COMPREHENSIVE ANNUAL FINANCIAL REPORT

OF THE LONG BEACH WATER DEPARTMENT

A Department of the City of Long Beach, California



For The Fiscal Year Ended
September 30, 2018





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COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE LONG BEACH WATER DEPARTMENT

(A Department of the City of Long Beach, California)

For the Fiscal Year Ended SEPTEMBER 30, 2018

CHRISTOPHER J. GARNER
General Manager

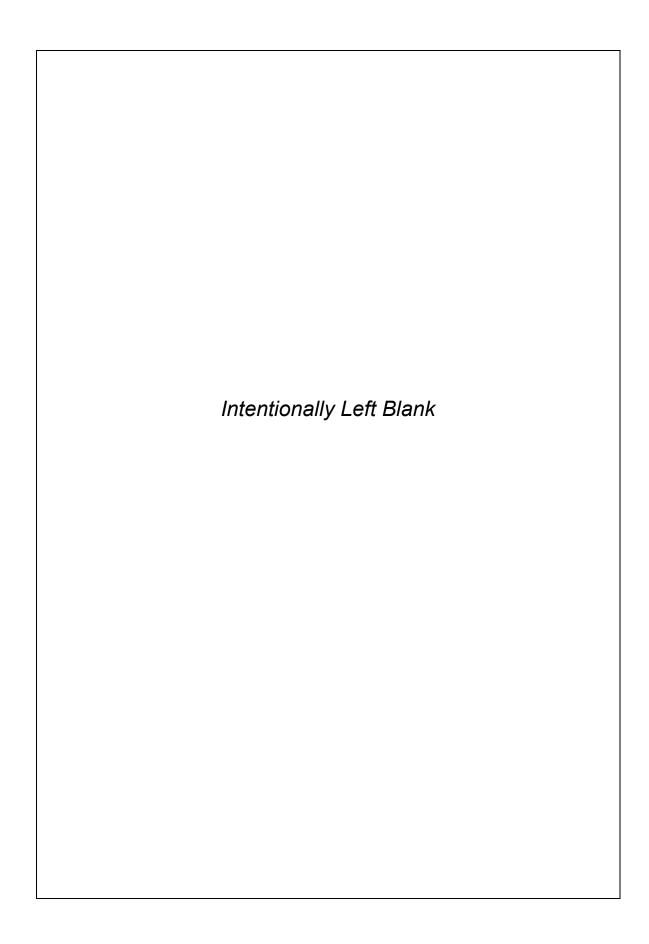
B. ANATOLE FALAGAN Assistant General Manager

PAUL FUJITA
Director of Finance

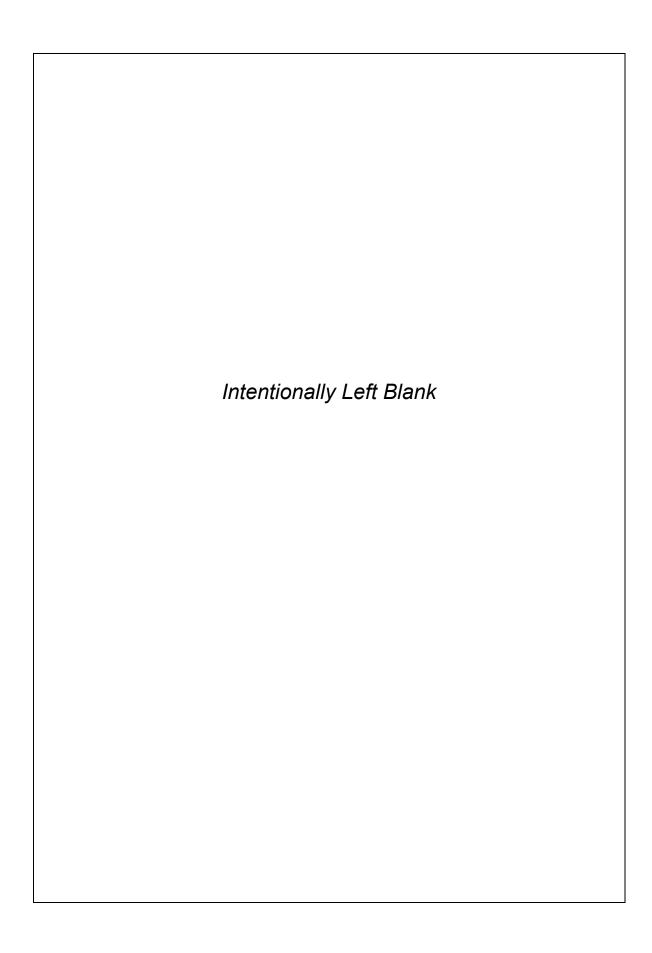
SOKHALAY HONG Senior Accountant

YUMINA C. EGGLESTON Senior Accountant

Prepared by the Finance Division of the Business Bureau



NTRODUCTORY SECTION



Comprehensive Annual Financial Report

of the

Long Beach Water Department (A Department of the City of Long Beach, California)

For the Fiscal Year Ended September 30, 2018

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1800 E. Wardlow Road, Long Beach, CA 90807-4931 562.570.2300 | Ibwater.org

DATE March 26, 2019

TO Board of Water Commissioners

FROM B. Anatole Falagan, Assistant General Manager

SUBJECT Approval of Comprehensive Annual Financial Report for the fiscal years ended September 30, 2018

Management is pleased to present the Comprehensive Annual Financial Report (CAFR) of the Long Beach Water Department (Department), for the fiscal year ended September 30, 2018. The Department's financial statements are also included in the City of Long Beach (the City) Financial Statements as enterprise funds (Water Fund and Sewer Fund).

Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control that is established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

The accompanying financial statements have been audited by KPMG LLP, an independent certified public accounting firm. KPMG LLP has issued an unmodified ("clean") opinion on the Department's financial statements for the fiscal year ended September 30, 2018. The independent auditors' report is located at the front of the financial section of this report.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditors' report, and provides a narrative introduction, overview, and analysis of the financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

THE REPORTING ENTITY

During the early years of the 20th Century, Long Beach began establishing itself as an up-and-coming area that seemed destined to someday become a large city. In order to sustain the expected growth that would occur in future years, it was critical that the City identify and secure a reliable source of water. In recognizing the importance of this, on June 27, 1911, Long Beach voters approved an \$850,000 bond issuance to purchase two private water companies that had been providing water supplies to the Long Beach population. Three days later, on June 30, 1911, the Long Beach city council approved an emergency ordinance creating the Long Beach Water Department, thereby giving the City its own municipal water agency that would regulate and control the use, sale and distribution of water owned or controlled by the City.

Twenty years later, in 1931, two additional significant milestones came to pass for the Department. The first was the creation of the Long Beach Board of Water Commissioners (Board), which governs the Department and is comprised of five members appointed by the Mayor, subject to confirmation by the City Council. Members of the Board serve overlapping five-year terms to provide continuity of operations. That same year, the City also became one of the original 13 founding members of the Metropolitan Water District of Southern California (MWD). Joining MWD would allow the Department to eventually acquire imported water as a supplement to the City's groundwater supplies.

