

## **I. Overview**

For over 100 years, the Long Beach Water Department has provided Long Beach residents and businesses with a reliable, cost-effective and high-quality drinking water supply. In addition, the Department has established itself as one of California's leaders in the areas of water conservation and environmental stewardship. As imported water supplies continue to become more expensive, the Department continues to seek out cost-effective methods for expanding its utilization of alternative water supply sources and water conservation programs.

The Department's service area encompasses the boundaries of the City of Long Beach, the seventh largest city in the state, with an area of approximately 50 square miles and a population of 467,354 with some customers outside the City limits. Total active water accounts number just under 90,000. The Department's budget and activities are divided into two independent funds, the Water Fund and the Sewer Fund.

In FY 21 the Department will complete a comprehensive conversion to Advanced Metering Infrastructure (AMI) smart water meters resulting in operational efficiencies, cost savings, and improved water efficiency. Additionally, the Department is undertaking a significant infrastructure improvement program, funded by a \$60,000,000 Line of Credit to drill new local water wells, refurbish existing wells, and rehabilitate existing storage tanks.

For the FY 21 Water Fund budget, expenditures are estimated to increase by 1% due to increased personal services costs, debt service, and Seawater Barrier costs. However, the additional debt service and Seawater Barrier costs are offset by revenue reimbursements. For FY 21, water purchase/pump/treatment costs have decreased due to a reduction in overall demand and an increase in pumping capacity which provides additional access to our lower cost water supply. In order to mitigate rate increases, budget reductions were achieved in capital equipment, materials and supplies, and the General Fund transfer. Budgeted revenues are estimated to increase by 6% due to a 6% increase in water rates as well as revenue reimbursements.

For the FY 21 Sewer Fund budget, expenditures are estimated to increase by 10% due to capital improvements and personal services costs. Budgeted revenues are estimated to decrease by 1% due to an anticipated reduction in development projects which decreased the budgeted capacity charges.

## **II. Management of the Water Resources Portfolio**

The Department meets the needs of its customers through a diverse portfolio of water resources. Local groundwater, combined with imported supplies, water recycling and water conservation are used in combination to meet the water demands within the service area.

**Groundwater** - Ownership of water rights in the Central Groundwater Basin allows almost two-thirds of the Department's water supply needs to be produced from groundwater wells located within the City. High-powered pumps extract the groundwater from 27 active wells and pump it to our groundwater treatment plant. The Department pays a Replenishment Assessment to the Water Replenishment District of Southern California (WRD), for water produced from the wells, in addition to electricity, maintenance and treatment costs at our groundwater treatment plant.

- For FY 21, the planned replenishment assessment charged by WRD will increase by 4%.
- WRD's rates have risen a total of 110% since 2010.

**Imported Supplies** - The balance of water supply needed to meet the City's demand for potable (drinking) water is treated water purchased from MWD. MWD's water supplies originate from two sources: the Colorado River Aqueduct and the State Water Project. Long Beach has been a member of MWD since 1931, and is one of the 13 original founding cities.

- For FY 21, MWD's rates for treated water will rise by 2.7%.
- MWD's rates have risen a total of 54% since 2010.

**Water efficiency as a way of life** - Since 2007, the Department has undertaken an extensive public communications strategy to emphasize the need for a comprehensive reduction in water consumption. The Department's customers were able to gradually reduce water usage to 25% below the historical ten-year average. During the recent historic drought, customers were able to cut back water use by an additional 15%, resulting in water use comparable to the 1950's despite having a 40% larger population.

California's climate naturally swings between flood and drought, and looking towards the future, climate change is predicted to exacerbate this pattern, resulting in more extreme droughts and storm events. Rather than take a reactive approach to inevitable future droughts, the Department is emphasizing a more proactive and durable approach to water use. The Department continues to provide programs such as landscape retrofit rebates to its customers and believes in water efficiency programs that promote sustainable practices to make water efficiency a way of life.

### **III. Infrastructure Repair and Rehabilitation**

The City has an aging infrastructure, which needs to be maintained and in certain parts replaced. At September 30, 2019, the water distribution system totaled 916 miles of water mains, 463 miles of water service lines with 89,805 active water service connections and the sewer distribution system totaled 714 miles of sewer mains, 369 miles of sewer service lines with 89,273 active sewer service connections.

