

# 2018 BUDGET

Lucerne Valley  
Fodder Crop Irrigation



Big Bear Area Regional Wastewater Agency



## Our Mission

The Big Bear Area Regional Wastewater Agency is committed to efficiently collect, treat and beneficially reuse wastewater and bio-solids in an environmentally and fiscally responsible manner. To carry out this mission, the Agency will meet the needs of the regulatory agencies and our community in an open and cooperative manner.

### Board of Directors

Rick Herrick, *Chair*

Karyn Oxandaboure, *Vice Chair*

Elizabeth Harris, E.d.P., *Secretary*

David Carretto, *Director*

John Green, *Director*

### General Manager

David Lawrence

The Big Bear Area Regional Wastewater Agency is a joint powers agency proudly serving the areas of Big Bear Lake, Big Bear City, Erwin Lake, Fawnskin, Lake Williams, and Sugarloaf.



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## Section I. Introduction and Overview

### Message from the General Manager

I'm very delighted to join the BBARWA Team as the new General Manager and am pleased to provide the Fiscal Year Ending June 30, 2018 Operating and Capital Budget. This plan reflects our commitment to provide continuous quality service to the member agencies and the community. The staff and board are committed to preserving the organization's long-term financial viability and seeking new opportunities for improved services. Agency staff has finalized the budget consistent with the Finance Committee and Governing Board direction.

The FY 2018 budget is balanced and fiscally sound and includes a 1.5% inflationary rate adjustment to cover inflationary cost increases and future capital projects. This shows our commitment to ensure the Agency's long-term stability and providing unsurpassed service while protecting the environment.

Setting long-term priorities for the Agency is one of the most important responsibilities of the governing body. During 2016, the Governing Board established goals for the next five years. These goals set the direction for the agency and act as a touchstone for making financial and operational decisions to achieve success. The following goals are reflected throughout the recommended budget:

Water Reclamation;  
Capital Improvement Planning;  
Succession Planning;  
Energy Independence and Improved Efficiencies;  
Trained and Talented Workforce;  
Service Sharing; and,  
Opportunities in Support of our Mission

As we enter our 43<sup>rd</sup> year of continuous service to the Big Bear Valley, the Agency will carry on with its plan of stabilizing rates with only minor, inflationary rate adjustments. This is accomplished by managing operating expenses and the timing of capital improvement projects. As in past years, we will continue to maintain the financial strength of the Agency through long-term planning, effective cost management, and empowering employees to seek efficiencies through both individual and group strategies.

In summary, the proposed operating and maintenance budget totals \$4.6 million, which represents a modest 1% increase over the prior year and is below expected inflation for the period. The \$883,619 capital budget for FY 2018 represents planned routine maintenance and replacement of existing assets. During the next five years, the Agency plans to invest \$11 million in the replacement of aging assets. Overall, the outlook for the Agency is good. We've managed through the recession and I believe this budget underscores a commitment by all to maintain service levels, and to implement cost-saving efficiencies wherever possible, all the while preserving the things that make BBARWA a superior organization.

I wish to thank the Finance Committee and Governing Board for their guidance and support throughout the development of this budget. In addition, I wish to thank Ms. Jennifer McCullar, Finance Manager and staff who have contributed to make the FY 2018 budget a reality.

A handwritten signature in black ink, appearing to read "David Lawrence", written over a horizontal line.

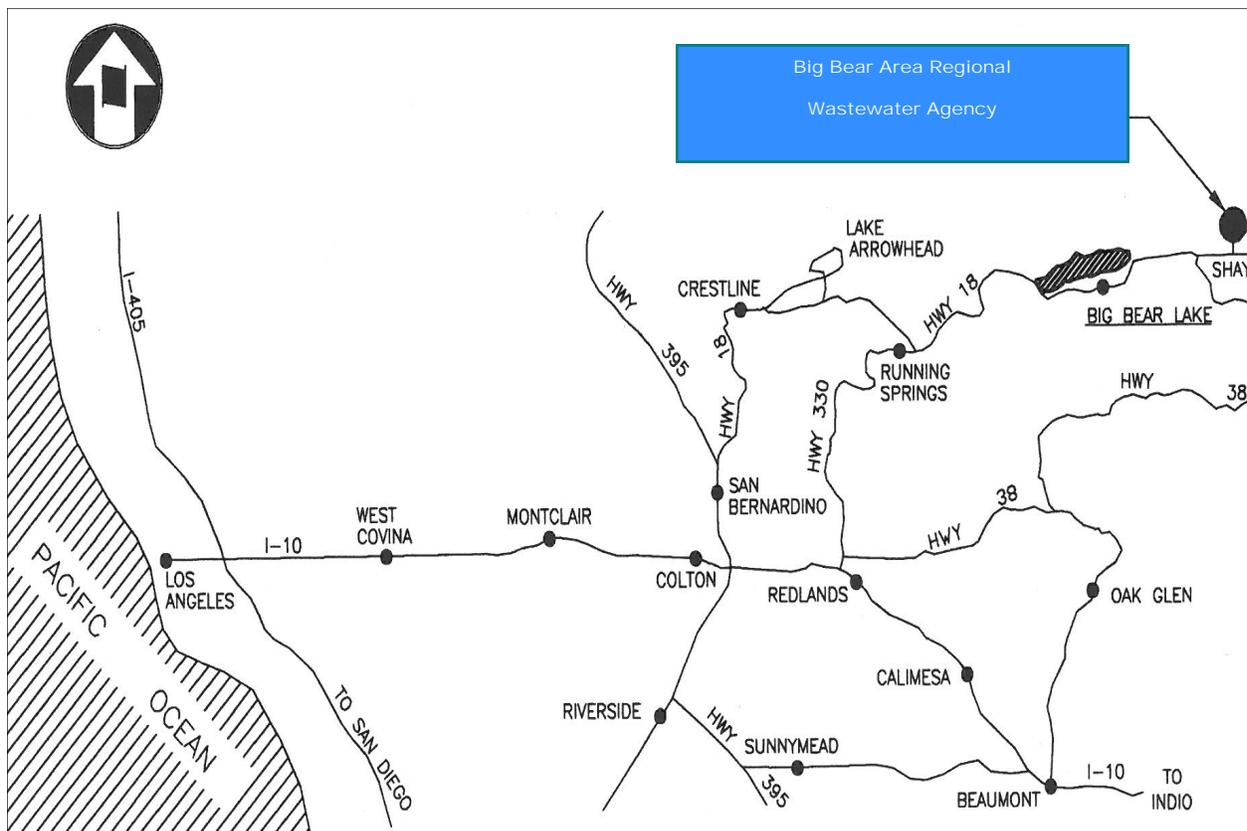
David Lawrence  
General Manager



## Agency Profile

### Location

The Agency is located in the San Bernardino Mountains of Southern California. The Big Bear area is a resort community located approximately 100 miles northeast of the City of Los Angeles. The area provides year-round recreational opportunities including biking, boating, fishing, camping, golfing, hiking, snow skiing, and snowboarding. The Big Bear area has a growing population of permanent residents and seasonal visitors. There are approximately 21,000 residential structures throughout the area serving permanent and part-time residents, with several million visitors arriving each year to engage in recreational activities.



### Formation

The Agency was formed in 1974 under a Joint Powers Agreement for the purpose of conveying, treating and disposing of sewage from the Big Bear City Community Services District, the City of Big Bear Lake and the County of San Bernardino on behalf of San Bernardino County Service Area 53B (the Member Agencies). The Agency was created as a management agency, obligated to provide service to three Member Agencies under the terms set forth in its operating agreements. Each Member Agency maintains and operates its own wastewater collection system and delivers wastewater to the Agency's interceptor system for transport to the wastewater treatment plant. The Agency's service area encompasses the entire 79,000 acres of the Big Bear area.



## **Facilities**

The Agency's facilities include a 4.8 million gallon-per-day sewage treatment plant, interceptors, outfall line and disposal site. The Agency operates three main lines: Lake Pump Station (LPS) force main that services the City of Big Bear Lake's wastewater system; North Shore Interceptor that services the County's wastewater system, and the trunk line that services the Big Bear City Community Services District's wastewater system and conveys flow from the North Shore Interceptor to the wastewater treatment plant. The Big Bear facilities operate under permit from the California Regional Water Quality Control Board, Santa Ana Region, Order No. R8-2005-0044. The Agency's 640-acre disposal site is located northeast of the Agency in the desert community of Lucerne Valley. The effluent from the treatment plant is pumped to Lucerne Valley for irrigation of fodder and fiber crops under permit from the California Regional Water Quality Control Board, Colorado River Basin, Order No. 01-156. The disposal site is leased to an independent contractor.



## **Administration and Operations**

The Agency is governed by a five-member Governing Board appointed annually by the governing bodies of its three Member Agencies. The Agency has permanent staffing consisting of five administrative personnel and ten operations personnel, and non-permanent or seasonal staffing of one during the summer months.

Overall, the Agency's staffing needs remain unchanged over time due to the consistent nature of the Agency's sewage treatment and disposal services and relatively little increase in MGDs (millions of gallons per day) treated each year.



## Strategic Goals and Strategies

The Agency's strategic plan was revised in 2015 and updated in 2016. The plan sets important direction for the Agency and establishes the mission, vision, and core values.

### MISSION

*The mission statement is a succinct statement of BBARWA's purpose. It focuses on the present, defines the customers and critical processes, and informs about the desired level of performance.*

BBARWA's mission is to efficiently collect, treat and beneficially reuse wastewater and bio-solids in an environmentally and fiscally responsible manner.

### VISION

*The vision statement is a statement of where BBARWA wants to be. It focuses on the future, is a source of inspiration, and drives the Agency's plan.*

In five years, BBARWA will:

- Implement a plan for reclaimed water.
- Continue to be on track with the implementation of the capital improvement plan.
- Have a succession plan for all levels of the organization.
- Have updated operational systems to improve efficiency, sustainability, and energy independence.
- Continue to have a trained, talented and motivated workforce.
- Be sharing services with its partners in the region.
- Have leveraged any and all opportunities in support of the mission.

### CORE VALUES

*Core Values are those things to which the Board of Directors is fiercely dedicated. The Board of Directors can return to the Core Values to remind themselves of their overall importance. Core Values drive "the way we work here".*

- Fairness (equity among member agencies).
- Ethical Behavior
- Integrity
- Respect
- Honesty
- Accountability
- Open Mindedness
- Transparent Communications
- Cooperation, as we implement the Vision and Mission
- BBARWA employees (as a valuable asset)



The strategic plan is an important management tool for the Agency. It aids in decision making and goal setting, promotes operational effectiveness, and influences the Agency's ability to successfully plan for the future. In FY 2016, the Agency created an implementation plan that outlines the actions, initiatives and projects, organized by strategic element. A summary is provided below.

PERFORMANCE AREA/ OBJECTIVE	INITIATIVES	ACTIONS
<p style="text-align: center;"><b>Operations</b></p> <p>To operate and maintain facilities in a manner that produces high-quality effluent and bio-solids, exceeds all regulatory requirements, and is fiscally responsible.</p>	<p><b>Continuously improve treatment plant processes and systems to optimize performance.</b></p> <p><i>Improvement and maintenance of processes and systems are essential in order to ensure operational efficiency and the cost-effective treatment of wastewater.</i></p>	<p>Develop a systems-analysis and assessment program to evaluate treatment processes and maintenance strategies. Consider the use of new technology, if available, to improve or stabilize treatment.</p>
		<p>Be "in the know" regarding changing technology and industry trends through conference attendance, association memberships and newsletter subscriptions.</p>
	<p><b>Continue to produce low-cost power as a stabilizing factor on rates.</b></p> <p><i>Power generation is a critical component of the Agency's operations and has resulted in cost savings to the Agency due to lower power costs and the beneficial reuse of waste heat in the bio-solids drying process.</i></p>	<p>Develop a comprehensive plan of annual and routine generator maintenance and have a dedicated, trained team that is responsible for the development and execution of the plan.</p>
		<p>Evaluate and develop policy on natural gas purchases.</p>
		<p>Evaluate new, power-producing technology for opportunities to improve efficiencies, lower costs, and increase sustainability.</p>
	<p><b>Continue to complete capital maintenance and replacement projects as scheduled to maximize the reliability and performance of the collection and treatment facilities.</b></p> <p><i>Maintenance and replacement of assets as needed optimizes system performance, enabling the Agency to produce high-quality effluent and bio-solids, meet discharge requirements, and avoid the high cost of crisis management and system failure.</i></p>	<p>Continue the current, annual capital planning process, which includes asset assessment and maintenance and replacement scheduling based on asset life, condition, financial resources and timing.</p>



PERFORMANCE AREA/ OBJECTIVE	INITIATIVES	ACTIONS
<p><b>Operations, Continued</b></p>	<p><b>Continue to recognize staff as “our greatest asset”.</b></p> <p><i>The level of operational success achieved by the Agency is determined largely by the level of engagement of its management and the employees that operate and maintain the system daily. Recognizing staff as one of the most critical components of the Agency’s success, directs resources toward the engagement and development of Agency employees and fosters an environment of innovation, creativity and progress.</i></p>	<p>Develop an organizational culture that engages employees through direct and open communication and promotes ideas, innovation, and teamwork. This will be accomplished through actions outlined in the Personnel and Organization Performance Area.</p>
<p><b>Water Sustainability</b></p>	<p><b>The Agency obtained authorization to reinstate the Construction Water Program and produces a limited amount of Disinfected Secondary Water for testing purposes.</b></p> <p><i>By producing a safe and usable water product, the Agency provides assurance for the regulatory agencies, users and public related to its ability to produce, test, regulate and utilize reclaimed water in a manner which is safe for the community and the environment. This action is the first step in implementing the Agency’s Mission, “...beneficially reuse wastewater...” and the Vision of implementing a plan for reclaimed wastewater by 2020.</i></p>	<p>Produce disinfected secondary water for testing purposes each year.</p>
<p>To cost effectively implement a comprehensive water sustainability program to promote the beneficial use of treated municipal wastewater in order to supplement and augment fresh water supplies while protecting the region’s environment and public health. The Agency will work together through regional collaboration to protect and conserve the region’s resources.</p>	<p><b>Continue to look for opportunities to cost effectively implement water reclamation.</b></p> <p><i>In 2016, the Agency utilized experienced and successful engineers and consultants to produce a Study so that the public, partnering agencies, Governing Board and regulators could be confident the Agency exerted due diligence in its effort to implement a plan for a future reclamation facility. While a definitive plan did not result from the Study, the Agency will continue to look for opportunities to cost effectively implement water reclamation. This is an important step in implementing the Agency’s Mission, “...beneficially reuse wastewater...” and the Vision of implementing a plan for reclaimed wastewater by 2020.</i></p>	



PERFORMANCE AREA/ OBJECTIVE	INITIATIVES	ACTIONS
<p style="text-align: center;"><b>Finance</b></p> <p>To be a financially strong and stable organization.</p>	<p><b>Control and maintain stable operating costs.</b></p> <p><i>Maintaining stable operating costs allows the Agency to better manage cash flow requirements and helps to maintain stable and affordable rates for system users. While not all costs are under the Agency's control, active cost management is critical and includes financial review, financial planning, and utilizing stabilizing measures where possible (such as offsetting actions and timing).</i></p>	<p>Manage growth in operating costs at or near the rate of inflation.</p>
	<p><b>Complete timely maintenance of infrastructure.</b></p> <p><i>Through budgeting, financial planning, and annual asset evaluations, the Agency can secure the necessary financial resources to adequately maintain its capital assets as needed. This type of management reduces unexpected asset failures and provides stability to the Agency's operations and financial strength to the organization.</i></p>	<p>Align budgetary decision making with strategic priorities. Strategic priorities control and drive spending.</p>
	<p><b>Maintain rates that are adequate and stable.</b></p> <p><i>Budgeting and long-term financial planning contribute to both the adequacy and stability of rates, which are the foundation for a stable and financially strong organization. Rate stability increases the affordability of rates and is an indicator of a well-managed organization.</i></p>	<p>Annually complete a 20-year capital improvement plan.</p>
	<p><b>Maintain operating and financial flexibility.</b></p> <p><i>Operating and financial flexibility are the ability to operate through periods of volatility or unexpected events with minimal impact to financial or operational strength. Contingency planning, adequate reserve funds and modest leverage are key components in maintaining a financially strong and stable organization.</i></p>	<p>Align the timing of capital investment with desired rate levels and debt capacity to ensure implementation of the capital improvement plan as scheduled.</p>
	<p>Annually complete a 5-year financial projection including a rate analysis.</p>	<p>Anticipate potential rate changes well in advance and manage annual changes at or near inflation.</p>
	<p>Periodically review all rates including connection fees, standby fees, waste disposal fees and user fees.</p>	<p>Adhere to reserve fund policies which establish cash reserve levels for contingencies.</p>
<p>Adhere to the agency's debt policy. Maintain excess debt capacity and access to funding sources.</p>		



PERFORMANCE AREA/ OBJECTIVE	INITIATIVES	ACTIONS	
<p><b>Finance, Continued</b></p>	<p><b>Maintain the public’s trust.</b></p> <p><i>Strong governance, effective internal controls, active financial management, accurate and timely financial reporting, and ongoing education contribute to responsible decision-making, planning, rate-setting, and reporting, and result in a solid, stable organization in which the public’s money is utilized to provide excellent service, preserve capital, and create value.</i></p>	<p>Present accurate, timely and transparent financial reporting.</p> <p>Maintain strong financial governance and controls.</p> <p>Pursue excellence in financial management, budgeting and financial reporting by participating in 1) continuing education events to improve competencies and 2) industry recognition programs such as the GFOA reporting programs.</p>	
	<p><b>Administration</b></p> <p>To be a well-managed, strategically focused and forward-looking organization.</p>	<p><b>Be responsible, accountable and transparent.</b></p> <p><i>Making well-informed decisions is part of good governance and good management. Reporting the impact of those decisions –plans, actions and results– in a comprehensive and clear manner provides accountability to our constituents and builds public trust.</i></p>	<p>Manage and utilize resources efficiently and with an understanding of the economic, environmental and social impact of our decisions.</p> <p>Exercise governance through monitoring, guiding and directing the actions, decisions, practices and policies of the Agency.</p>
	<p><b>Prepare the Agency for the future</b></p> <p><i>Preparing for the future starts with having a shared vision developed through strategic focus. Part of this shared vision involves understanding the Agency’s current role as a wastewater treatment facility and the necessary changes that will occur as the Agency takes on a more critical, leadership role in the sustainability and protection of the region’s water resources. To meet the demands of this evolving role, the Agency must be prepared from a financial, managerial and human resource standpoint.</i></p>	<p>Commit to ongoing, long-term planning including both strategic and financial planning with broad input from the Board, the Public, Staff, and Stakeholders.</p> <p>Perform risk management analysis annually (prior to budget cycle).</p> <p>Periodically review infrastructure to assess capacity and future expansion.</p>	
<p><b>Create value for the Agency’s stakeholders (member agencies, partner agencies, ratepayers, employees, customers, vendors, et al.).</b></p> <p><i>We understand that our actions and decisions can have social and environmental impacts for the thousands of people we serve. We will approach our decision making and interactions with an appreciation for the impact we can have and a desire to nurture and develop strong alliances.</i></p>	<p>Manage relationships to maximize value by understanding, engaging, and aligning the interests of stakeholders, while minimizing tradeoffs. This win-win leadership approach builds trust and increases productivity.</p>		



PERFORMANCE AREA/  
OBJECTIVE

INITIATIVES

ACTIONS

Personnel and Organization

To attract and sustain a trained, talented, motivated workforce committed and engaged in integrating the Agency's mission and core values in their daily work.

**Provide comprehensive orientation, training, development and professional growth opportunities.**

*Communicating the attitudes, knowledge, skills, and behaviors required to function effectively within the Agency allows employees to fully understand what is necessary to be successful and how the Agency will assist in achieving that success. Ensuring that employees have opportunities to make good use of their KSAs (Knowledge Skills, Abilities) and improve their skills through education and experience supports a trained and motivated workforce*

Evaluate current training programs, workplace tools and resources, and mentoring practices to identify the need for additional training or resources to improve efficiency, productivity and worker satisfaction, and to provide support to employees in achieving high performance and professional growth.

Improve employee orientation through development of a comprehensive onboarding model that communicates the mission, core values, job scope, performance expectations, resources and opportunities for training and development.

Assist employees in designing personalized development plans that incorporate training elements and are updated annually as part of the employee's performance evaluation.

**Have a succession plan for all Agency positions.**

*Sustaining a high-performing workforce is critical to the mission and operations of the Agency. Whenever possible, the Agency will develop future leadership and pass down competencies to facilitate continuity and smooth transitioning. Developing and implementing initiatives that support succession planning ensure that the Agency maintains a multi-talented, adaptable workforce with the skills and experience to meet the needs of the Agency today and into the future.*

Identify likely retirements or separations. Assess current workforce skills, experience, and interests to align potential candidates with those separations and to identify potential staffing gaps. Provide succession developmental training where appropriate

Where internal succession is unlikely, review job description and compensation package to attract highly qualified candidates.



PERFORMANCE AREA/  
OBJECTIVE

INITIATIVES

ACTIONS

Personnel and Organization,  
Cont.

**Foster employee engagement and create meaningful opportunities for employees to contribute to organizational success.**

Ensuring that employees can participate in the planning and implementation of Agency initiatives creates an atmosphere of open communication, instills a spirit of cooperation and teamwork, and cultivates a culture in which employees are respected and valued. The Agency recognizes that employees are a valuable asset - that everyone in the organization is important and the everyday actions of a dedicated team can determine organizational success or failure.

Develop and implement in-service day(s) with full employee participation in round table discussions and projects related to current issues, strategic planning, improving the work environment and innovative ideas.

**Improve assessment and recognition of employee work performance.**

*Understanding what is expected and how performance is evaluated and rewarded promotes employee commitment. Recognizing human potential and actively seeking to engage and empower employees at every level nurtures a work environment that encourages employees to strive for excellence.*

Develop a standardized schedule and format for performance evaluations with comprehensive job-specific criteria that define performance expectations. Include performance measures that encourage improvement and performance goals that are tied to strategic objectives where applicable. Utilize a consistent method for providing feedback during employee performance evaluations, assisting the employee in identifying strengths and areas for improvement.

Promote and acknowledge exceptional performance by employees and the Agency. Evaluate current Employee/ Manager of the Year programs and annual award event. Develop a program that effectively acknowledges accomplishments and aligns with employee interests and motivations.

Partnerships

To build partnerships through open, honest dialogue.

**Identify and seek opportunities to engage potential partners/stakeholders.**

*Open dialogue with the Agency's partners and stakeholders will allow the Agency to understand needs and expectations and to identify opportunities to 1) combine resources and competencies and 2) share risks and benefits.*

Identify partners and stakeholders.

Identify ways to support and share services with partners and stakeholders.

Continue monthly, "same staff" meetings, as appropriate, with other Big Bear agencies, i.e. General Managers, Finance Managers, HR professionals, and Board Secretaries.



## Budget Overview

### Short-Term Factors Influencing the FY 2018 Budget and Forecast Period

The Agency, as a matter of practice, focuses on 1) cost control, with the growth in operating costs maintained at or near inflation, 2) timely maintenance of infrastructure, and 3) meeting or exceeding all operating and regulatory requirements for the treatment and disposal of wastewater. These factors influence each budget and overlap with Board-directed priorities and strategic initiatives. Controlling costs is paramount and allows the Agency to better maintain adequate, affordable and stable rates. Adequate rates, in turn, provide for the timely maintenance of infrastructure and the satisfaction of mandated regulatory and operating requirements and the terms of the Agency's operating agreement with its Member Agencies. Other factors impacting financial performance and operational/financial management during FY 2018 are as follows:

#### HIGHER COSTS AND THE TIMING OF CAPITAL PROJECTS

The Agency has experienced unplanned operating expenses that impact its cost structure. These include increasing sludge removal expenses beginning in FY 2016 through FY 2018, and higher pension expense beginning in FY 2019. Unplanned or accelerated capital projects in the next five-year period include the sludge dewatering project (the "SD Project"), pond 1 reconstruction, head works maintenance, and generator replacement in addition to higher costs estimated for the Load Equalization Basin project (the "LEB Project"). Prioritization of capital projects by staff initially included moving the LEB beyond the five-year period to allow the Agency to maintain better financial strength and flexibility. However, after review, it was determined that the LEB should remain in the five-year plan and may or may not be completed as currently presented depending on the Agency's financial ability to complete it within this timeframe. The timing of the LEB Project will be impacted by current and future financial performance, by the final costs for the SD and the LEB Projects, and whether or not slip lining scheduled in FY 2021 will be needed (confirmed through future video inspection).

#### LOWER RATES THAN PLANNED

The Governing Board increased user rates to a lesser amount than allowed under the Maximum Rate Schedule adopted in 2011. This is the fifth consecutive year of lower rates than planned due to lower operating and capital costs than estimated during the 2010 Rate Study. Usage rates or Annual Charges will increase 1.5%, from \$201.32 per EDU (equivalent dwelling unit) to \$204.34 in FY 2018. This rate is much lower than the estimated \$221.03 per EDU permitted under the 2011 rate ordinance.

*This is the fifth consecutive year of lower rates than planned due to lower operating and capital costs than estimated during the 2010 Rate Study.*

#### SUSTAINED ECONOMIC RECOVERY—RISING INFLATION

As we move into FY 2018, economic indicators continue to strengthen with a tightening labor market and steady wage growth leading to increased consumption, a solid housing market, higher inflation and somewhat higher short-term interest rates. For the budget and forecast period, Interest Income is expected to gradually increase as a result of improving short-term interest rates and an increasing balance in the capital and replacement fund.

#### STAFFING CHANGES

The Agency's General Manager will retire at the end of FY 2017. This position will be replaced with a new hire resulting in lower salaries and benefits expense. Lower salaries and benefits expense resulting from the retirement will be offset to some extent by 1) an employee returning from disability, 2) the promotion of an operator in training to an operator I position, 3) higher medical benefits expense and 4) higher pension contribution expense.

#### LESS SELF HAULING

The Agency will reduce tons self hauled to an estimated 528 tons in FY 2018 from much higher levels previously. Frequent breakdowns and costly maintenance of the Agency's hauling truck has caused the Agency to lower tons hauled in an effort to better determine the hauling capacity of the truck, with the goal of re-evaluating the economics of the operation after this is determined. The reduction in self-hauling will result in higher sludge removal costs in FY 2018 compared to FY 2017.



### HIGHER PENSION COSTS

CalPERS will lower the discount rate, also known as the assumed rate of return, to 7% from 7.5% over a 3-year period which will increase the Agency's pension contributions beginning in FY 2019 through FY 2023. The normal cost is expected to increase 2.4 points, from 12.5% of payroll in FY 2018 to 14.9% of payroll in FY 2022, and the payment of the unfunded liability is expected to increase substantially, from \$63,814 to an estimated \$230,693 in FY 2023. These increases represent an average annual growth rate of 15% for the next five years compared to -1% over the last five years (due to reduction in the Agency's UAL and Side Fund).

### NO CHANGE IN ANNUAL CONNECTIONS

The Agency has assumed 55 annual connections through FY 2022. This level of connections is uncertain but in line with FY 2017 experience to date (56 connections for the trailing twelve months ended January 31, 2017, excluding multi-unit developments). The Agency has averaged 37 connections per year for the last five years, excluding multi-unit developments. The Agency has taken a conservative approach to the level of connections considering the timing and level of the recovery in vacation/second-home starts still remains uncertain and has yet to be seen.

### NEW SLUDGE DEWATERING PROJECT

The Agency's current belt press is becoming difficult to repair and has been operating at a level that exceeds its specifications. The Agency began a sludge dewatering study in FY 2017 to determine the need for replacement as well as replacement options. Currently the Agency is considering two options proposed in the sludge dewatering study: 1) a screw press and 2) a centrifuge. Pilot testing will begin in the spring of 2017 and construction of the best alternative is scheduled for FY 2019. The Agency has earmarked approximately \$3.5 million for this project and is planning to debt finance 50% of the project. The new sludge dewatering process is expected to dry the solids to a greater degree (up to 18%) than the Agency's current belt press (13 - 14% reduction) and is expected to be less labor intensive. For each % reduction in solids, the estimated dollar savings is approximately \$18,000, for potential possible of savings of \$90,000 annually. The current belt process requires an operator to standby during operation. The impact on the Agency's operations will be more certain after a process is chosen and pilot testing is complete. This project was initially slated for FY 2023 but is expected to occur in FY 2019.

### LOAD EQUALIZATION BASIN DEFERRED FROM FY 2019 TO FY 2021

The Agency has been planning to complete the LEB Project which replaces the old, and failing balancing chambers in FY 2019 and 2020. Logistically and financially, the SD Project and the LEB Project cannot occur at the same time. The Agency has placed the priority on the SD Project due to the critical nature of the sludge drying process within the plant. The Agency has targeted FY 2021 to construct the new LEB. If the walls of the existing balancing chambers were to fail prior to construction of the new LEB, the Agency would be able to re-valve the plant for a period of time as well as use contingency funding and debt capacity to begin the replacement of the chambers. The Agency will complete engineering for the new LEB in FY 2017. Based on current engineering estimates, the project has increased to approximately \$3.7 million from an estimated \$3.1 million last year. The Agency will further evaluate this project in FY 2018 for possible cost reductions and has earmarked \$3.5 million in FY 2021 for this project.

