time Equivalent (FTE)

FY 2014-15 Actual FTE	FY 2015-16 Actual FTE	FY 2016-17 Projected FTE	FY 2016-17 Budget FTE	FY 2017-18 Budget FTE
8.23	11.35	13.44	14.35	20.27

The following table summarizes the planned expenditures for FY 2017-2018 and the next four years.



Inside Look at  
the Recycled  
Water Process

Project	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Capital Improvement Projects</b>					
Recycled Water Distribution System Cathodic Protection Project	\$ 3,171,960	\$ 709,370	\$ -	\$ -	\$ -
Capital Improvement Program Master Plan	-	567,628	682,372	-	-
JMMCRWRP Tesoro Expansion	21,435,289	6,092,560	-	-	-
Donald L. Dear Building Renovation	545,785	2,897,292	1,648,923	-	-
El Segundo Recycled Water Project	596,548	-	-	-	-
Facility-Wide Power Monitoring Project	400,000	925,000	-	-	-
HSEPS Improvements Project	13,194,761	2,285,015	-	-	-
Inglewood Disinfection Station	1,276,799	-	-	-	-
Kenneth Hahn Park Recycled Water Pipeline Project	886,045	770,723	9,214,944	712,973	-
PalM MF Expansion Project	3,777,658	16,314	-	-	-
Palos Verdes Recycled Water Pipeline Project	911,378	8,345,274	1,439,243	-	-
Phase IV MF Optimization Project	76,137	-	-	-	-
ECLWRF Clean-In-Place Waste Discharge Project	3,559,625	-	-	-	-
Recycled Water Distribution System SCADA Project	151,297	165,941	-	-	-
Secondary Effluent Flow Meter Installation	75,000	415,000	-	-	-
Torrance RW Expansion Feasibility Study	38,081	652,959	-	-	-
TRWRP Dechlorination System Project	14,408	290,000	-	-	-
ECLWRF Visitor Center Renovation Project	4,877,284	1,142,216	-	-	-
TRWRP MF Replacement Project	-	-	1,135,000	5,980,875	7,289,125
Phase II/Phase III MF Replacement Project	-	292,400	1,707,200	15,981,650	311,250
<b>R&amp;R Projects</b>					
Chlorine Contact Basin Rehabilitation Project	1,980,360	148,446	-	-	-
Phase III Clearwell Rehabilitation	1,156,960	-	-	-	-
Chemical Containment R&R Project	3,124,564	-	-	-	-
TRWRP Waste Discharge Capacity Increase Project	50,000	282,000	-	-	-
HSEPS R&R Project	-	323,333	5,294,167	1,494,500	-
Solids Handling System Rehabilitation Project	357,727	390,012	1,527,261	-	-
Facility-Wide Surge Tank Project	816,267	53,733	-	-	-
Welded Steel Storage Tank Rehabilitation Project	3,285,522	1,230,311	-	-	-
MF Membrane Replacement	2,499,588	1,679,490	-	261,000	978,750
RO Membrane Replacement	504,000	378,000	777,000	399,000	1,260,000
Misc. Facility R&R	3,000,000	11,000,000	8,000,000	13,000,000	13,000,000
Brewer Desalter Well Rehabilitation Project	500,000	-	-	-	-
<b>Customer Development Projects</b>					
Caltrans (405) & Main Street Recycled Water Project	50,000	310,000	-	-	-
Dominguez Tech Center Recycled Water Project	85,000	-	-	-	-
Hollywood Park Recycled Water Project	29,746	-	-	-	-
Mills Park Recycled Water Project	-	40,000	260,000	-	-
Monroe Middle School Recycled Water Project	-	50,000	70,000	-	-
Northrop Grumman	31,204	-	-	-	-
Shell Refinery Recycled Water Lateral Project	8,883	-	-	-	-
Anderson Park Recycled Water Project	25,000	-	-	-	-
<b>Desal</b>					
Lease	39,000	-	-	-	-
Compliance and Reporting	250,003	-	-	-	-
Program Master Plan and Planning Services	70,000	-	-	-	-
Site Option Contracting	258,540	-	-	-	-
Environmental Impact Report Development and Approval	1,158,000	-	-	-	-
Funding Services	250,000	-	-	-	-
Legal Services	25,000	-	-	-	-
Permitting Process	900,000	-	-	-	-
Design	250,000	-	-	-	-
<b>Other/Overhead</b>					
West Basin Project Administration	4,922,040	5,069,701	5,221,792	5,378,446	5,539,799
Job Order Contract Development	150,000	-	-	-	-
Labor Compliance Program	71,515	-	-	-	-
Suez Labor (Placeholder)	500,000	500,000	500,000	500,000	500,000
Project Management System	200,000	-	-	-	-
<b>TOTAL</b>	<b>\$81,536,974</b>	<b>\$46,522,721</b>	<b>\$36,977,902</b>	<b>\$43,208,444</b>	<b>\$28,378,924</b>