In February 1988, the Department assumed the responsibility of the various functions of the City's sanitary sewer system, including operations and maintenance. In April 1990, the citizens of Long Beach passed a City Charter amendment that allowed greater autonomy for the Department in administering the City's sanitary sewer operations.

The Department's service area encompasses the boundaries of the City of Long Beach, the seventh largest city in State, with an area of approximately 50 square miles and a population of 469,450 with some customers outside the City limits. The Department is not subject to regulation by the California Public Utilities Commission.

LOCAL ECONOMY

The City has a diverse economic base as both a major industrial center and popular beach resort area. In addition, the Port of Long Beach, along with its related commercial and international trade activities, strengthens the local economy. Further, the City has been successful in building and maintaining a substantial tourist and convention business. This diversification helped the City to weather the effects of the national recession. Continuing positive trends in both the State and local economies indicate slow and steady economic growth for the near future. As an older, established and geographically built-out City, the Department's customer base is relatively stable and is comprised of ninety percent (90%) residential

accounts, with the remaining ten percent (10%) comprised of commercial, industrial, irrigation and other accounts. The residential accounts comprise approximately sixty-nine percent (69%) of the Department's total potable water sales. Further information on the local economy is provided in the City of Long Beach CAFR, of which the Department is a component unit.

WATER SUPPLY

The Department meets the needs of its customers through an increasingly 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.

Drought Related Developments

Long Beach water demand peaked in 1990, but water demand has been declining ever since. The reduced water demand can be attributed to a combination of a steady commitment to water conservation efforts by the Department and statewide droughts in 1990-1991, 2007-2009, and 2015-2016, each of which triggered a sharp decrease in water demand. Conservation efforts have included aggressive public outreach and incentive programs for water saving measures. The Water Department will continue these efforts to incorporate the conservation success into a sustained change in consumption behavior.

Reduced water usage due to conservation does result in reduced revenues. At the same time, those reductions are also offset by a reduction in operating expenses as a result of less imported water purchases from Metropolitan Water District (MWD).

Additionally, the Department managed discretionary budget expenses to minimize initial budget and rate impacts from reduced consumption. The Water Department's budget and rate structure is based annually on cost recovery and on State law governing water utility rate setting (Proposition 218).

The following subsections provide an overview of the Department's water resources.

Groundwater

Ownership of water rights allows approximately sixty percent (60%) of Long Beach's water supply needs to be produced from groundwater wells located within the City. Before it reaches our customers' taps, local groundwater must journey many miles from its source high up in the mountains. Rain and snow-melt from the San Gabriel Mountains watershed travel through washes and creeks into the San Gabriel River and the Whittier Narrows Basin. From there it percolates underground through sand and water beds where it begins a lengthy subsurface journey to Long Beach. High-powered pumps then extract it from 30 active groundwater wells and pump it to our groundwater treatment plant.

During the 1940's and 1950's the population grew and the increased water demand in the San Gabriel Valley significantly reduced the flows southward to the Central Basin, contributing to falling water tables. In 1959, to protect this vital source of local water supply, the Board initiated a lawsuit against major water producers in the San Gabriel Valley to guarantee water supplies to Central Basin producers.

Parties to the lawsuit negotiated a settlement which provided the basis of a stipulated judgment (the "Long Beach Judgment") rendered by the Superior Court on October 8, 1965. By separate action, a committee of Central Basin producers reached an agreement for voluntary reduction of pumpage within the basin to restore and protect the water table and to expedite the above judgment to permanently prevent excessive pumping. The reduction in pumping began October 1, 1962. The two events were of major importance in securing local water supplies for the City. The Department is the largest producer of water in the Central Basin.

Imported Supplies

Another portion of the City's potable (drinking) water supply is treated water purchased from MWD. This water originates from two sources: the Colorado River Aqueduct and the State Water Project (SWP).

Through its 242-mile long system, the Colorado River Aqueduct provides up to a billion gallons of water a day to residents and businesses in Southern California's coastal plain. Water is taken in at Lake Havasu and carried to the reservoir facilities at Lake Mathews. The State Water Project delivers water originating from the Oroville Dam and Reservoir and the Sacramento River Delta. The SWP is an intricate network of dams, pumping plants, reservoirs, hydroelectric plants, the Sacramento and San Joaquin Rivers and 440 miles of aqueducts that carry water to several Southern California reservoirs.

Water Recycling

Effective water recycling helps stretch the potable water supply; that is the primary reason the Department launched a reclaimed water system in 1978. In FY2018, the Department served approximately 1.8 billion gallons of reclaimed water to a variety of users throughout the City.

Water that would otherwise flow to the ocean and be wasted is reclaimed and used to irrigate park land, golf courses, freeway landscaping and school grounds, which reduces our dependence on imported water. Since 2005, recycled water treated at the Leo J. Vander Lans Advanced Water Treatment Facility (LVLAWTF) has partially replaced the use of imported water at the Alamitos Barrier, an engineered freshwater pressure ridge and seawater trough constructed to prevent seawater intrusion into the Central Basin and neighboring Orange County Groundwater Basin. In 2015, LVLAWTF was expanded, providing the operational flexibility to meet the needs of the Alamitos Barrier almost entirely with recycled water, minimizing the need of imported water.

Conservation

The Department has an aggressive water conservation program that offers a variety of opportunities to conserve water across different sectors of the community and for both indoor and outdoor water uses.

Single-family and multi-family customers together are responsible for approximately two-thirds of the City's demand for water. Several of the Department's programs provide rebates to residential customers towards the purchase of water-efficient toilets and washing machines.

Close to half of single-family residential water use is estimated to be for landscape irrigation. The Department provides, at no cost to the customers, very well attended and well received classroom instruction on the design, installation, and maintenance of water-efficient California-friendly landscapes. The Department has also developed and implemented an award-winning Lawn-to-Garden program whereby customers can apply for an incentive to replace up to 1,500 square feet of turf with a California-friendly landscape. Incentives are also offered for customers to change traditional spray irrigation systems to water-efficient drip irrigation.

In addition to promoting conservation to residential and landscape accounts, we work closely with commercial, industrial and institutional (CII) customers to help them conserve water. The Department has encouraged conservation through targeted direct marketing, through rebates for water conserving devices, and offers a Certified Blue program to promote water efficiency in restaurants which will be expanded to include other CII sectors.

Long Beach Water Department promotes water use efficiency with many community partners, including schools, organizations and businesses. The Department takes pride in its award-winning outreach efforts, including supporting community functions, making presentations at local and regional events, and marketing through print, digital and social media strategies.

WATER QUALITY

A primary objective of the Department is to deliver to our customers water that meets or exceeds all Federal and State standards. The Department continues to be recognized as a leader in the area of water quality. Our extensive testing and Quality Assurance/Quality Control program ensures that water delivered to our customers is of the highest possible quality.

The Long Beach Groundwater Treatment Plant is a state of the art water treatment facility, including four advanced water quality laboratories. This combination helps explain why the City's high quality drinking water consistently meets or exceeds all Federal and state drinking water regulations.

The Department conducts extensive sampling and testing of groundwater wells, water storage reservoirs, the water distribution system and, when appropriate, selected homes, businesses, schools and public facilities. This year, our Water Quality laboratories collected 16,421 samples and performed 82,033 tests while maintaining certification with the California Department of Health Services and Environmental Protection Agency (EPA).