### REDUCTION OF OPEB UNFUNDED ACCRUED LIABILITY (OPEB UAL)

The Agency has budgeted to reduce its OPEB UAL by \$200,000 during FY 2018. This is part of a five-year plan to reduce the liability annually by \$200,000 for a total of \$1.0 million. Based on the most recent valuation (July 1, 2015), the unfunded OPEB Liability is \$1.6 million and represents a 37.6% funded ratio (ratio of assets to liability). If the Agency were to pay down its OPEB UAL by \$1.0 million over the next five years, the funded ratio would be greatly improved. Based on the current valuation, if the liability is reduced by \$1.0 million (the pay down over five years), the funded ratio would be approximately 76%.



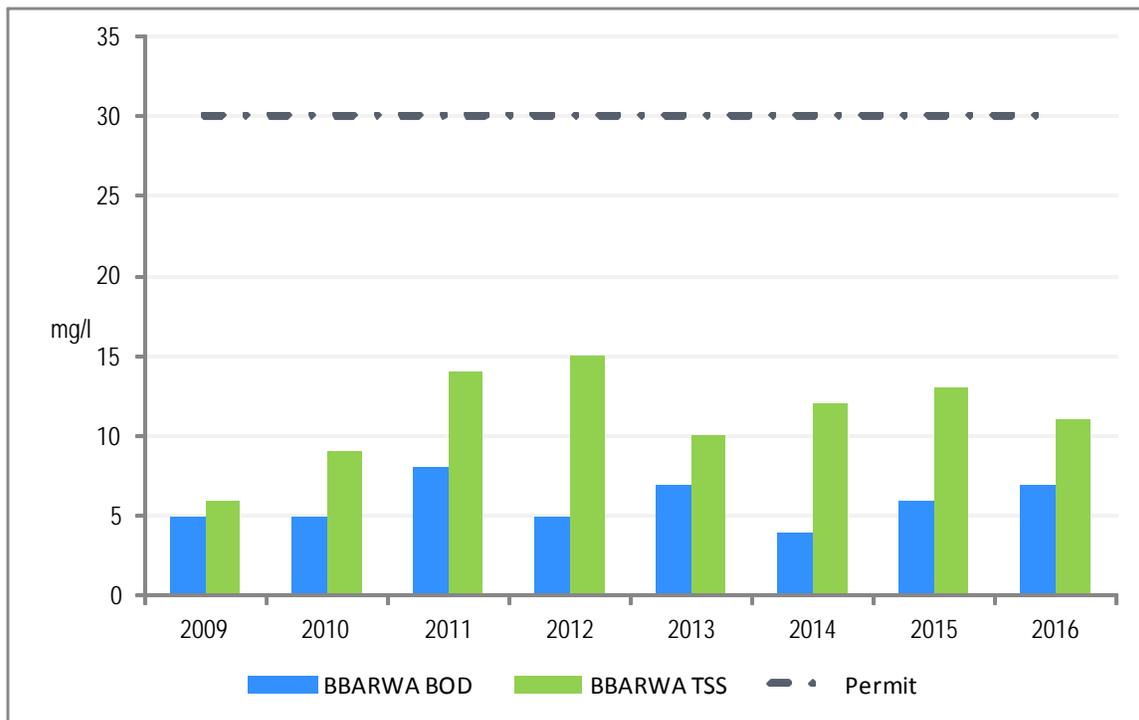
A goal of the Agency has been to reduce its unfunded pension/OPEB liabilities so that the Agency's pension/OPEB assets are nearly equal to its pension/OPEB liabilities, resulting in annual pension/OPEB expense near the normal cost (the annual pension and OPEB cost of active employees --the amount "earned in" through service during a given year). The unfunded liability represents benefits earned in the past by active and retired employees, that are not covered by assets. Maintaining a higher funded ratio, better ensures that the Agency's obligations will be met and that intergenerational equity will be maintained among ratepayers.

### **Core Business and Operating Objectives**

#### **CORE BUSINESS**

The Agency's core business is operating and maintaining the collection, treatment and disposal system in a manner that ensures all federal and state requirements associated with the Agency's treatment and discharge of wastewater are met. Industry measures for effluent quality and the effectiveness of wastewater treatment include the Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS). BOD is a measure of how much oxygen is required to biologically decompose organic matter in the water. TSS is the total amount of suspended materials in the water. Both measure the strength of wastewater discharges and are each limited to 30 milligrams per liter (30 mg / l) under the Agency's Santa Ana Region and Colorado River Basin Region discharge permits.

Discharge Permit Requirements Compared to Actual



#### **OPERATING OBJECTIVES**

The Agency's near-term operating objectives remain primarily unchanged from the prior period. The Agency's objectives for FY 2018 are 1) maintaining stable rates, 2) controlling labor and benefit costs, 3) managing the increasing costs associated with power and sludge removal, and 4) capital planning for infrastructure replacements and capacity expansion.

- **Maintaining Stable User Rates:** The Agency's rate adjustments are driven by inflationary changes in operating costs and capital projects. The Agency's focus on operational and cost controls has resulted in relatively stable



rates, with a 1.5% rate adjustment planned for FY 2018. Adequate capital funding, cost management, and long-term financial planning, have positioned the Agency to maintain stable and competitive rates and to adequately fund future capital projects.

- **Controlling Labor and Benefit Costs:** The Agency has benefitted from steps taken in 2009 to control labor and benefits expense through the renegotiation of its employee MOU, resulting in modifications to its compensation structure and a cap on health premiums paid by the Agency for active employees and for those retirees retiring on or after January 1, 2011. The Agency paid down its unfunded pension liability in FY 2012 (\$594,000 reduction), and in FY 2016 (\$800,000 reduction). These payments lowered the Agency's annual benefits expense. The Agency plans to pay down its OPEB unfunded accrued liability during FY 2017, and annually thereafter through FY 2021 by \$200,000 each year.
- **Controlling Sludge Removal and Power Costs:** The Agency began self hauling sludge to disposal sites in FY 2014 and completed the construction of a covered drying bed (CDB) in 2015. Both of these initiatives have resulted in lower sludge removal costs. The CDB project involves the re-use of waste heat from the Agency's generators to increase the drying of the solid waste and thus reduces the weight and volume of sludge removed from the plant. The Agency has been able to avoid the high cost of power associated with power purchases through the local electric provider by operating a natural gas generation system for power to its treatment plant and administration building.
- **Capital Planning:** The Agency maintains a 20-year capital plan to ensure completion of capital maintenance and replacement projects in a timely manner. This optimizes system performance, enabling the Agency to produce high-quality effluent and bio-solids, meet discharge requirements, and avoid the high cost of crisis management and system failure. Two major replacement projects are planned during the next five-year period. These projects are the replacement of the Agency's belt press equipment and its balancing chambers. The Agency's current belt press is becoming difficult to repair and has been operating at a level that exceeds its specifications. The new sludge dewatering process is expected to dry the solids to a greater degree (up to 18%) than the Agency's current belt press (13 - 14% reduction) and is expected to be less labor intensive. The balancing chambers have been in service for approximately 70 years and are showing signs of excessive damage and failure, and are in need of replacement. A new load equalization basin (LEB) to replace the chambers will increase the hydraulic capacity of the treatment plant and provide adequate capacity for build out of the Big Bear area.

*Sludge Removal and Power expense, on a combined basis, account for 21% of total operating expenses (before depreciation).*

### **Financial Summary FY 2018 - FY 2022**

*While the Agency completes a one-year budget, it also looks closely at the next five-year period. Most of the discussion and analysis, and financial information presented will include the five-year period, from FY 2018 through FY 2022.*

Based on the current forecast, the Agency will need inflationary rate adjustments in FY 2018 through 2022. The Agency had planned to begin inflationary rate adjustments in FY 2020, but due to unplanned operating and capital costs the Agency is recommending an earlier rate adjustment.

During the next five-year period, growth in operating expenses will outpace that of revenues, but is projected to come in line, as planned, in FY 2022 (i.e. revenues growing near the same pace as operating expenses). Over the five-year period, revenues will grow at an average annual rate of 2% while expenses grow at an average annual rate of 4%. As a result, operating income will shrink. This combined with the increased use of debt to finance the Sludge Dewatering Project (\$1.7 million debt financing) and the Load Equalization Basin (\$3.5 million debt financing) will lower the Agency's debt service coverage to 2.1x, lower debt capacity to approximately \$600,000 and reduce the Agency's financial strength and flexibility. The Agency has scheduled the SD Project for FY 2019 and the LEB for FY 2021. Depending on future financial performance and final cost estimates for the SD Project and the LEB, these projects may need to be modified or deferred or the Agency may need to consider rate adjustments in excess of the planned in-

*Operating Income is an important measure for the Agency. Operating Income is Operating Revenues less Operating Expenses and is an indicator of the Agency's ability to cover maintenance capital expenditures and debt service with recurring revenues.*



flationary adjustments. A rate study is planned for FY 2018, at which time the project cost estimates will be finalized and the Agency will be better able to assess project timing. During the forecast period, the Agency's minimum fund balance targets are met.

Operating Income is expected to decrease from \$592,045 projected in FY 2017 to \$262,769 in FY 2022. The decline in Operating Income is acceptable, considering the Agency's average Operating Income over the period provides adequate cash flow for operating and capital requirements. Under the current operating assumptions, including the inflationary rate increases beginning in FY 2018, Operating Income is sufficient to fund debt service and approximately 70% of depreciation, or maintenance level capital expenditures, on average through FY 2022. (During the 2011 Rate Study, the Board structured rates to collect \$450,000, or 54% of annual depreciation).

Under the proposed rate and cost structure, the Agency has sufficient funds to cover capital expenditures and debt service through FY 2022. The Agency has a net use of cash during the five-year period of approximately \$1.7 million, which reflects a high level of cash-funded capital expenditures during the period (\$5.7 million) and the reduction of the Agency's OPEB UAL (\$800,000).

At the end of FY 2022, the balance in the Agency's capital and replacement fund is projected to be approximately \$880,000, of which approximately \$325,000 is planned for FY 2023 cash-funded capital expenditures. The residual \$557,994 would be available for future capital projects beginning in FY 2024.

The Agency's debt service coverage covenants are acceptable, although declining during the period from an estimated 2.9 x in FY 2017 to 2.1 x in FY 2022, driven largely by an increase in the Agency's debt service during the period.

## Operating Trends and Outlook

### Declining Operating Income, Higher Operating Expenses

Operating Income recovered from historically low levels as a result of rate increases in FY 2012 through FY 2015, and lower, stable operating expenses. Beginning in FY 2015, Operating Income begins to decline and continues to gradually lower through FY 2022, as a result of flat rates and increasing operating expenses.

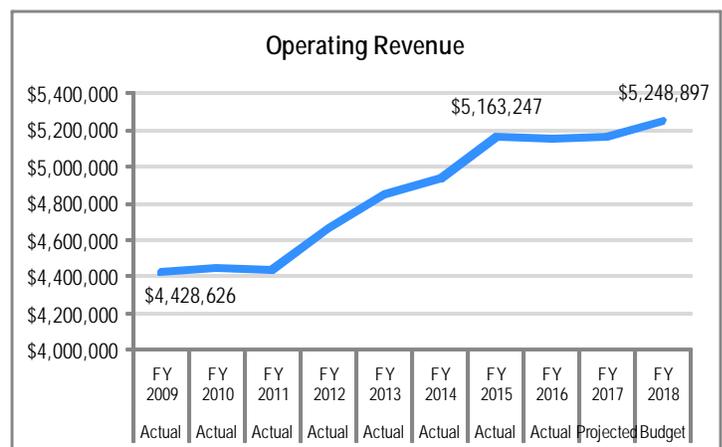
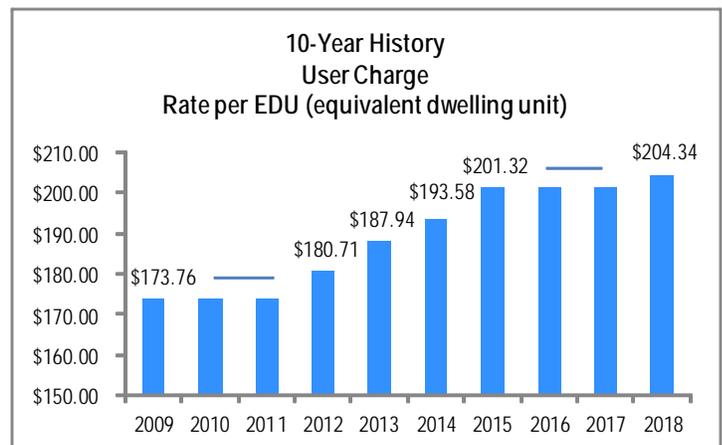
#### HIGHER RATES FOR THE BUDGET AND FORECAST PERIODS

Starting in FY 2012, the Agency began annual rate increases under a Maximum Rate Schedule adopted in 2011, which allows the Agency to increase rates up to a maximum amount each year. The increase in rates increased the Agency's Operating Revenues and has contributed to improved Operating Income since FY 2012. Rates are expected to increase annually at inflationary levels through FY 2022.

#### HIGHER OPERATING EXPENSES

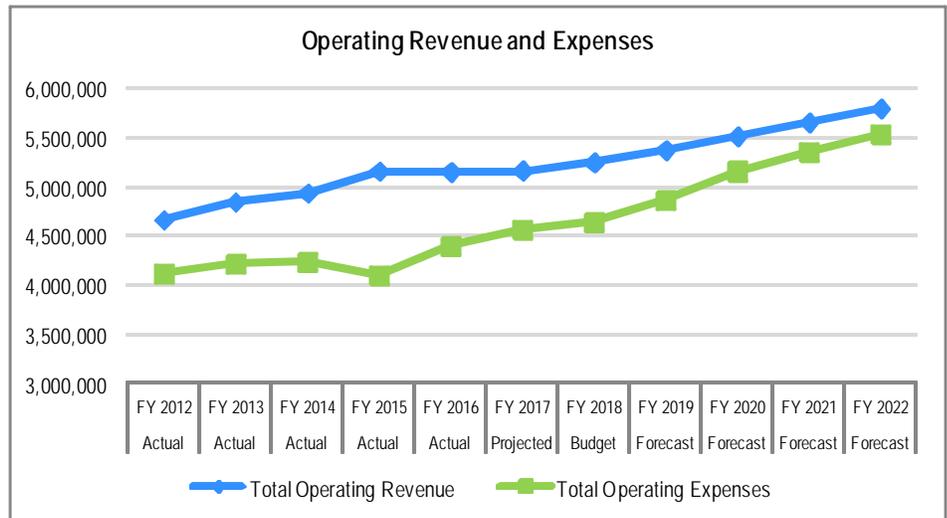
Operating Income is expected to decrease from \$592,045 in FY 2017 to \$262,769 in FY 2022 and is the result of the growth in Operating Expenses outpacing the growth in Operating Revenues.

The Agency's Operating Expenses are expected to grow at average annual rate of 4% over the next five years, outpacing expected inflation of 2.4% for the same period, and





higher than the most recent five-year period of 2% average growth (FY 2012-2017). Lower growth in the most recent five-year period has been driven by 1) lower salaries and benefits expense (3% annual growth) due to flat employee benefits expense and staffing changes, 2) low inflation, averaging 1.4% per year and 3) lower annual flows, averaging 665 million gallons or 16% below the average dry weather flow.



Over the next five years, higher operating expenses can be expected, in general, as a result of higher inflation and higher expected flows. Other contributors to faster growing Operating Expenses include Salaries and Benefits, Sludge Removal and Insurance expense, which on an average annual basis, are projected to grow at rates exceeding inflation.

- **Salaries and Benefits** expense is expected to outpace the 5-year historical average annual growth of 3%, and is expected to grow at an average annual rate of 6% over the period due to routine merit, longevity and inflationary adjustments, higher medical premiums, and higher pension expense. (See Discussion and Analysis section for further details.)
- **Sludge Removal** expense increased in FY 2016 and again in FY 2017 as the Agency began removing a higher amount of solids from the plant. This line item will increase again in FY 2018 by approximately \$45,000 a year due to a reduction in self hauling. On a combined basis, the impact of increased sludge removal and less self hauling will increase costs by more than \$100,000 annually when compared to historical averages and prior projections, and a represents a significant increase in the Agency's cost structure from previous budgets. (See Discussion and Analysis section for further details.)
- **Insurance** expense is projected to increase 6% annually compared to -2% historically. The increase is driven by a 10% increase in property liability insurance in FY 2018 and increases in workman's compensation insurance which are driven by projected changes in salaries and wages. SDRMA, the Agency's insurance provider, held property liability rates flat for seven years through rate stabilization funds and will increase rates in FY 2018 to cover higher costs.

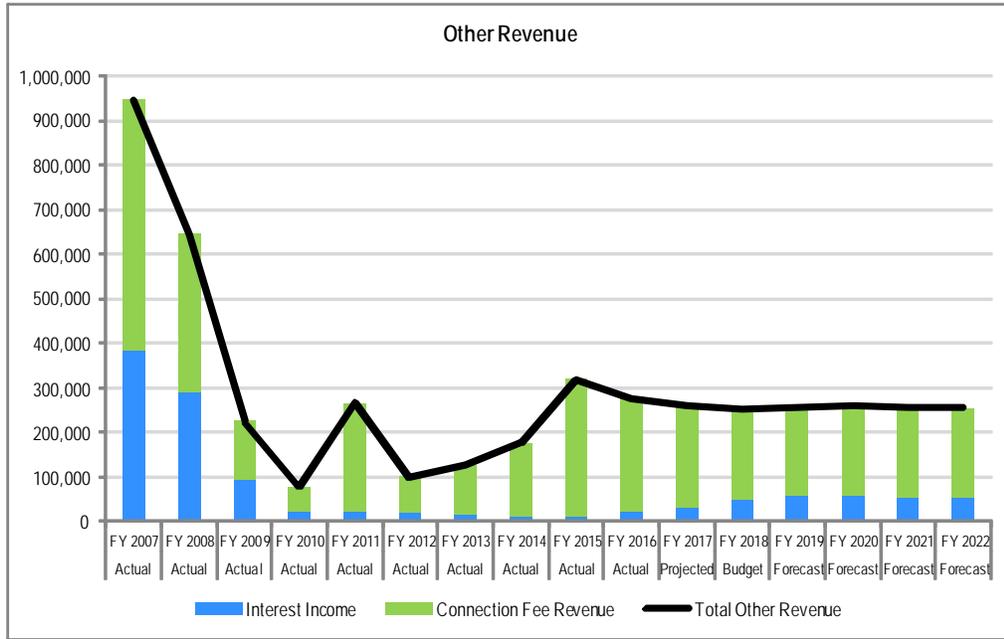
**Other Revenue Sources Trend Up Slightly**

The Agency's other revenue sources, Interest Income and Connection Fees, experienced sharp declines during the most recent recession and have continued to be relatively flat. For the budget and forecast period, Interest Income is expected to remain flat over the period, increasing in FY 2018 as cash builds and then gradually declining as the Agency uses cash to fund capital expenditures. The capital and replacement fund is expected to decline by approximately \$2.5 million over the period (reducing the Agency's cash balance available for investment) while interest rates are forecast to increase slightly.

New connections to the wastewater system have been at an unprecedented low, averaging 37 connections per year for the last five years with the highest annual connections of 53 in FY 2016 (excludes nonrecurring connections related to multi-unit developments). While connections are trending up, the Agency has taken a conservative approach to the level



of connections considering the timing of the recovery in vacation/second-home starts remains uncertain. Connection Fees are expected to remain relatively flat and are projected at 55 annually over the forecast period. Other revenue sources, Interest Income and Connection Fee revenue combined, are projected to remain consistent with FY 2017 projected levels of approximately \$255 -260,000 annually.

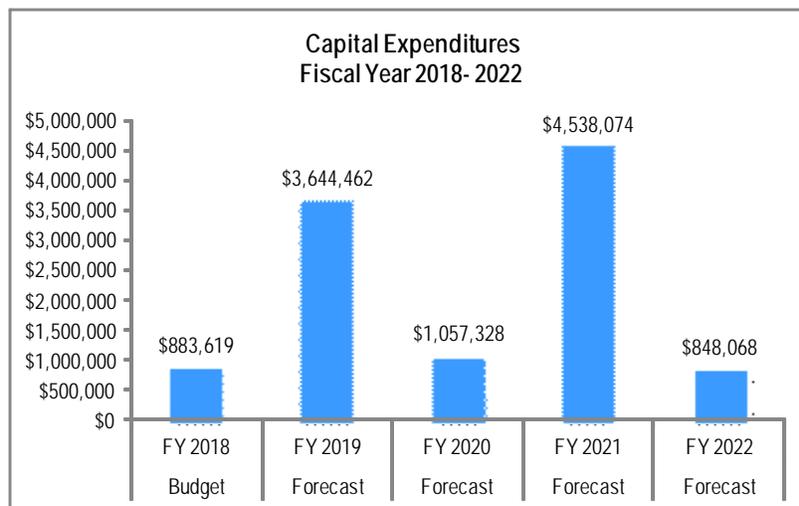


Other revenue sources such as Interest Income and Connection Fees are considered separately from Operating Revenue since they are cyclical and potentially non-recurring, and not generated as part of the Agency's primary operations.

## Capital

### Capital Expenditures (CAPEX)

During the five-year forecast, CAPEX is very high due to two large capital projects and sliplining. Total CAPEX planned for the period is approximately \$11 million, or an average of \$2.2 million a year. Approximately \$5.2 million of the planned capital expenditures is forecast to be debt financed, with the remaining \$5.8 million funded through cash. Excluding the large projects (approximately \$7 million) along with the sliplining (approximately \$1 million), the average annual CAPEX is approximately \$600,000 during the period which is more in line with expected annual maintenance and replacement. See Capital Projects section for a detailed discussion of the planned capital projects for the budget and forecast period.



Average Annual =  
\$2,194,310



## Debt

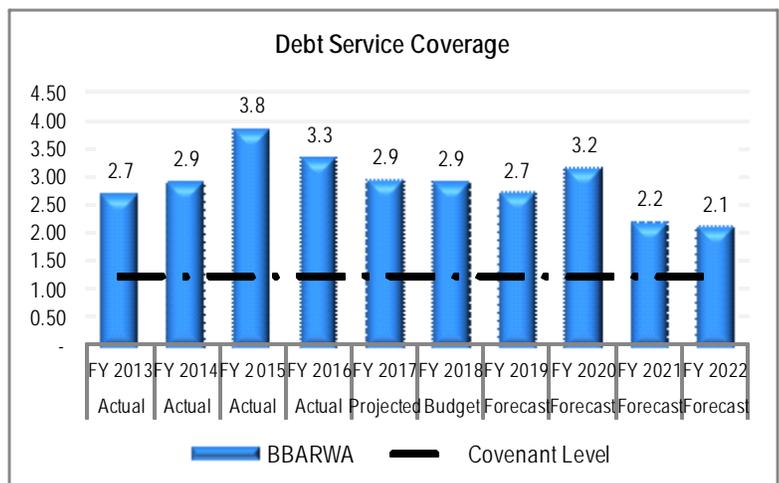
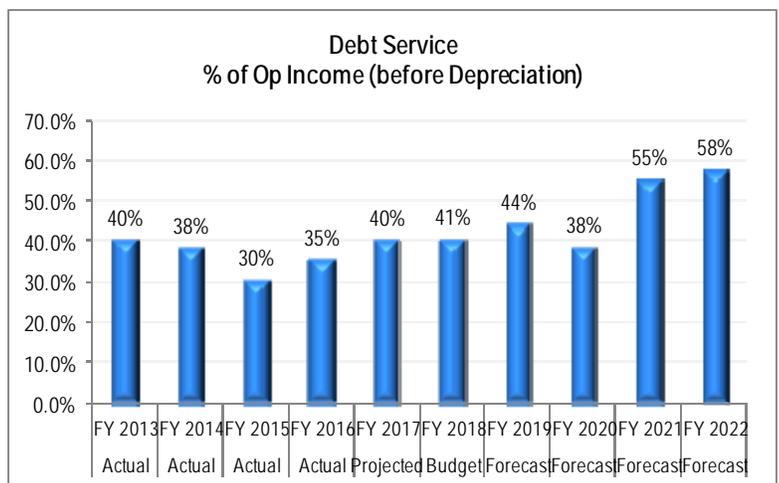
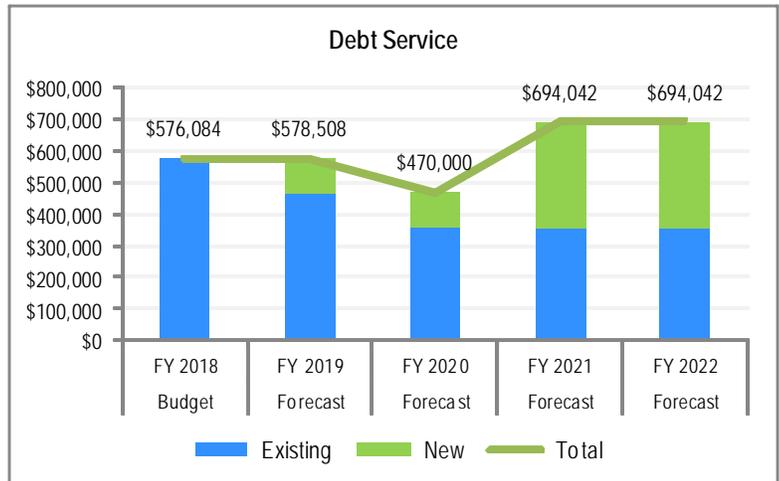
### LEVERAGE

Under the current capital improvement schedule, the Agency anticipates approximately \$5.2 million in new debt during the five-year period. In FY 2019, the Agency plans to borrow \$1.7 million or 50% of the \$3.5 million SD project and in FY 2021, the Agency plans to borrow \$3.5 million or 100% of the LEB construction costs. Completing both of these projects during the five year period reduces the Agency's residual cash balance to approximately \$560,000 and reduces debt capacity to approximately \$600,000 at the end of FY 2022. The Agency's leverage increases over the period but to levels that are still manageable. At higher debt levels, the Agency has less available funds for capital expenditures and reduced ability to borrow additional funds if needed. During the next five-year capital investment cycle, FY 2023 - FY 2027, there are \$3.3 million of planned capital expenditures or approximately \$550,000 per year. The timing of these future projects will need to be scheduled based on available cash.

### DEBT SERVICE COVERAGE COVENANT

The Agency's debt service coverage covenant requires a minimum of 1.2 x coverage and measures the Agency's ability to cover its annual debt service with current year earnings. The Agency's debt service coverage ratios are excellent and show the financial strength of the Agency.

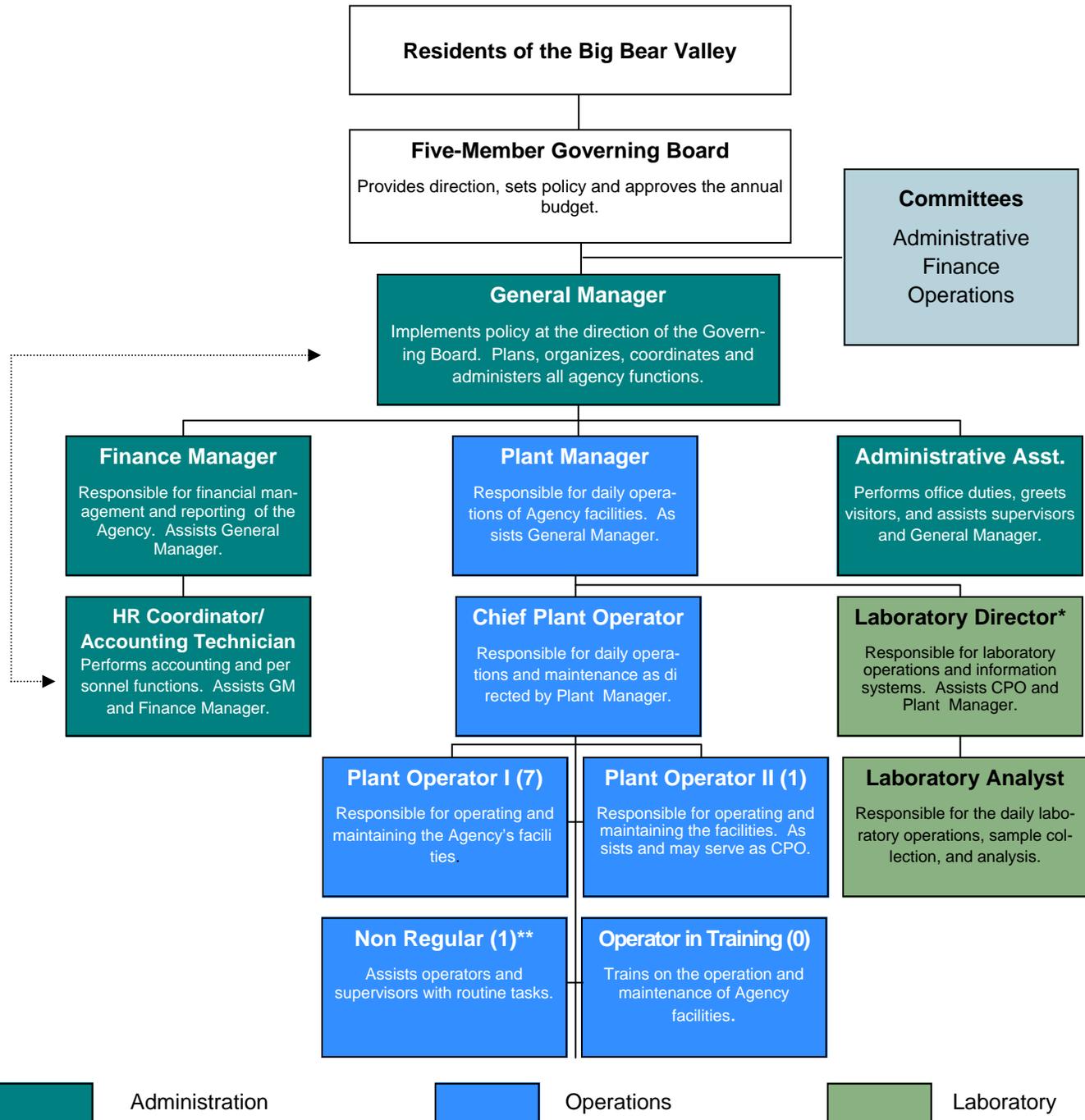
The Agency's rates were structured to achieve 1.7 x coverage during the last rate study. Lower operating expenses realized through FY 2015 combined with lower debt service than planned are the contributing factors to the higher debt service coverage ratios when compared to the 2011 Rate Study. Debt coverage ratios show some deterioration beginning in FY 2016, however these levels are still strong. Beginning in FY 2020, the Agency's debt service declines causing the coverage to improve to 3.2x before declining again in FY 2021 due to new debt associated with planned capital projects and thus higher debt service.