## Strategic Goals and Objectives

### Strategic Business Plan Goals



Water Reliability



Water Quality



Customer Service



Sound Financial & Resource Management



Environmental Stewardship

### FY 2016-17 Accomplishments



#### Water Reliability

- Objective 3:**
- ✓ Completed feasibility studies for expansions of West Basin's recycled water distribution system to the Kenneth Hahn State Park, Palos Verdes Peninsula, and the City of Torrance.
  - ✓ Began the design of the Solids Handling System Rehabilitation Project to ensure reliability of West Basin's ability to process biosolids removed from the Hyperion Secondary Effluent.
  - ✓ Began design 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.
  - ✓ Began design 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.
  - ✓ Began design of the Phase III Clearwell R&R Project to ensure continued and reliable production of the Chevron Boiler Feed System.
  - ✓ Completed the design of the Juanita Millender-MacDonald Carson Regional Water Recycling Plant expansion, intended to deliver approximately 2,000 AFY more recycled water to the Tesoro Refinery for cooling tower applications, as well as improve reliability of the microfiltration system used in the boiler feed treatment system.
  - ✓ Began 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 to West Basin's overall recycled water supply system.
  - ✓ Completed the Construction of the Carson Mall Lateral Phase II project to deliver recycled water into new areas within the City of Carson.
  - ✓ Completed the construction of the South Gardena Lateral project to deliver recycled water into new areas within the Gardena area.

- Objective 4:**
- ✓ Completed the draft Environmental Impact Report as part of California’s Environmental Quality Act (CEQA) to quantify all impacts associated with the development and construction of an ocean water desalination project.
  - ✓ Completed the Preliminary Analysis of the Planning and Development (pAPD) for the ocean-water desalination program, evaluating alternative project delivery methods that could be used in the planning, design, and construction of an ocean-water desalination facility.



### **Water Quality**

- Objective 1:**
- ✓ Completed construction for the disinfected tertiary recycled water Alkalinity Improvement project. This project addressed the need for nitrified water upgrades to improve the water quality and enhance production capacity.
  - ✓ Began design 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.
  - ✓ Began design 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.
  - ✓ Began design of the Phase III Clearwell R&R Project to ensure continued and reliable production of the Chevron Boiler Feed System.



### **Customer Service**

- Objective 2:**
- ✓ Began design 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.
  - ✓ Began design 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.
  - ✓ Began design of the Phase III Clearwell R&R Project to ensure continued and reliable production of the Chevron Boiler Feed System.
  - ✓ Began the design 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.
- Objective 5:**
- ✓ Complete the construction for the Edward C. Little Water Recycling Facility Visitor Center Renovation to expand the visitor center space, renovate interior of the existing office spaces, relocate the control room, update interpretive messages and renovate exhibits. The expanded visitor center and additional conference will allow West Basin to host multiple and large special events, including industry meetings, conferences and events due to close proximity to Los Angeles airport. The updated exhibits will reinforce West Basin’s mission and water related issues in the region.



### **Sound Financial and Resource Management**

- Objective 1:**
- ✓ Began R&R Program Development to ensure timely and efficient implementation of RW R&R projects based on asset condition and need.
- Objective 2:**
- ✓ Completed several R&R projects including: Chlorine Contact Basin Rehabilitation Project, Phase III Clearwell Rehabilitation, and Chemical Containment R&R Project.

- ✓ Began 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 to West Basin's overall recycled water supply system.

**Objective 3:**

- ✓ Completed feasibility studies for expansions of West Basin's recycled water distribution system to the Kenneth Hahn State Park, Palos Verdes Peninsula, and the City of Torrance, and identified project partners for the future design and construction.
- ✓ 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.
- ✓ Completed construction of the South Gardena Lateral. This lateral was partially funded by West Basin, Los Angeles Department of Water and Power (LADWP) as well as a state grant from the Department of Water Resources.
- ✓ Completed three of seven customer pipeline and connection construction projects with grant funding from California's Proposition 84 grant funding.

**Objective 6:**

- ✓ Began design 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.
- ✓ Completed the design of the Juanita Millender-MacDonald Carson Regional Water Recycling Plant expansion, intended to deliver approximately 2,000 AFY more recycled water to the Tesoro Refinery for cooling tower applications, as well as improve reliability of the microfiltration system used in the boiler feed treatment system.