During fiscal year 2018, the Groundwater Treatment Plant processed approximately 9.5 billion gallons of drinking water. Overall, 17.4 billion gallons of high-quality water were delivered to the Long Beach community.

MAJOR INITIATIVES

Seawater Desalination Research

Since 1994, the Department has researched seawater desalination as a potential source of drinking water. In 1996, the Department received authorization for Federal cost-sharing of a seawater desalination demonstration project; and in fiscal year 2001, the Department received an earmark in the Federal fiscal year 2002 budget, making it the only newly funded water project by the Federal government in that budget. Federal funding continued in fiscal years 2003 through 2015. Through an innovative public sector partnership, the Long Beach Water Department along with the Los Angeles Department of Water & Power and the United States Bureau of Reclamation operated a 300,000 gallon-per-day prototype desalination facility, one of the largest seawater desalination research and development facilities in the United States. The Seawater Desalination study was completed in March 2010 and research gathered from the operation of the prototype plant was published as a report to the U.S. Bureau of Reclamation. Additionally, the Department operates an ongoing research project for an under-ocean intake and discharge system.

Conjunctive Use

The Department has also partnered with MWD and the California Department of Water Resources (DWR) on an innovative groundwater storage program. The \$4.5 million project, which was funded by State of California Proposition 13, stored surplus water in the Central Groundwater Basin, and has previously, delivered the stored water during previous drought conditions in 2008 and 2009. A second \$2.7 million joint conjunctive use project with the City of Lakewood was completed in 2009 and water stored under this project may also be called upon in a drought.

Water Distribution System

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 with approximately 90,000 service connections.

During fiscal year 2018, the Department and contractors replaced 22,198 feet of deteriorated cast iron water mains with new ductile iron pipe. This critical replacement program addresses upgrading old pipelines, many of which were installed more than 50 years ago.

The Department maintains 644 large control valves 20 inches or more in diameter and 23,098 smaller control valves. The Department has a maintenance and replacement program to ensure that control valves are operational and that they can be turned off or on promptly during emergencies. The Department responds immediately, 24-hours a day, 365 days a year to water emergencies. With 30 active water wells across Long Beach supplying just over half of the City's water, well maintenance is another ongoing project for the Department. Rehabilitation of water wells and storage tanks at Alamitos and J. Will Johnson Reservoirs continues to ensure a reliable supply of water in the future.

Sanitary Sewer Collection System

The Department has made considerable progress since 1988 in addressing the substantial challenges posed by an aging sanitary sewer infrastructure, much of which is between 60 and 80 years old. At September 30, 2018, the sanitary sewer collection system totaled 714 miles of sewer pipelines. The Department developed the first City-wide Sewer Master Plan in 1991, which provided an initial prioritization of sewer deficiencies to be addressed. The Department has since developed a comprehensive program of maintenance, monitoring and repair of sewer lines including:

- an aggressive annual pipeline cleaning program and Fats, Oil and Grease (FOG) program to address impacts to lines;
- a video monitoring program to assess conditions of pipelines;
- a comprehensive annual sewer infrastructure repair program.

In fiscal year 2009, the Department completed a comprehensive Sewer Master Plan Update, providing the Department with an updated evaluation and prioritization of current deficiencies. The plan included the use of dynamic hydraulic modeling software to assess existing collection system performance, as well as to evaluate the system for future conditions. Based on the plan, the Department developed and began implementation of a multi-year Capital Improvement Program to address aging infrastructure identified by the Master Plan analysis.

RELEVANT FINANCIAL POLICIES

The Department's financial statements are presented on the accrual basis of accounting. As an enterprise fund, the cost of providing water is recovered through user charges assessed by meter size, volumetric charges and other miscellaneous charges. The cost of providing sewer service is also recovered through user and volumetric charges for all water customers who are connected to the City's sewers. Certain services, such as payroll, civil service, public service, general service, customer billing, data processing, legal, etc., are provided to the Department by other City departments; these costs are reimbursed to the City by transfer of funds from the Water Fund or the Sewer Fund.

Internal Control Structure

In the development and enhancement of the Department's accounting system, careful consideration is given to the adequacy of the internal controls designed to provide reasonable assurance regarding the safeguarding of assets against possible loss, unauthorized use or disposition; to ensure the reliability of financial records for preparing financial statements and maintaining accountability for assets, and to promote operational efficiency and compliance with managerial policies. The concept of reasonable assurance recognizes that: (1) the cost of a specific control feature should not exceed the benefits likely to be derived, and; (2) the evaluation of costs and benefits requires continued estimates and judgment by management.

Budgetary Control

The budget is a management control device for the forthcoming fiscal year. Prior to July 1 each year, the Board adopts an operating budget, which covers anticipated revenues and expenditures of the Department. The Department's budget is also subject to the approval of the City Council. By September 30 each year, the City Council shall approve the budget as adopted by the Board of Water Commissioners, or shall amend the budget and approve it as amended.

Budgets are prepared on a cash basis for revenues and for several categories of expenses. These budgets are not designed to be pro-forma statements of income and expense in the same format as the Water Department's financial statements. Instead, they are utilized primarily for controlling costs along organizational and programmatic lines. Each Bureau within the Department is responsible for outlays initiated by Divisions. Revenues are monitored only at the departmental level, except in certain areas where they are controlled by individual projects.

AWARDS AND ACKNOWLEDGEMENTS

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Department for its comprehensive annual financial report (CAFR) for the fiscal year ended September 30, 2017. The Certificate of Achievement is the highest form of recognition in the area of governmental accounting and financial reporting and its attainment represents a significant accomplishment by a government agency and its management. In order to be awarded a Certificate of Achievement, the Department must publish an easily readable and efficiently organized CAFR whose contents not only conform to the high program standards of the GFOA, but also satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

We would like to acknowledge the assistance of Sokhalay Hong, Senior Accountant, and Yumina C. Eggleston, Senior Accountant, of the Business Bureau Finance Division in the preparation of this report.

It is recommended that the Board of Water Commissioners receive and file the Comprehensive Annual Financial Report for the fiscal years ended September 30, 2018.