## Section II. Financial Structure, Policy and Process

### Organization Chart



\*The Laboratory Director and a Plant Operator I position are unfilled.

\*\*This position is typically seasonal in nature. The Agency has budgeted for one seasonal operator in FY 2018 and each year through FY 2021.



## Governance

The Agency is governed by a five-member Governing Board appointed annually by the governing bodies of its three Member Agencies.

### The Governing Board of Directors

<u>Member Agency</u>	<u>Number of Appointments</u>
Big Bear City Community Services District	2
City of Big Bear Lake	2
San Bernardino County Service Area 53B	1



Rick Herrick, Chair  
City of Big Bear Lake



Karyn Oxandaboure,  
Vice Chair  
Big Bear City CSD



Liz Harris Ed. D., Secretary  
County Service Area 53 B



David Caretto, Director  
City of Big Bear Lake



John Green, Chair  
Big Bear City CSD

## Staffing

### General Manager and Management Staff



David Lawrence  
General Manager



Jennifer McCullar  
Finance Manager



Fred Uhler  
Plant Manager

The Agency's employees are accountable for the efficient operation and administration of the treatment plant and related facilities. The Agency maintains informal departments due to the small, single-service nature of the Agency's operations. The operations department consists of the plant manager and nine operators. The laboratory department includes one lab director and one lab analyst. The administrative department includes the general manager, finance manager, human resource coordinator/accounting technician, and administrative assistant.

The Agency has a dedicated team with 36% of the employees employed for more than ten years and 71% employed for more than five. Employee longevity provides the organization with decades of experience and lends itself to efficient operations. Approximately 29% of the workforce will be eligible for retirement in FY 2018.

## Service Recognition and Awards

The Agency has received multiple industry awards over the years. In FY 2016, the Agency and certain of its employees received the following awards by the **California Water Environment Association** at its annual event recognizing outstanding employees and treatment facilities in the local desert and mountain areas of Big Bear, Running Springs, Lake Arrowhead, Crestline, Victorville, Hesperia, and Apple Valley:



*Plant of the Year*

*Administrative Assistant of the Year (Kim Booth)*

*Laboratory Person of the Year (Nikki Crumpler) - Regional and State Recognition*

*Mechanical Person of the Year (Troy Bemisdarfer)*

*Operator of the Year (Kyle Burnett)*

Also during 2016, the Agency’s Administrative Assistant, Kim Booth was awarded **Staff Member of the Year by the CSDA**, (California Special Districts Association). The award winner is selected from nominations by special district board members/trustees or district management staff. Ms. Booth received this award based on her accomplishments during employment at the Agency.

During the period, the **Special District Risk Management Authority**, the Agency’s insurance provider, awarded the Agency the 2016 **McMurchie Excellence in Safety Award—Small Member Category** in the workers’ compensation category as a result of its low Experience Modifier of .74, longevity in the SDRMA program and earning 15 credit incentive points for the 2015-16 program year.

The Agency received the **Certificate of Achievement for Excellence in Financial Reporting** (4th consecutive year) and the **Distinguished Budget Presentation Award** (8th consecutive year) from the **Government Finance Officers Association**: “The Distinguished Budget Presentation Awards Program allows the public finance profession a welcome opportunity to recognize those governments that have, in fact, succeeded in preparing a high quality budget document. Recognition can be viewed as a positive factor by credit rating agencies and by others interested in the professionalism of a government’s finance function.” (Government Finance Officers Association)



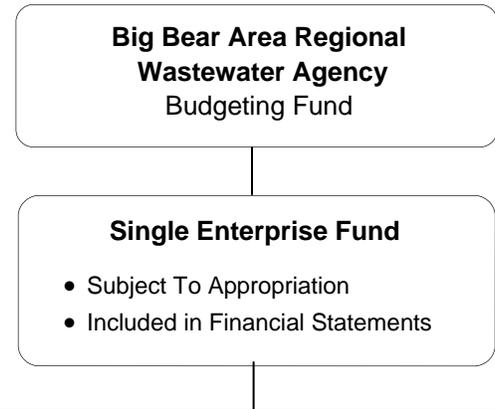


## Fund Descriptions and Fund Structure

As noted in subsequent sections, the Agency operates and reports as a proprietary, enterprise fund, using standards that are similar to private sector accounting. This allows the Agency to readily determine the cost of providing its service and the amount that is recovered through the Agency's fees: usage fee, connection fee, and standby fee. Any excess cash flow translates into retained earnings and is maintained in the Agency's Capital and Replacement reserve fund unless or until designated to another reserve fund or otherwise appropriated.

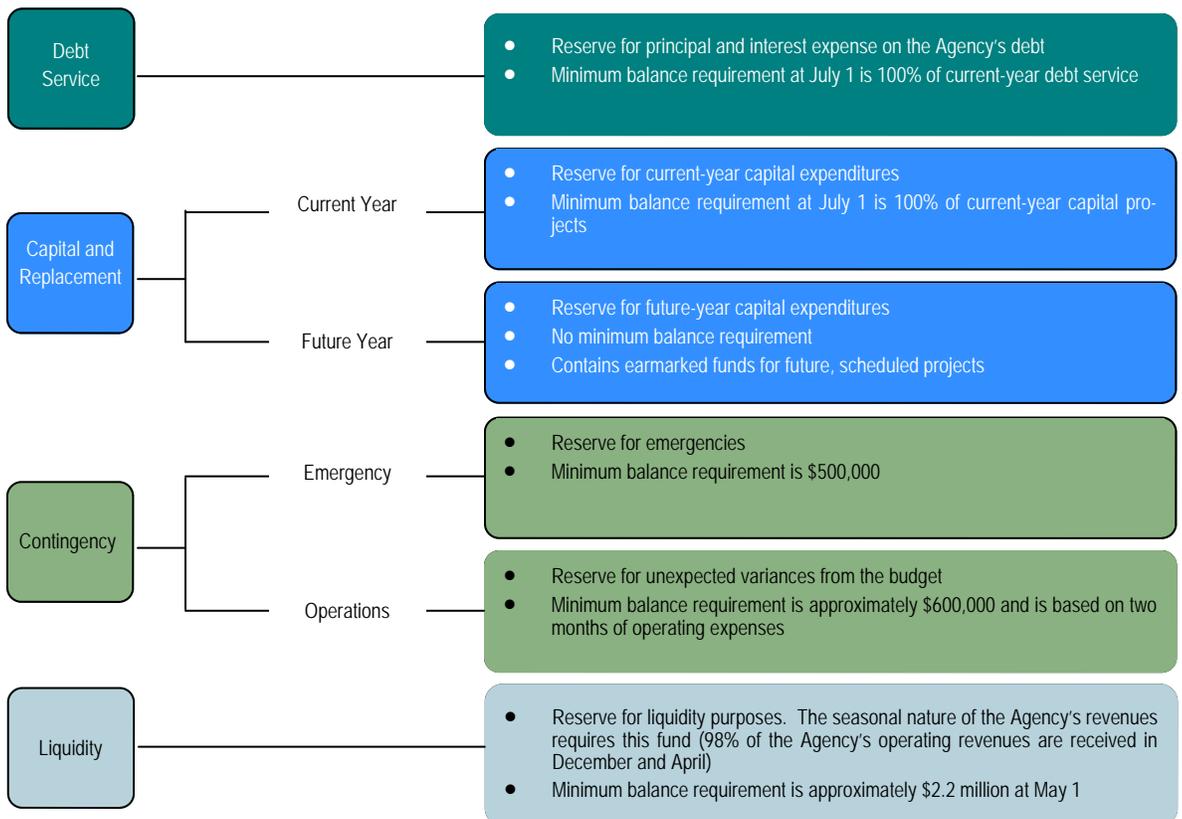
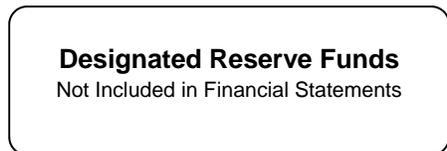
The Agency's cash position is allocated among its designated reserve funds in accordance with its Designated Funds Policy. The Agency maintains multiple reserve funds through its formal Designated Funds Policy for financial management purposes. These funds include debt service, capital expenditures, contingency and liquidity reserve funds. **These designated funds are for internal, financial management purposes only and are not included in the audited financial statements.** The Agency is currently meeting and is projected to meet all minimum balance requirements associated with its designated reserve funds over the next five-year period through FY 2022.

### Budget Fund Structure



### FUND DESCRIPTION

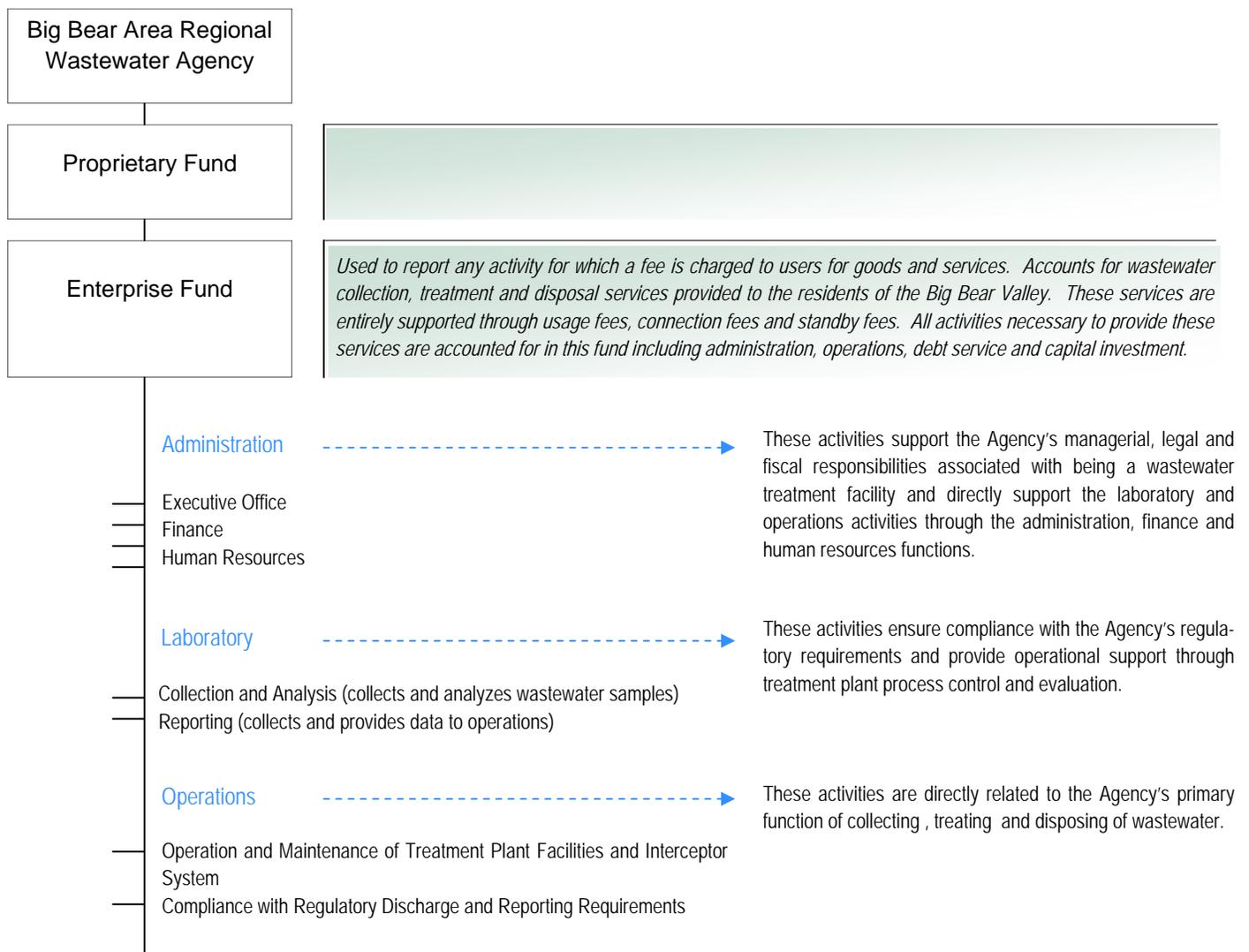
Accounts for wastewater collection, treatment and disposal services provided to the residents of the Big Bear Valley. These services are entirely supported through usage fees, connection fees and standby fees. All activities necessary to provide this service are accounted for in this fund including administration, operations, debt service and capital investment.





## Departmental/Fund Relationship

Governmental accounting and financial reporting systems are organized and operated on a “fund” basis for the purpose of demonstrating compliance with various potential legal and contractual obligations associated with government activities. Examples of these obligations would be special purpose revenues which are collected for a specific purpose and therefore restricted to a specific use by law or regulation. An example provided by the GFOA in its Governmental Accounting, Auditing and Financial Reporting publication, is a government establishing a separate fund to account for revenues from gasoline taxes that can only be spent on road repair and construction so as to ensure and demonstrate compliance with that requirement. Funds are separate fiscal and accounting entities, and may be presented separately and in aggregate in a government’s financial statements. Different governmental departments may have distinct activities which are represented by separate funds. The Big Bear Area Regional Wastewater Agency is considered a proprietary, single enterprise fund for accounting and financial reporting purposes. All of its activities/departments are included in a single accounting and reporting entity.



## Basis of Accounting and Budgeting

### Basis of Accounting

The Agency operates and reports as an **enterprise** utilizing the accrual method of accounting. Revenues are recog-



nized when earned and expenses are recognized when incurred. The Agency applies all applicable Government Accounting Standards Board (GASB) pronouncements in accounting and reporting for its proprietary operations as well as the following pronouncements issued on or before November 30, 1989, unless these pronouncements conflict with or contradict GASB pronouncements: Financial Accounting Standards Board (FASB) Statements and Interpretations, Accounting Principles Board (APB) Opinions, and Accounting Research Bulletins (ARBs) of the Committee on Accounting Procedure.

**Basis of Budgeting**

The Agency’s annual budget and five-year forecast are based on the accrual method of accounting and are structured to reflect the same format as the Agency’s audited financial statements. Both the “basis of accounting” and the “basis of budgeting” are on an accrual basis which recognizes revenues when earned and expenses when incurred.

**Financial Policies**

The Agency has developed multiple financial policies which have laid the foundation for the Agency’s continued financial strength. Financial strength is assessed by the bond rating agencies using various frameworks for measurement. Utilizing Standard and Poor’s Top 10 Management Characteristics for comparison purposes, the Agency’s achievement of strong leadership and financial management is evident.

**Top Ten Management Characteristics**

1. Focus on structural balance		Structural balance references the ability of recurring revenues to cover recurring expenditures. The Agency’s current and future rates (operating revenues) are structured to cover recurring expenditures. These include ongoing operating expenses, debt service and maintenance capital expenditures.
2. Strong liquidity management		The Agency maintains reserves to meet its minimum debt service obligations, emergency funding requirements, and operational variances equal to two months of operating expense in addition to maintaining additional debt capacity.
3. Regular economic and revenue reviews to identify shortfalls early		Management staff reviews monthly variance reports. Quarterly variance reports are prepared and presented to the Governing Board.
4. An established rainy day / budget stabilization reserve		The Agency maintains contingency funds specifically for emergency and budget variance purposes.
5. Prioritized spending plans and established contingency plans for operating budgets		The annual budget and five-year forecast, including both the operating and capital budget, prioritize spending. The Agency has established a contingency fund to fund any unexpected and unabsorbed variances from budget.
6. Strong long-term and contingent liability management		The Agency completes annual and bi-annual actuarial valuations of its pension and OPEB obligations and funds 100% of its annual required contributions. Information related to these liabilities is audited and disclosed annually in the Agency’s financial statements.
7. A multi-year financial plan in place that considers the affordability of actions or plans before they are part of the annual budget		The Agency prepares and maintains a 5-year operating and capital plan and a 20-year capital plan. The timing of capital projects is based on need and affordability.
8. A formal debt management policy in place to evaluate future debt profile		The Agency’s debt policy specifically requires a review of the Agency’s debt capacity prior to new debt issuance. The Agency’s debt capacity is measured using S&P and Moody’s criteria.
9. A pay-as-you go financing strategy as part of the operating and capital budget		The Agency has structured its rates to collect approximately 50% of its average annual capital requirements on a cash basis.
10. A well-defined and coordinated economic development strategy		As a wastewater agency, an economic development strategy is not directly applicable; however, the economic impact of the Agency’s operating and financial decisions are paramount with priorities placed on 1) affordable and competitive rates, 2) local contractor preference, 3) volunteer and internship programs for on-the-job training.



## **Policies**

The Agency has established financial controls pertaining to revenue and expenditures, designated funds, assets, investments, debt and the budget to improve effectiveness, ensure reliable financial reporting, and comply with legal requirements.

The INTERNAL CONTROL POLICIES outline internal controls and procedures for accounts payable, purchase orders, appropriations and expenditures, credit card purchases, banking activities and verifications, contractual bidding, budget amendments and adjustments, and business meeting and professional development reimbursement.

The BUDGET ADOPTION POLICY ensures the Agency's compliance with the budget adoption requirements of the California Government Code and the Operating Agreement No. 1 among the Member Agencies, outlines the requirements for operating and capital planning, the rate review, and the budget development process.

- The Agency is subject to Government Code Section 61110 which prescribes that a preliminary budget be adopted prior to July 1 of each year. Pursuant to the Operating Agreement No. 1, the Agency must adopt a budget prior to May 1.
- The annual operating budget will be based on historical performance and staff input and includes an income statement, cash flow statement and ending designated fund balances.
- A five-year operating projection will include an income statement, cash flow statement, and designated fund balances. This forecast combined with the long-term capital plan is used to assess the adequacy of the Agency's rates and to plan for capital financing.
- Capital planning will include both a five-year and twenty-year plan. Strategic capital projects for the purposes of costs savings should include calculations of payback period, NPV (Net Present Value) and IRR (Internal Rate of Return) for comparison purposes.
- During the budget development process, the Agency will address the adequacy of rates (sewer usage fees) based on the five-year forecast and long-term capital needs. The Agency's connection fee will be evaluated based on changes in the capital plan, capital financing, and EDUs over the capital planning horizon.

The DESIGNATED FUNDS POLICY establishes reserves and designated reserve balances for the purposes of contingency, liquidity, debt service and capital investment.

- Provides funding for specific purposes related to the management and operation of the Agency.
- The Designated Funds are financial resources available to finance expenditures and are not limited by legal or contractual requirements and may be appropriated elsewhere at the discretion of the Governing board
- The Agency's Designated Funds are outlined on page 26 of this budget document.

The DEBT POLICY establishes the conditions and analysis required for debt issuance and recognizes the essentials of 1) ensuring the Agency's ability to meet its debt service requirements and 2) maintain sufficient financial flexibility to respond to unexpected events.

- The debt policy applies to all forms of debt obligations including bonds, certificates of participation, lease/purchase agreements and other obligations permitted to be issued by the Agency under California Law.
- Debt issuance may be considered a financing option for 1) expenditures that have been formalized in a capital improvement plan and approved by the Governing Board and are considered major infrastructure projects, 2) capital expenditures that have long economic useful lives, usually five years or greater, and 3) capital expenditures where the use of debt financing would better "match" the benefit received by the Agency's ratepayers with the economic impact to the ratepayers.
- Factors to consider when issuing debt are the impact on customers, the timing of the Agency's infrastructure needs, the Agency's debt capacity, the nature of the asset and availability of resources (i.e. the useful life of the project should be commensurate with the term of the debt), and the economic and interest rate environment.
- Analysis requirements prior to debt issuance include a cost and benefit analysis incorporating the impact of the project and debt financing on the budget and multi-year forecast.



The INVESTMENT POLICY applies to all financial assets and has the primary objectives of safety, liquidity and yield (in priority order). When managing public funds, the Agency understands that investment success can not be measured in terms of achieving the highest possible return but must be measured in terms of prudent investing that utilizes uncommitted dollars in safe, short-term investments to earn the Agency reasonable returns with the least amount of risk and to maintain adequate liquidity.

- Investments permitted by policy and authorized by the California Government Code 53646 include: 1) LAIF managed by the Treasurer of the State of California; 2) CDs insured by the FDIC with maturities less than two years (purchases less than 30% of Agency surplus funds); 3) U.S. Treasury Bills, Notes and Bonds with maturities less than two years ; and 4) AAA-rated money market mutual funds regulated by the SEC and consisting only of U.S. Treasury securities.
- The finance officer reports to the General Manager and the Governing Board on a monthly basis the Agency's investments and the ability of the Agency to meet its expenditure requirements for a period of six months.

The FINANCIAL REPORTING POLICY is for the purpose of fiscal monitoring.

- The finance officer will prepare monthly financial reports for review by the management staff. These reports include an income statement, cash flow statement, balance sheet and a fund balance report. The presentation will include actual performance compared to the budget on a period and year-to-date basis.
- The finance officer will prepare quarterly and annual reports for the Governing Board of Directors. These reports include an income statement, a cash flow statement, and a fund balance report. The presentation will include 1) actual performance compared to the budget on a period and year-to-date basis and 2) an explanation of variances from the budget. Quarterly reports should be completed no later than 45 days from quarter end. Annual reports should be completed no later than 60 days from year end.

The RATES POLICY ensures the Agency's compliance with the legal requirements associating with setting and maintaining rates. Maintaining adequate, stable and competitive rates is an Agency priority.

- The policy establishes that the Agency's rates are:
  - Cost-based, equitable and meet the Agency's full revenue requirement
  - Easy to understand and administer
  - Have been set based on generally accepted rate-setting techniques
  - Are stable in the ability to provide adequate revenues for meeting the Agency's current and future financial requirements
  - Have been established at a level that is stable from year to year from a ratepayer perspective
  - Have been adopted according to legal requirements
- The policy outlines the legal requirements for each of its rates: the sewer user fee (also referenced as the Agency's Annual Charges), the connection fee, and the standby fee.

## **Balanced Budget**

The Agency considers the budget balanced when recurring revenues are equal to or in excess of recurring expenditures or in the case where recurring revenues are less than recurring expenditures, there are adequate reserves to cover the excess expenditures. Recurring revenues include annual charges (user fees), standby fees, wastewater disposal fees, and rental income. Recurring expenditures include ongoing operating expenses, debt service and average annual maintenance capital expenditures. The Agency is projected to have a balanced budget during the current budget year.

## **Budget Process**

Pursuant to financial policy, a budget must be reviewed, approved and adopted prior to May 1 of each year for the subsequent fiscal year beginning July 1. The budget adoption deadline of May 1, is also established in the Agency's operating agreement among BBARWA and its member agencies. By California Government Code, the Agency must adopt its budget by July 1 of each year.

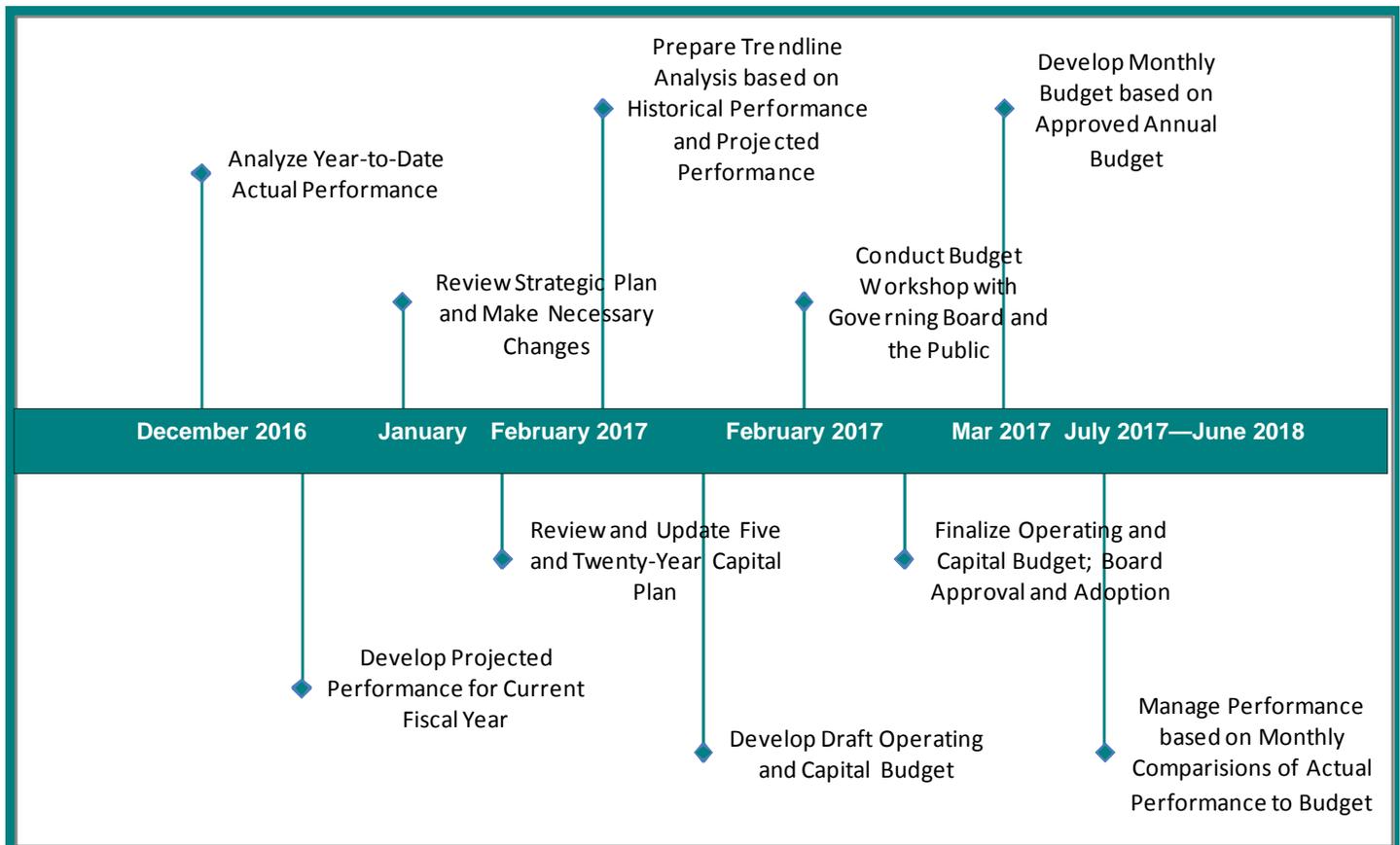


Development of the budget is influenced by the strategic plan, organizational goals and objectives, and external factors such as economic conditions. The Governing Board, General Manager, Agency staff and the public participate in the development of the budget. A public workshop is held to review the draft budget and to get public input prior to the public hearing to adopt the budget.

The Agency's annual budget provides a solid picture of the Agency's expectations for the next twelve months and is an accountability tool for management and reflects its commitment to performance. Overall, the Agency's operations are fairly stable and the goal is to be within five percent of the original budget during any given year, unless unexpected events occur.

After the annual budget has been adopted by the Governing Board, a monthly budget is created from which actual performance will be compared. The General Manager, Plant Manager and Finance Manager review financial performance on a monthly basis to discuss operating performance and variances from the budget. This aids in understanding the Agency's operating and financial performance, changing patterns of performance, trends in costs, and general economic data. On a quarterly basis, a quarterly financial report is presented to the Governing Board for its review and discussion. Variances from the budget may require a budget amendment and/or newly appropriated funds by the Governing Board. Pursuant to financial policy, Governing Board approval is required to amend the budget if 1) the Operating Budget is unable to absorb a cost overage, 2) a capital project exceeds the original budgeted expenditure by \$20,000 or more, and 3) any new capital expenditure needs to be added to the Agency's current-year capital improvement plan.

### Budget Timeline





## Section III: Financial Summaries

### Budget Framework

While the Agency completes a one-year budget, it also looks closely at the next five-year period. Most of the discussion and analysis, and financial information presented will include the five-year period, from FY 2018 through FY 2022.

