

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 469,450 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.

For the FY 20 Water Fund budget, expenditures are estimated to increase by 9% due to increased purchasing and treatment costs, capital improvement projects, and personal services costs. Budgeted revenues are estimated to increase by 14% due to a 12% increase in water rates and advanced metering infrastructure debt proceeds.

For the FY 20 Sewer Fund budget, expenditures are estimated to decrease by 20% due to advanced metering infrastructure costs being shifted to the Water Fund. Budgeted revenues are estimated to decrease by 22% due to advanced metering infrastructure debt proceeds being shifted to the Water Fund.

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 30 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 20, the planned replenishment assessment charged by WRD will increase by 8%.
- WRD's rates have risen a total of 101% 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 20, MWD's rates for treated water will rise by 3.4%.
- MWD's rates have risen a total of 50% 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, 2018, the water distribution system totaled 912 miles of water mains, 463 miles of water service lines with 89,354 active water service connections and the sewer distribution system totaled 714 miles of sewer mains, 369 miles of sewer service lines with 86,703 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 less than 30 per year.

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.

The Department responds immediately, 24-hours a day, 365 days a year, to water emergencies such as main breaks.

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.

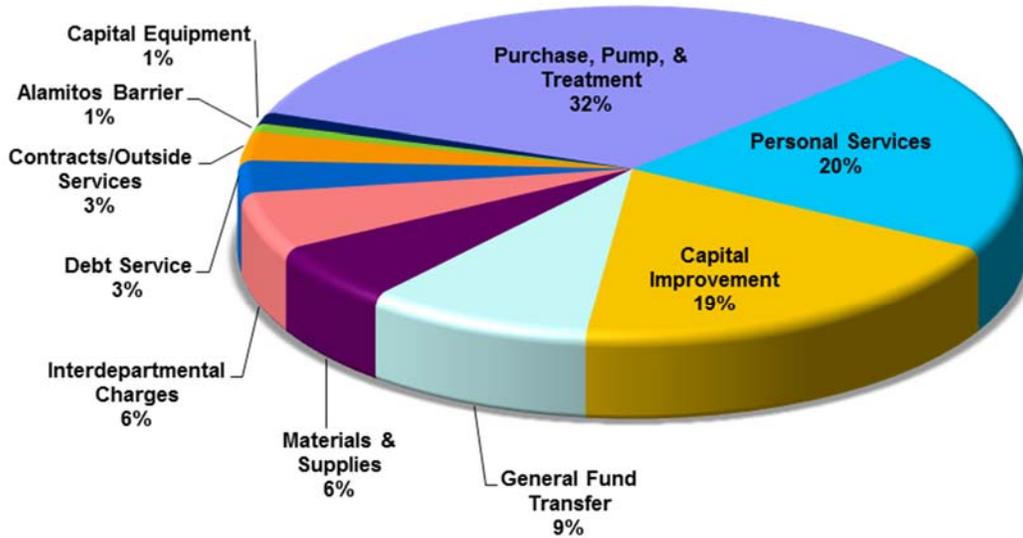
IV. Budget Highlights

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

- FY 20 Water Fund expenditures total \$134.9 million, a 9% increase as compared to the FY 19 budget.
- FY 20 Sewer Fund expenditures total \$21.4 million, a 21% decrease as compared to the FY 19 budget.
- FY 20 Water Fund revenues total \$128.3 million, a 14% increase as compared to the FY 19 budget.
- FY 20 Sewer Fund revenues total \$18.9 million, a 22% decrease as compared to the FY 19 budget.