**Environmental Stewardship**

**Objective 2:**

- ✓ Began design of the Chemical Containment R&R Project to ensure chemicals used in West Basin's recycled water program are prevented thoroughly contained and prevented from release into the environment.
- ✓ Began construction of the Reverse Osmosis (RO) Clean-in-Place Waste Discharge project to allow RO cleaning chemicals to be discharged to the sewer rather than being combined with RO brine and discharged to Hyperion Treatment Plant's ocean outfall.
- ✓ Began design of the Chemical Containment R&R Project to ensure chemicals used in West Basin's recycled water program are prevented thoroughly contained and prevented from release into the environment.



## FY 2017-18 Strategies



### Water Reliability

#### *Objective 3:*

- Begin design of Facility-Wide Power Monitoring Project to add equipment and assets to monitor discreet power consumption within the unit processes for the RW treatment systems.
- Complete CEQA and preliminary design for expansions of West Basin's recycled water distribution system to the Kenneth Hahn State Park, Palos Verdes Peninsula, and the City of Torrance.
- Complete the design of the Solids Handling System Rehabilitation Project to ensure reliability of West Basin's ability to process biosolids removed from the Hyperion Secondary Effluent.
- Complete construction and begin operation 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.
- Complete design and begin 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.
- Complete construction of the Phase III Clearwell R&R Project to ensure continued and reliable production of the Chevron Boiler Feed System.
- Begin construction of the Juanita Millender-MacDonald Carson Regional Water Recycling Plant expansion, intended to deliver approximately 2,000 AFY more recycled water to the Tesoro Refinery for cooling tower applications, as well as, improve reliability of the microfiltration system used in the boiler feed treatment system.
- Continue 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 to West Basin's overall recycled water supply system.

#### *Objective 4:*

- West Basin Board Certification of the Environmental Impact Report as part of CEQA to quantify all impacts associated with the development and construction of an ocean water desalination project.
- Adopt the recommended project delivery method from the Preliminary Analysis of the pAPD for the ocean water desalination program.



### Water Quality

#### *Objective 1:*

- Complete design and begin operation 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.
- Begin 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.
- Complete construction of the Phase III Clearwell R&R Project to ensure continued and reliable production of the Chevron Boiler Feed System.



- Begin construction of the Juanita Millender-MacDonald Carson Regional Water Recycling Plant expansion, intended to deliver approximately 2,000 AFY more recycled water to the Tesoro Refinery for cooling tower applications, as well as improve reliability of the microfiltration system used in the boiler feed treatment system.

**Objective 2:**

- 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.
- Complete construction of the Reverse Osmosis (RO) Clean-in-Place Waste Discharge project to allow RO cleaning chemicals to be discharged to the sewer rather than being combined with RO brine and discharged to Hyperion Treatment Plant's ocean outfall.



**Customer Service**

**Objective 2:**

- Complete construction and begin operation 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.
- Begin 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.
- Complete construction of the Phase III Clearwell R&R Project to ensure continued and reliable production of the Chevron Boiler Feed System.
- 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.

**Objective 5:**

- Complete the construction for the Edward C. Little Water Recycling Facility Visitor Center Renovation to expand the visitor center space, renovate interior of the existing office spaces, relocate the control room, update interpretive messages and renovate exhibits. The expanded visitor center and additional conference will allow West Basin to host multiple and large special events, including industry meetings, conferences and events due to close proximity to Los Angeles airport. The updated exhibits will reinforce West Basin's mission and water related issues in the region.



**Sound Financial and Resource Management**

**Objective 1:**

- Implement R&R Program to ensure timely and efficient implementation of RW R&R projects based on asset condition and need.

**Objective 2:**

- Begin several R&R projects including: Torrance Refinery Water Recycling Plant Waste Discharge Capacity Increase Project, HSEPS R&R Project, Facility-Wide Surge Tank Project, and Welded Steel Storage Tank Rehabilitation Project.
- Continue 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 to West Basin's overall recycled water supply system.

**Objective 3:** ● Complete CEQA and preliminary design for expansions of West Basin’s recycled water distribution system to the Kenneth Hahn State Park, Palos Verdes Peninsula, and the City of Torrance, and enter into agreements with project partners for the future design and construction.

● Completed four of seven customer pipeline and connection construction projects with grant funding from California’s Proposition 84 grant funding.