### Important Assumptions

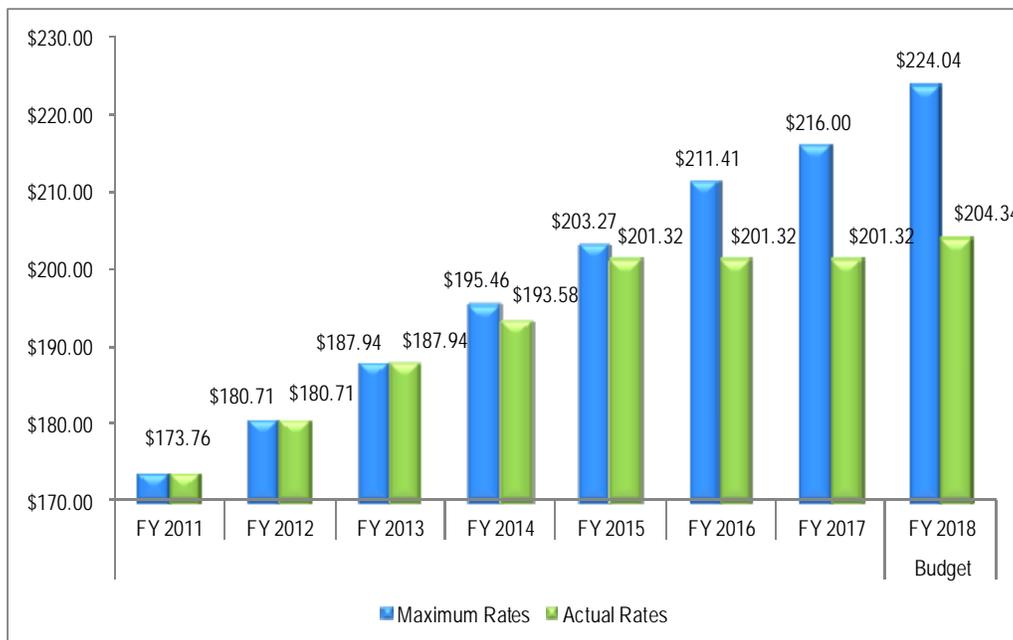
The budget and the forecast period were prepared using the following assumptions:

#### AVERAGE DRY WEATHER FLOW

The Agency budgets for dry weather as a matter of practice. The Agency experiences average dry weather flows of approximately 788 million gallons on an annual basis. If, during the budget period, the Agency incurs wet weather flows or other operational variances from the budget, and the operating budget is unable to absorb the increased costs, the Agency has established a contingency fund from which the Board may appropriate funds. The contingency fund is recommended to be two months of operating and maintenance expense by the Government Finance Officers Association. Based on staff's review, we believe the amount to be adequate.

#### LOWER RATES THAN THE MAXIMUM RATE SCHEDULE

The budget and forecast period assume inflationary rate adjustments in the Agency's sewer user fees. The Agency consulted with the engineering firm of HDR Engineering, Inc. to complete a comprehensive review of the Agency's sewer user fees, standby fees and connection fees in FY 2011. As a result of these studies, the Governing Board of Directors approved a multi-year rate schedule. The maximum rate schedule determines the maximum rate the Agency can charge in any particular year. The following is a comparison between the actual rates and those allowed through the maximum rate schedule.



Beginning in FY 2017, the Agency may increase its sewer user fees annually by an amount not to exceed the percentage change in the twenty-city construction cost index published by Engineering News Record.

As previously noted, lower rates than the maximum rate schedule were achieved primarily through lower operating expenses, due mostly to lower salaries and benefits expense. The rates through FY 2022 have been structured to meet the Agency's current needs and future capital requirements. During the next five-year period, the Agency's capital plans



include the purchase and installation of new sludge dewatering equipment and the construction of a new Load Equalization Basin for a total estimated cost of \$7 million. Under the proposed rate structure, the Agency will be positioned to cash finance 25% of the capital costs of these projects and debt finance the remainder.

**INFLATIONARY ASSUMPTIONS**

Annual price change assumptions are used in the multi-year forecast to project year-over-year changes in certain revenues and costs. The Agency considers the Los Angeles-Riverside-Orange County, CA CPI-U (Consumer Price Index for all Urban Consumers, All Items; published by the Bureau of Labor Statistics), the Construction Cost Index (published by Engineering News Record), and the Congressional Budget Office forecast CPI as indicators in determining future price changes.

Price Index	Date	Change
CPI, Los Angeles-Riverside-Orange-County – All Urban Consumers	December 2016	1.9%
Construction Cost Index	December 2016	3.7%
Congressional Budget Office, CPI, All Urban Consumers	Calendar Years 2018- 2026, Annual Average	2.4%

Increased consumer spending and economic expansion driven by business investment and homebuilding, are expected to put upward pressure on inflation in the future and bring the rate of inflation to the 2% target rate established by the Federal Reserve. Forecasts are for sustained inflation above 2% during the next five-year period. The Agency has assumed inflation of 2.3% in FY 2018 increasing to 2.4% over the forecast period, for an average annual rate of 2.4%.

	Actual FY 2012	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year Average
Inflation	1.6%	1.0%	1.8%	0.8%	1.8%	2.2%	2.3%	2.4%	2.4%	2.4%	2.4%	2.4%

Note: Actual inflation represents the CPI, Los Angeles, Riverside, Orange County, All Urban Consumers

**Comparisons**

Financial performance comparisons throughout this budget include historical, current and future periods. The periods prior to and including FY 2016 are periods of actual financial performance, FY 2017 is the projected performance, FY 2018 is the budget period, and FY 2018 – FY 2022 is the forecast period:

<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2018 - FY 2022</u>
Actual	Projected	Budget	Forecast Period

**Items Impacting Financial Performance**

**STAFFING CHANGES**

A long-term, senior employee (General Manager) is expected to retire at the end of FY 2017\*. This position will be replaced with a new hire resulting in lower salaries and benefits expense. Lower salaries and benefits expense resulting from the retirement will be offset to some extent by 1) an employee returning from disability, 2) the promotion of an operator in training to an operator I position, 3) higher medical benefits expense and 4) higher pension contribution expense. \*Please note, as of the budget publication date (July 2017) the Agency has a new General Manager.

**LESS SELF HAULING**

The Agency will reduce tons self hauled to an estimated 528 tons in FY 2018 from much higher levels previously. Frequent breakdowns and costly maintenance of the Agency's hauling truck has caused the Agency to lower tons



hauling in effort to better determine the hauling capacity of the truck, with the goal of re-evaluating the economics of the operation after this is determined. The reduction in self-hauling will result in higher sludge removal costs in FY 2018 compared to FY 2017.

#### HIGHER PENSION COSTS

CalPERS will lower the discount rate, also known as the assumed rate of return, to 7% from 7.5% over a 3-year period which will increase the Agency's pension contributions beginning in FY 2019 through FY 2023. The normal cost is expected to increase 2.4 points, from 12.5% of payroll in FY 2018 to 14.9% of payroll in FY 2022, and the payment of the unfunded liability is expected to increase substantially, from \$63,814 to an estimated \$230,693 in FY 2023. These increases represent an average annual growth rate of 15% for the next five years compared to -1% over the last five years (due to reduction in the Agency's UAL and Side Fund).

#### NO CHANGE IN ANNUAL CONNECTIONS

The Agency has assumed 55 annual connections through FY 2022. This level of connections is uncertain but in line with FY 2017 experience to date (56 connections for the trailing twelve months ended January 31, 2017, excluding multi-unit developments). The Agency has averaged 37 connections per year for the last five years, excluding multi-unit developments. The Agency has taken a conservative approach to the level of connections considering the timing and level of the recovery in vacation/second-home starts still remains uncertain and has yet to be seen.

#### NEW SLUDGE DEWATERING PROJECT

The Agency's current belt press is becoming difficult to repair and has been operating at a level that exceeds its specifications. The Agency began a sludge dewatering study in FY 2017 to determine the need for replacement as well as replacement options. Currently the Agency is considering two options proposed in the sludge dewatering study: 1) a screw press and 2) a centrifuge. Pilot testing will occur in the spring and construction of the best alternative is scheduled for FY 2019. The Agency has earmarked approximately \$3.5 million for this project and is planning to debt finance 50% of the project. The new sludge dewatering process is expected to dry the solids to a greater degree (up to 18%) than the Agency's current belt press (13 - 14% reduction) and is expected to be less labor intensive. For each % reduction in solids, the estimated dollar savings is approximately \$18,000, for potential possible of savings of \$90,000 annually. The current belt process requires an operator to standby during operation. The impact on the Agency's operations will be more certain after a process is chosen and pilot testing is complete. This project was initially slated for FY 2023 but is expected to occur in FY 2019.

#### LOAD EQUALIZATION BASIN DEFERRED FROM FY 2019 TO FY 2021

The Agency has been planning to complete the new load equalization basin (LEB) which replaces the old, and failing balancing chambers in FY 2019 and 2020. Logistically and financially, the SD Project and the LEB cannot occur at the same time. The Agency has placed the priority on the SD Project due to the critical nature of the sludge drying process within the plant. The Agency has targeted FY 2021 to construct the new LEB. If the walls of the existing balancing chambers were to fail prior to construction of the new LEB, the Agency would be able to re-valve the plant for a period of time as well as use contingency funding and debt capacity to begin the replacement of the chambers. The Agency will complete engineering for the new LEB in FY 2017. Based on current engineering estimates, the project has increased to approximately \$3.7 million from an estimated \$3.1 million last year. The Agency will further evaluate this project in FY 2018 for possible cost reductions and has earmarked \$3.5 million in FY 2021 for this project.

#### REDUCTION OF OPEB UNFUNDED ACCRUED LIABILITY (OPEB UAL)

The Agency has budgeted to reduce its OPEB UAL by \$200,000 during FY 2018. This is part of a five-year plan to reduce the liability annually by \$200,00 for a total of \$1.0 million. Based on the most recent valuation (July 1, 2015), the unfunded OPEB Liability is \$1.6 million and represents a 37.6% funded ratio (ratio of assets to liability). If the Agency



were to pay down its OPEB UAL by \$1.0 million over the next five years, the funded ratio would be greatly improved. Based on the current valuation, if the liability is reduced by \$1.0 million (the pay down over five years), the funded ratio would be approximately 76%.

A goal of the Agency has been to reduce its unfunded pension/OPEB liabilities so that the Agency's pension/OPEB assets are nearly equal to its pension/OPEB liabilities, resulting in annual pension/OPEB expense near the normal cost (the annual pension and OPEB cost of active employees --the amount "earned in" through service during a given year). The unfunded liability represents benefits earned in the past by active and retired employees, that are not covered by assets. Maintaining a higher funded ratio, better insures that the Agency's obligations will be met and that intergenerational equity will be maintained among ratepayers.

### **Net Position or Fund Equity**

Net Position reflects the Agency's equity, or its assets minus its liabilities. The Statement of Revenues, Expenses and Changes in Net Position, shows the Agency's Change in Net Position for the period, which increases or decreases the Agency's overall Net Position (see page 38). The Agency's Net Position or fund equity reflects amounts that are not necessarily available for expenditure. For financial management purposes, the Agency's primary focus is on changes in cash and ending cash balances, net of working capital, thus, it focuses on its expendable, available funds. The Agency designates portions of its cash balance to meet current period financial requirements and future capital requirements. The designated portions of the cash balance are referred to as the Agency's Designated Reserve Funds. Target balances have been established for the various designated reserve funds for financial management and planning purposes.

### **Special Terms**

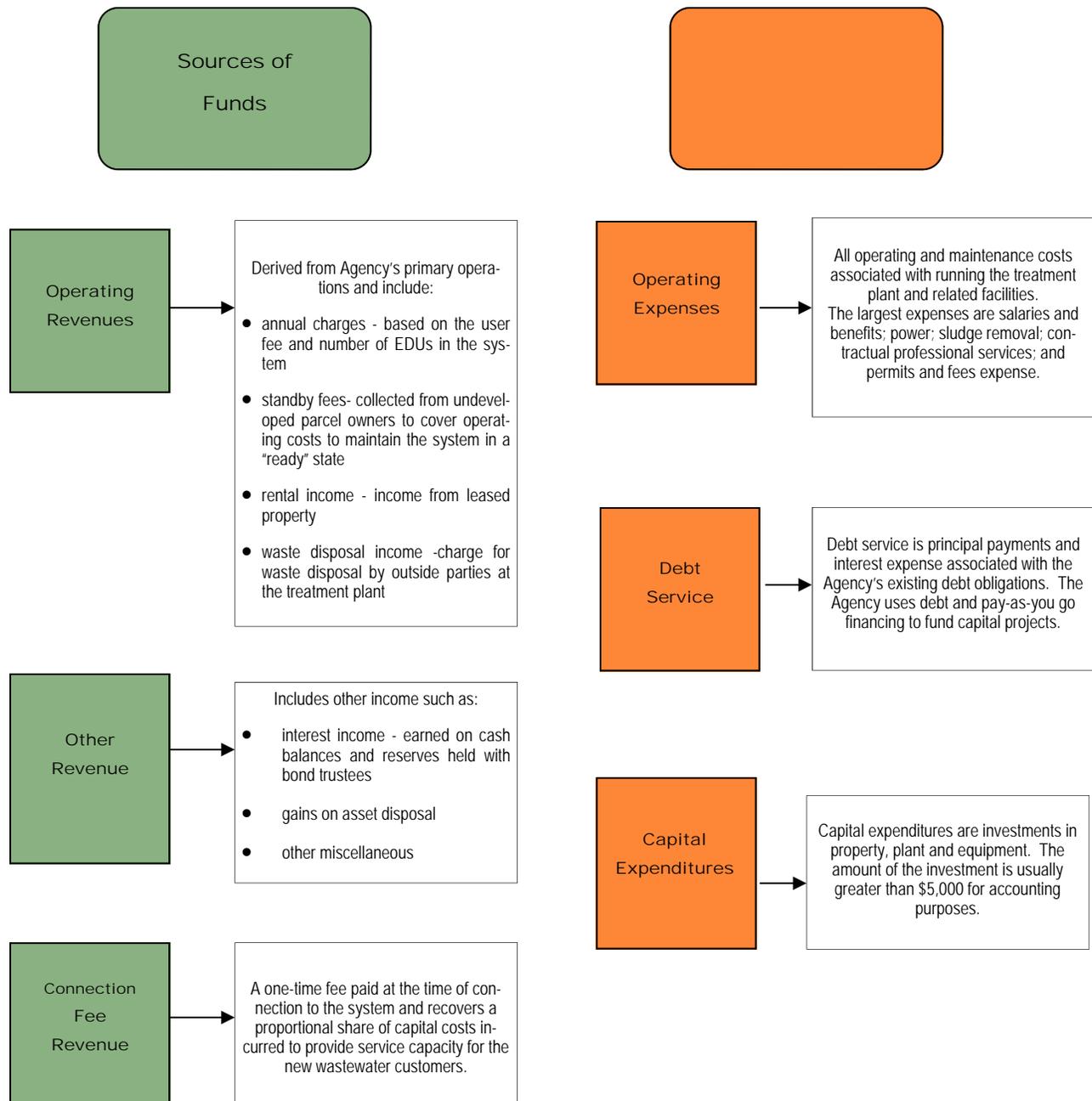
The following terms are used throughout the Financial Summaries section of this budget and have been provided here as a matter of convenience to the reader. These terms may also be found in the Glossary.

<b>CAGR</b>	is the Compound Average Growth Rate which is the average annual growth rate over the period referenced
<b>CDB</b>	Covered Drying Bed
<b>FY</b>	means the fiscal year ending June 30 <sup>th</sup> of the year referenced, i.e. FY 2017 is the fiscal year ending June 30, 2017
<b>LEB</b>	Load Equalization Basin
<b>SD Project</b>	Sludge Dewatering Project
<b>UAL</b>	is the unfunded accrued liability associated with the Agency's pension and OPEB obligations and represents the accrued liability that is unfunded as of the most recent valuation date
<b>nm</b>	means "not meaningful". It is input as the outcome when dividing by "0"
<b>Projected performance</b>	is based on five months of actual performance through November 2016 and represents the Agency's best estimate of full-year, FY 2017 performance



## Sources and Uses of Funds

In an effort to assist the public in better understanding the budget, an overview of the Agency’s primary sources and uses of funds is outlined below.





FINANCIAL SUMMARY  
SOURCES AND USES OF FUNDS

	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year Total
<b>Sources of Funds:</b>											
Operating Revenues	4,849,143	4,941,801	5,163,247	5,157,621	5,166,604	5,248,897	5,382,208	5,519,026	5,659,441	5,803,548	27,613,120
Connection Fees	110,100	165,150	256,900	300,940	227,540	201,850	201,850	201,850	201,850	201,850	1,009,250
Other Income	16,167	11,789	188,573	18,770	32,088	48,817	56,250	57,184	54,439	53,367	270,056
Proceeds from Debt Issuance	0	0	0	0	0	0	1,733,000	0	3,500,000	0	5,233,000
Working Capital	-126,100	79,824	-82,825	-3,726	34,895	20,781	28,072	29,281	23,133	29,336	130,604
<b>Total Sources of Funds</b>	<b>4,849,310</b>	<b>5,198,564</b>	<b>5,525,895</b>	<b>5,473,605</b>	<b>5,461,126</b>	<b>5,520,346</b>	<b>7,401,380</b>	<b>5,807,341</b>	<b>9,438,863</b>	<b>6,088,101</b>	<b>34,256,031</b>
<b>Uses of Funds</b>											
Op Expense (b/f Depreciation)	-3,414,118	-3,443,480	-3,270,754	-3,526,098	-3,733,089	-3,831,242	-4,074,797	-4,297,078	-4,403,837	-4,599,194	-21,206,148
Working Capital	0	0	0	0	0	0	0	0	0	0	0
Debt Service	-527,410	-527,224	-576,084	-576,084	-576,084	-576,084	-578,508	-470,000	-694,042	-694,042	-3,012,677
Other	6,400	0	-979,262	0	-200,000	-200,000	-200,000	-200,000	-200,000	0	-800,000
Capital Expenditures	-703,600	-2,196,489	-319,050	-580,730	-620,984	-883,619	-3,644,462	-1,057,328	-4,538,074	-848,068	-10,971,550
<b>Total Uses of Funds</b>	<b>-4,638,728</b>	<b>-6,167,193</b>	<b>-5,145,150</b>	<b>-4,682,912</b>	<b>-5,130,156</b>	<b>-5,490,945</b>	<b>-8,497,767</b>	<b>-6,024,406</b>	<b>-9,835,953</b>	<b>-6,141,304</b>	<b>-35,990,375</b>
<b>Net Cash Flow</b>	<b>210,582</b>	<b>-968,629</b>	<b>380,745</b>	<b>790,693</b>	<b>330,970</b>	<b>29,401</b>	<b>-1,096,387</b>	<b>-217,065</b>	<b>-397,089</b>	<b>-53,203</b>	<b>-1,734,345</b>

The Agency is expected to generate positive cash flow of \$29,401 in FY 2018 and net negative cash flow of approximately \$1.7 million on a cumulative basis through FY 2022. The net use of cash during the forecast period reflects a high level of cash-funded capital expenditures during the period (\$5.7 million) and the reduction of the Agency's OPEB UAL (\$800,000).

**Financial Schedules**

The Statement of Revenues, Expenses and Changes in Net Position and the Statement of Cash Flows have been provided on the following pages. A financial summary is provided for each statement. A discussion and analysis of the FY 2018 Budget follows.



STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION, COMPARISON

	Actual FY 2016	Projected FY 2017	NEW Budget FY 2018	Projected FY 2017 vs Actual FY 2016		Budget FY 2018 vs Projected FY 2017	
				\$	%	\$	%
<b>Operating Revenues:</b>							
Annual Charges	4,991,166	5,007,070	5,091,576	15,904	0%	84,506	2%
Standby Charges	89,250	86,930	85,180	-2,320	-3%	-1,750	-2%
Rental Income	49,232	49,638	50,344	406	1%	706	1%
Waste Disposal	22,869	22,940	21,798	71	0%	-1,142	-5%
Other Revenue	5,104	26	0	-5,078	-99%	-26	nm
Total Operating Revenue	5,157,621	5,166,604	5,248,897	8,983	0%	82,294	2%
<b>Operating Expenses:</b>							
Salaries and Benefits	1,843,684	1,945,615	2,047,123	101,931	6%	101,508	5%
Power	520,431	508,013	501,011	-12,418	-2%	-7,002	-1%
Sludge Removal	225,990	258,910	303,809	32,920	15%	44,899	17%
Chemicals	48,561	70,769	43,362	22,208	46%	-27,407	-39%
Materials and Supplies	136,371	132,370	142,037	-4,001	-3%	9,667	7%
Repairs and Replacements	150,764	154,258	133,580	3,494	2%	-20,678	-13%
Equipment Rental	165	770	786	605	367%	16	2%
Utilities Expense (other than power)	11,773	13,391	16,837	1,618	14%	3,446	26%
Communications Expense	38,610	43,111	43,719	4,501	12%	608	1%
Contractual Services - Other	102,120	103,509	99,435	1,389	1%	-4,074	-4%
Contractual Services - Professional	151,407	195,127	192,447	43,720	29%	-2,680	-1%
Permits and fees	145,866	153,441	150,199	7,575	5%	-3,242	-2%
Property Tax Expense	3,476	3,524	3,572	47	1%	48	1%
Insurance	87,406	85,208	93,307	-2,198	-3%	8,099	10%
Other Operating Expense	59,474	65,073	60,019	5,599	9%	-5,055	-8%
Depreciation Expense	875,328	841,470	811,358	-33,858	-4%	-30,112	-4%
Total Operating Expense	4,401,426	4,574,559	4,642,600	173,133	4%	68,041	1%
Operating Income	756,194	592,045	606,298	-164,150	-22%	14,253	2%
<b>Nonoperating Income</b>							
Gain (loss) on asset disposition	-2,678	0	0	2,678	+ a)	0	nm
Interest Income	22,889	32,088	48,817	9,199	40%	16,729	52%
Other Nonoperating Income	0	0	0	0	nm	0	nm
Nonoperating income	20,211	32,088	48,817	11,877	59%	16,729	52%
<b>Nonoperating Expense</b>							
Other Expense	11,700	11,700	11,700	0	0%	0	0%
Interest Expense	130,669	117,740	102,489	-12,930	-10%	-15,250	-13%
Nonoperating expense	142,369	129,440	114,189	-12,930	-9%	-15,250	-12%
Income before Contributions	634,036	494,693	540,925	-139,343	-22%	46,232	9%
Connection Fees	253,230	227,540	201,850	-25,690	-10%	-25,690	-11%
Change in Net Position	887,266	722,233	742,775	-165,033	-19%	20,542	3%
Beginning Net Position	17,402,574	18,289,840	19,012,073	887,266	5%	722,233	4%
Ending Net Position	18,289,840	19,012,073	19,754,849	722,233	4%	742,775	4%

a) Percent change is not provided if either the latest period or the comparison period contains a loss or negative number. If the performance is improved, a "+" is given. If the performance is worse, a "-" is given.



STATEMENT OF CASH FLOWS AND ENDING DESIGNATED RESERVE FUND BALANCES

	Actual FY 2016	Projected FY 2017	Budget FY 2018
<b>Cash from operating activities:</b>			
Operating Income (Loss)	756,194	592,045	606,298
Depreciation expense	875,328	841,470	811,358
Other Miscellaneous Income (Exp)	0	0	0
Change in Working Capital	<u>-3,726</u>	<u>34,895</u>	<u>20,781</u>
Net cash provided by op activities	1,627,796	1,468,409	1,438,436
<b>Cash from noncapital financing:</b>			
Payment of pension related debt/liability	0	-200,000	-200,000
<b>Cash from capital and related financing:</b>			
Capital Expenditures	-580,730	-620,984	-883,619
Proceeds from Asset Disposition	0	0	0
Connection Fee (Capital Contrib)	300,940	227,540	201,850
Proceeds from Debt Issuance	0	0	0
Debt Service:			
Interest Expense	-132,499	-117,740	-102,489
Principal Debt Amortization	<u>-443,585</u>	<u>-458,344</u>	<u>-473,594</u>
Total Debt Service	<u>-576,084</u>	<u>-576,084</u>	<u>-576,084</u>
Net cash used for cap and related financing	-855,874	-969,527	-1,257,853
<b>Cash from investing:</b>			
(Increase) Decrease in Other Assets	0	0	0
Other Proceeds	0	0	0
Interest Income	18,770	32,088	48,817
Proceeds from the Sale of Investment	<u>0</u>	<u>0</u>	<u>0</u>
Net cash from investing	18,770	32,088	48,817
<b>Net Change in Cash</b>	790,693	330,970	29,401
Beginning Cash Balance	5,826,390	6,617,083	6,948,053
Ending Cash Balance	<u>6,617,083</u>	<u>6,948,053</u>	<u>6,977,453</u>
<b>Change in Cash Balance</b>	790,693	330,970	29,401
<b>Designated Reserve Fund Balance (Ending)</b>			
Cash Balance	6,617,083	6,948,053	6,977,453
Designated Fund Balances:			
Capital and Replacement Fund			
Current Year	620,984	883,619	1,911,462
Future Years	<u>2,442,488</u>	<u>2,445,682</u>	<u>1,283,176</u>
Total C & R	3,063,472	3,329,301	3,194,638
Debt Service Fund	576,084	576,084	578,508
Liquidity Fund	1,855,345	1,904,127	2,025,174
Contingency Fund:			
Emergency	500,000	500,000	500,000
Operating	<u>622,182</u>	<u>638,540</u>	<u>679,133</u>
Total Contingency	1,122,182	1,138,540	1,179,133
Designated Funds	6,617,083	6,948,053	6,977,453



**Financial Summary: NEW Budget FY 2018 Compared to Projected FY 2017**

**Operating Revenues** are budgeted to be \$5.3 million, up 2% from FY 2017. The increase is driven by the change in Annual Charges which are expected to increase 2% from the prior year as a result of a 1.5% rate adjustment.

**Operating Expenses** are budgeted at \$4.6 million, up \$68,042 or 1% from FY 2017 projected performance. Operating expenses are budgeted to increase when compared to the prior period primarily due to higher Salaries and Benefits, Sludge Removal, and Insurance expense. These increases are explained below.

- **Salaries and benefits expense** is budgeted to be \$2,047,123, an increase of \$101,508 or 5%. The increase is driven by higher salaries and wages due to annual merit, cola and longevity adjustments, higher medical premium expense, and higher pension/ OPEB contribution expense. The increase by component is as follows:

<b>Change in Staffing (GM Change, Promotion of OIT, Employee back from Disability)</b>	(\$21,916)
<b>Merit and Longevity</b>	49,031
<b>COLA (November 2016 1.8%)</b>	25,263
<b>Medical, Dental, Vision and Life Insurance</b>	27,083
<b>Pension / OPEB Contributions</b>	21,638
<b>Payroll Taxes</b>	409
<b>Total</b>	\$101,508

- **Solids Removal expense** is budgeted to be \$303,809, an increase of \$44,899 or 17%. The increase is the result of lower self hauling. The Agency is budgeting to self haul approximately 530 tons of sludge compared to approximately 1,700 tons projected for FY 2017.
- **Insurance expense** is budgeted to be \$93,307 an increase of \$8,099 or 10% due to an increase in the Agency's property liability insurance. The Agency's provider has held rates flat for the last 7 years through rate stabilization funds and due to cost increases, must increase rates.

**Operating Income** is budgeted to be \$606,298, an increase of \$14,253 or 2% compared to FY 2017. The increase in Operating Income is primarily due to slightly higher Operating Revenues (increasing by 2%) and relatively flat Operating Expenses (increasing by 1%).

**Change in Net Position** is budgeted to be \$742,775, an increase of \$20,542 or 3%. The increase is due to slightly higher Operating Income (noted above), higher Interest Income, and lower Interest Expense offset by somewhat lower Connection Fees. The Agency expects 62 connections in FY 2017 and has budgeted 55 connections in FY 2018, a decrease of 7 connections. Seven of the 62 estimated connections for FY 2017 are related to a multi-unit development.