Prepared by:

Paul Fujita, Director of Finance

Submitted and Recommended by:

B. Anatole Falagan, Assistant General Manager

Approved by:

Christopher J. Garner, General Manager

Att. PTF:ptf intro.doc



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

Long Beach Water Department California

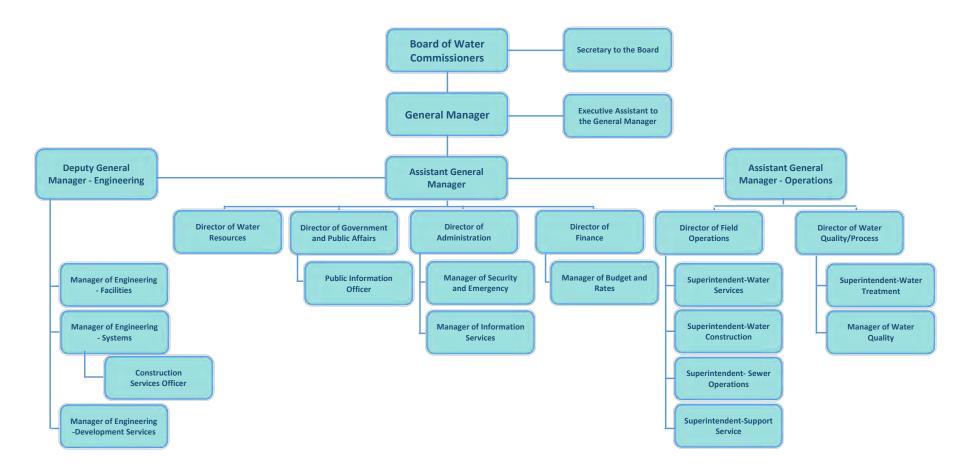
For its Comprehensive Annual Financial Report for the Fiscal Year Ended

September 30, 2017

Christopher P. Morrill

Executive Director/CEO

Long Beach Water Department Organizational Chart



BOARD OF WATER COMMISSIONERS

GLORIA CORDERO PRESIDENT

HARRY SALTZGAVER VICE PRESIDENT

FRANK MARTINEZ SECRETARY

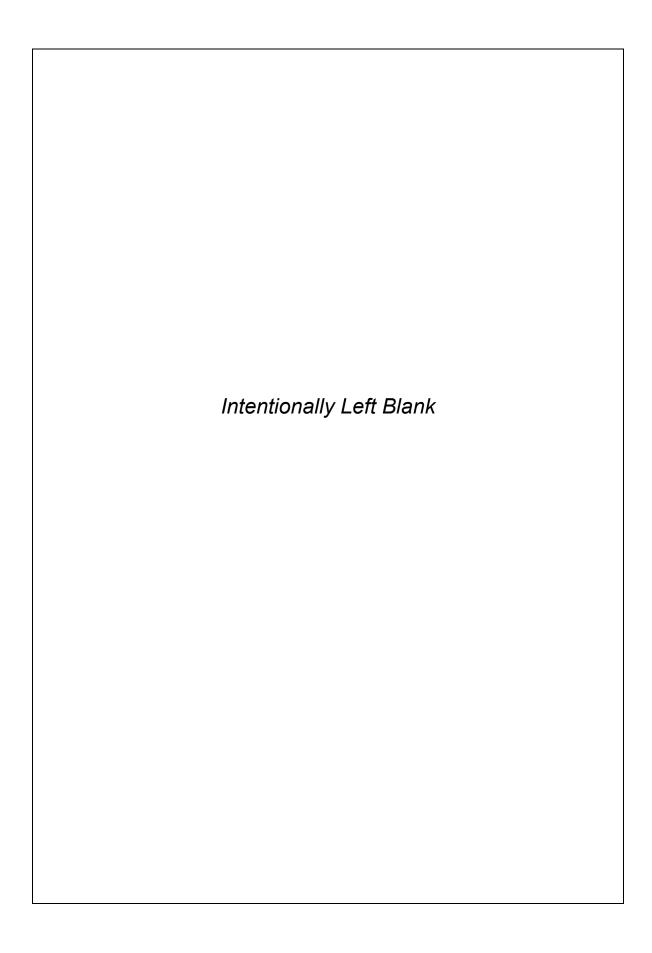
ARTHUR LEVINE MEMBER

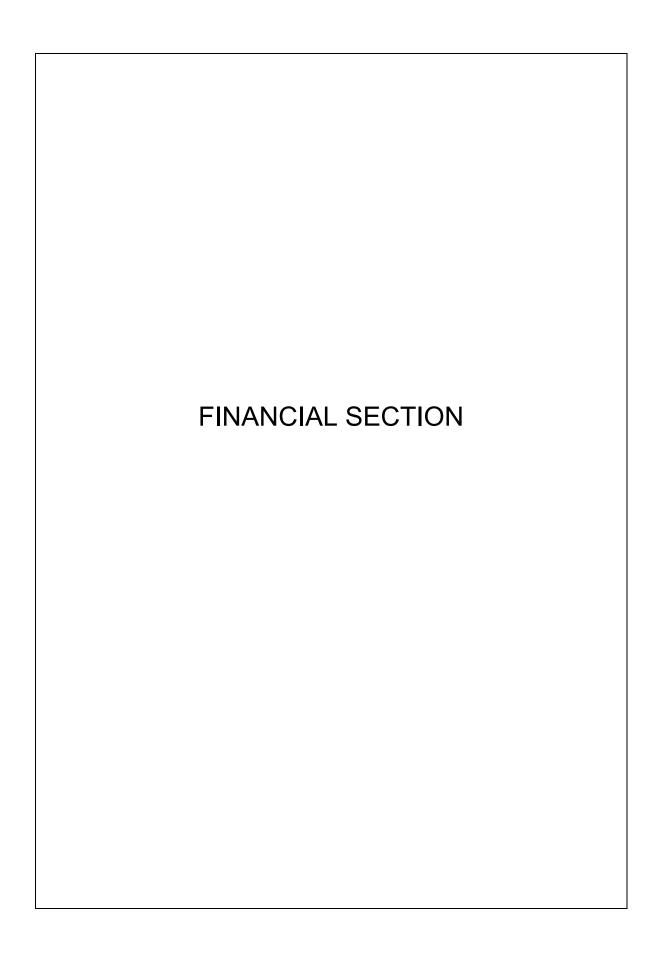
ROBERT SHANNON MEMBER

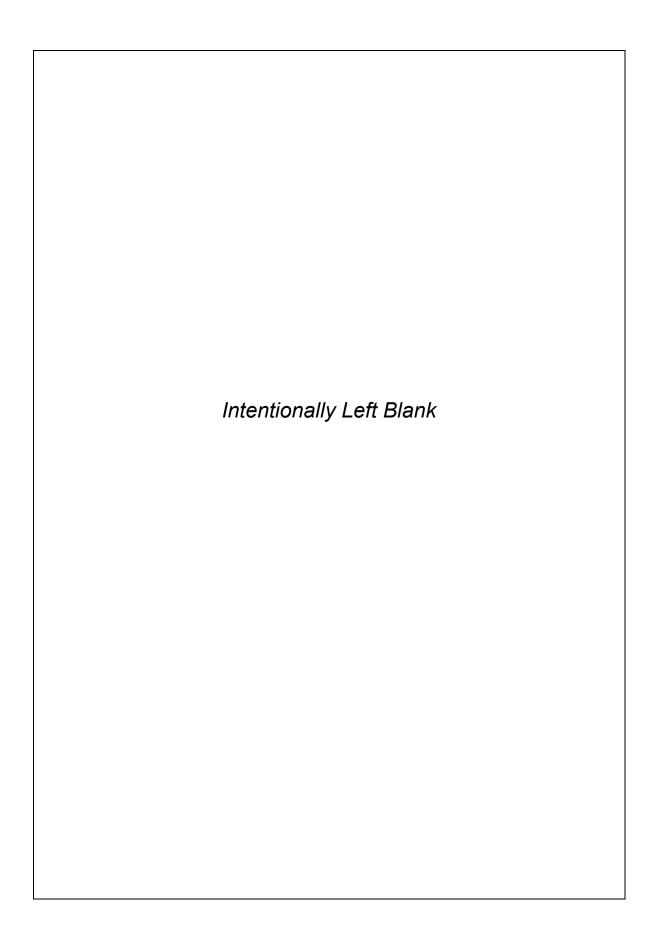
STAFF

CHRISTOPHER J. GARNER
General Manager

B. ANATOLE FALAGAN Assistant General Manager









KPMG LLP Suite 700 20 Pacifica Irvine, CA 92618-3391

Independent Auditors' Report

The Honorable Mayor and City Council
The Honorable Members of the Board of Water Commissioners:

We have audited the accompanying financial statements of the business-type activities and each major fund of the Long Beach Water Department (the Department) of the City of Long Beach, California (the City), as of and for the year ended September 30, 2018, and the related notes to the financial statements, which collectively comprise the Department's basic financial statements as listed in the tables of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial statements contained in *Government Auditing* Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and each major fund for the Long Beach Water Department of the City of Long Beach, California, as of September 30, 2018, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with U.S. generally accepted accounting principles.