FIGURE 1

**Water Fund
FY 20 Expenditures**

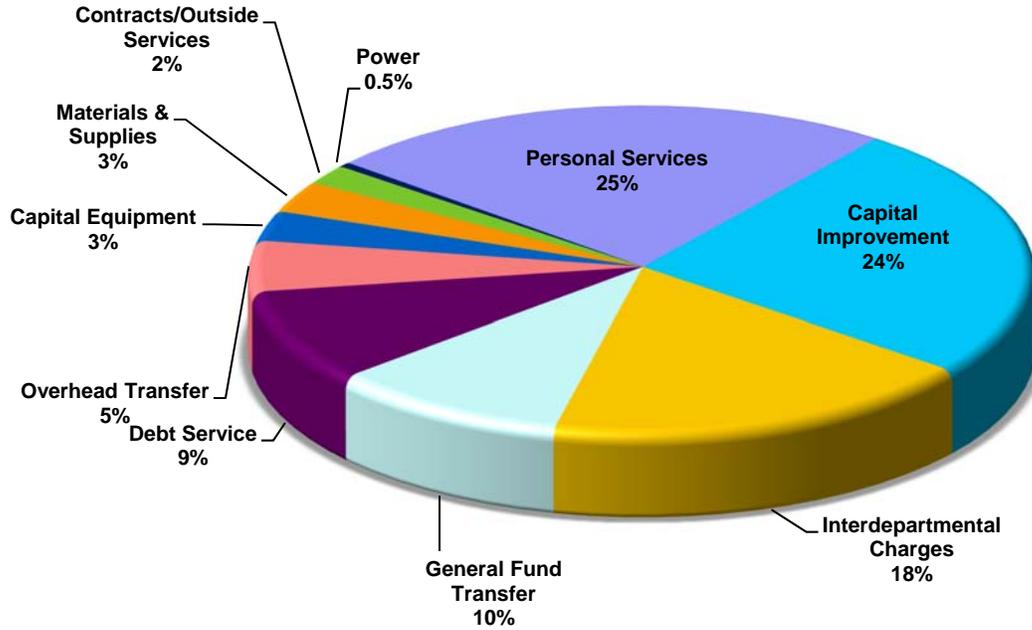


Expenditures (in \$1,000's): Budget to Budget Comparison

| | FY 19 Budget | FY 20 Budget | Change | Percent Change |
|-----------------------------|-------------------------|-------------------------|---------------|---------------------------|
| Purchase, Pump, & Treatment | 39,426 | 43,768 | 4,342 | 11% |
| Personal Services | 25,475 | 26,819 | 1,344 | 5% |
| Capital Improvement | 19,511 | 25,518 | 6,006 | 31% |
| General Fund Transfer | 12,318 | 12,654 | 337 | 3% |
| Materials & Supplies | 7,361 | 7,776 | 416 | 6% |
| Interdepartmental Charges | 6,963 | 7,647 | 684 | 10% |
| Debt Service | 4,332 | 4,270 | (63) | -1% |
| Contracts/Outside Services | 4,075 | 3,792 | (283) | -7% |
| Alamos Barrier | 3,141 | 1,069 | (2,072) | -66% |
| Capital Equipment | 1,565 | 1,545 | (20) | -1% |
| Total Expenditures | 124,167 | 134,857 | 10,690 | 9% |