FIVE-YEAR FORECAST  
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year Total
<b>Operating Revenues</b>							
Annual Charges	5,007,070	5,091,576	5,225,282	5,362,473	5,503,240	5,647,675	26,830,246
Standby Charges	86,930	85,180	84,057	82,934	81,812	80,689	414,672
Rental Income	49,638	50,344	51,071	51,820	52,592	53,386	259,213
Waste Disposal	22,940	21,798	21,798	21,798	21,798	21,798	108,989
Other Revenue	<u>26</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Operating Revenue	5,166,604	5,248,897	5,382,208	5,519,026	5,659,441	5,803,548	27,613,120
<b>Operating Expenses</b>							
Salaries and Benefits	1,945,615	2,047,123	2,201,235	2,359,486	2,516,747	2,645,981	11,770,572
Power	508,013	501,011	562,795	564,622	566,493	568,408	2,763,329
Sludge Removal	258,910	303,809	305,271	306,732	308,194	309,655	1,533,661
Chemicals	70,769	43,362	69,936	45,468	46,560	75,094	280,420
Materials and Supplies	132,370	142,037	143,612	148,351	146,020	147,450	727,471
Repairs and Replacements	154,258	133,580	126,196	211,675	140,657	138,960	751,069
Equipment Rental	770	786	803	820	837	854	4,100
Utilities Expense	13,391	16,837	17,241	17,655	18,079	18,512	88,324
Communications Expense	43,111	43,719	42,925	43,955	45,010	46,091	221,701
Contractual Services - Other	103,509	99,435	101,468	105,256	107,151	114,220	527,531
Contractual Services - Prof	195,127	192,447	185,900	159,945	158,585	167,714	864,590
Permits and fees	153,441	150,199	158,938	168,207	178,038	188,466	843,847
Property Tax Expense	3,524	3,572	3,621	3,671	3,722	3,773	18,359
Insurance	85,208	93,307	96,940	101,928	107,015	111,829	511,018
Other Operating Expense	65,073	60,019	57,916	59,306	60,729	62,187	300,157
Depreciation Expense	<u>841,470</u>	<u>811,358</u>	<u>792,557</u>	<u>867,001</u>	<u>958,441</u>	<u>941,585</u>	<u>4,370,942</u>
Total Operating Expense	4,574,559	4,642,600	4,867,354	5,164,079	5,362,278	5,540,780	25,577,090
Operating Income	592,045	606,298	514,854	354,947	297,163	262,769	2,036,030
<b>Nonoperating Income</b>							
Finance Charge	0	0	0	0	0	0	0
Interest Income	32,088	48,817	56,250	57,184	54,439	53,367	270,056
Other Nonoperating Income	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Nonoperating income	32,088	48,817	56,250	57,184	54,439	53,367	270,056
<b>Nonoperating Expense</b>							
Other Expense	11,700	11,700	11,700	11,700	11,700	11,700	58,500
Interest Expense	<u>117,740</u>	<u>102,489</u>	<u>156,032</u>	<u>143,465</u>	<u>272,309</u>	<u>257,409</u>	<u>931,705</u>
Nonoperating expense	129,440	114,189	167,732	155,165	284,009	269,109	990,205
Income before Contributions	494,693	540,925	403,372	256,965	67,592	47,026	1,315,881
Connection Fees	<u>227,540</u>	<u>201,850</u>	<u>201,850</u>	<u>201,850</u>	<u>201,850</u>	<u>201,850</u>	<u>1,009,250</u>
Change in Net Position	722,233	742,775	605,222	458,815	269,442	248,876	2,325,131



**FIVE-YEAR FORECAST**  
**STATEMENT OF CASH FLOWS AND ENDING DESIGNATED RESERVE FUND BALANCES**

	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	Total
<b>Cash from operating activities:</b>							
Operating Income (Loss)	592,045	606,298	514,854	354,947	297,163	262,769	2,036,030
Depreciation expense	841,470	811,358	792,557	867,001	958,441	941,585	4,370,942
Other Miscellaneous Income (Exp)	0	0	0	0	0	0	0
Change in Working Capital	34,895	20,781	28,072	29,281	23,133	29,336	130,604
Net cash provided by op activities	1,468,409	1,438,436	1,335,483	1,251,229	1,278,738	1,233,690	6,537,577
<b>Cash from noncapital financing:</b>							
Payment of pension related debt/liability	-200,000	-200,000	-200,000	-200,000	-200,000	0	-800,000
<b>Cash from capital and related financing:</b>							
Capital Expenditures	-620,984	-883,619	-3,644,462	-1,057,328	-4,538,074	-848,068	-10,971,550
Proceeds from Asset Disposition	0	0	0	0	0	0	0
Connection Fee (Capital Contrib)	227,540	201,850	201,850	201,850	201,850	201,850	1,009,250
Proceeds from Debt Issuance	0	0	1,733,000	0	3,500,000	0	5,233,000
<b>Debt Service:</b>							
Interest Expense	-117,740	-102,489	-156,032	-143,465	-272,309	-257,409	-931,705
Principal Debt Amortization	-458,344	-473,594	-422,477	-326,535	-421,733	-436,633	-2,080,972
Total Debt Service	-576,084	-576,084	-578,508	-470,000	-694,042	-694,042	-3,012,677
Net cash used for cap and related financing	-969,527	-1,257,853	-2,288,120	-1,325,478	-1,530,266	-1,340,260	-7,741,977
<b>Cash from investing:</b>							
(Increase) Decrease in Other Assets	0	0	0	0	0	0	0
Other Proceeds	0	0	0	0	0	0	0
Interest Income	32,088	48,817	56,250	57,184	54,439	53,367	270,056
Proceeds from the Sale of Investment	0	0	0	0	0	0	0
Net cash from investing	32,088	48,817	56,250	57,184	54,439	53,367	270,056
<b>Net Change in Cash</b>	330,970	29,401	-1,096,387	-217,065	-397,089	-53,203	-1,734,345
Beginning Cash Balance	6,617,083	6,948,053	6,977,453	5,881,066	5,664,000	5,266,911	6,948,053
Ending Cash Balance	6,948,053	6,977,453	5,881,066	5,664,000	5,266,911	5,213,708	5,213,708
<b>Change in Cash Balance</b>	330,970	29,401	-1,096,387	-217,065	-397,089	-53,203	-1,734,345
<b>Designated Reserve Fund Balances (Ending):</b>							<b>Change</b>
<b>Capital and Replacement Fund</b>							
Current Year	883,619	1,911,462	1,057,328	1,038,074	848,068	324,710	-558,909
Future Years	2,445,682	1,283,176	1,001,910	505,513	179,207	557,994	-1,887,688
Total C & R	3,329,301	3,194,638	2,059,238	1,543,586	1,027,274	882,704	-2,446,598
<b>Debt Service Fund</b>							
Liquidity Fund	576,084	578,508	470,000	694,042	694,042	694,042	117,958
<b>Liquidity Fund</b>							
Contingency Fund:	1,904,127	2,025,174	2,135,648	2,188,707	2,285,800	2,354,374	450,246
Emergency	500,000	500,000	500,000	500,000	500,000	500,000	0
Operating	638,540	679,133	716,180	737,665	759,795	782,589	144,049
Total Contingency	1,138,540	1,179,133	1,216,180	1,237,665	1,259,795	1,282,589	144,049
Designated Funds	6,948,053	6,977,453	5,881,066	5,664,000	5,266,911	5,213,708	-1,734,345



## Financial Summary: Budget and Forecast Period, FY 2018 - FY 2022

Based on the current forecast, the Agency will need inflationary rate adjustments in FY 2018 through 2022. The Agency had planned to begin inflationary rate adjustments in FY 2020, but due to unplanned operating and capital costs the Agency is recommending an earlier rate adjustment.

During the next five-year period, growth in operating expenses will outpace that of revenues, but is projected to come in line, as planned, in FY 2022 (i.e. revenues growing near the same pace as operating expenses). Over the five-year period, revenues will grow at an average annual rate of 2% while expenses grow at an average annual rate of 4%. As a result, operating income will shrink. This combined with the increased use of debt to finance the Sludge Dewatering Project (\$1.7 million debt financing) and the Load Equalization Basin (\$3.5 million debt financing) will lower the Agency's debt service coverage to 2.11, lower debt capacity to approximately \$600,000 and reduce the Agency's financial strength and flexibility. The Agency has scheduled the SD Project for FY 2019 and the LEB Project for FY 2021. Depending on future financial performance and final cost estimates for the SD and the LEB Projects, these projects may need to be modified or deferred or the Agency may need to consider rate adjustments in excess of the planned inflationary adjustments. A rate study is planned for FY 2018, at which time the project cost estimates will be finalized and the Agency will be better able to assess project timing. During the forecast period, the Agency's minimum fund balance targets are met.

Operating Income is expected to decrease from \$592,045 projected in FY 2017 to \$262,769 in FY 2022. The decline in Operating Income is acceptable, considering the Agency's average Operating Income over the period provides adequate cash flow for operating and capital requirements. Under the current operating assumptions, including the inflationary rate increases beginning in FY 2018, operating income is sufficient to fund debt service and approximately 70% of depreciation, or maintenance level capital expenditures, on average through FY 2022. (During the 2011 Rate Study, the Board structured rates to collect \$450,000, or 54% of annual depreciation).

Under the proposed rate and cost structure, the Agency has sufficient funds to cover capital expenditures and debt service through FY 2022. The Agency has a net use of cash during the five-year period of approximately \$2 million, which reflects a high level of cash-funded capital expenditures during the period (\$5.7 million) and the reduction of the Agency's OPEB UAL (\$800,000).

At the end of FY 2022, the balance in the Agency's capital and replacement fund is projected to be approximately \$883,000, of which approximately \$324,710 is planned for FY 2023 cash-funded capital expenditures. The residual \$557,994 would be available for future capital projects beginning in FY 2024. (Residual cash is the amount of cash held in the "future" portion of the capital and replacement fund and represents cash available for capital projects beyond the next 12-month period or for other purposes.)

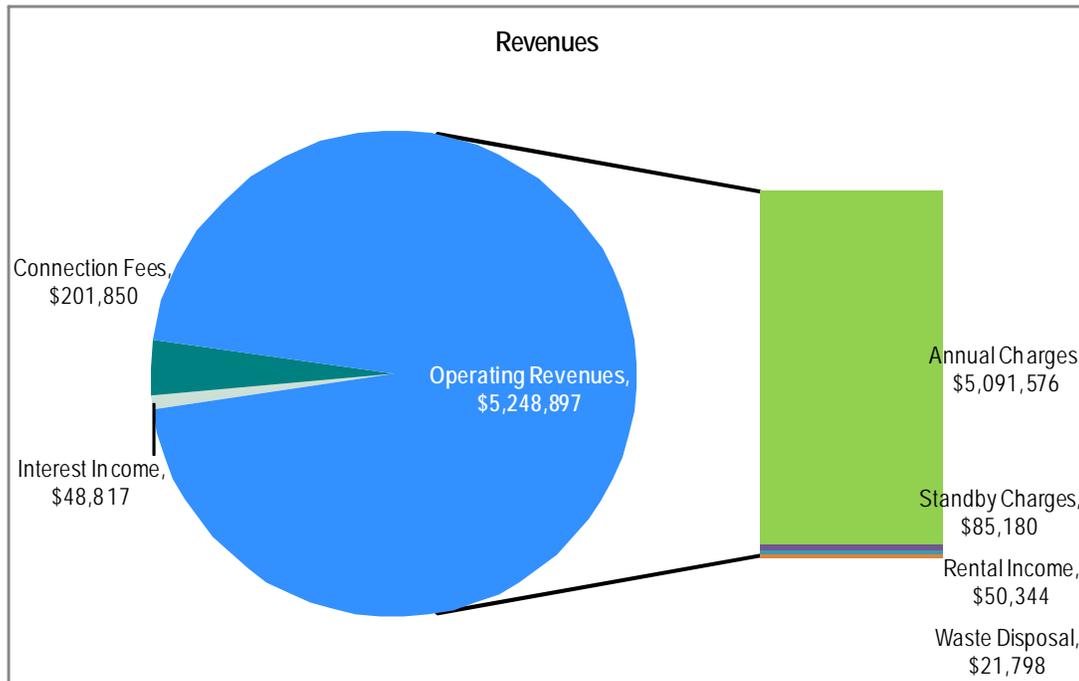
The Agency's debt service coverage covenants are acceptable, although declining during the period from an estimated 2.9 x in FY 2017 to 2.1 x in FY 2022, driven largely by an increase in the Agency's debt service during the period.



## Revenues: Trends and Analysis

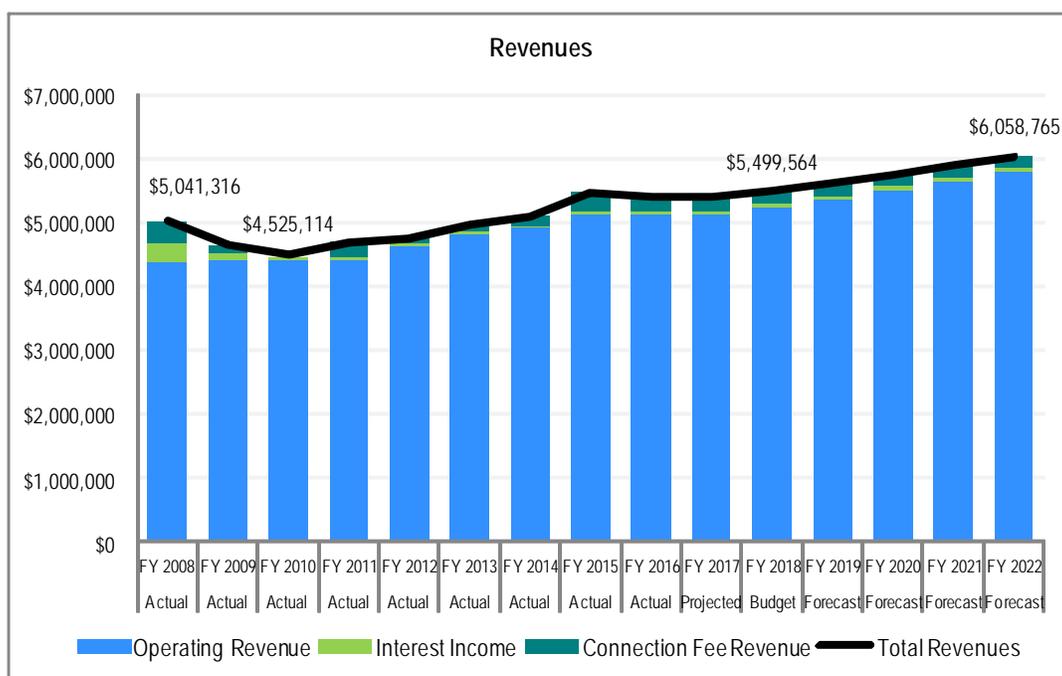
### Revenues

Operating Revenues are the Agency's largest source of funds (96% of total sources) and are driven by the Agency's Annual Charges.



### Revenue Trends

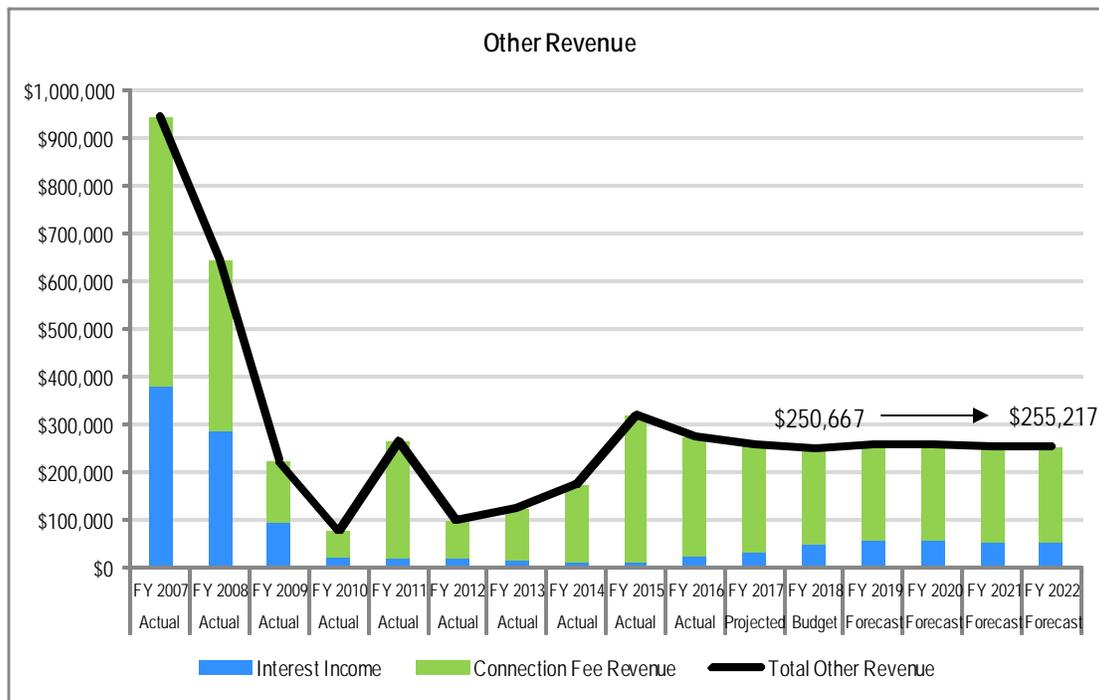
The Agency's overall revenues have been negatively impacted by the last recession and the lackluster recovery in new connections, which has largely impacted the Agency's Connection Fee Revenue and Interest Income beginning in 2008.





The Agency's other revenue sources, Interest Income and Connection Fees, experienced sharp declines during the most recent recession and have continued to be relatively flat. For the budget and forecast period, Interest Income is expected to remain flat over the period, increasing in FY 2018 as cash builds and then gradually declining as the Agency uses cash to fund capital expenditures. The capital and replacement fund is expected to decline by \$2.5 million over the period (reducing the Agency's cash balance available for investment) while interest rates are forecast to increase slightly.

New connections to the wastewater system have been at an unprecedented low, averaging 37 connections per year for the last five years with the highest annual connections of 53 in FY 2016 (excludes nonrecurring connections related to multi-unit developments). While connections are trending up, the Agency has taken a conservative approach to the level of connections considering the timing of the recovery in vacation/second-home starts remains uncertain. Connection Fees are expected to remain relatively flat and are projected at 55 annually over the forecast period. Other revenue sources, Interest Income and Connection Fee revenue combined, are projected to remain consistent with FY 2017 projected levels of approximately \$255 -260,000 annually.



**Operating Revenue**

Operating Revenue consists of Annual Charges, Standby Charges, Rental Income, Waste Disposal Fees and Other Revenue:

- Annual Charges:** The amount charged to the Member Agencies based on the User Fee (per EDU), the number of EDUs, and wastewater flow.
- Standby Charges:** Fees charged to the owners of undeveloped parcels to cover operating costs associated with maintaining the system in a "ready" state.
- Rental Income:** Income from leased property.
- Waste Disposal Fees:** Charges for waste disposal at the treatment plant by outside parties.
- Other Revenue:** Miscellaneous or unusual one-time operating revenue.

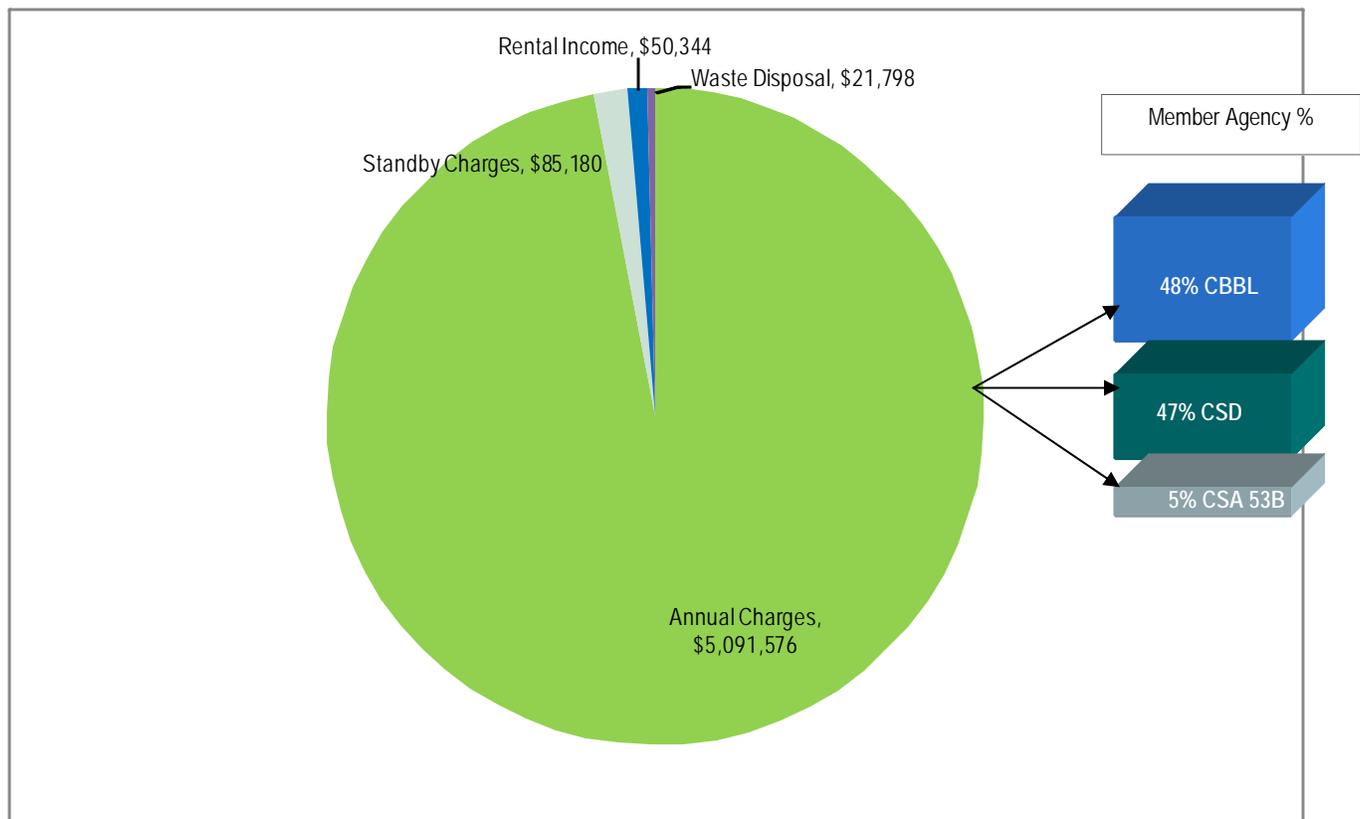


Operating Revenues are budgeted to increase 2% in FY 2018 and 2% on an average annual basis over the forecast period, through FY 2022. The flat growth reflects a 2% average annual change in the Agency's sewer user fees over the period and minimal change in annual connections to the system.

	Actual FY 2012	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year CAGR
Op Revenue:												
Annual Charges	4,506,876	4,688,312	4,778,215	4,979,690	4,991,166	5,007,070	5,091,576	5,225,282	5,362,473	5,503,240	5,647,675	2%
Standby Charges	93,890	92,430	91,400	90,860	89,250	86,930	85,180	84,057	82,934	81,812	80,689	-1%
Rental Income	46,859	47,433	47,745	48,291	49,232	49,638	50,344	51,071	51,820	52,592	53,386	1%
Waste Disposal	18,081	20,918	22,433	19,829	22,869	22,940	21,798	21,798	21,798	21,798	21,798	-1%
Other Revenue	56	50	2,007	24,575	5,104	26	0	0	0	0	0	-100%
Op Revenue	4,665,762	4,849,143	4,941,801	5,163,247	5,157,621	5,166,604	5,248,897	5,382,208	5,519,026	5,659,441	5,803,548	2%
% Change	5%	4%	2%	4%	0%	0%	2%	3%	3%	3%	3%	

### Annual Charges

Operating Revenues are driven by changes in Annual Charges, which account for approximately 97% of the Agency's Operating Revenues. Annual Charges, pursuant to the Agency's Operating Agreement No. 1, are collected annually from the three member agencies based on EDUs and flow per agency. While this represents a high concentration of revenues among two of the three agencies (see chart below), public agency default risk, according to bond rating agencies, has historically been low with strong recovery rates. The Agency maintains contingency funds of approximately \$1.1 million which could be used to temporarily soften the impact in the event of a non-payment from one of its member agencies.





## Member Agency Charges

	Reported EDUs	Charge per EDU	Fixed Charge	Variable Charge	Annual Charge Adjustment (a)	Total
Annual Charges:						
City of Big Bear Lake	11,654	\$210.09	\$1,749,183	\$540,899	\$158,340	\$2,448,421
Big Bear City CSD	12,004	\$199.80	\$1,801,685	\$461,636	\$135,137	\$2,398,457
CSA 53 B	<u>1,259</u>	\$194.36	<u>\$188,964</u>	<u>\$43,113</u>	<u>\$12,621</u>	<u>\$244,697</u>
Total	24,917		\$3,739,831	\$1,045,647	\$306,098	\$5,091,576
Standby Charges:						
City of Big Bear Lake						\$30,420
Big Bear City CSD						\$48,820
CSA 53 B						<u>\$5,940</u>
Total Annual Charges						\$85,180
Connection Fee:						
Connection Fee per EDU Effective July 1, 2017						\$3,670

(a) The annual charge adjustment reflects charges in excess or below the total of 1) the required rate revenues and 2) estimated costs associated with wet weather flow during the prior 3-year period. The Annual Charge Adjustment is prorated among the member agencies based on 3-year average flow.

## Standby Charges , Rental Income and Waste Disposal Fees

Both Standby Charges and Rental Income are stable and predictable. Standby Charges are the fees paid by the owners of vacant parcels and are collected from the member agencies at the same time as the Annual Charges. These charges decline annually as parcels are developed and connect to the system or are combined. Rental Income is related to leased property and is contractual in nature.

## Capital Contributions - Connection Fee Revenue

The Agency has assumed 55 annual connections through FY 2022. This level of connections is uncertain but in line with FY 2017 experience to date. The Agency has averaged 37 connections per year for the last five years, excluding multi-unit developments. The Agency has taken a conservative approach to the level of connections considering the timing and level of the recovery in vacation/second-home starts still remains uncertain and has yet to be seen.

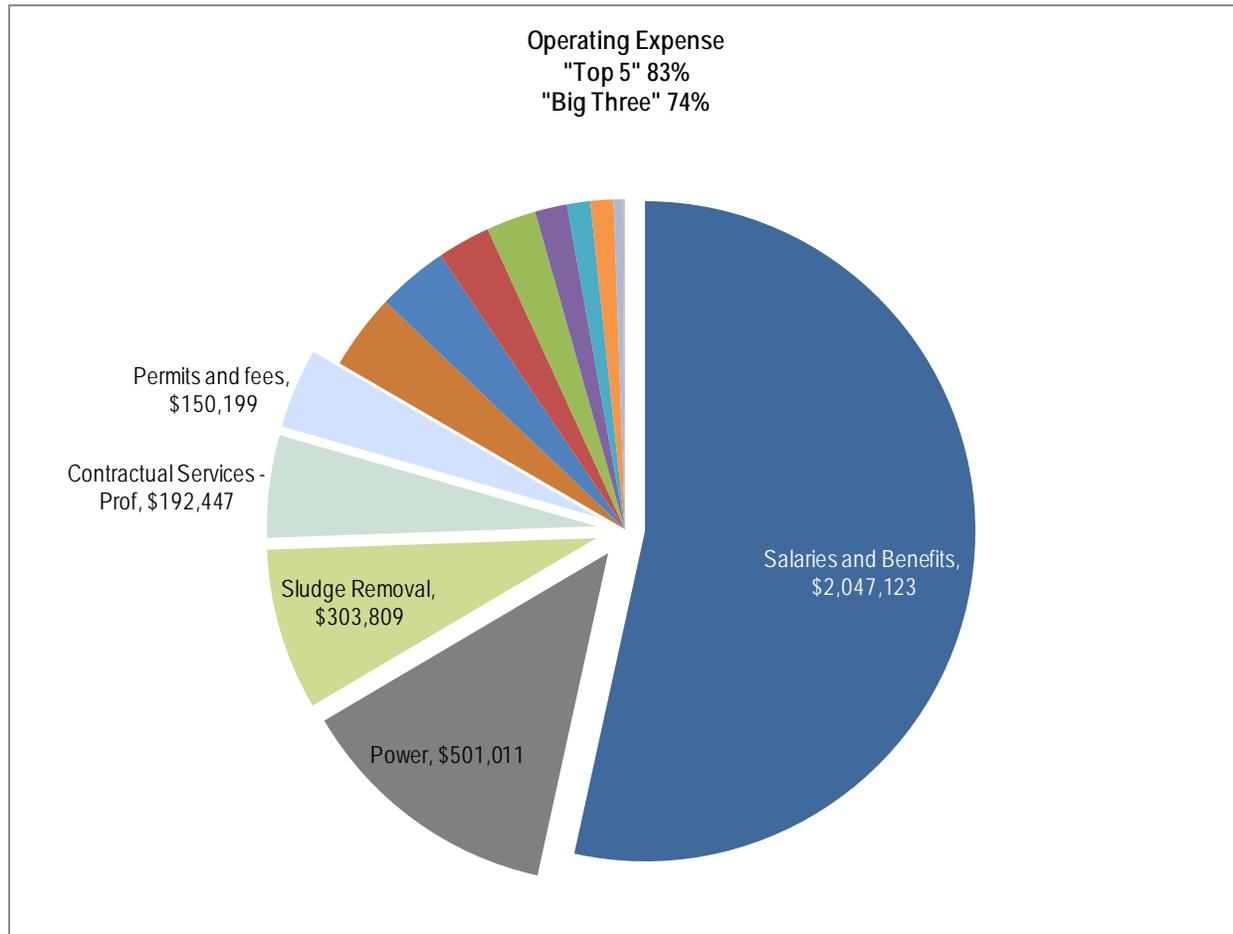
The connection fee charged per connection increased to \$3,670 from \$3,031.22 per connection in FY 2012 as a result of the connection fee study completed in December 2010. The Agency re-evaluated this fee during the FY 2017 budget process and at that time, based on conversations with its rate consultant, a change in the fee is not needed. A new study will be completed in FY 2018.

	Actual FY 2011	Actual FY 2012	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022
Connections	81	22	30	45	84	69	62	55	55	55	55	55
Connection Fee	\$ 3,031	\$ 3,670	\$ 3,670	\$ 3,670	\$ 3,670	\$ 3,670	\$ 3,670	3,670	3,670	3,670	3,670	3,670
Connection Fee Revenue	244,923	80,740	110,100	165,150	308,280	253,230	227,540	201,850	201,850	201,850	201,850	201,850
% Change	349%	-67%	36%	50%	87%	-18%	-10%	-11%	0%	0%	0%	0%
*Recurring Connections (excludes multi-unit developments)	27	22	30	37	43	53	59					



## Operating Expenses

The Agency's top five operating expenses are shown below and account for 83% of the Agency's budgeted operating expenses (before depreciation) in FY 2018. The "Big Three" -Salaries and Benefits, Power and Sludge Removal expense- account for 74% of total operating expenses.