**Objective 6:** ● Complete construction and begin operation 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.



### **Environmental Stewardship**

**Objective 2:** ● Complete construction of the Chemical Containment R&R Project to ensure chemicals used in West Basin’s recycled water program are prevented thoroughly contained and prevented from release into the environment.

● Complete construction of the Reverse Osmosis (RO) Clean-in-Place Waste Discharge project to allow RO cleaning chemicals to be discharged to the sewer rather than being combined with RO brine and discharged to Hyperion Treatment Plant’s ocean outfall.

● Completed construction for the ECLWRF renovation, which will update and modernize West Basin’s education program and facilities for water recycling outreach.



## ORGANIZATIONAL MEMBERSHIPS & SPONSORSHIPS

West Basin Municipal Water District (West Basin) seeks to engage with the community on many levels and maintaining membership and sponsoring events with various organizations that provide platforms for discourse on topics such as environment, conservation, and education. Involvement with certain organizations also gives West Basin the ability to stay abreast of cutting-edge technology, current trends, and latest innovations. It also provides opportunities to speak to industry experts about issues in line with to West Basin's mission.

<b>Memberships</b>	<b>FY 2017 Budget</b>	<b>FY 2018 Budget</b>
Alliance for Water Efficiency	\$ 3,100	\$ 3,100
American Academy of Environmental Engineers and Scientists	6,000	6,000
American Membrane Technology Association	675	825
American Water Works Association Membership	21,000	21,500
Association of California Water Agencies	27,500	28,000
CalDesal	5,000	5,000
California Association of Sanitation Agencies	800	855
California Special Districts Association	5,700	5,000
California Urban Water Conservation Council	8,000	8,000
<b>Chambers of Commerce</b>		
- Carson	450	450
- Culver City	350	350
- El Segundo	500	500
- Gardena Valley	600	600
- Greater Los Angeles African-American	500	500
- Harbor City / Harbor Gateway	175	175
- Hawthorne	300	300
- Hermosa Beach	375	300
- Inglewood / Airport Area	300	300
- Lawndale	500	500
- LAX Coastal	330	340
- Lomita	425	425
- Los Angeles Area	850	875
- Malibu	400	400
- Manhattan Beach	650	650
- Palos Verdes Peninsula	600	600
- Redondo Beach	300	300
- Topanga	120	100
- Torrance	500	500
- West Hollywood	450	450

<b>Memberships (cont.)</b>	<b>FY 2017 Budget</b>	<b>FY 2018 Budget</b>
Climate Registry	1,200	1,200
Los Angeles Council of Professional Black Engineers	1,000	1,000
Los Angeles County Business Federation (BizFed)	-	5,000
National Water Research Institute	50,000	50,000
National Water Resources Association	350	350
So CA Alliance of Public Owned Treatment Works	6,000	6,000
Southern California Water Committee	2,500	2,500
Southwest Membrane Operators Association	600	600
Urban Water Institute, Inc.	1,250	1,250
Water Education Foundation	2,700	2,700
Water Research Foundation	44,000	28,000
WaterReuse Association	8,600	8,600
WaterReuse Research Foundation	25,000	25,000
West Basin Water Association	800	500
<b>Memberships Total</b>	<b>\$230,450</b>	<b>\$219,595</b>

<b>Water Related Sponsorships</b>	<b>FY 2016-17 Budget</b>	<b>FY 2017-18 Budget</b>
CalDesal Annual Conference	\$1,500	\$1,500
Coro- Annual; Water Sustainability Conference	2,500	2,500
Friends of Ballona Wetlands	3,000	3,000
Groundwater Festival Sponsorship	2,500	2,500
Heal the Bay	5,000	5,000
Los Angeles Waterkeeper	5,000	5,000
Public Officials for Water & Environment Reform (POWER)	1,500	1,500
Southern California Water Committee Quarterly	2,500	2,500
Southwest Membrane Operators Association Annual Symposium	1,200	1,500
Urban Water Institute - Spring & Annual Conference	5,000	5,000
WaterReuse CA Annual Conference Sponsorship	2,500	3,500
Water Education for Latino Leaders	-	10,000
<b>Sponsorships Total</b>	<b>\$32,200</b>	<b>\$43,500</b>



Summarized descriptions of FY 2017-18 Organizational Memberships are listed on the following pages.

## **ALLIANCE FOR WATER EFFICIENCY**

Orientation: Policy/Technical

Description: The Alliance for Water Efficiency (AWE) is a national stakeholder-based non-profit organization dedicated to the efficient and sustainable use of water. Stakeholders include water agencies, non-profits, environmental organizations, and private companies.

West Basin Involvement: Staff attends local conferences presented by AWE.