FIGURE 2

**Sewer Fund
FY 20 Expenditures**

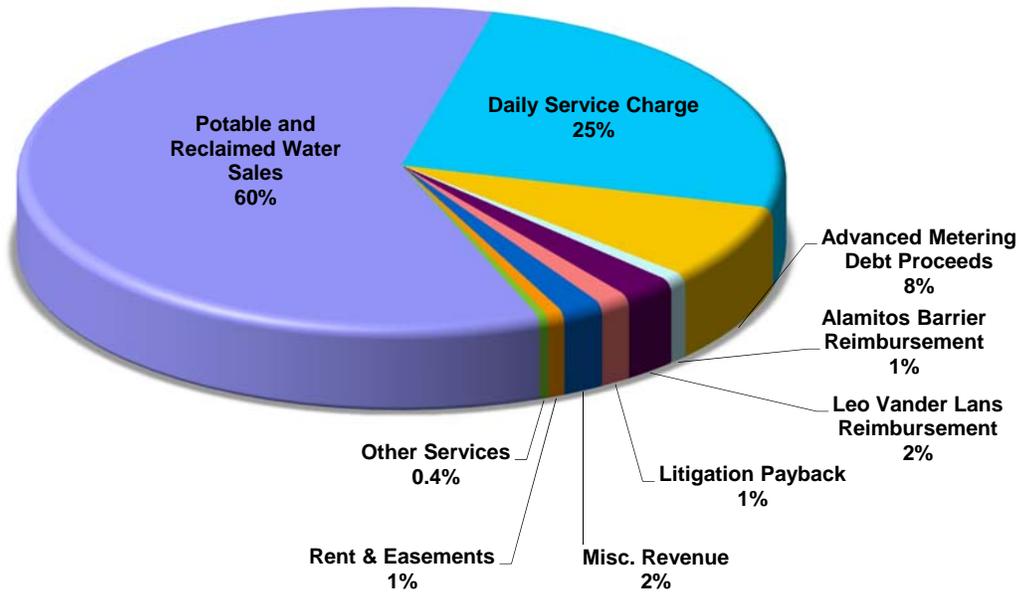


Expenditures (in \$1,000's): Budget to Budget Comparison

| | FY 19 Budget | FY 20 Budget | Change | Percent Change |
|----------------------------|-------------------------|-------------------------|----------------|---------------------------|
| Capital Improvement | 11,769 | 5,198 | (6,571) | -56% |
| Personal Services | 4,988 | 5,411 | 423 | 8% |
| Interdepartmental Charges | 3,465 | 3,836 | 371 | 11% |
| General Fund Transfer | 2,094 | 2,118 | 24 | 1% |
| Debt Service | 1,968 | 1,937 | (31) | -2% |
| Overhead Transfer | 1,038 | 1,069 | 31 | 3% |
| Capital Equipment | 779 | 635 | (144) | -18% |
| Materials & Supplies | 644 | 668 | 24 | 4% |
| Contracts/Outside Services | 271 | 421 | 150 | 55% |
| Power | 102 | 102 | - | 0% |
| Total Expenditures | 27,118 | 21,395 | (5,723) | -21% |

FIGURE 3

**Water Fund
FY 20 Revenues**

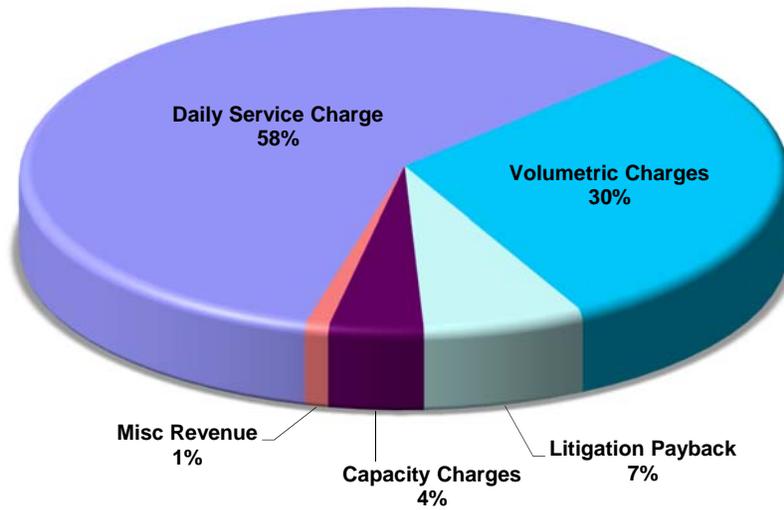


Revenues (in \$1,000's): Budget to Budget Comparison

| | FY 19 Budget | FY 20 Budget | Change | Percent Change |
|-----------------------------------|-------------------------|-------------------------|---------------|---------------------------|
| Potable and Reclaimed Water Sales | 71,651 | 76,699 | 5,048 | 7% |
| Daily Service Charge | 25,553 | 32,458 | 6,906 | 27% |
| Advanced Metering Debt Proceeds | 5,258 | 9,752 | 4,494 | 85% |
| Alamos Barrier Reimbursement | 3,141 | 1,069 | (2,072) | -66% |
| Leo Vander Lans Reimbursement | 2,792 | 2,946 | 154 | 6% |
| Litigation Payback | 1,710 | 1,710 | - | 0% |
| Misc. Revenue | 1,040 | 2,280 | 1,240 | 119% |
| Rent & Easements | 893 | 927 | 34 | 4% |
| Other Services | 419 | 502 | 83 | 20% |
| Total Revenues | 112,457 | 128,344 | 15,887 | 14% |

FIGURE 4

**Sewer Fund
FY 20 Revenues**



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

| | FY 19 Budget | FY 20 Budget | Change | Percent Change |
|---------------------------------|-------------------------|-------------------------|----------------|---------------------------|
| Daily Service Charge | 10,782 | 11,057 | 274 | 3% |
| Volumetric Charges | 5,829 | 5,595 | (234) | -4% |
| Advanced Metering Debt Proceeds | 5,258 | - | (5,258) | -100% |
| Litigation Payback | 1,290 | 1,290 | - | 0% |
| Capacity Charges | 750 | 750 | - | 0% |
| Misc Revenue | 186 | 187 | 2 | 1% |
| Total Revenues | 24,095 | 18,879 | (5,216) | -22% |