The Department continues to replace aging cast iron mains with ductile iron pipe, which enhances the reliability of the distribution system and protects against main breaks. Since 1991, this investment in infrastructure has reduced the annual number of main breaks from near 150 in 1991

to an average of 30 over the past five years. The Department responds immediately, 24-hours a day, 365 days a year, to water emergencies such as main breaks.

Additionally, efficient operation of the distribution system requires the ongoing maintenance, repair and rehabilitation of the other components of the distribution system, such as control valves, storage tanks and the network of groundwater pumping wells.

In 2020, the Department established a \$60,000,000 Line of Credit to facilitate increased investment in its water system infrastructure. Planned capital improvements include drilling new local water wells, refurbishing existing wells, and rehabilitating existing storage tanks. These investments will improve production, conveyance, treatment, storage, and distribution of water to its customers. The debt service for the Line of Credit will be secured by and payable from the revenues generated from charges to customers for water usage.

Since 2009, the Department's Sewer Fund capital expenditures have been focused on a large amount of capital work driven by the Sewer Master Plan. The Department's Sewer Master Plan was also updated in response to increased statewide regulations that required preparation of a Master Plan and targeted infrastructure repairs and replacements to the sewer collection system. Statewide regulations also established additional, annual activities such as televising and cleaning of sewer lines and a Fats, Oil and Grease (FOG) reduction program.

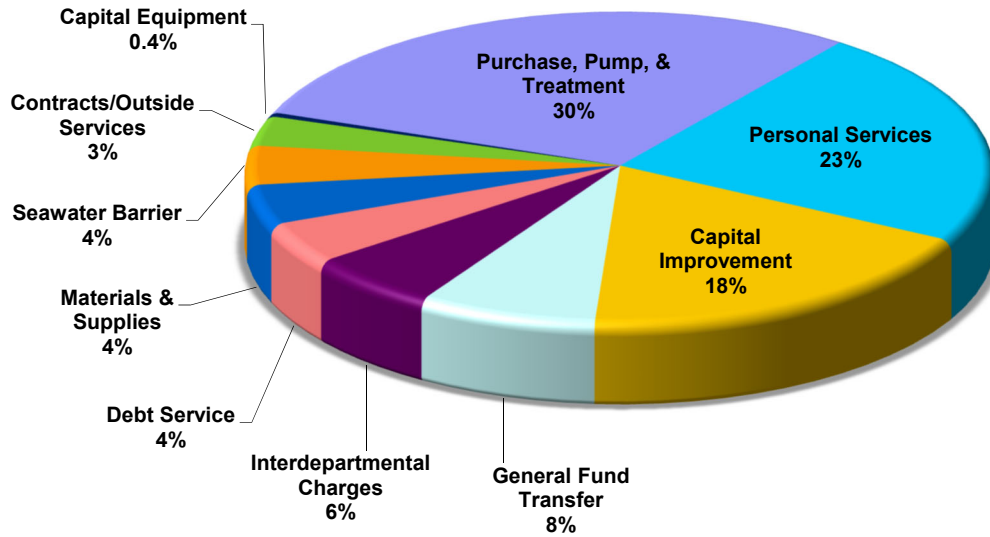
#### **IV. Budget Highlights**

Please refer to Figures 1 - 4 for the budget summaries of the Water and Sewer Funds.

- FY 21 Water Fund expenditures total \$136.2 million, a 1% increase as compared to the FY 20 budget.
- FY 21 Water Fund revenues total \$136.3 million, a 6% increase as compared to the FY 20 budget.
- FY 21 Sewer Fund expenditures total \$23.6 million, a 10% increase as compared to the FY 20 budget.
- FY 21 Sewer Fund revenues total \$18.6 million, a 1% decrease as compared to the FY 20 budget.