Value: AWE provides access to information and resources drawn from agencies nationwide, specifically our efforts are enhanced by access to AWE's conservation modeling tool for developing local conservation master plans. AWE also provides direct technical support to members interested in water efficiency matters.

**Association Fee: \$3,100**

## **AMERICAN ACADEMY OF ENVIRONMENTAL ENGINEERS & SCIENTISTS (AAEES)**

Orientation: Technical

Description: The American Academy of Environmental Engineering and Scientists® is a not-for-profit 501(c)(6) organization serving the Environmental Engineering and Environmental Science professions by providing Board Certification to those who qualify through experience and testing. The Academy also provides training through workshops and seminars, participates in accrediting universities, publishes a periodical and other reference material, interacts with students and young professionals, sponsors a university lecture series, and rewards outstanding achievements through its international awards program.

West Basin Involvement: AAEES provides development opportunities for staff and Board Certification of Environmental Engineers.

Value: The Academy publishes in-depth reports and books on environmental issues and topics which advance the state of the art of environmental engineering and environmental science practices. Its members and staff regularly consult with government leaders regarding policies affecting environmental quality and the practice of environmental engineering and environmental science.

**Association Fee: \$6,000**



## **AMERICAN MEMBRANE TECHNOLOGY ASSOCIATION**

Orientation: Technical

Description: The American Membrane Technology Association is dedicated to developing and promoting the use of desalination and technology, encouraging cooperation and communication with governmental, institutional and private agencies in matters relating to desalination.

West Basin Involvement: Staff has presented papers on West Basin projects at past conferences.

Value: Involvement in American Membrane Technology Association provides staff an opportunity to interact with other agencies involved in desalination and learn about the latest technologies.

**Association Fee: \$825**

## **AMERICAN WATER WORKS ASSOCIATION (AWWA)**

Organization: Policy Development/Technical

Description: Established in 1881, the American Water Works Association is the largest nonprofit, scientific and educational association dedicated to managing and treating water, the world's most important resource. With approximately 50,000 members, AWWA provides solutions to improve public health, protect the environment, strengthen the economy and enhance our quality of life.

West Basin Involvement: West Basin Directors and staff regular attend meetings and conferences hosted by this organization. Issues including potable water, recycled water, and conservation are discussed. Staff also volunteers time by participating on Water Reuse and Membrane Processes Committees.

Value: AWWA provides valuable information to staff and Board Members on a variety of critical issues.

**Association Fee: \$21,500**

## **ASSOCIATION OF CALIFORNIA WATER AGENCIES (ACWA)**

Organization: Policy Development/Legislation

Description: ACWA is the largest and oldest association of public water agencies in California, functioning as an effective forum for developing consensus on statewide policy issues.

West Basin Involvement: Board and staff are involved in various advisory committees and attend two semi-annual conferences. A board member is appointed by the West Basin Board as a Region 8 representative.

Value: Directors and staff participate in ACWA forums that provide information on key statewide and industry issues that could impact West Basin.

**Association Fee: \$28,000**

## **CALDESAL**

Orientation: Policy Development/Legislation

Description: CalDesal is a non-profit organization comprised of public agencies and associates that see desalinated water key to meeting the State of California's water-supply needs. CalDesal is the first organization that is focused solely on advocating in Sacramento and throughout the State for legislation and regulatory action to streamline and facilitate the use of ocean and brackish groundwater desalination as a viable water supply.

West Basin Involvement: West Basin is a charter member and has a seat on the Board of Directors. Staff participates in conferences and attends legislative briefings, receives timely and informative publications on legislation and regulatory matters from CalDesal.

Value: West Basin is able to stay on top of crucial issues affecting the development of desalination projects.

**Association Fee: \$5,000**

## **CALIFORNIA ASSOCIATION OF SANITATION AGENCIES (CASA)**

Orientation: Policy Development/Technical

Description: CASA provides its members with current technical information, as well as, state and federal legislative advocacy and representation before the State Water Resources Control Board and other State entities on issues affecting sanitation agencies.

West Basin Involvement: West Basin receives timely and informative publications on legislation and regulatory matters from CASA related to water quality.

Value: West Basin is able to stay on top of crucial issues affecting sanitation agencies.

**Association Fee: \$855**

## **CALIFORNIA SPECIAL DISTRICTS ASSOCIATION (CSDA)**

Orientation: Outreach

Description: The California Special Districts Association (CSDA) is a 501c(6), not-for-profit association that was formed in 1969 to promote good governance and improved core local services through professional development, advocacy, and other services for all types of independent special districts.