Growth in operating expenses can be largely impacted by changes in salaries and benefits expense and power expense, the two largest categories of operating expense, comprising 53% and 13% of operating expenses (before depreciation), respectively. As noted herein and in prior budgets, the Agency has taken steps to control the growth in these costs and its overall operating expenses to the rate of inflation.

### Operating Expenses: Trends and Analysis

The Agency's operating expenses are expected to grow at an average annual rate of 4% over the next five years, outpacing expected inflation of 2.4% for the same period, and higher than the most recent five-year period of 2% (FY 2012-2017). Over the next five years, higher operating expenses can be expected, in general, as a result of higher inflation and higher expected flows. Other contributors to faster growing operating expenses include Salaries and Benefits, Sludge Removal, Permits and Fees, and Insurance expense

A discussion of operating trends is presented on the following pages for the Agency's top five operating expense categories.



**OPERATING EXPENSES SUMMARY, AVERAGE ANNUAL GROWTH (CAGR)**

	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	CAGR FY 2012-17 5-Year	CAGR FY 2017-22 5-Year
Operating Expenses:												
Salaries and Benefits	1,812,835	1,797,691	1,745,041	1,843,684	1,945,615	2,047,123	2,201,235	2,359,486	2,516,747	2,645,981	3%	6%
Power	424,266	399,239	486,463	520,431	508,013	501,011	562,795	564,622	566,493	568,408	2%	2%
Sludge Removal	242,838	221,541	162,627	225,990	258,910	303,809	305,271	306,732	308,194	309,655	7%	4%
Chemicals	81,290	37,376	45,636	48,561	70,769	43,362	69,936	45,468	46,560	75,094	3%	1%
Materials and Supplies	144,334	153,454	147,264	136,371	132,370	142,037	143,612	148,351	146,020	147,450	-4%	2%
Repairs and Replacements	159,819	186,806	161,825	150,764	154,258	133,580	126,196	211,675	140,657	138,960	-2%	-2%
Equipment Rental	0	0	3,659	165	770	786	803	820	837	854	39%	2%
Utilities Expense	22,509	19,757	16,062	11,773	13,391	16,837	17,241	17,655	18,079	18,512	-12%	7%
Communications Expense	34,293	45,613	33,491	38,610	43,111	43,719	42,925	43,955	45,010	46,091	-4%	1%
Contractual Services - Other	75,706	95,678	81,627	102,120	103,509	99,435	101,468	105,256	107,151	114,220	5%	2%
Contractual Services - Prof	136,259	224,045	99,798	151,407	195,127	192,447	185,900	159,945	158,585	167,714	7%	-3%
Permits and fees	124,708	131,361	142,310	145,866	153,441	150,199	158,938	168,207	178,038	188,466	7%	4%
Property Tax Expense	3,488	3,265	3,426	3,476	3,524	3,572	3,621	3,671	3,722	3,773	2%	1%
Insurance	86,135	69,622	83,561	87,406	85,208	93,307	96,940	101,928	107,015	111,829	-2%	6%
Other Operating Expense	65,638	58,032	57,964	59,474	65,073	60,019	57,916	59,306	60,729	62,187	2%	-1%
Depreciation Expense	<u>806,274</u>	<u>799,443</u>	<u>840,229</u>	<u>875,328</u>	<u>841,470</u>	<u>811,358</u>	<u>792,557</u>	<u>867,001</u>	<u>958,441</u>	<u>941,585</u>	<u>1%</u>	<u>2%</u>
Total Operating Expenses	4,220,392	4,242,923	4,110,983	4,401,426	4,574,559	4,642,600	4,867,354	5,164,079	5,362,278	5,540,780	2%	4%

**SALARIES AND BENEFITS EXPENSE**

Salaries and Benefits expense is budgeted to increase by 5% in FY 2018, driven by a 5% increase in salaries and wages and a 6% increase in benefits expense. The increase in salaries and wages is tempered by a change in staffing occurring at the end of FY 2017. The Agency's long-term General Manager will retire resulting in lower initial compensation for a new General Manager (*as of the publication date of this budget, the Agency has a new General Manager*). The 5% net increase in salaries and wages is due to the return of an employee on disability, the promotion of an Operator-in-Training to an Operator I, a 1.8% COLA adjustment, and annual increases associated with merit and longevity adjustments (1%). The 6% increase in benefits expense is driven by an 11% increase in medical premium expense and a 10% increase in pension contribution expense, offset by a 21% decrease in life insurance expense. Medical premiums increased by 15% in January 2017 and the Agency has budgeted for a 7% increase beginning January 2018. The increase in pension contribution expense is due to changes in the Agency's UAL related to gains/losses on assets and demographic assumptions. The reduction in life insurance expense is related to the General Manager retirement.

For the forecast period, salaries and benefits expense is expected to grow at rates faster than the prior five-year period, 6% on average compared to 3% historically. Salaries and wages will grow at a faster pace due to the composition of the employee base. With recent new hires over the last three years, a higher level of employees are within pay scale and eligible for merit increases (average of 5% annually). Approximately 67% of the employee base will be eligible for merit increases in FY 2018, dropping to 21% in FY 2022. Benefits expense is expected to grow at an average annual rate of 9% over the next five years, compared to 2% historically. The increase in benefits expense is driven by increases in pension contribution expense resulting from the reduction in the discount rate from 7.5% to 7% by CalPERS which increases the Agency's unfunded liability and thus, annual contribution requirements.



## Big Bear Area Regional Wastewater Agency

	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5- Year CAGR
Salaries and Benefits:											
Salaries and Wages	1,124,801	1,153,346	1,156,599	1,286,602	1,239,727	1,301,112	1,376,146	1,450,619	1,523,077	1,582,839	5%
Employee Benefits	617,635	622,998	553,247	601,956	675,288	713,810	791,130	873,120	956,164	1,024,166	9%
Accrued Benefits Expense	42,947	2,445	15,382	-64,781	12,624	13,239	13,910	14,608	15,317	15,928	5%
Payroll Tax Expense	17,224	18,399	17,811	19,165	17,976	18,962	20,049	21,138	22,189	23,048	5%
Unemployment Expense	<u>10,228</u>	<u>503</u>	<u>2,002</u>	<u>742</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>nm</u>
Total	1,812,835	1,797,691	1,745,041	1,843,684	1,945,615	2,047,123	2,201,235	2,359,486	2,516,747	2,645,981	6%
% Change	6%	-1%	-3%	6%	6%	5%	8%	7%	7%	5%	

### POWER EXPENSE

The Agency utilizes power from Bear Valley Electric (BVE) to run its pumping stations and purchases natural gas under a five-year contract to run its generators which supply power to the Agency's Treatment Plant and Administration Building. The Agency extended its natural gas contract from October 2019 to October 2021, and blended its rate to incorporate lower current market rates. This resulted in lower natural gas prices and lower budgeted and projected costs for fuel for power production. The Agency incurred a rate increase from BVE in FY 2015 (effective December 2014) and has incorporated a subsequent rate increase in FY 2019.

	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5- Year CAGR
POWER:											
Fuel for Power	331,479	319,045	389,373	400,699	379,829		361,760	361,760	361,760	361,760	-1%
Gas Admin Building	3,232	3,823	3,649	3,692	2,994		3,810	3,902	3,995	4,091	6%
Gas Treatment Plant	9,584	8,442	7,472	5,497	5,448		7,308	7,484	7,663	7,847	8%
Electricity T/P	31,117	31,841	47,421	61,931	63,341		124,913	124,913	124,913	124,913	15%
Electricity Stations	47,972	35,090	36,231	39,537	52,002		63,032	64,545	66,094	67,680	5%
Electricity Admin Bldg	132	195	1,510	8,284	3,557		1,024	1,049	1,074	1,100	-21%
Electricity Lucerne	<u>750</u>	<u>803</u>	<u>807</u>	<u>791</u>	<u>842</u>		<u>947</u>	<u>970</u>	<u>993</u>	<u>1,017</u>	<u>4%</u>
Total	424,266	399,239	486,463	520,431	508,013		562,795	564,622	566,493	568,408	2%
% Change	-10%	-6%	22%	7%	-2%		12%	0%	0%	0%	

### SLUDGE REMOVAL EXPENSE

Changes in sludge removal in the last two years have resulted in higher sludge removal costs. In FY 2016 the Agency was expecting approximately \$141,000 in annual sludge removal costs, lower than in prior years due to the impact of the Covered Drying Bed. In FY 2017, the Agency began budgeting for higher solids removal as a result of an increase in expected sludge due in part to lower flows (higher BOD), but mostly to a change in the methodology used to estimate sludge production. It is believed that the Agency's previous method of budgeting underestimated this line item. Sludge removal costs will increase again in FY 2018 by approximately \$45,000 due to a reduction in self hauling. The Agency will reduce tons self hauled to an estimated 528 tons in FY 2018 from much higher levels previously. Frequent breakdowns and costly maintenance of the Agency's bin truck has caused the Agency to lower tons hauled in an effort to better determine the hauling capacity of the truck, with the goal of re-evaluating the economics of the operation after this is determined.

	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year CAGR
Sludge Removal	242,838	221,541	162,627	225,990	258,910	303,809	305,271	306,732	308,194	309,655	4%
% Change	31%	-9%	-27%	39%	15%	17%	0%	0%	0%	0%	



**PERMITS AND FEES EXPENSE**

A large portion of the permits and fees expense is related to the Agency's discharge permits through the State Water Resources Control Board (SWRCB). These permits make up approximately 90% of the total line item, with the remaining permits and fees through the South Coast Air Quality Management District, USDA Forest Service, Environmental Laboratory Accreditation Program, and San Bernardino County Fire. The five-year average growth in the SWRCB discharge permit fees has exceeded inflation at 6%. This is also the rate of growth assumed over the five-year period for these fees, with the remaining fees assumed to grow at inflation.

For the budget period, Permits and Fees are expected to decrease over the prior period due to one-time fees incurred in FY 2017.

	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year CAGR
Permits and Fees	124,708	131,361	142,310	145,866	153,441	150,199	158,938	168,207	178,038	188,466	4%
% Change	15%	5%	8%	2%	5%	-2%	6%	6%	6%	6%	

**CONTRACTUAL SERVICES—PROFESSIONAL**

Contractual Services Professional expense contains engineering, legal and other expense (audit, actuarial, and other services). Multiple projects in FY 2016 and FY 2017 have elevated this line item, as well as the need to contract for IT services beginning at the end of FY 2016. Special projects include the water sustainability study, the solids dewatering study, a compensation and classification study, and recruitment services. The Agency has budgeted for a rate study in FY 2018.

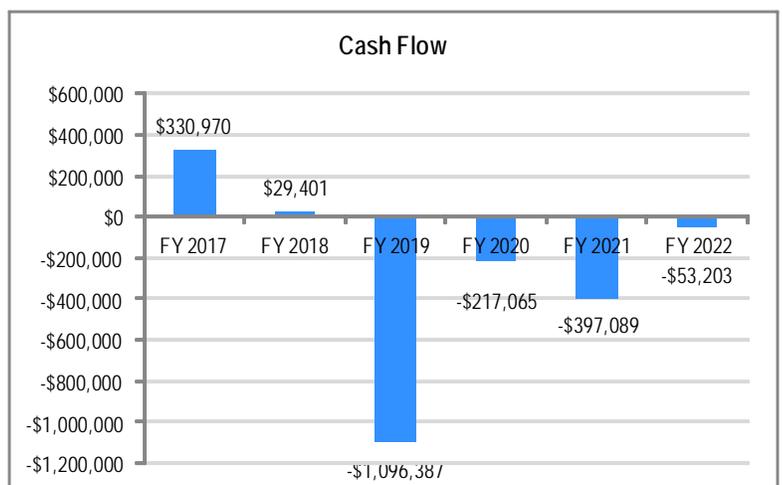
	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year CAGR
Contractual Services - Professional											
Engineering	10,911	2,715	12,261	6,293	95,600	55,510	15,974	16,358	16,750	17,152	-29%
Legal	102,474	190,766	58,735	54,575	61,000	95,004	131,944	99,619	102,010	104,458	11%
Other	<u>22,874</u>	<u>30,564</u>	<u>28,802</u>	<u>90,539</u>	<u>38,527</u>	<u>41,933</u>	<u>37,982</u>	<u>43,968</u>	<u>39,825</u>	<u>46,104</u>	4%
Total	136,259	224,045	99,798	151,407	195,127	192,447	185,900	159,945	158,585	167,714	-3%
% Change	-3%	64%	-55%	52%	29%	-1%	-3%	-14%	-1%	6%	

**Cash Flow and Designated Reserve Fund Balances**

**All references to Agency funds and designated fund balances are related to internal reserve funds maintained by the Agency for various operating and capital related purposes and are not governmental or proprietary funds for accounting purposes.**

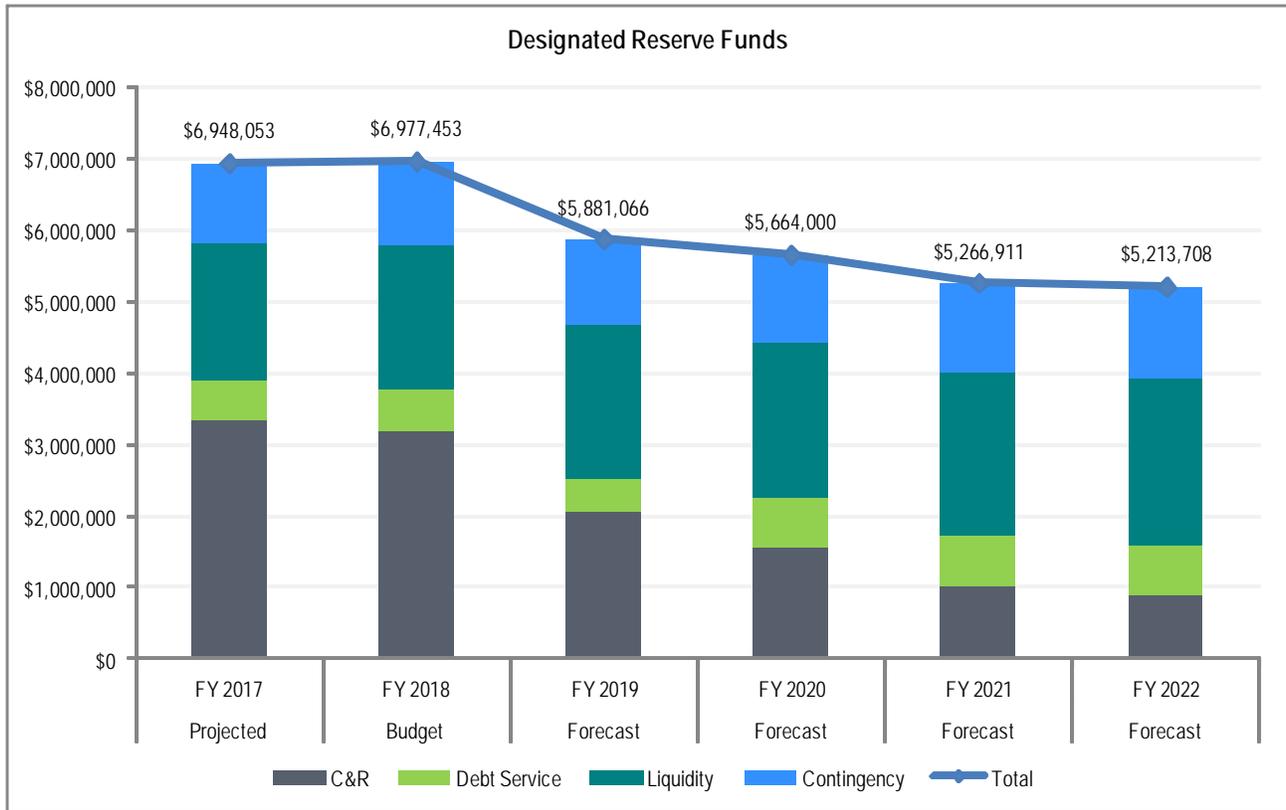
Primary drivers of cash flow are operating income, (operating revenues less operating expenses), connection fees, debt service and capital expenditures. Volatility in cash flow from year to year, as shown in the chart, is primarily due to the timing of the Agency's capital expenditures

The Agency has a net use of cash during the five-year period of approximately \$1.7 million, which reflects a high level of cash-funded capital expenditures during the period (\$5.7 million) and the reduction of the Agency's OPEB UAL (\$800,000).





At the end of FY 2022, the balance in the Agency's capital and replacement fund is projected to be approximately \$883,000, of which approximately \$324,710 is planned for FY 2023 cash-funded capital expenditures. The residual \$557,994 would be available for future capital projects beginning in FY 2024.



**DESIGNATED RESERVE FUND BALANCES (Ending)**

	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	Change
<b>ENDING BALANCE:</b>							
<b>Cash Balance</b>	6,948,053	6,977,453	5,881,066	5,664,000	5,266,911	5,213,708	-1,734,345
<b>Designated Fund Balances:</b>							
<b>Capital and Replacement Fund</b>							
Current Year	883,619	1,911,462	1,057,328	1,038,074	848,068	324,710	-558,909
Future Years	2,445,682	1,283,176	1,001,910	505,513	179,207	557,994	-1,887,688
<b>Total C &amp; R</b>	3,329,301	3,194,638	2,059,238	1,543,586	1,027,274	882,704	-2,446,598
<b>Debt Service Fund</b>	576,084	578,508	470,000	694,042	694,042	694,042	117,958
<b>Liquidity Fund</b>	1,904,127	2,025,174	2,135,648	2,188,707	2,285,800	2,354,374	450,246
<b>Contingency Fund:</b>							
Emergency	500,000	500,000	500,000	500,000	500,000	500,000	0
Operating	638,540	679,133	716,180	737,665	759,795	782,589	144,049
<b>Total Contingency</b>	1,138,540	1,179,133	1,216,180	1,237,665	1,259,795	1,282,589	144,049
<b>Designated Funds</b>	6,948,053	6,977,453	5,881,066	5,664,000	5,266,911	5,213,708	-1,734,345



## Long-Range Financial Plans

Long-term planning is essential to financial management and maximizing ratepayer value. The Agency completes a five-year financial forecast each year. The first year of the forecast, is the Agency's annual budget. The budget provides a solid picture of the Agency's expectations for the next twelve months and is an accountability tool for management and reflects its commitment to performance. The forecast is the Agency's best estimate of performance beyond the next twelve months. It is based on historical trend analysis, economic conditions, inflationary expectations, and other relevant information that may impact future performance. The information provided in the previous section, discusses and analyzes information provided in the five-year forecast through FY 2022. Each year, the Agency also reviews and updates its 20-year capital plan which includes 1) the scheduled maintenance and replacement of Agency assets and 2) any planned improvement or capacity expansion projects.

*Through long-term planning, the Agency understands the expected timing and nature of future operating and capital requirements and can determine the adequacy of its revenues to meet these demands.*

Through long-term planning, the Agency understands the expected timing and nature of future operating and capital requirements and can determine the adequacy of its revenues to meet these demands. This type of planning is necessary to maintain stable, fair and competitive rates. The Agency's current rate structure has been designed to accommodate annual inflationary changes in operating costs, meet designated fund balance requirements, and fund fifty percent of average annual capital expenditures on a pay-as-you-go basis.

Long-term forecasting has provided the Agency with a tool to evaluate cost trends associated with its salaries and benefits, power, and sludge removal expenses. As a result, the Agency has taken numerous actions to slow the growth and lower the costs associated with these expense categories. The Agency's actions directly reduced the level of rates approved in FY 2011 and subsequently implemented, and continue to improve the Agency's ability to appropriately fund capital expenditures and access the capital markets when needed. Currently, and as a result of long-term planning, the Agency has sufficient reserves combined with debt capacity to fund both current and future projects as scheduled.

## Section IV. Capital and Debt

### Capital Expenditures ( CAPEX)

#### Definition

Capital expenditures or CAPEX are expenses incurred to construct or build an asset, purchase an asset or add value to an existing asset such as acquiring or upgrading a physical asset (i.e. machinery, equipment, property or buildings). For the Agency's accounting purposes, an expense is considered a capital expenditure if the investment extends the useful life beyond one year and is \$5,000 or more.

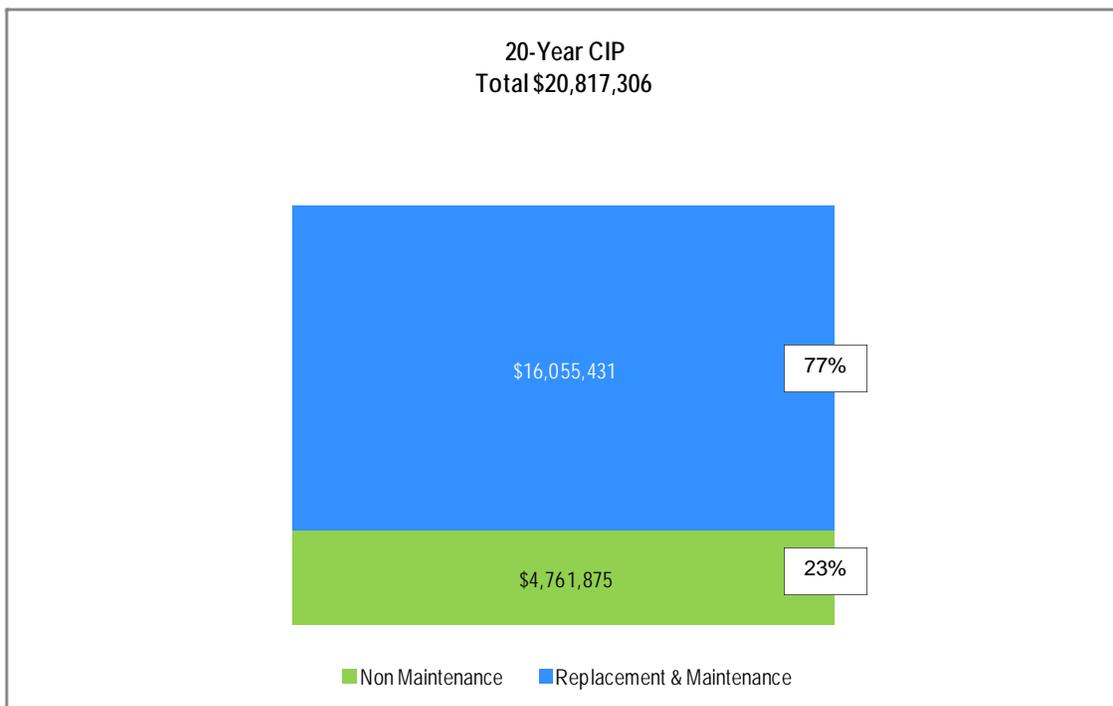
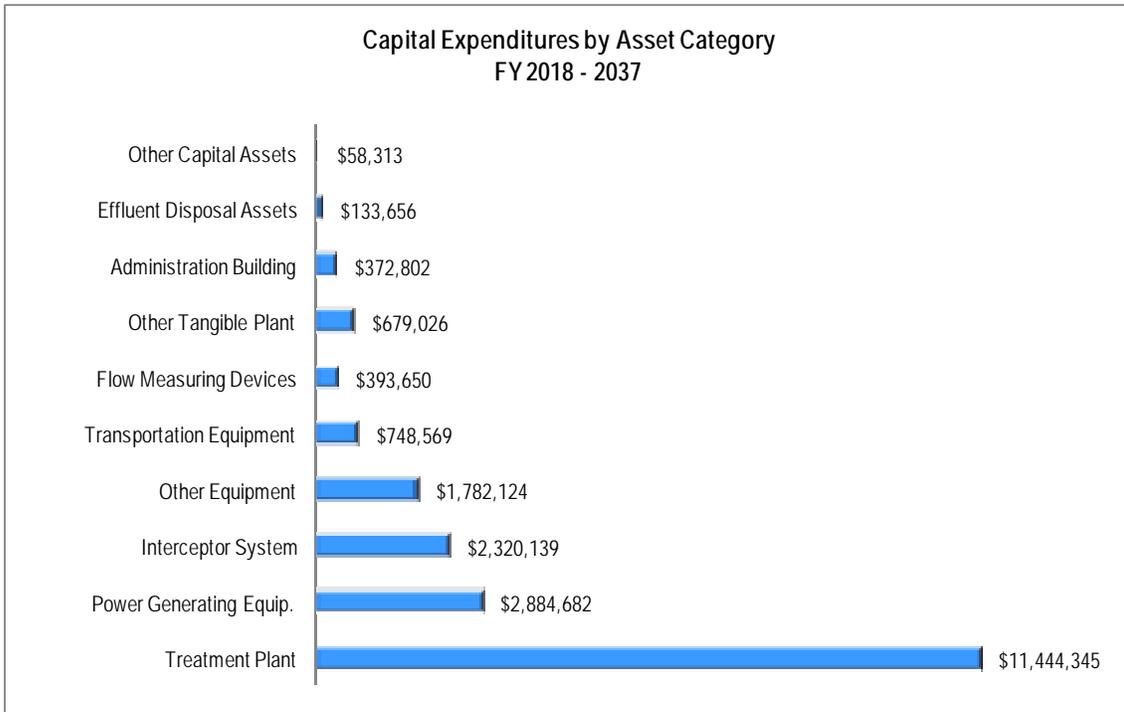
#### Long-Range Planning and Nature of CAPEX

As a wastewater treatment facility, the Agency's operations are capital intensive. The replacement value of the current facilities is estimated to be in excess of \$40 million. Given the large capital requirements associated with the Agency's operations, long-term planning is essential in order to have the financial resources available to replace assets when necessary. The Agency upgraded its master plan in FY 2011 which included a detailed analysis of its assets and capital needs through FY 2029. The Agency maintains both a five-year and twenty-year capital plan which is evaluated annually. Depending on the nature of the investment and the Agency's debt capacity, the Agency may finance the costs either with debt financing or pay-as-you-go (cash) financing.

The Agency's primary facilities were constructed in 1979 and were built with excess capacity. This excess capacity combined with the relatively slow growth in housing development (1.0% annually) reduces the need for major capital improvements that expand the Agency's current facilities. The majority of the Agency's CAPEX is for the repair and replacement of the existing facilities with some investments related to new processes for the treatment and disposal of solid waste which will either improve service or lower costs to the ratepayer. Based on the current 20-year capital im-

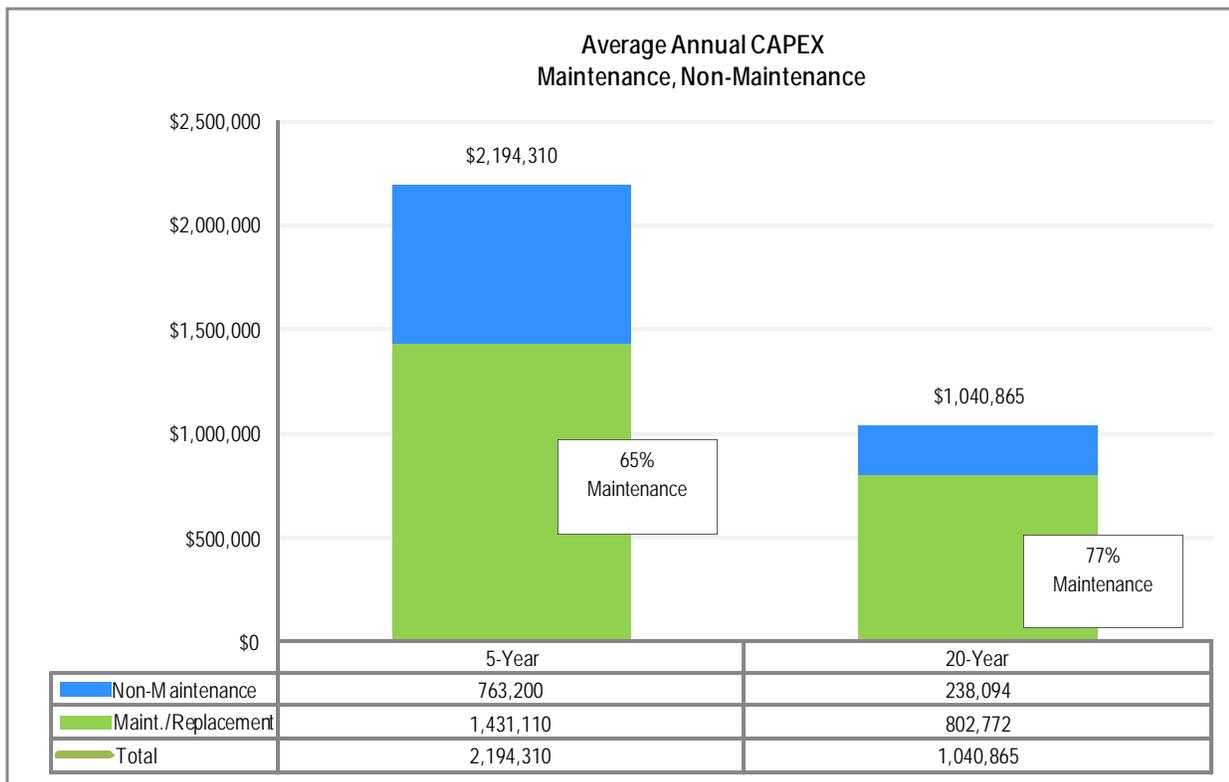


provement plant, approximately 80% of the Agency's CAPEX is for maintenance with the remaining 20% for non-maintenance improvements.