Emphasis of Matter

As discussed in note 1, the financial statements of the Department are intended to present the financial position, the changes in financial position and, where applicable, cash flows of only that portion of the business-type activities and each major fund of the City that is attributable to the transactions of the Department. They do not purport to, and do not, present fairly the financial position of the City as of September 30, 2018, the changes in its financial position, or, where applicable, its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3–21 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Department's basic financial statements. The introductory and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated March 26, 2019 on our consideration of the Department's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Department's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Department's internal control over financial reporting and compliance.



Irvine, California March 26, 2019

Management's Discussion and Analysis September 30, 2018

As the management of the Long Beach Water Department, a department of the City of Long Beach (the City), we offer readers of the Long Beach Water Department's financial statements this narrative overview and analysis of the financial activities of the Long Beach Water Department (the Department) for the fiscal year ended September 30, 2018. We encourage readers to consider the information presented here in conjunction with the accompanying financial statements. The Department comprises the City's Water Enterprise Fund (Water Fund) and Sewer Enterprise Fund (Sewer Fund) operations. All amounts, unless otherwise indicated, are expressed in thousands of dollars.

FINANCIAL HIGHLIGHTS

The Department's assets and deferred outflows exceeded its liabilities and deferred inflows at the close of fiscal year 2018 (FY2018) by \$364,087 (net position). The Department's net position is further broken down between the Water Fund and Sewer Fund below.

Water Fund. Assets and deferred outflows exceeded liabilities and deferred inflows at the close of FY2018 by \$295,160. Of this amount, \$299,325 represents net investment in capital assets, and \$1,706 represents resources that are subject to restrictions on how they may be used. The Water Fund showed a deficit in unrestricted net position of \$5,871 in FY2018. Total Water Fund net position increased by \$12,396 (+4.4%) from the prior fiscal year. The increase reflects income in excess of expenses and contributed capital received during the year.

Sewer Fund. Total Sewer Fund net position totaled \$68,927 as of September 30, 2018, an increase of \$5,338 (+8.4%) from the prior fiscal year. The increase reflects income in excess of expenses during the year. In FY2018, the net investment in capital assets and the unrestricted portion of net position totaled \$61,593 and \$7,031, respectively.

Significant Department Events. On November 8, 2017, the City of Long Beach (City) entered into a Settlement and Release Agreement (Agreement) with Diana Lejins (Ms. Lejins), a resident of the City and Water and Sewer service customer of the Department. The Agreement settled the lawsuit entitled Diana Lejins v. City of Long Beach (Los Angeles Superior Court Case No. BS1655724) alleging that the City's annual assessment and transfer of Pipeline Permit Fees from the Water and Sewer Funds to the City's general fund violates Proposition 218 (California Constitution Article XIII D).

Management's Discussion and Analysis September 30, 2018

The following is a summary of significant terms and conditions stipulated in the Agreement which affected the Water fund and Sewer fund:

- The City may no longer charge Pipeline Permit Fees to the Department's Water and Sewer Funds.
- The City is required to return previous transfers totaling \$12,000 from the City's general fund back to the Department in four equal annual payments of \$3,000 each. Each payment is allocated 57% to the Water Fund and 43% to the Sewer Fund (\$1,710 and \$1,290 respectively).
- The Agreement allows for an accepted methodology for calculating future transfers from the Department to the City's general fund based on a consultant study of City costs incurred for maintenance of the City street right-of-way (ROW study).
- The Department reduced its FY2018 Water and Sewer rates to reflect that the Pipeline Permit Fees are no longer being paid to the City. The Department implemented volumetric and daily service charge rate reductions of 4.2% for the Water Fund and 10.4% for Sewer Fund effective January 1, 2018. The Agreement allows for the Department to adjust rates to account for potential increases in future annual transfers based on the City's ROW study methodology.

On June 5, 2018, the residents of the city of Long Beach voted to pass the Utility Revenue Transfer Charter Amendment (Measure M). With this amendment, the Department is authorized to make annual transfers of any funds from the Water and Sewer Funds to the General Fund that are determined by the Board of Water Commissioners (Commission) to be unnecessary to meet its obligations; provided that the maximum transfer does not exceed 12% of each funds' audited annual gross revenues. The transfers to the General Fund can be spent for unrestricted general revenue purposes. The Commission is authorized to set, and the City Council to approve, water and sewer rates in an amount sufficient to recover the cost of Water and Sewer Fund obligations.

Effects of these significant events on the Water Fund and Sewer Fund operations are further discussed in the Financial Analysis section of this report.

OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the Department's financial statements. Because the Department is a business-type activity of the City, enterprise funds are used to account for its water and sewer operations. These financial statements include only the activities of the Department and provide comparative

Management's Discussion and Analysis September 30, 2018

information for the last fiscal year. Information on Citywide financial operating results is available in the City of Long Beach Comprehensive Annual Financial Report as of September 30, 2018.

The Department's financial statements comprise two components: 1) financial statements and 2) notes to financial statements. Included as part of the financial statements are the Statements of Net Position, Statements of Revenues, Expenses, and Changes in Fund Net Position, and Statements of Cash Flows.

The *Statements of Net Position* present the Department's assets and liabilities, with the difference between the two reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Department is improving or deteriorating.

The Statements of Revenues, Expenses, and Changes in Fund Net Position present information showing how the Department's net position have changed during the most recent fiscal year. Results of operations are recorded under the accrual basis of accounting, whereby transactions are reported as underlying events occur, regardless of the timing of cash flows. Thus, revenues and expenses are reported in these statements for some items that will only result in cash flows in future fiscal periods (i.e., accounts payable and accounts receivable). The Department's use of the accrual basis of accounting is more fully described in the accompanying Notes to Financial Statements.

The *Statements of Cash Flows* present flows of cash and cash equivalents during the last two fiscal years, including certain restricted amounts.

The *Notes to Financial Statements* provide additional information that is essential to the full understanding of the data provided in the financial statements and can be found on pages 27-53 of this report.