**FIGURE 1**

**Water Fund  
FY 21 Expenditures**

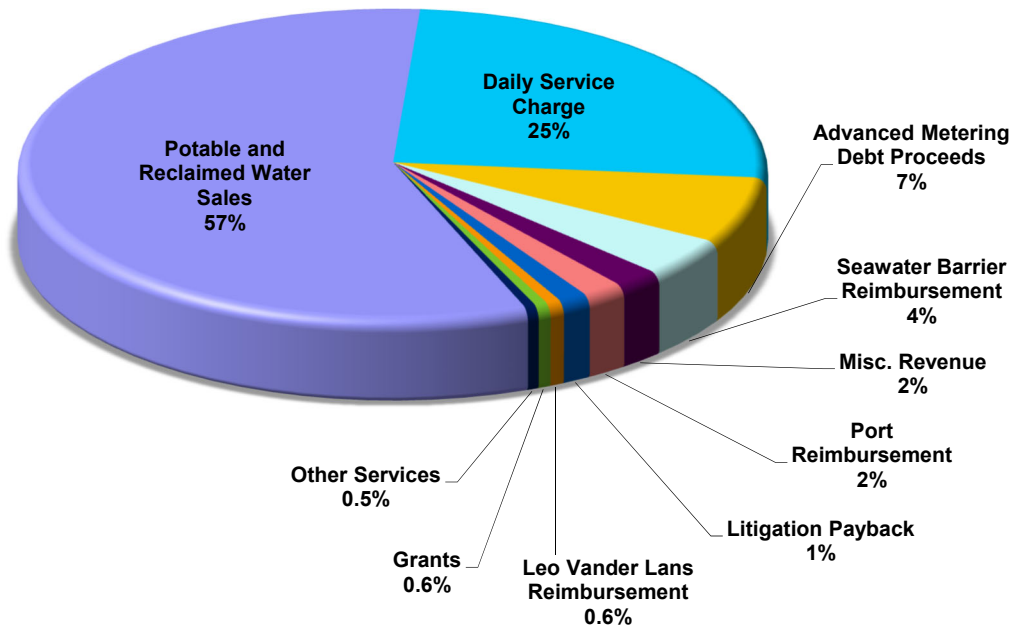


**Expenditures (in \$1,000's): Budget to Budget Comparison**

	<b>FY 20 Budget</b>	<b>FY 21 Budget</b>	<b>Change</b>	<b>Percent Change</b>
Purchase, Pump, & Treatment	43,768	40,470	(3,298)	-8%
Personal Services	26,819	30,777	3,958	15%
Capital Improvement	25,518	24,816	(702)	-3%
General Fund Transfer	12,654	10,575	(2,079)	-16%
Interdepartmental Charges	7,647	7,856	208	3%
Debt Service	4,270	5,822	1,552	36%
Materials & Supplies	7,776	5,604	(2,173)	-28%
Seawater Barrier	1,069	5,513	4,444	416%
Contracts/Outside Services	3,792	4,200	409	11%
Capital Equipment	1,545	562	(983)	-64%
<b>Total Expenditures</b>	<b>134,857</b>	<b>136,195</b>	<b>1,338</b>	<b>1%</b>