West Basin Involvement: West Basin receives timely and informative publications on advocacy and legislation matters from CSDA relevant to special districts throughout California.

Value: West Basin is able to stay on top of crucial issues affecting special districts.

**Association Fee: \$5,700**

## CALIFORNIA URBAN WATER CONSERVATION COUNCIL (CUWCC)

Orientation: Policy/Technical

Description: CUWCC consists of urban water agencies, environmental organizations with an interest in water and other interested parties such as non-profit and private companies that oversee the implementation of the 14 Best Management Practices within those agencies responsible for water management and develop firm conservation savings from these practices.

West Basin Involvement: Staff attends Residential and Commercial, Industrial & Institutional committee meetings, as well as the quarterly plenary meetings.

Value: Participation in CUWCC provides West Basin with direct input into conservation strategies impacting statewide water policy.

**Association Fee: \$8,000**

## THE CLIMATE REGISTRY

Orientation: Technical

Description: The Climate Action Registry (Registry) is the premier voluntary greenhouse gas registry in North America. The Registry is a non-profit partnership developing an accurate, complete, consistent and transparent greenhouse gas emissions measurement protocol that is capable of supporting voluntary and mandatory greenhouse gas emission reporting policies for its members and reporters. It provides a verified set of greenhouse gas emissions data from its reporters supported by robust accounting and verification infrastructure.

West Basin Involvement: West Basin is a founding Reporter of the Registry and voluntarily reports West Basin's annual greenhouse gas emissions.

Value: West Basin benefits from participation in the Registry through its recognition as an environmental leader by identifying and managing our indirect and direct greenhouse gas emissions.

**Association Fee: \$1,200**

“  
**THE ONLY WAY FORWARD, IF WE ARE GOING TO IMPROVE  
THE QUALITY OF THE ENVIRONMENT, IS TO GET  
EVERYBODY INVOLVED.**” - RICHARD ROGERS



## LOS ANGELES COUNCIL OF BLACK PROFESSIONAL ENGINEERS

Orientation: Advocacy

Description: The Los Angeles Council of Black Professional Engineers helps advance the education, employment, and business opportunities of minority individuals. These aims are achieved through personal contact with students of all levels, curriculum advice, higher level education communication, employers' communication, and support and aid.

West Basin Involvement: West Basin Board and staff have participated in annual events and volunteered and student development programs throughout the year.

Value: Participation in this organization promotes water and the environment to the youth in West Basin's service area. It allows for increased awareness of water and conservation issues.

**Association Fee: \$1,000**

## LOS ANGELES COUNTY BUSINESS FEDERATION (BizFed)

Orientation: Advocacy

Description: BizFed unites more than 160 chambers, trade associations, minority business groups, economic development organizations and business improvement districts to speak out for a strong economy.

West Basin Involvement: West Basin Board and staff will have opportunities to understand the needs of the business community in the greater Los Angeles area. Serving on Boards and committees will help promote West Basin's mission in developing local eater supplies.

Value: Participation in this organization will allow West Basin to reach a large number of businesses and agencies that do work in the around West Basin's service area. Membership will facilitate outreach, collaboration, and education opportunities.

**Association Fee: \$5,000**

## NATIONAL WATER RESEARCH INSTITUTE (NWRI)

Orientation: Research

Description: The NWRI is a public-private partnership that promotes the protection, maintenance and restoration of water supplies through the development of cooperative research.

West Basin Involvement: West Basin Board appoints a board member and alternate to the NWRI Board. Staff presents research projects to the NWRI, receives funding and attends applicable meetings.

Value: NWRI provides funding for West Basin research projects.

**Association Fee: \$50,000**

## **NATIONAL WATER RESOURCES ASSOCIATION (NWRA)**

Orientation: Policy Development/Legislation

Description: NWRA is a non-profit organization comprised of companies, associations and individuals concerned with the appropriate management, conservation and use of national water resources.

West Basin Involvement: Directors occasionally attend the NWRA Federal Water Seminar in Washington D.C., which provides water district board members and general managers with an opportunity to interact with members of Congress, key congressional staff and federal agency representatives to promote West Basin's needs and objectives.

Value: NWRA allows West Basin access to its broad-based information and action efforts.

**Association Fee: \$350**

## **SOUTHERN CALIFORNIA ALLIANCE OF PUBLICLY OWNED TREATMENT WORKS (SCAP)**

Orientation: Policy

Description: SCAP was created in July 1992. It is an association of cities, special districts, and other public agencies formed to concentrate their resources to ensure the passage of reasonable local, state and federal regulations and legislation impacting publicly owned treatment facilities.