FINANCIAL ANALYSIS

As noted earlier, net position may serve over time as a useful indicator of the Department's financial position. As of September 30, 2018, Water Fund assets exceeded liabilities by \$295,160, and Sewer Fund assets exceeded liabilities by \$68,927, representing a 4.4% increase in net position over the prior fiscal year for the Water Fund and an 8.4% increase in Sewer Fund net position. Net positions are further categorized by net investment in capital assets, and restricted and unrestricted net positions.

As of September 30, 2018, investment in capital assets, such as production, transmission, and distribution facilities, less any related debt used to acquire those assets that remains

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outstanding, amounted to \$299,325 and \$61,593 of Water Fund and Sewer Fund, respectively. The Department uses these capital assets to provide services to customers; consequently, these assets are not available for future spending. Resources needed to repay the outstanding debt on the Statements of Net Position must come from other sources such as operations.

The restricted portion of the Department's net position amounted to \$1,706 and \$303 for Water Fund and Sewer Fund, respectively. This represents resources that are subject to external restrictions on how they may be used. These restrictions are for items such as debt repayment and other legally restricted purposes.

The unrestricted portion of the net position for Water Fund reflects a deficit of \$5,871 as of September 30, 2018, representing a 75.3% increase over FY2017. On the other hand, the Sewer Fund's unrestricted portion amounted to \$7,031, representing a 61.3% increase in deficit over FY2017. The unrestricted portion of the Department's net position may be used to meet the Department's ongoing obligations to creditors and customers.

The Department's Condensed Schedules of Net Position as of September 30, 2018 and 2017 are as follows (in thousands):

Long Beach Water Department
Condensed Schedules of Net Position
September 30, 2018 and 2017
(in thousands)

			Variance	
			2018/2	017
	2018	2017	Amount	%
Assets:				
Current and other assets	\$ 75,032	\$ 68,436	\$ 6,596	9.6%
Capital assets	391,362	377,238	14,124	3.7%
Total assets	466,394	445,674	20,720	4.6%
Deferred Outflows of Resources:				
Deferred Outflows	8,812	15,099	(6,287)	-41.6%
Liabilities:				
Current liabilities	24,328	20,814	3,514	16.9%
Noncurrent liabilities	81,482	89,477	(7,995)	-8.9%
Total liabilities	105,810	110,291	(4,481)	-4.1%
Deferred Inflows of Resources:				
Deferred Infows	5,309	4,129	1,180	28.6%
Net Position:				
Net investment in				
capital assets	360,918	343,340	17,578	5.1%
Restricted	2,009	2,002	7	0.3%
Unrestricted	1,160	1,011	149	14.7%
Total net position	\$364,087	\$346,353	\$17,734	5.1%

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The Department's financial position is further broken down as follows between the Department's Water Fund and the Sewer Fund as of September 30, 2018 and 2017:

Water Fund Condensed Schedules of Net Position September 30, 2018 and 2017 (in thousands)

		2017	Variance	
			2018/2	2017
	2018		Amount	%
Assets:	-			_
Current and other assets	\$ 56,791	\$ 55,075	\$ 1,716	3.1%
Capital assets	319,277	307,357	11,920	3.9%
Total assets	376,068	362,432	13,636	3.8%
Deferred Outflows of Resources:				
Deferred Outflows	7,564	12,963	(5,399)	-41.6%
Liabilities:				
Current liabilities	20,703	19,034	1,669	8.8%
Noncurrent liabilities	63,389	70,309	(6,920)	-9.8%
Total liabilities	84,092	89,343	(5,251)	-5.9%
Deferred Inflows of Resources:				
Deferred Infows	4,380	3,288	1,092	33.2%
Net Position:				
Net Investment in				
capital assets	299,325	284,413	14,912	5.2%
Restricted	1,706	1,700	6	0.4%
Unrestricted	(5,871)	(3,349)	(2,522)	75.3%
Total net position	\$295,160	\$282,764	\$12,396	4.4%

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Sewer Fund Condensed Schedules of Net Position September 30, 2018 and 2017 (in thousands)

			Variance	
			2018/2	2017
	2018	2017	Amount	%
Assets:				
Current and other assets	\$ 18,241	\$ 13,361	\$ 4,880	36.5%
Capital assets	72,085	69,881	2,204	3.2%
Total assets	90,326	83,242	7,084	8.5%
Deferred Outflows of Resources:				
Deferred Outflows	1,248	2,136	(888)	-41.6%
Liabilities:				
Current liabilities	3,625	1,780	1,845	103.7%
Noncurrent liabilities	18,093	19,168	(1,075)	-5.6%
Total liabilities	21,718	20,948	770	3.7%
Deferred Inflows of Resources:				
Deferred Infows	929	841	88	10.5%
Net Position:				
Net Investment in				
capital assets	61,593	58,927	2,666	4.5%
Restricted	303	302	1	0.3%
Unrestricted	7,031	4,360	2,671	61.3%
Total net position	\$ 68,927	\$ 63,589	\$ 5,338	8.4%

Fiscal Year Ended September 30, 2018 Compared to 2017

Water Fund. Net position increased by \$12,396 (+4.4%) over FY2017. This net increase is attributable to contributed capital of \$6,122 from various Developers for water distribution system improvements and revenues in excess of expenses of \$6,274.

Current and other assets increased by \$1,716 (+3.1%) from FY2017, due to an increase in cash reserves and inventory by \$1,346 (+3.9%) in relation to operating activities in FY2018. In addition, receivables from other government agencies increased by \$613 (+1,703.5%) as a result of increased of activities in capital improvement projects over FY2017.

Capital assets increased by \$11,920 (+3.9%) over the prior year, mainly due to the ongoing capital improvement program for cast iron water main replacement, water service installations, machinery and equipment purchases, and facility improvements.

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Deferred outflows of resources decreased by \$5,399 (-41.6%) over FY2017. This net decrease reflects changes in actuarial assumptions on other post-employment benefits costs (OPEB) and overall deferred net pension costs. Additional information on deferred outflows related to pensions is provided on Note 5 - Retirement Program of the Notes to Financial Statements on page 43.

Current liabilities increased by \$1,669 (+8.8%) compared to FY2017 mainly due to an increase in accounts payable by \$663 (+6.3%) as a result of increases in potable water purchases from Metropolitan Water District (MWD) and expenditures relating to capital improvements in potable water and reclaimed water distribution systems. In addition, liabilities to the City increased by \$1,058 (+100.0%) representing outstanding amounts due in relation to the ROW Study and Measure M.

Noncurrent liabilities decreased by \$6,920 (-9.8%) from FY2017 primarily due to annual principal payments on debt and bonds premium amortization in FY2018 and a decrease in net pension liability by \$4,158 (-10.6%). Additional information is provided on Note 4 - Noncurrent Liabilities of the Notes to Financial Statements in page 38 and on Note 5 - Retirement Program on page 43.

Deferred inflows of resources increased by \$1,092 (+33.2%) over FY2017. This net increase reflects changes in actuarial assumptions, differences between actual and projected experience and proportionate share of deferred pension and OPEB costs. Additional information on deferred outflows related to pensions is provided on Note 5 - Retirement Program of the Notes to Financial Statements on page 43.

Sewer Fund. Net position increased \$5,338 (+8.4%) over FY2017. This increase was attributable to revenues in excess of expenses.