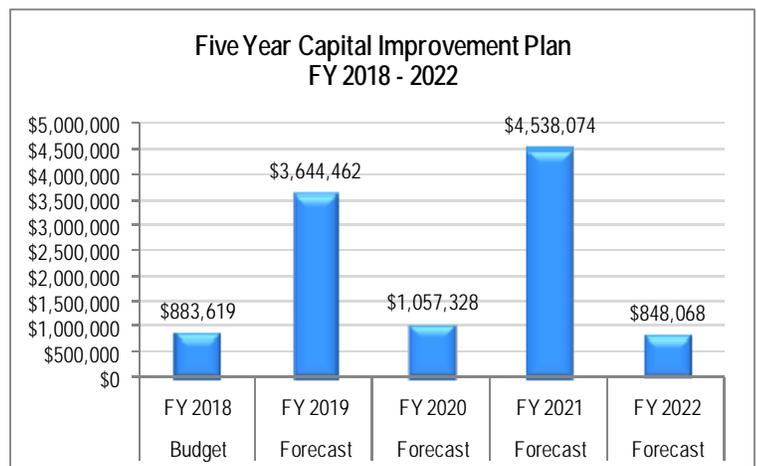
The Agency's long-term annual depreciation expense averages approximately \$830,000, and is a general indicator of the level of annual maintenance CAPEX needed to maintain the Agency's assets. The Agency's 20-year CIP (capital improvement program) indicates an average annual maintenance requirement of approximately \$800,000 and is slightly lower than average depreciation based on the timing of replacement projects.



### Five-Year Capital Improvement Plan (CIP)

The Agency's five-year CIP totals approximately \$11 million and will be funded with cash (52%) and debt (48%). The Agency's rates were structured to collect approximately \$450,000 for annual capital expenditures, thereby assuming a long-term capital funding structure that generally implies 55% pay-as-you-go (funded through rates) and 45% debt financing (funded through debt).

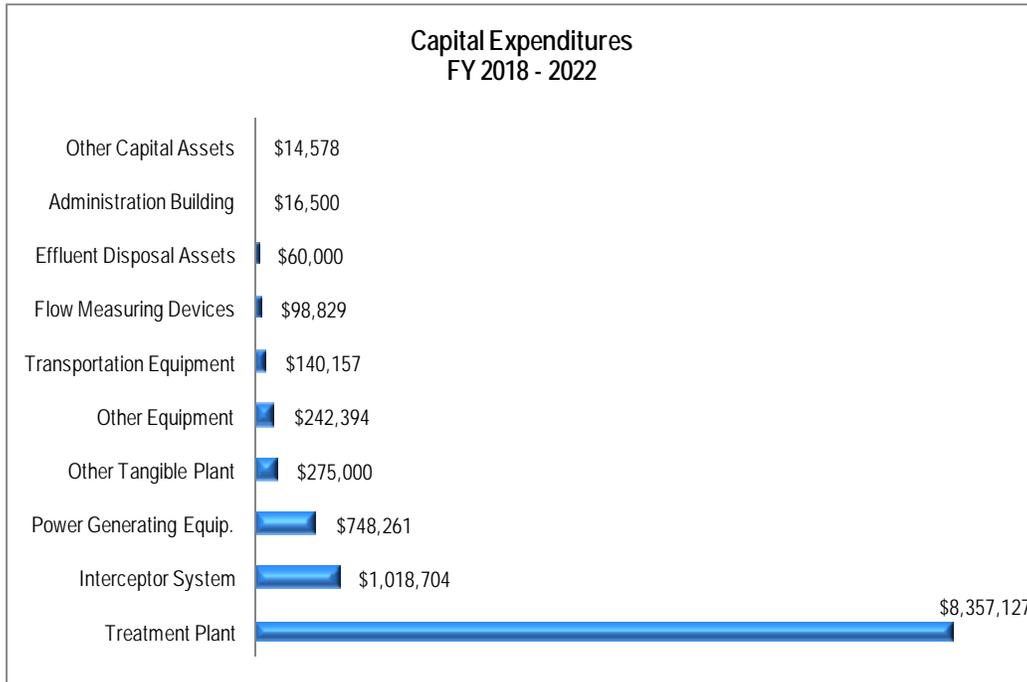
The majority of the capital expenditures will occur in FY 2019 and 2021, with a \$3.5 million sludge dewatering project scheduled to begin construction in FY 2019, and the \$3.5 million LEB project scheduled in FY 2021. The Agency plans to debt finance 75% or approximately \$5.2 million of the costs associated with these two projects.



The following chart summarizes the projects in the five-year plan by primary account and amount. The next five-year period represents a high investment cycle due to the timing of two major improvement projects. The average annual maintenance is approximately \$760,000 over the next five years compared to \$800,000 in the 20-year capital plan.



FIVE-YEAR CAPITAL IMPROVEMENT PLAN SUMMARY, FY 2018—FY 2022, \$10.9 MILLION



FIVE-YEAR CAPITAL IMPROVEMENT PLAN, FY 2018—FY 2022

	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year FY 2018-2022
<b>ADMINISTRATION BUILDING</b>						
Admin Building - HVAC Boiler and Controls	0	0	0	0	0	0
Admin Building - Painting	16,500	0	0	0	0	16,500
<b>Total</b>	<b>16,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,500</b>
<b>EFFLUENT DISPOSAL ASSETS</b>						
Outfall Lines						0
Cactus Flats Repair	60,000	0	0	0	0	60,000
<b>Total</b>	<b>60,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60,000</b>
<b>FLOW MEASURING DEVICES</b>						
RAS Flow Meter (10 year replacement)	0	0	0	0	15,289	15,289
WAS Meter (10 year maint replacement)	0	0	0	0	9,909	9,909
BB Flow Meter and Software (10 year replacement)	0	0	47,289	0	0	47,289
Effluent Flow Meter (10 year replacement)	9,898	0	0	0	0	9,898
Flow Meter CSD/CSA - OAC (10 yr replacement)	16,444	0	0	0	0	16,444
<b>Total flow measuring devices</b>	<b>26,343</b>	<b>0</b>	<b>47,289</b>	<b>0</b>	<b>25,198</b>	<b>98,829</b>
<b>INTERCEPTOR SYSTEM</b>						
<b>Pipeline</b>						
Main Trunk	0	0	0	411,334	0	411,334
North Shore Interceptor Sliplining	0	0	0	0	599,570	599,570
<b>Pumping Equipment</b>						
Pump 3, Flygt 150 HP Rebuild	7,800	0	0	0	0	7,800
<b>Total interceptor system</b>	<b>7,800</b>	<b>0</b>	<b>0</b>	<b>411,334</b>	<b>599,570</b>	<b>1,018,704</b>



FIVE-YEAR CAPITAL IMPROVEMENT PLAN, FY 2018—FY 2022

	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year FY 2018-2022
<b>OTHER EQUIPMENT</b>						
<b>Communications</b>						
SCADA PH and ORC Sensors	0	0	0	0	25,948	25,948
<b>Electrical</b>						
VFD T/P - Rotor 1 60 HP (7 yr)	13,450	0	0	0	0	13,450
VFD T/P - Rotor 4 60 HP (7 yr)	13,592	0	0	0	0	13,592
VFD T/P - Rotor 5 60 HP (7 yr)	0	13,931	0	0	0	13,931
VFD T/P - Rotor 7 60 HP (7 yr)	0	14,076	0	0	0	14,076
VFD T/P - Rotor 8 60 HP (7 yr)	0	0	14,280	0	0	14,280
VFD Interceptor - LPS (7 yr)	0	0	26,225	0	0	26,225
Ground Fault Interruptor	25,071	0	0	0	0	25,071
Transfer Switch Admin Building	0	0	79,944	0	0	79,944
<b>Office Equipment</b>						
Copier	0	15,876	0	0	0	15,876
<b>Total</b>	<b>52,113</b>	<b>43,883</b>	<b>120,449</b>	<b>0</b>	<b>25,948</b>	<b>242,394</b>
<b>OTHER CAPITAL ASSETS</b>						
Web Site	0	14,578	0	0	0	14,578
<b>Total</b>	<b>0</b>	<b>14,578</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,578</b>
<b>OTHER TANGIBLE PLANT</b>						
Asphalt and Paving	35,000	120,000	120,000	0	0	275,000
<b>POWER GENERATING EQUIPMENT</b>						
Cummins Rebuild	108,636	0	0	303,704	0	412,340
Waukesha Rebuild	0	0	0	0	82,741	82,741
Rolling Generator	94,013	0	0	0	0	94,013
Station 1 Generator + Fuel System	0	0	0	0	39,813	39,813
LPS Generator + Fuel System	0	0	0	119,354	0	119,354
<b>Total</b>	<b>202,649</b>	<b>0</b>	<b>0</b>	<b>423,058</b>	<b>122,554</b>	<b>748,261</b>
<b>TRANSPORTATION EQUIPMENT</b>						
<b>Vehicles</b>						
2010 GMC 1/2 Ton	0	0	46,541	0	0	46,541
2004 Toyota 4-Runner	0	0	0	47,704	0	47,704
2004 Toyota Tundra	0	0	45,912	0	0	45,912
<b>Total transportation equipment</b>	<b>0</b>	<b>0</b>	<b>92,453</b>	<b>47,704</b>	<b>0</b>	<b>140,157</b>
<b>TREATMENT PLANT</b>						
<b>Miscellaneous Equipment:</b>						
AQMD Emissions Tester	0	0	14,462	0	0	14,462
<b>Processing Equipment:</b>						
Polyblend Unit Backup 1	0	0	0	0	9,980	9,980



FIVE-YEAR CAPITAL IMPROVEMENT PLAN, FY 2018—FY 2022

	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	5-Year FY 2018-2022
<b>TREATMENT PLANT, continued</b>						
Shaft Mount Reducer - Ditch #3	0	0	0	15,756	0	15,756
Screw Press (or Other Project)	0	3,466,000	0	0	0	3,466,000
<b>Pumping Equipment:</b>						
<i>Clarifier 3:</i>						
Scum and Tank Drain Pump - 10 HP	0	0	0	0	18,318	18,318
<i>Auxiliary Pump Building:</i>						
Auxiliary Pump 3	0	0	0	0	46,500	46,500
<i>Main Pump Building:</i>						
RAS Pump 2 Rebuild	4,857	0	0	0	0	4,857
RAS Pump 3 Rebuild	4,857	0	0	0	0	4,857
Effluent Pump 3 100 HP	0	0	26,169	0	0	26,169
<b>Storage:</b>						
Pond #1 Reconstruction	224,750	0	0	0	0	224,750
Pond #2 Reconstruction	224,750	0	0	0	0	224,750
<b>Structures</b>						
Bal Chamber/LEB - NEW	0	0	0	3,500,000	0	3,500,000
Main Pump Building - Block Entry	12,000	0	0	0	0	12,000
Headworks	12,000	0	404,811	0	0	416,811
<b>Treatment Equipment</b>						
Clarifier 3 - Gear Reducer, Drive Motor, Scum Sweep	0	0	0	140,222	0	140,222
Bar Screen	0	0	129,289	0	0	129,289
Grit Aeration, Air Lift Difuser	0	0	47,573	0	0	47,573
Grit Washer	0	0	54,833	0	0	54,833
<b>Total treatment plant equipment</b>	<b>483,214</b>	<b>3,466,000</b>	<b>677,137</b>	<b>3,655,978</b>	<b>74,798</b>	<b>8,357,127</b>
<b>TOTAL</b>	<b>883,619</b>	<b>3,644,462</b>	<b>1,057,328</b>	<b>4,538,074</b>	<b>848,068</b>	<b>10,971,550</b>

**FY 2018 Capital Expenditure Budget**

The capital expenditure budget for FY 2018 totals approximately \$880,000 and is comprised of routine maintenance and replacement projects only and does not include any non-routine, significant capital projects. **Therefore, there is no notable expected or budgeted impact to the operating budget as a result of the FY 2018 capital expenditures.**

**ADMINISTRATION BUILDING**

**Painting (\$16,500):** The administration building is in need of painting. The building has not been painted in thirteen years and it is needed to preserve the asset. The scope of work will consist of using a DIR registered contractor that will pressure wash, caulk and paint the entire building.

Budget: \$16,500  
 Start Date: August 14, 2017  
 Target completion date: August 28, 2017



#### EFFLUENT DISPOSAL ASSETS

**Cactus Flats Repair (\$60,000):** A section of our pipeline was exposed due to storm water runoff from the County dump site. Approximately 75 feet of BBARWA pipeline has been exposed along with a Southwest Gas line. The repair is needed to ensure that our pipeline is covered with a material that can withstand the runoff and to ensure the safety of our line. The repair will be a joint effort with Southwest Gas and BBARWA and will consist of a concrete cover of the pipeline.

Budget: \$60,000  
Start Date: September 12, 2017  
Target completion date: September 29, 2017

#### FLOW MEASURING DEVICES

**Effluent Flow Meter (\$9,898):** The effluent flow meter is at the end of its useful life and is a critical piece of equipment used for flow metering to our disposal site. The meter is no longer supported by the manufacturer. The scope of work includes the purchase and installation of meter that is fingerprinted from the factory and measures flow within a 1% accuracy rate.

Budget: \$9,898  
Start Date: October 3, 2017  
Target completion date: October 6, 2017

**Flow Meter CSD/CSA (\$16,444):** The CSA/CSD flow meter is at the end of its useful life and is a critical piece of equipment used for flow metering and billing the member agencies. The meter is no longer supported by the manufacturer. The scope of work will include the purchase and the installation of the meter that is fingerprinted from the factory and measures flow within a 1% accuracy.

Budget: \$16,444  
Start Date: October 9, 2017  
Target completion date: October 13, 2017

#### INTERCEPTOR SYSTEM

**LPS Pump 3 Rebuild (\$16,000):** Pump #3 is in need of a rebuild that will enable us to move more water from the station during large storm events. The scope of work includes the replacement of the impeller by the manufacturer that will enable us to pump an additional one million gallons a day from the station to the treatment plant.

Budget: \$16,000  
Start date: July 11, 2017  
Target completion date: July 13, 2017

#### OTHER EQUIPMENT

**Variable Frequency Drive Rotor 1 and 4 (\$27,042):** Rotor # 1 and Rotor # 4 are due for replacement and are at the end of their useful lives. The VFDs are critical pieces of electrical equipment that allow BBARWA to nitrify and denitrify to meet discharge requirements. The scope of work will include the purchase and installation by a qualified electrical contractor.



Budget: \$27,042  
Start date: December 11, 2017  
Target completion date: December 28, 2017

**Ground Fault Indicator (\$25,071):** The ground fault indicator is 15 years old and is at the end of its useful life. The ground fault indicator is a critical piece of equipment that indicates electrical problems within the treatment plant. The scope of work includes the purchase of a ground fault indicator and the installation by a qualified electrical contractor.

Budget: \$25,071  
Start date: January 8, 2018  
Target completion date: January 16, 2018

#### OTHER TANGIBLE PLANT

**Asphalt (\$35,000):** The treatment plant has approximately 10,000 square feet of repair work that needs to be repaired due to heavy truck traffic. The scope of work includes contracting with a paving contractor for the repairs.

Budget: \$35,000  
Start date: August 15, 2017  
Target completion date: August 29, 2017

#### POWER GENERATING EQUIPMENT

**Cummins Rebuild (\$108,636):** The Cummins generator system was installed in 2007 and provides low cost power to the treatment plant and the administrative building and supplies heat to the covered drying bed. The generator system is a critical part of operations that ensures reduced expenditures for electricity by not having to utilize Bear Valley Electric. The generators require a minor or major overhaul every 20,000 hours. The scope of work will include new cylinder heads, turbocharger lifters and push rods. The work will be done by staff and a certified Cummins mechanic.

Budget: \$108,636  
Start date: October 3, 2017  
Target completion date: November 1, 2017

**Rolling Generator (\$94,013):** The rolling generator will be used as an emergency back-up generator that will be used for the North Shore Lift Stations. The generators at the stations are obsolete and repair parts are hard to find. The Agency will replace all 4 generators at the lift stations (including LPS) over the next seven years. At the end of this replacement cycle, the back-up generator will be permanently installed in Station 3 in 2024.

Budget: \$94,013  
Start date: July 7, 2017  
Target completion date: August 11, 2017



#### TREATMENT PLANT - PUMPING EQUIPMENT

**Return Activated Sludge Pump Rebuilds (\$9,714):** The RAS pumps are a critical part of the operation of the treatment process and are due for a rebuild. The pumps are on a 7-year cycle for rebuilds. The scope of work will include the removal of the pumps by staff. The pumps will be rebuilt by a factory-approved repair facility. Staff will reinstall the pumps and return to service.

Budget: \$9,486  
Start date: April 2, 2018  
Target completion date: May 1, 2018

#### TREATMENT PLANT - STORAGE

**Pond #1 and #2 Reconstruction (\$449,500):** Pond one and two are in need of dyke repair due to the wave action of the effluent. The ponds have not had any dyke repair work done from the time they were built in 1974 and the reinforcement of the dykes are needed to preserve the asset. The engineering for the project is done. The scope of work will include site grading, excavation, compaction, construction surveying and shot crete slope stabilization. The project requires a formal competitive bid process.

Budget: \$449,500  
Start date: August 1, 2017  
Target completion date: April 30, 2018

#### TREATMENT PLANT - STRUCTURES

**Main Pump Building Block Wall Entry (\$12,000):** The entrance to the main pump building is showing wear from the weather and use. It needs to be replaced with a more secure entry. The main pump building is the most critical piece of the treatment plant. It houses the SCADA network and pump controls for the entire system. The scope of work will include contracting with a qualified masonry contractor.

Budget: \$12,000  
Start date: August 29, 2017  
Target completion date: September 22, 2017

**Headworks Heating (\$12,000):** The heating system has failed in headworks and needs to be replaced with a heating system that meets safety requirements. The scope of work will include purchasing an explosion-proof heating unit and the installation by a qualified electrical contractor.

Budget: \$12,000  
Start date: October 2, 2017  
Target completion date: October 16, 2017

### Capital Projects FY 2019 – FY 2022

Projects discussed below are in the 5-year capital plan, beyond the budget year, and exceed \$100,000.

#### INTERCEPTOR SYSTEM, PIPELINE

**Main Trunk Line (\$411,334):** The Main Trunk Line is a 20-inch line that conveys the raw sewage from Big Bear City Community Services District and CSA 53B to the Treatment Plant. The previous video inspections have identified portions of the line that will need repair. The scope of work will include sliplining approximately 3,500 lineal feet of gravity sewer line.

**North Shore Interceptor Sliplining (\$599,570):** The North Shore Interceptor System is a series of pump stations and pipelines that convey the sewage from CSA-53B to the Treatment Plant. The Interceptor System consists of both force mains and gravity sections. The pipelines are approximately 40-years old. Previous video inspections have identified portions of the gravity sections that require repair. The project scope will include sliplining approximately 3,300 lineal feet



of the gravity sewer lines.

#### OTHER TANGIBLE PLANT

**Asphalt and Paving (\$240,000):** Asphalt and paving work includes the grading and paving of areas within the Treatment Plant. Asphalt work includes grading, base material and new asphalt.

#### POWER GENERATING EQUIPMENT

**Cummins Generator Major Overhaul (\$303,704):** The Cummins generator system was installed in 2007 and put on line in 2008. The generators run approximately 4,500 hours a year to supply power for the treatment plant, the administration building and supply heat to the covered drying bed. The generator system is a critical part of operations and ensures reduced expenditures for electricity by not having to utilize Bear Valley Electric. The generators require a major overhaul every 40,000 hours. The scope of work will include new Crankshaft, camshaft, piston kits, cylinder heads, turbocharger and the generator end to be checked for any electrical shorts.

**LPS Generator and Fuel System:** The LPS generator is at the end of its useful life and needs to be replaced with a AQMD approved generator. The scope of work will include the purchase of an approved generator and fuel system to be installed by a approved factory representative.

#### TREATMENT PLANT, PROCESSING EQUIPMENT

**Sludge Dewatering Project (\$3,466,000):** The Agency contracted with Water Systems Consulting (WSC) to do a sludge dewatering study with four dewatering systems to be analyzed. The evaluation included capital costs, annual O&M, energy use, operator attention needed, reliability and dewatering performance. Our current belt press is at the end of its useful life and is hard to maintain and repair. The technologies that were looked at were screw press, centrifuge, rotary press and a belt press. The two technologies that would work best for the Agency were the screw press and the centrifuge. Both will be pilot tested at our facility in the early spring of 2017 to determine the best option for the Agency.

#### TREATMENT PLANT, STRUCTURES

**Load Equalization Basin Engineering and Construction (\$3,500,000):** The Load Equalization Basin (LEB) project is the replacement of the two Balancing Chambers. The Balancing Chambers are concrete structures that were part of the original Big Bear City Community Services Districts Treatment Plant constructed during the 1930's. Over the years, they have been modified to serve as chlorine contact chambers, secondary effluent polishing ponds and construction water or tertiary treated storage basins. These structures have been in service for approximately 70-years and are showing signs of excessive damage and failure, and are in need of replacement.

**Headworks (\$404,811):** Headworks is in need of rehabilitation. The scope of work will include concrete patching within the grit chamber and overflow structure, piping replacement, slide gate replacement, electrical upgrades, epoxy coating and new ceiling material. Headworks is a critical part of our operation that is exposed to hydrogen sulfide that is corrosive to all materials.

#### TREATMENT PLANT, TREATMENT EQUIPMENT

**Clarifier 3 (\$143,118):** Clarifier 3 is a critical part of operations that is in service 365 days a year. The gear reducer, drive motor and sludge sweeps are the major components of the clarifier and are nearing the end of their useful lives and will need to be replaced for the continued reliability of the asset. The scope of work will include the purchase of needed parts and replacement by a qualified contractor

**Bar Screen (\$131,318):** The Bar Screen was installed in 1979 and is at the end of its useful life. The Agency utilizes the Bar Screen to remove large material from the incoming flow to the Treatment Plant that could harm pipelines and pumping equipment. On average, the Treatment Plant removes approximately 50 cubic yards of material that is disposed of at the local transfer station. The scope of work will include the purchase and installation of the new Bar Screen.



## Impact of Capital Investments on Operating Budget

The capital investment in the current budget period is for recurring, routine maintenance expenditures with no significant nonrecurring capital expenditures. Therefore, there is no notable expected or budgeted impact to the operating budget as a result of FY 2018 capital expenditures.

## Debt

The Agency funds its capital requirements using both pay-as-you-go and debt financing and recognizes that debt management is critical to its overall financial success. The Agency refinanced its outstanding debt in FY 2012 to take advantage of the low interest rate environment. The Agency's current outstanding debt obligation is as follows:

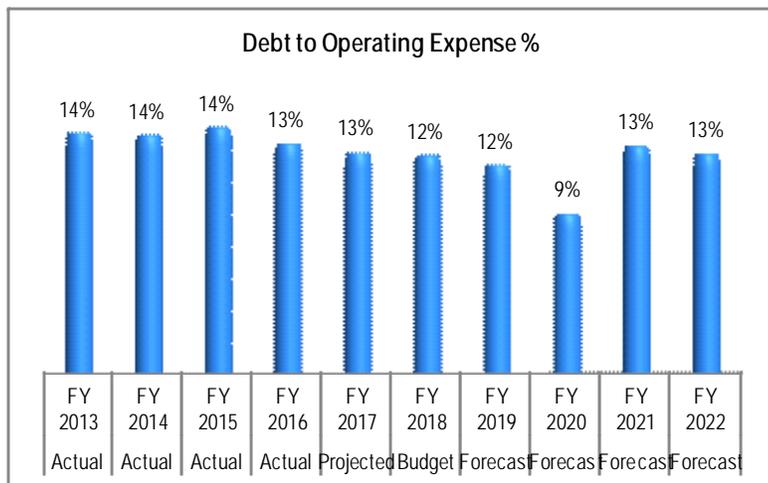
Issue	Date of Issuance	Issue Amount; Rate	Use of Proceeds
Compass Bank Loan Agreement	November 1, 2011	\$5.6 million; 3.3%	Refinance of existing debt. Original debt used for improvements including nutrient removal system, effluent storage, Horseshoe Pond modifications, generator installation, sludge handling, administration building, Cannibal Solids Reduction System, and 2, 250-kilowatt natural gas generators.

## Debt Limitations and Capacity

California Government Code places certain restrictions on the Agency's indebtedness. In the case of 1) general obligation bonds, a district shall not incur bonded indebtedness that exceeds 15 percent of the assessed value of all taxable property in the district at the time bonds are issued and 2) promissory notes, the total amount issued shall not exceed 5 percent of the district's total enterprise and non-enterprise revenues in the preceding fiscal year. **Currently, these restrictions do not apply to the Agency based on the debt instruments it has in place.**

The Agency's debt policy establishes the conditions and analysis required for debt issuance, and recognizes the essentials of 1) ensuring the Agency's ability to meet its debt service requirements and 2) maintaining sufficient financial flexibility to respond to unexpected events.

The Agency's debt service requirement is approximately \$576,000 per year and represents 12% of FY 2018 budgeted operating expenses. The Agency is expected to increase its use of debt during the next five years to finance larger capital projects during the period, resulting in higher debt service requirements and higher leverage. Standard & Poor's Analytical Characterizations of Debt Service as a Percentage of Expenditures characterize debt service between 8% - 15% of expenditures as moderate.



Scheduled Debt Service			
Date	Beginning Balance	Amortization	Ending Balance
11/15/17	3,223,168	288,042	2,988,308
05/15/18	2,988,308	288,042	2,749,573
11/15/18	2,749,573	288,042	2,506,899
05/15/19	2,506,899	179,554	2,368,709
11/15/19	2,368,709	179,554	2,228,239
05/15/20	2,228,239	179,554	2,085,452
11/15/20	2,085,452	179,554	1,940,308
05/15/21	1,940,308	179,554	1,792,769
11/15/21	1,792,769	179,554	1,642,796
05/15/22	1,642,796	179,554	1,490,348
11/15/22	1,490,348	179,554	1,335,385
05/15/23	1,335,385	179,554	1,177,865
11/15/23	1,177,865	179,554	1,017,746
05/15/24	1,017,746	179,554	854,985
11/15/24	854,985	179,554	689,539
05/15/25	689,539	179,554	521,363
11/15/25	521,363	179,554	350,411
05/15/26	350,411	179,554	176,639
11/15/26	176,639	179,554	0



Currently, the Agency has excess debt capacity under its existing rate and cost structure. The Agency's ability to borrow additional debt is based in large part on its ability to pay the principal and interest (the debt service) over the life of the loan, without financial distress and while maintaining its operating and financial flexibility. The Agency's ability to pay its debt service is measured by a debt service coverage ratio. This ratio is included as a covenant in the Agency's borrowing documents and is typically set at a minimum of 1.20 to 1.25. From an operational and financial management standpoint, a ratio of 2.0 provides the Agency with better flexibility to meet its obligations during unexpected events. Based on a target ratio of 2.0, the Agency has the following available debt capacity.

Projected Available Debt Capacity									
	Actual FY 2015	Actual FY 2016	Projected FY 2017	Budget FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	
Target Coverage	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Net Revenues	2,213,203	1,907,641	1,693,143	1,668,322	1,565,510	1,480,981	1,511,893	1,459,571	
Maximum Debt Service to Meet Target Coverage	1,106,601	953,821	846,571	834,161	782,755	740,491	755,947	729,785	
Actual Debt Service	576,084	576,084	576,084	576,084	578,508	470,000	694,042	694,042	
Additional Debt Service Capacity	530,518	377,737	270,488	258,077	204,247	270,490	61,904	35,743	
Available Debt Capacity (a)	7,500,000	5,900,000	4,200,000	4,000,000	3,200,000	4,200,000	1,000,000	600,000	

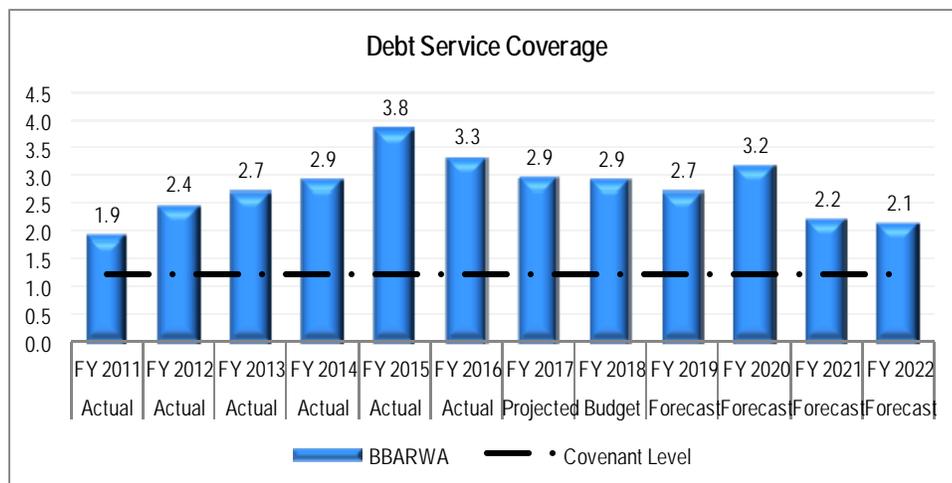
(a) Assumes 4% borrowing rate for 25 years; principal amount rounded to the nearest hundred thousand.