West Basin Involvement: West Basin receives SCAP publications and occasionally staff attends its conferences.

Value: As an organization, SCAP serves as a watchdog for legislation that could negatively impact publicly owned treatment facilities, such as the Hyperion Wastewater Treatment Plant and the Edward C. Little Water Recycling Facility.

**Association Fee: \$6,000**

## **SOUTHERN CALIFORNIA WATER COMMITTEE**

Orientation: Policy/Educational

Description: The Southern California Water Committee is a non-profit, nonpartisan, public education partnership dedicated to informing Southern Californians about our water needs and our water resources. The goal of SCWC is to ensure an adequate, reliable, high-quality water supply statewide by maximizing California's water resources for the benefit of current and future generations through seminars and quarterly briefings.

West Basin Involvement: West Basin supports the organization's goals and objectives.

Value: SCWC seeks to educate business and government leaders and make available information to the public to support informed decisions on water issues, working towards a state consensus on water supply issues, imperative to our future needs.

**Association Fee: \$2,500**

## THE URBAN WATER INSTITUTE (UWI)

Orientation: Outreach

Description: The mission of the UWI is to provide a non-partisan exchange of information regarding emerging technology and policy issues to the water resource industry in the Western United States.

West Basin Involvement: West Basin was a founding agency of UWI and appoints a Board member to the UWI Board. Staff attends conferences as presenters and attendees.

Value: West Basin benefits from information on emerging technology and public policy for water resources through a monthly newsletter and conferences that address local and Southern California water issues.

**Association Fee: \$1,250**

## WATER EDUCATION FOUNDATION (WEF)

Orientation: Outreach

Description: The mission of WEF is to develop and implement education programs leading to a broader understanding of water issues and the resolution of water problems.

West Basin Involvement: Board members and staff attend the briefings and tours conducted by WEF.

Value: WEF assists West Basin in making information on water issues available to students, residents, Board members and staff.

**Association Fee: \$2,700**

## WATER RESEARCH FOUNDATION (WRF)

Orientation: Technical

Description: The Water Research Foundation (WRF) is still affiliated with the oldest water association in the Americas, the American Water Works Association. WRF manages more than \$30 million per year of drinking water research in the areas of water quality, treatment, management, resources and health effects.

West Basin Involvement: Staff serves on Project Advisory Committees (PAC) as well as participating in studies with other utilities, universities, and research consultants to advance our knowledge in water quality and improve efficiencies in water resources.

Value: West Basin and its customers receive continuing research benefits in water quality issues.

**Association Fee: \$28,000**

## **WATEREUSE ASSOCIATION (WATEREUSE)**

Orientation: Technical/Policy/Education

Description: WaterReuse promotes recycled water as a supplemental water supply for the state and works for the adoption of legislation and regulations that increase the safe use for recycled water through conferences, workshops and publications that exchange information and ideas between members and others involved in water recycling.

West Basin Involvement: Staff actively participates in WaterReuse committees and conferences and has a seat on the Board of Directors and often has its projects highlighted.

Value: WaterReuse is actively involved in local, state and federal level regulatory issues and legislation critical to West Basin's efforts to encourage and expand the use of recycled water locally.

**Association Fee: \$8,600**

## **WATEREUSE RESEARCH FOUNDATION (FOUNDATION)**

Orientation: Research

Description: The Foundation is an educational, nonprofit corporation that serves as a centralized organization for the water and wastewater community to advance the science of water reuse, recycling, reclamation and desalination.

West Basin Involvement: Staff is on the Board of Directors and also attends and presents at research conferences.

Value: The Foundation has funded research for West Basin, furthering the knowledge and use of recycled water.