Current assets and other assets increased by \$4,880 (+36.5%), reflecting an increase in pooled cash and cash equivalents. This increase is due to a \$1,325 (-26.7%) decrease on payments for goods and services relating to sewer operations over FY2017, In addition, cash paid to the City for permit fees decreased by \$2,373 (-50.2%) in FY2018. The Department also received a reimbursement from the City in the amount \$1,290 in FY2018. This reimbursement is the first of four annual payments based on the terms and conditions stipulated in the Settlement and Release Agreement.

Capital assets increased by \$2,204 (+3.2%) over FY2017 due to machinery and equipment purchases and the completion of several sewer main pipe relining and replacement, and sewer pump station rehabilitation projects across the city of Long Beach.

Management's Discussion and Analysis September 30, 2018

Deferred outflows of resources decreased by \$888 (-41.6%) over FY2017. This net decrease shows changes in actuarial assumptions on OPEB costs and deferred pension costs. Additional information on deferred outflows related to pensions is provided on Note 5 - Retirement Program of the Notes to Financial Statements on page 43.

Current liabilities increased by \$1,845 (+103.7%) compared to FY2017 due to an increase in accounts payable by \$498 (+70.9%) as a result of increases in expenditures relating to sewer collection system maintenance and capital improvements. In addition, liabilities to the City increased by \$1,118 (+100.0%) representing the outstanding amount due in relation to the ROW Study and Measure M.

Noncurrent liabilities decreased by \$1,075 (-5.6%) from FY2017 primarily due to a decrease in the net pension liabilities by \$708 (-9.6%). In addition, long-term bonds payable decreased by \$476 (-4.5%) primarily due to annual principal payments on Series 2016A Bonds. Additional information is provided on Note 4 - Noncurrent Liabilities of the Notes to Financial Statements in page 38 and on Note 5 – Retirement Program on page 43.

Deferred Inflows of resources increased by \$88 (+10.5%) over FY2017. This increase reflects changes in actuarial assumptions, differences between actual and projected experience and proportionate share of deferred pension and OPEB costs. Additional information on deferred outflows related to pensions is provided on the Note 5 - Retirement Program of the Notes to Financial Statements in page 43.

Management's Discussion and Analysis September 30, 2018

The Water Department's Condensed Schedules of Revenues, Expenses, and Changes in Fund Net Position provide further insight as to the nature and source of changes in net position and are summarized as follows for the years ended September 30, 2018 and 2017 (in thousands):

Long Beach Water Department Condensed Schedules of Revenues, Expenses, and Changes in Fund Net Position Fiscal Years Ended September 30, 2018 and 2017 (in thousands)

			Variance	
			2018/	2017
	2018	2017	Amount	%
Operating Revenues:				
Metered water sales	\$ 66,891	\$ 67,616	\$ (725)	-1.1%
Reclaimed water sales	3,604	3,338	266	8.0%
Service charges	38,697	36,469	2,228	6.1%
Maintenance services	86	86	-	-
Other services	8,767	9,823	(1,056)	-10.8%
Total operating revenues	118,045	117,332	713	0.6%
Operating Expenses:				
Cost of water	29,927	25,374	4,553	17.9%
Personal services	26,706	25,153	1,553	6.2%
Maintenance and other	28,984	27,728	1,256	4.5%
Depreciation and amortization	15,043	14,017	1,026	7.3%
Permit fees	5,029	10,892	(5,863)	-53.8%
Commercial Services	4,105	4,041	64	1.6%
Total operating expenses	109,794	107,205	2,589	2.4%
Operating income	8,251	10,127	(1,876)	-18.5%
Nonoperating Income (Expenses):				
Interest income	268	119	149	125.2%
Interest expense	(269)	(238)	(31)	13.0%
Loss on disposition of property	40	(114)	154	-135.1%
Rents	905	811	94	11.6%
Bonds issuance costs	-	(21)	21	-100.0%
Other	1,868	(1,134)	3,002	-264.7%
Income before contributed capital	11,063	9,550	1,513	15.8%
Capital contributions	6,671	734	5,937	808.9%
Change in net position	17,734	10,284	7,450	72.4%
Beginning net position, as adjusted	346,353	336,069	10,284	3.1%
Ending net position	\$364,087	\$346,353	\$17,734	5.1%

Management's Discussion and Analysis September 30, 2018

The Department's operations are further broken down as follows between the Department's Water Fund and the Sewer Fund for the years ended September 30, 2018 and 2017:

Water Fund
Condensed Schedules of Revenues, Expenses, and Changes in Fund Net Position
Fiscal Years Ended September 30, 2018 and 2017
(in thousands)

			Variance	
			2018	/2017
	2018	2017	Amount	%
Operating Revenues:	_	_		
Metered water sales	\$ 60,886	\$ 61,383	\$ (497)	-0.8%
Reclaimed water sales	3,604	3,338	266	8.0%
Service charges	27,325	24,599	2,726	11.1%
Other services	7,358	8,063	(705)	-8.7%
Total operating revenues	99,173	97,383	1,790	1.8%
Operating Expenses:				
Cost of water	29,927	25,374	4,553	17.9%
Personal services	22,500	21,389	1,111	5.2%
Maintenance and other	25,397	25,101	296	1.2%
Depreciation and amortization	12,553	11,694	859	7.3%
Permit fees	2,671	6,161	(3,490)	-56.6%
Commercial Services	2,272	2,174	98	4.5%
Total operating expenses	95,320	91,893	3,427	3.7%
Operating income (loss)	3,853	5,490	(1,637)	-29.8%
Nonoperating Income (Expenses):				
Interest income	210	87	123	143.0%
Interest expense	(123)	(161)	38	-23.7%
Gain (Loss) on disposition of property	138	(94)	232	-246.8%
Rents	905	811	94	11.6%
Other	1,291	(133)	1,424	-1070.7%
Income (loss) before contributed capital	6,274	6,000	274	-4.6%
Capital contributions	6,122	734	5,388	734.1%
Change in net position	12,396	6,734	5,662	84.1%
Beginning net position, as adjusted	282,764	276,030	6,734	2.4%
Ending net position	\$295,160	\$282,764	\$12,396	4.4%

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Sewer Fund Condensed Schedules of Revenues, Expenses, and Changes in Fund Net Position Fiscal Years Ended September 30, 2018 and 2017 (in thousands)