**FIGURE 2**

**Water Fund  
FY 21 Revenues**

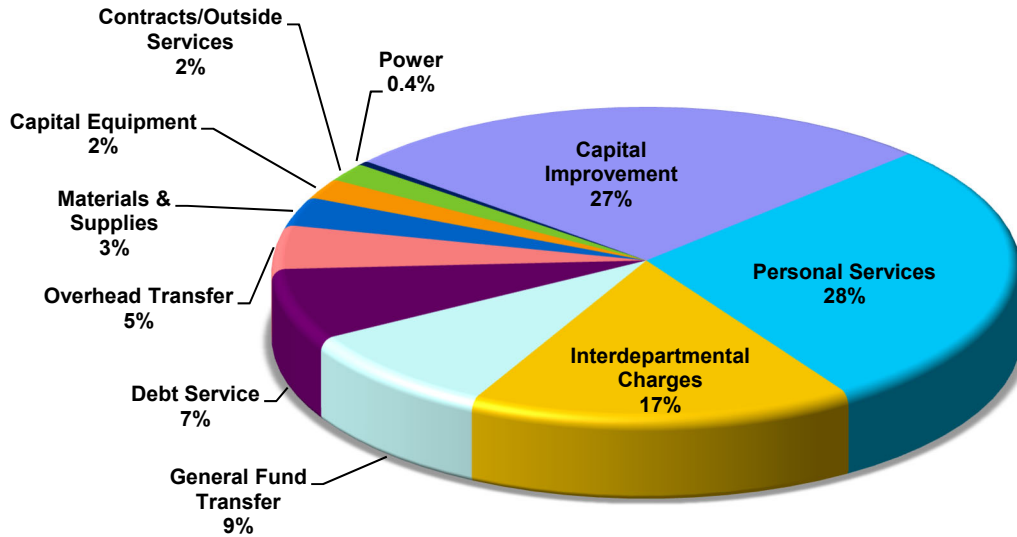


**Revenues (in \$1,000's): Budget to Budget Comparison**

	<b>FY 20 Budget</b>	<b>FY 21 Budget</b>	<b>Change</b>	<b>Percent Change</b>
Potable and Reclaimed Water Sales	76,699	77,685	985	1%
Daily Service Charge	32,458	34,576	2,118	7%
Advanced Metering Debt Proceeds	9,752	9,375	(377)	-4%
Seawater Barrier Reimbursement	1,069	5,513	4,444	416%
Misc. Revenue	3,207	2,706	(501)	-16%
Port Reimbursement	-	2,420	2,420	0%
Litigation Payback	1,710	1,710	-	0%
Leo Vander Lans Reimbursement	2,946	851	(2,095)	-71%
Grants	-	750	750	0%
Other Services	502	667	165	33%
<b>Total Revenues</b>	<b>128,344</b>	<b>136,253</b>	<b>7,909</b>	<b>6%</b>

**FIGURE 3**

**Sewer Fund  
FY 21 Expenditures**

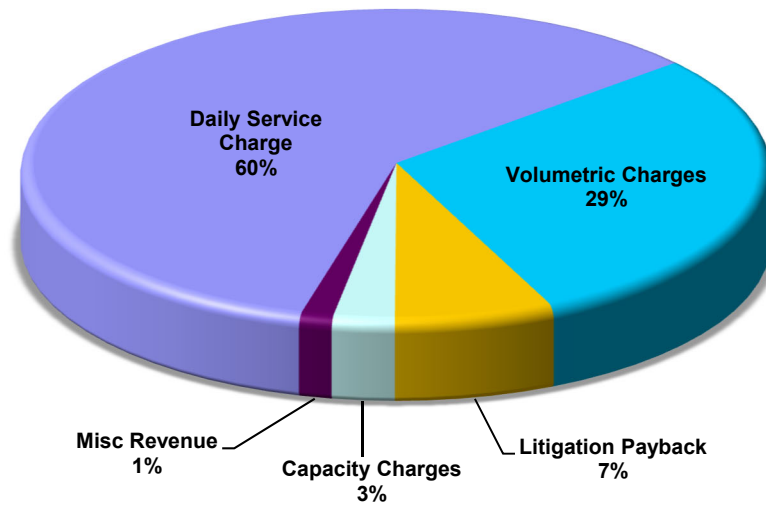


**Expenditures (in \$1,000's): Budget to Budget Comparison**

	<b>FY 20 Budget</b>	<b>FY 21 Budget</b>	<b>Change</b>	<b>Percent Change</b>
Capital Improvement	5,198	6,287	1,089	21%
Personal Services	5,411	6,628	1,218	23%
Interdepartmental Charges	3,836	3,944	108	3%
General Fund Transfer	2,118	2,118	-	0%
Debt Service	1,937	1,749	(188)	-10%
Overhead Transfer	1,069	1,069	-	0%
Materials & Supplies	668	706	38	6%
Capital Equipment	635	495	(140)	-22%
Contracts/Outside Services	421	452	31	7%
Power	102	102	-	0%
<b>Total Expenditures</b>	<b>21,395</b>	<b>23,552</b>	<b>2,156</b>	<b>10%</b>

**FIGURE 4**

**Sewer Fund  
FY 21 Revenues**



**Revenues (in \$1,000's): Budget to Budget Comparison**

	<b>FY 20 Budget</b>	<b>FY 21 Budget</b>	<b>Change</b>	<b>Percent Change</b>
Daily Service Charge	11,057	11,104	47	0%
Volumetric Charges	5,595	5,473	(122)	-2%
Litigation Payback	1,290	1,290	-	0%
Capacity Charges	750	500	(250)	-33%
Misc Revenue	187	263	76	41%
<b>Total Revenues</b>	<b>18,879</b>	<b>18,631</b>	<b>(248)</b>	<b>-1%</b>