As can be seen from the table, the Agency's available debt capacity peaks in FY 2015, the last year of assumed rate increases under the Agency's Maximum Rate Schedule. Beginning in FY 2017, additional debt capacity declines as net revenues decline due to flat revenues and increasing operating costs. Debt capacity declines further in FY 2019 and FY 2021 due to expected new borrowings of \$1.7 million and \$3.5 million, respectively.

### Debt Service and Debt Service Coverage

Debt service is part of the Agency's capital requirements and represents debt-financed capital expenditures. As a fixed, legal obligation, the Agency must maintain adequate revenues to meet its debt service obligations. This is measured through the debt service coverage covenant as previously noted.

The Agency's debt service coverage covenant requires a minimum of 1.2 x coverage and measures the Agency's ability to cover its annual debt service with current year earnings. The Agency's debt service coverage ratios are excellent and show the financial strength of the Agency. The Agency's rates were structured to achieve 1.7 x coverage. Lower operating expenses combined with lower debt service than planned are the contributing factors to the higher debt service coverage ratios when compared to the 2010 Rate Study. Debt coverage ratios show some deterioration beginning in FY 2016, however these levels are still strong.





## Section V: Staffing and Departmental Information

### Staffing

Overall, the Agency's staffing needs remain unchanged over time due to the consistent nature of the Agency's sewage treatment and disposal services and relatively little increase in annual MGDs (millions of gallons per day) treated. The Agency has budgeted for one seasonal position in FY 2018.

#### Full– Time Equivalent Staffing (a)

Position	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
	Actual	Actual	Actual	Actual	Actual	Actual	Projected	Budget
<b>Administration:</b>								
General Manager	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Finance Manager	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HR Coordinator/Accounting Tech	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Administrative Assistant	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>
Subtotal	<u>3.5</u>							
<b>Operations:</b>								
Plant Manager	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Chief Plant Operator	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Plant Operator I	4.0	4.0	3.0	5.0	5.0	4.0	6.0	7.0
Plant Operator II	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
Operator in Training	<u>1.0</u>	<u>0.0</u>	<u>2.0</u>	<u>0.0</u>	<u>1.0</u>	<u>2.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	<u>9.0</u>	<u>8.0</u>	<u>8.0</u>	<u>8.0</u>	<u>9.0</u>	<u>9.0</u>	<u>9.0</u>	<u>10.0</u>
<b>Laboratory:</b>								
Laboratory Director	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Laboratory Analyst	<u>1.0</u>							
Subtotal	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>1.0</u>	<u>1.0</u>
<b>Seasonal / Temporary</b>	<b><u>0.0</u></b>	<b><u>0.5</u></b>	<b><u>1.0</u></b>	<b><u>0.5</u></b>	<b><u>0.5</u></b>	<b><u>0.5</u></b>	<b><u>0.5</u></b>	<b><u>0.5</u></b>
<b>Total</b>	<b><u>14.5</u></b>	<b><u>14.0</u></b>	<b><u>14.5</u></b>	<b><u>14.0</u></b>	<b><u>15.0</u></b>	<b><u>15.0</u></b>	<b><u>14.0</u></b>	<b><u>15.0</u></b>

(a) Part-time and non-regular seasonal employees are considered a 0.5 full-time equivalent employee, although total hours worked may be greater or less than 50% of a full-time equivalent employee.



## Departments

### Administration Department

Positions	General Manager
	Finance Manager
	Human Resources Coordinator/ Accounting Technician
	Administrative Assistant
	Plant Manager (this position is the senior operations position but is also part of the Agency's key management staff)
Functions	Accountable for the Agency's managerial, legal and fiscal responsibilities associated with being a public wastewater treatment facility and directly supports the operations department through the administration, finance and human resource functions.



#### ADMINISTRATIVE

#### AWARD RECOGNITION

- **Administrative Assistant of the Year Award**, DAMS, 2016 – Kim Booth, Administrative Assistant
- **Staff Member of the Year Award**, CWEA, 2016— Kim Booth, Administrative Assistant
- **Excellence in Financial Reporting**, GFOA, FY 2017
- **Distinguished Budget Presentation**, GFOA, FY 2017

### Laboratory Department

Positions	Laboratory Analyst
Functions	Collects and analyzes wastewater flows and bio-solids to adhere to federal, state, and local guidelines and 2) provides data to the operations department for implementing process control decisions. The laboratory analyses include, but are not limited to, 1) those required on a daily basis for compliance with the Agency's discharge order permits, such as pH, biochemical oxygen demand, total dissolved solids, suspended solids, nitrates, chloride, fluoride, sulfate, conductivity, total and fecal Coliform, and conductivity, and 2) wastewater solids inventory and microscopic examinations of activated sludge for process control. Based on the laboratory department's analyses, it is also responsible for preparing evaluations of the treatment plant unit processes and making recommendations for process control.



#### LABORATORY AWARD

#### RECOGNITION

- **Laboratory Person of the Year**, DAMS, 2016 – Nikki Flores, Laboratory Analyst
- **Laboratory Person of the Year**, CWEA, 2016 — Nikki Flores, Laboratory Analyst



Positions Plant Manager  
Chief Plant Operator  
Plant Operator II  
Plant Operator I (7)

Functions The Agency expects to collect and treat approximately 800 million gallons of wastewater at the wastewater treatment plant in FY 2017. These services will be performed by the Operations Department, in compliance with discharge permits issued by the Colorado and Santa Ana Regions of the State Water Resource Control Boards which regulate the Agency's effluent quality as it leaves the treatment plant.

The Operations Department is responsible for operating, inspecting, maintaining, and troubleshooting the wastewater pumping stations and treatment plant equipment and processes. In addition, it is responsible for ensuring the treatment plant processes are operating efficiently and all discharge requirements are fulfilled.

The Operations Department is a technical element of the Agency's operation which 1) utilizes complex valving schemes and flow patterns specific to a variety of treatment processes, 2) performs basic troubleshooting on systems as necessary, 3) reads meters, gauges, charts, and instruments, and 4) interprets, records, and logs plant performance. The department is also responsible for maintaining and servicing the interceptor system which consists of (15.07) miles of pipelines, (93) manholes, (12) air



OPERATIONS

AWARD RECOGNITION

- **Plant of the Year (under 5 MGD)**, DAMS, 2016
- **Mechanical Person of the Year**, CWEA, 2016 – Troy Bemisdarfer, Plant Operator II
- **Operator of the Year**, DAMS, 2016 — Kyle Burnett, Plant Operator I



AGENCY

AWARD RECOGNITION

2016 McMurchie Excellence in Safety Award  
Workers Compensation Program— Small Member Category  
Awarded by  
Special District Risk Management Authority



## The Strategic Plan and Performance Management

The Agency developed a new, 5-year strategic plan in FY 2016 (the Strategic Plan) and renewed this plan in FY 2017. Annual performance measures have not been developed from the plan as of this date; however, the Agency has established annual goals and priorities which are derived from the initiatives outlined in the Strategic Plan.

### Achievement of Strategic Plan Goals



The cycle for BBARWA includes:

- 1) establishing priorities
- 2) allocating resources (through the budget process)
- 3) managing the plan, and
- 4) evaluating performance

### Establishing Priorities

The Strategic Plan set important direction for the Agency in terms establishing a mission statement, a vision statement, values and strategic elements (see page 8 for details of each). It also includes an implementation plan that contains actions, initiatives and projects organized by strategic element or performance area and prioritized by the target completion date.

#### STRATEGIC ELEMENT

#### OUTCOME/OBJECTIVE

	Operations	BBARWA operates and maintains its facilities in a manner that produces high-quality effluent and biosolids, exceeds all regulatory requirements and is fiscally responsible.
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Strategic Goals	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Detail
Develop program to analyze and assess systems and processes			x			Identify processes and equipment to be evaluated. Determine evaluation parameters.
Be "in the know"	x	x	x	x	x	Attend ACWA, CWEA, Generator, GE Power and other conferences as appropriate. Evaluate beneficial memberships and subscriptions.
Develop a comprehensive plan for generator maintenance and trained staff		x				Identify dedicated staff, required training, and develop a plan for scheduled maintenance based on engine hours.
Develop policy on natural gas purchases					x	Educate staff on the natural gas market and complete purchasing policy.
Evaluate new power producing technology			x			Evaluate potential for solar, wind, and geothermal energy.

Completed       In Process



**STRATEGIC ELEMENT**

**OUTCOME/OBJECTIVE**

Finance

BBARWA is a financially strong and stable organization.

Strategic Goals	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Detail
Align budgetary decision making with strategic priorities.	x	x	x	x	x	Review strategic plan prior to budget cycle to align strategic priorities with available resources.
Maintain 20-year capital improvement plan.	x	x	x	x	x	Complete rolling 20-year CIP to estimate annual capital outlays and financing method.
Maintain rates that are adequate and stable.	x	x	x	x	x	Complete 5-year financial projection including rate analysis; complete annual review of rates and fees.
Pursue excellence in financial management.	x	x	x	x	x	Submit budget and CAFR to GFOA awards programs.
Maintain operating and financial flexibility						Adhere to reserve fund and debt policies. Review and report reserve fund levels during monthly, quarterly and annual financial reporting. Report the Agency's debt capacity in the annual budget.
Present accurate, timely and transparent financial reporting.	x	x	x	x	x	Report monthly to management staff. Report quarterly and annually to the Board. Annual budgets, CAFRs and monthly financial reports are posted on the web site.
Maintain strong financial governance and controls.						Maintain financial policies related to investment, debt, reserve funds, budgeting and budget amendments. Utilize beneficial oversight of Finance Committee for budgeting, outside audit and policy-setting and review.
Maintain growth in operating costs at or near inflation.	x	x	x	x	x	Review financial performance monthly to identify emerging trends and changes in conditions, both internal and external.



Completed



In Process



Ongoing



**STRATEGIC ELEMENT**

**OUTCOME/OBJECTIVE**

Personnel and Organization

BBARWA attracts and sustains a trained, talented, and motivated workforce committed and engaged in integrating the Agency's mission and core values in their daily work.

**ACTION ITEMS**

Strategic Goals	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Detail
Develop and implement in-service days for employee participation.	x	x				Employees participate in round-table discussions regarding current issues, strategic planning, improving the work environment and innovative ideas.
Develop on-boarding model.		x				Formalize orientation for new employees by expanding the current process to communicate the agency's mission and values, job scope and expectations; and coordinate training and resources.
Develop succession plan.	x					Identify likely retirements or separations and plan for succession through internal training and development or outside recruitment. Assess potential separations annually during the performance appraisal process.
Redesign performance appraisals and develop standardized schedule for reviews.	x					Performance appraisals include job-specific criteria and performance goals and expectations. A standardized schedule is in place for periodic reviews and "one-on-one" meetings.
Promote and acknowledge exceptional employee and Agency performance.						With employee input, determine recognition avenues including an annual appreciation event.
Establish personalized development plans		x				Complete personalized development plans in conjunction with annual performance appraisals. These plans are developed by the employee and supervisor and include desires related to personal job-related development.
Evaluate current training programs and assess need for additional training.		x				Maintain financial policies related to investment, debt, reserve funds, budgeting and budget amendments. Utilize beneficial oversight of Finance Committee for budgeting, outside audit and policy-setting and review.

Completed
  In Process
  Ongoing



**STRATEGIC ELEMENT**

**OUTCOME/OBJECTIVE**

Administration

BBARWA is a well-managed, strategically focused and forward-looking organization.

**ACTION ITEMS**

Strategic Goals	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Detail
Complete risk management analysis.	x	x				Complete annual risk assessment to identify risks to the Agency's operation both internal and external.
Complete ongoing long-term planning, both strategic and financial.	x	x	x	x	x	Continue five-year financial projects and 20-year capital improvement plan as part of the budget process. Update 5-year strategic plan prior to budget preparation.
Conduct periodic review of infrastructure to assess capacity and future expansion.		x	Ongoing	Ongoing	Ongoing	Assess need for renewed Master Plan.



Completed



In Process



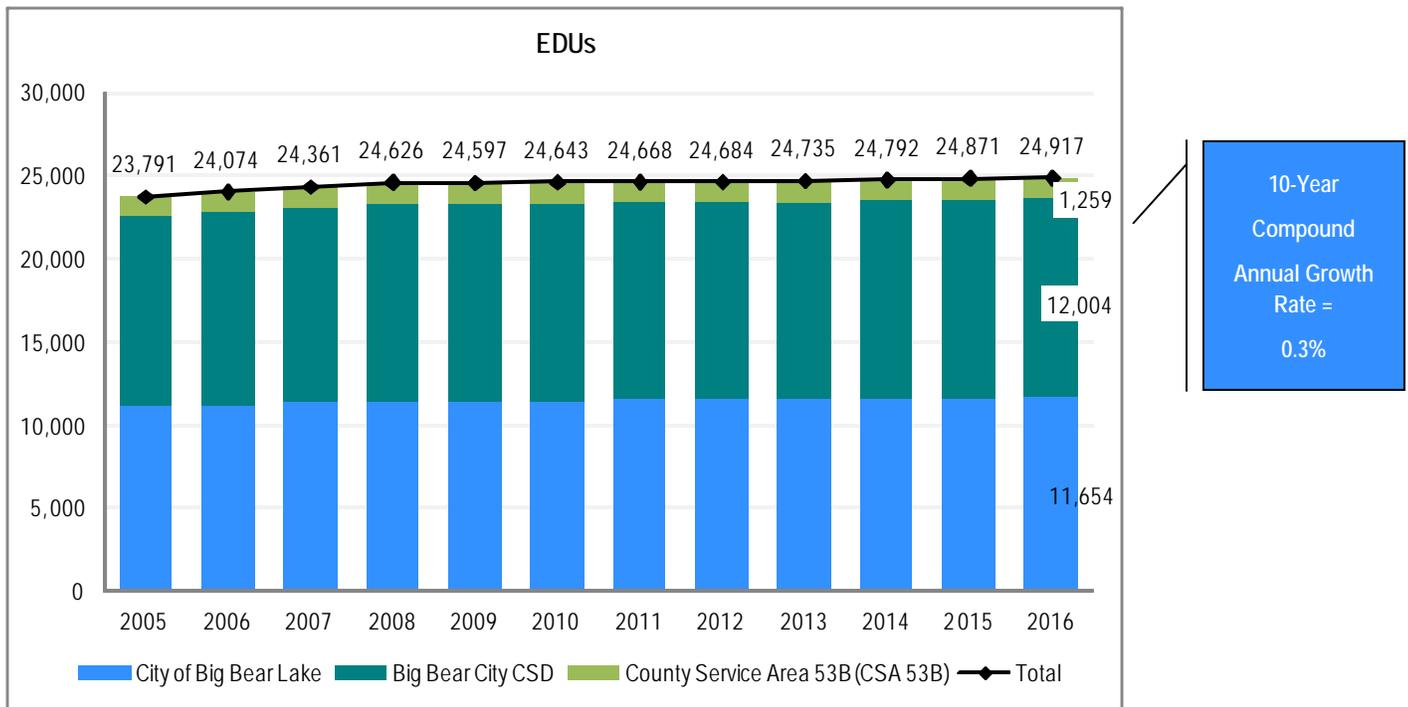
Ongoing



## Section VI: Supplemental Information

### Demographics

The Agency serves an area that experiences relatively slow population growth. The average annual change in EDUs (Equivalent Dwelling Units) has been less than 1% over the last 10 years.



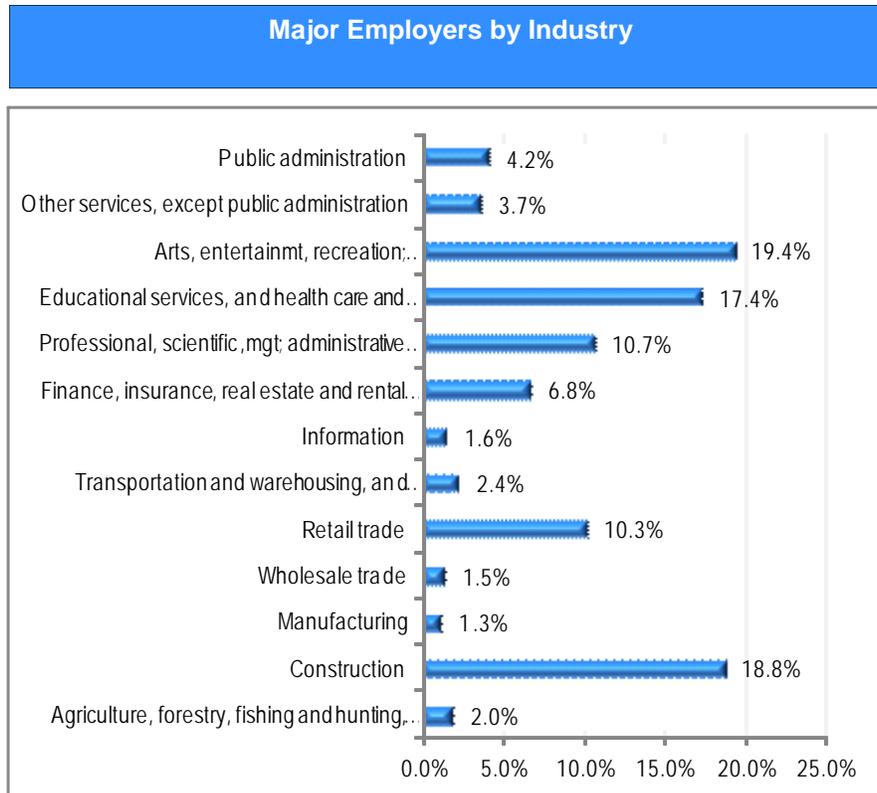
The Big Bear area is considered a four-season resort community and is characterized by a large, part-time population of second homeowners and seasonal peaks associated with tourism. The permanent population consists of approximately 20,000 residents and 1,400 businesses and on a busy weekend, can flourish to 100,000. It is estimated that approximately 38% of all sewer connections are full-time residents with the remainder part-time or second homeowners.

The following demographic, economic and social statistics are important considerations for the Agency, especially in maintaining affordable rates for the permanent population of the Agency's service area. The information has been gathered from the U.S. Census Bureau and represents the areas of Big Bear Lake and Big Bear City, and excludes Erwin Lake, Lake Williams and Sugarloaf. While the information is incomplete, we believe it is representative of the Agency's service area.



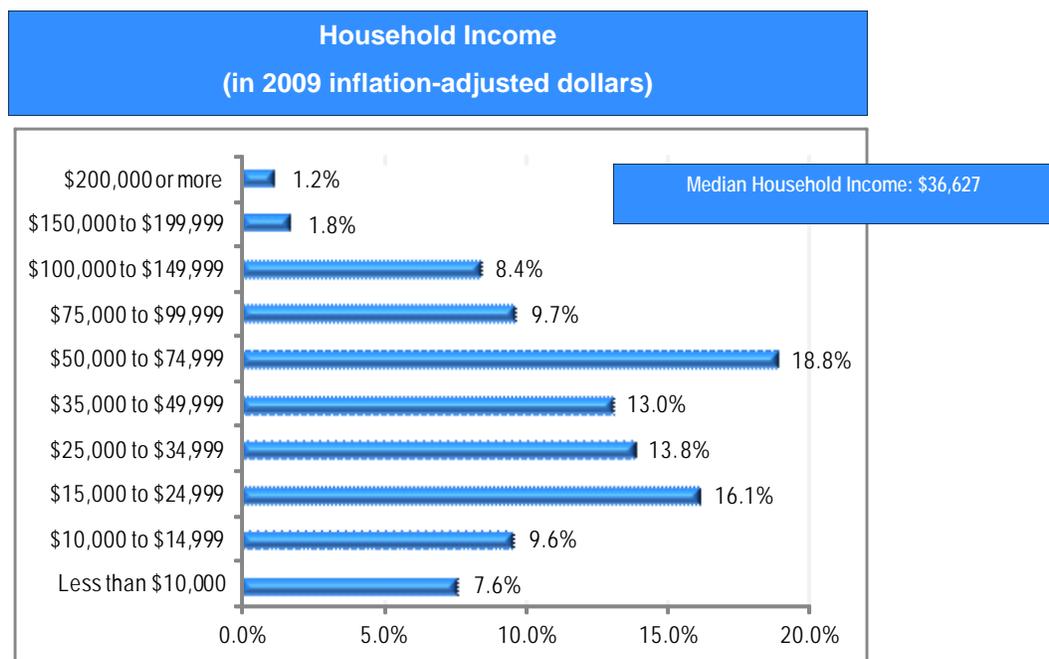
**Employment**

As a resort community, the primary employer is the Arts, Entertainment, Recreation, Accommodation and Food Service Industries, employing approximately 19.4% of the workforce.



**Household Income**

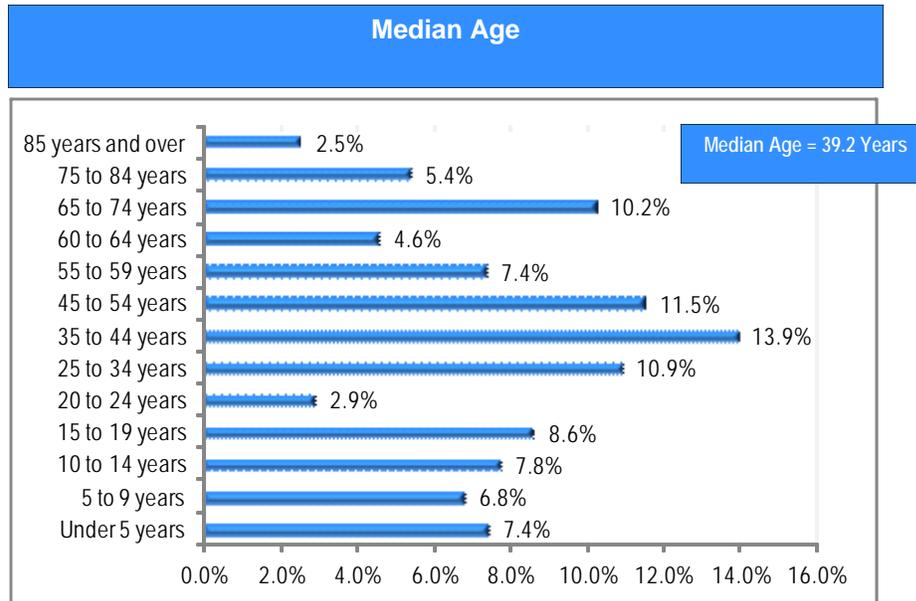
The median household income for the area was \$36,627 in 2009, approximately \$13,000 below the national average of \$49,777 for the same period.





## Median Age

The median age of the area has remained relatively unchanged. In 2003, it was estimated to be 41 years old and in 2009 it was 39.2 years. Approximately 30.1% of the population is estimated to be 55 years and older, with 23% of the population 60 years and older.



## Section VII: Glossary

- Accrual accounting** A method of accounting in which revenues are recorded when earned and expenses are recognized when incurred.
- Annual charges** The amount collected by the Agency to cover its revenue requirements. It is calculated by multiplying the number of equivalent dwelling units reported by each member agency by the user fee. This amount is then prorated based on member agency actual flow into the system. Annual charges are collected from the member agencies in April and December of each year. Each member agency, in turn, collects the fees from the respective ratepayers.
- Appropriation** The act of setting aside money for a specific purpose. The formal approval of the Agency's budget by the Governing Board legally appropriates funding for the purposes outlined in the budget and places constraints on management pursuant to the budget.
- Balanced budget** A balanced budget is when the Agency's recurring revenues are equal to or in excess of recurring expenditures or in the case where recurring revenues are less than recurring expenditures, there are adequate contingency reserves to cover the excess expenditures. Recurring revenues include annual charges (user fees), standby fees, wastewater disposal fees and rental income. Recurring expenditures include ongoing operating expenses, debt service and average annual maintenance capital expenditures.
- BOD** Biochemical oxygen demand. A chemical testing procedure for determining the uptake rate of dissolved oxygen by the biological organisms in a body of water. It is widely used as an indication of the quality of water.



cific interest on the amount borrowed at predetermined intervals during the life of the bond.

C4	Clarifier 4
CalPERS	California Public Employees' Retirement System
CalPERS UAL	Refers to the Agency's Unfunded Accrued Liability with CalPERS and represents the Agency's accrued pension liability amount that is not currently funded with (matched by) assets.
Cannibal system	A solids reductions system or process that uses a combination of biological and manufacturing processes to lower typical sludge yield.
CAPEX	A capital expenditure (s)
Capital budget	The Agency's plan for capital expenditures during a one-year period.
Capital expenditure	An expenditure of \$5,000 or more that is used to purchase or improve an asset with a useful life of one year or more.
CDB	Covered Drying Bed. An enclosed building with a heated floor and will be used to dry the Agency's solid waste year-round. The building will utilize waste heat from the Agency's generators to heat the floor. The project is expected to be complete in June 2014.
CAGR	Compound Average Growth Rate. The average annual growth rate over the period referenced.
Connection fee	A system development fee or capacity charge and is a one-time fee paid at the time of connection to the system. The fee recovers a proportional share of capital costs incurred to provide service capacity for the new wastewater customers.
Debt service	Principal and interest payments on borrowed money.
Depreciation	A reduction in the value of an asset with the passage of time, due in particular to wear and tear. Annual depreciation is often considered a measure of annual maintenance expense.
EDU	An equivalent dwelling unit. EDUs are used to set water rates based on the amount of wastewater generated from an average, single-family residence, or EDU. Connections and EDUs may be used interchangeably to reference the number of single-family households in the system or connecting to the system at any given time.
Enterprise Fund	A fund which establishes a separate accounting and financial reporting mechanism for municipal services for which a fee is charged in exchange for goods and services.



Fodder, fiber crops	Fodder and fiber crops are those cultivated explicitly or primarily for feeding animals.
FY	Means the fiscal year ending June 30th of the year referenced, i.e. FY 2017 is the fiscal year ending June 30, 2017.
GFOA	Government Finance Officers Association
Great Recession	The recession beginning in December 2007 and ending in June 2009.
I & I	Infiltration and inflow. A term used to describe the ways that groundwater and storm water enter into a sewer system. Inflow is storm water that enters into sanitary sewer systems and point of direct connection to the system. Infiltration is groundwater that enters sanitary sewer systems through cracks and / or leaks in the sanitary sewer pipes.
IRR	Internal Rate of Return. The discount rate at which the present value of all future cash flow is equal to the initial cost of the investment. Used to compare multiple projects for decision-making purposes or to determine the level at which a project's rate of return exceeds the Agency's cost of capital.
Interceptor system	That portion of the Agency's pipeline system that collects wastewater flow from the member agencies and transports it to the treatment plant.
Joint powers agreement	A formal legal agreement between two or more public agencies that shows a common power and where the agencies want to jointly implement programs, build facilities, or deliver services. Officials from those public agencies formally approve a cooperative arrangement.
LEB	Load Equalization Basin
Master plan	A long-term plan which outlines and discusses the Agency's operations and capital plan for the period in review.
Member agencies	The member agencies pursuant to BBARWA's joint powers agreement are the Community Services District, the City of Big Bear Lake, and the County of San Bernardino County Service Area 53B.
MGD	Million gallons per day.
Mixed liquor	A mixture of raw or settled wastewater and activated sludge contained in an aeration tank in the activated-sludge process.
nm	Means "not meaningful". It is input as the outcome when dividing by "0".
NPV	Net Present Value. The present value of cash inflows and present value of cash outflows



related to a capital project. Is used to determine the overall value or profitability of a project. Used to compare multiple projects for decision-making purposes.

OPEB	Other post employment benefits.
Operating income	Is equal to Operating Revenue less Operating Expenses. Is a key indicator of the Agency's ability to cover its debt service and maintain capital assets.
Operating budget	The Agency's plan for operating and maintenance expenses during a one-year period.
Projected performance	Is based on five months of actual performance through November 2015 and represents the Agency's best estimate of full-year, FY 2017 performance.
PUC	Public Utilities Commission. Is the governing body that regulates the rates and services of a public utility.
Pumping station	A pumping operation, usually located a long distance from the treatment plant, that provides for the lifting and conveyance of sewage through the force main to gravity flow points.
Revenue requirements	Amount of revenue required to cover operating and capital costs. Operating costs are usually routine or periodic costs incurred to provide service on an ongoing basis. Capital costs relate to capital items such as equipment or facilities that provide benefits over multiple years.
SCADA	Supervisory Control and Data Acquisition (SCADA) is an automated system that uses programmable logic controls to monitor and control treatment processes and pump stations.
Sewage	Wastewater flow from residential and commercial units connected to the sewer system.
Sewerage	The infrastructure, including pipelines, drains, manholes, and other system facilities used to convey sewage.
Sludge	Sludge refers to the residual, semi-solid material left from industrial wastewater, or sewage treatment processes.
Solids	The material removed from sludge such as grit, sand or debris.
Standby fee	A charge to undeveloped parcel owners that recovers a proportional share of operating costs to maintain the wastewater facilities in "ready" state.
UAL	The unfunded accrued liability represents that portion of the Agency's accrued liability for retirement obligations that exceeds the Agency's assets/investments that are held in trust to meet the retirement obligations.



User fee	The rate charged per equivalent dwelling unit. This rate is set by BBARWA based on its revenue requirements.
Wastewater	Any water that has been adversely affected in quality by anthropogenic influence. It comprises liquid waste discharged by domestic residences, commercial properties, industry, and/or agriculture and can encompass a wide range of potential contaminants and concentrations. In the most common usage, it refers to the municipal wastewater that contains a broad spectrum of contaminants resulting from the mixing of wastewaters from different sources.