**Association Fee: \$25,000**

## **WEST BASIN WATER ASSOCIATION (WBWA)**

Orientation: Outreach

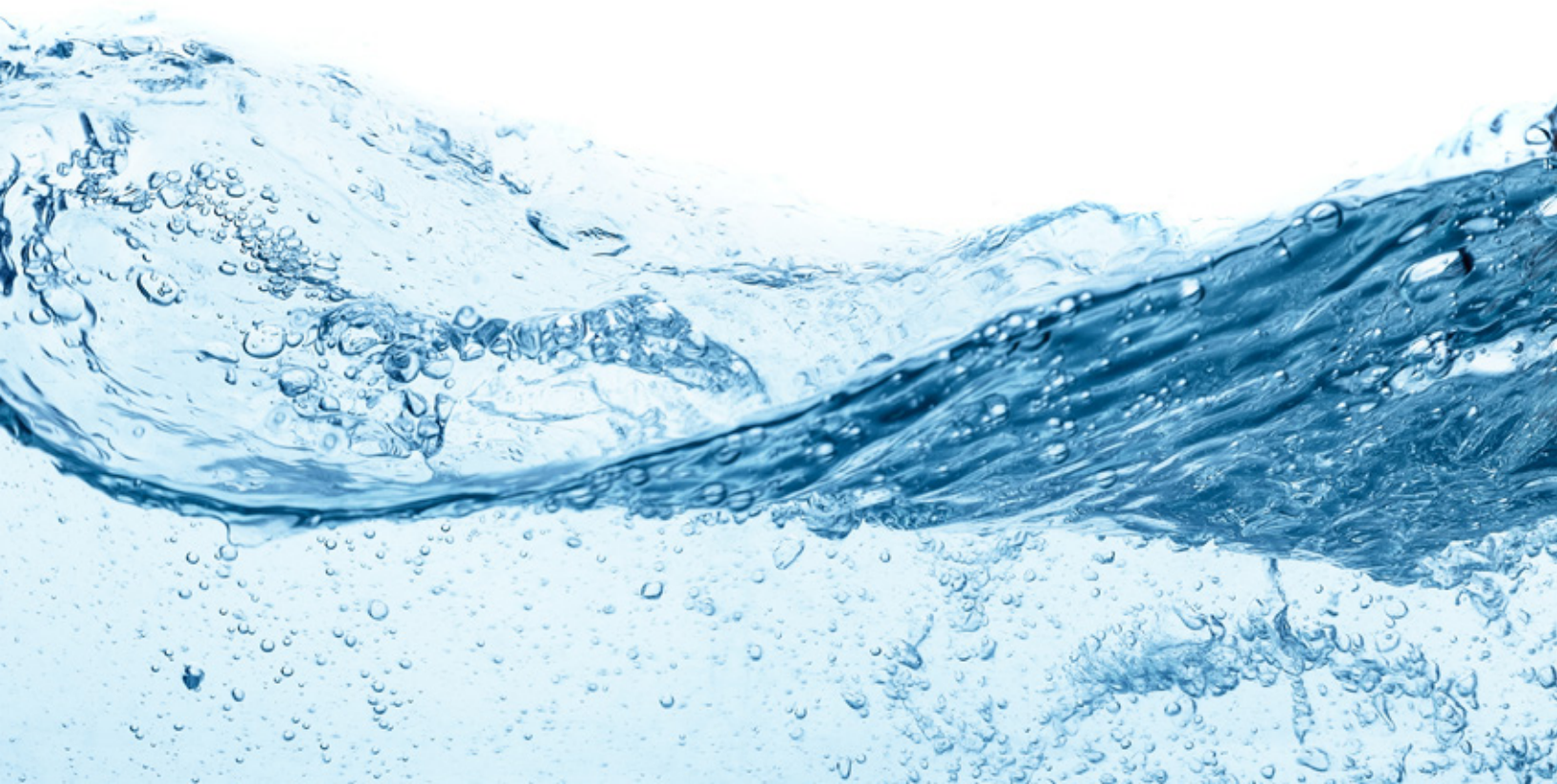
Description: WBWA is composed of pumpers with water rights in the West Coast Basin and provides a forum to members to discuss current water rights issues and policies.

West Basin Involvement: West Basin participates in forums to better understand local water issues and rate structures.

Value: WBWA provides West Basin with valuable insight on current water rates established by West Basin and throughout our service area, and discuss proposed legislation and water industry news that affect the way in which West Basin makes policy decisions.

**Association Fee: \$500**





# GLOSSARY

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# ACRONYMS

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

**AED** – Automated External Defibrillator

**AF** – Acre-Foot

**AFY** – Acre-Foot per Year

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

**BMP** – Best Management Practice

**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

**CRA** – Colorado River Aqueduct

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

**CWSC** – California Water Service Company

**CY** – Calendar Year

**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

**IRWMP** – Integrated Regional Water Management Plan

**JMMCRWRF** – Juanita Millender-McDonald Carson Regional Water Recycling Facility

**LPBF** – Low-Pressure Boiler Feed

**LRP** – Local Resources Program

**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

**WR** – Water Reliability Program

**WRD** – Water Replenishment of Southern California

**WRDA** – Water Resources Development Act



# 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.

**Arbitrage** – The simultaneous purchase and sale of the same commodity or investment in two different markets at two different prices, which results in a riskless profit.

**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 demineralize 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 timeframe 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.







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