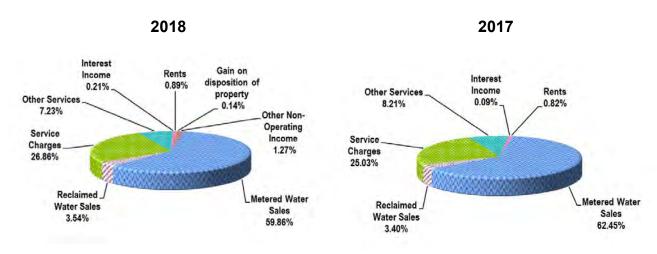
			Vari	ance
			2018	/2017
	2018	2017	Amount	%
Operating Revenues:				
Metered water sales	\$ 6,005	\$ 6,233	\$ (228)	-3.7%
Service charges	11,372	11,870	(498)	-4.2%
Maintenance services	86	86	-	-
Other services	1,409	1,760	(351)	-19.9%
Total operating revenues	18,872	19,949	(1,077)	-5.4%
Operating Expenses:				
Personal services	4,206	3,764	442	11.7%
Maintenance and other	3,587	2,627	960	36.5%
Permit fees	2,358	4,731	(2,373)	-50.2%
Depreciation	2,490	2,323	167	7.2%
Commercial Services	1,833	1,867	(34)	-1.8%
Total operating expenses	14,474	15,312	(838)	-5.5%
Operating income	4,398	4,637	(239)	-5.2%
Nonoperating Income (Expenses):				
Interest income	58	32	26	81.3%
Interest expense	(146)	(77)	(69)	89.6%
Loss on disposition of property	(98)	(20)	(78)	390.0%
Bonds issuance costs	-	(21)	21	-100.0%
Other	577	(1,001)	1,578	-157.6%
Income before contributed capital	4,789	3,550	1,239	34.9%
Capital contributions	549		549	-
Change in net position	5,338	3,550	1,788	50.4%
Beginning net position, as adjusted	63,589	60,039	3,550	5.9%
Ending net position	\$ 68,927	\$ 63,589	\$ 5,338	8.4%

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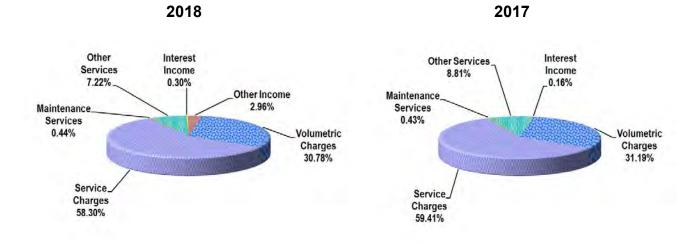
Sources of Revenues

Sources of revenue for fiscal years 2018 and 2017 are shown on the following charts.

Water Fund



Sewer Fund



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Management Review of the Department's Revenues

Water Fund

Fiscal Year Ended September 30, 2018 Compared to 2017

Total operating revenues were \$99,173, an increase of \$1,790 (+1.8%) over FY2017. The major elements of this net increase are as follows:

- Metered potable water sales revenue decreased by \$497 (-0.8%) primarily due to changes in water rates during FY2018. In the first quarter of FY2018, there was a 4% water rate increase effective October 1, 2017. For the three remaining quarters in FY2018, there was a 4.2% decrease in water rates became effective January 1, 2018. The changes in rates were offset by a 1,961 AF (+3.8%) increase in consumption.
- Service charges increased by \$2,726 (+11.1%) in FY2018 primarily as result of a restructuring of water rates based on an updated Cost of Service Study. The new rates came into effect in July 1, 2017.
- Revenue from other services totaled \$7,358, a net decrease of \$705 (-8.7%) from the prior year. This is primarily attributable to a decrease in reimbursements from operating the Leo J. Vander Lans Advanced Water Treatment Facility (LVLAWTF) by \$826 (-28.6%) compared to FY2017. The facility reduced its operations in treating reclaimed water while the Sanitation Districts of Los Angeles County (LACSD) Water Reclamation Plant is undergoing rehabilitation.

Capital contributions increased by \$5,388 (+734.1%) compared to FY2017 primarily due to several potable and reclaimed water distribution system facilities completed such as Douglas Business Park Development, Long Beach City College South Quad Complex, and North Gate Redevelopment.

Sewer Fund

Fiscal Year Ended September 30, 2018 Compared to 2017

Total operating revenues decreased \$1,077 (-5.4%) over FY2017. The key elements of this decrease are as follows:

- Metered water sales revenue decreased by \$228 (-3.7%) over FY2017 as a result of a
 net decrease in sewer rates. In the first quarter of FY2018, there was a 2% sewer rate
 increase effective October 1, 2017. There was also a 10.4% decrease in sewer rates
 which came into effect in January 1, 2018. This decrease in revenue was offset by an
 increase in volumetric demand by 1.8% compared to FY2017.
- Service charges decreased by \$498 (-4.2%) over FY2017 due to changes in sewer rates during FY2018. There was a 2% sewer rate increase effective October 1, 2017,

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which was offset by a 10.4% sewer rate decrease which came into effect in January 1, 2018.

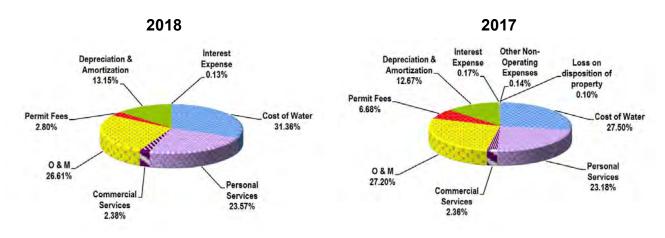
 Other services revenue decreased by \$351 (-19.9%) over FY2017 due to a decrease in sewer capacity charges revenue as a result of a decline in residential development in the city of Long Beach.

Capital contributions increased by \$549 (+100.0%) compared to FY2017 primarily due to several sewer collection system facilities completed such as the Douglas Business Park Development.

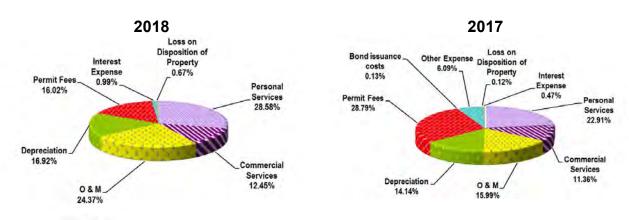
Functional Expenses

Functional expenses for the 2018 and 2017 fiscal years are shown on the following charts.

Water Fund



Sewer Fund



Management's Discussion and Analysis September 30, 2018

Management Review of the Department's Expenses.

Water Fund

Fiscal Year Ended September 30, 2018 Compared to 2017

Operating expenses totaled \$95,320, an increase of \$3,427 (+3.7%) over FY2017. The major elements attributable to the net increase are as follows:

- In FY2018, purchased water costs and volume increased by \$4,553 (+17.9%) and 4,380 AF (+18.3%) respectively, due to increased demand and rate increases as follows:
 - Purchased potable water from MWD increased by 2,873 AF (+14.9%) with a 3.7% Tier 1 full service treated volumetric rate increase compared to FY2017.
 - Purchased potable water through an agreement with the City of Lakewood via a distribution pipeline inter-tie connection increased by 1,554 AF (+293.2%) in FY2018. Also, during FY2018, increases in purchased water rates amounted to 5% compared to FY2017.
- Personal services costs increased by \$1,111 (+5.2%) in FY2018 primarily as a result of increases in staffing previously budgeted vacant positions, negotiated Cost of Living Allowance (COLA), fringe benefits, overtime, and pension costs.
- Permit fees decreased by \$3,490 (-56.6%) over FY2017 due to termination of the City's Pipeline Permit Fee assessments to the Department on December 31, 2017 as a result of the terms and conditions stated in the Settlement and Release Agreement.

FY2018 net nonoperating income totaled \$2,421, a net increase of \$1,911 (+374.7%) over FY2017 which is primarily due to a payment of \$1,710 from the City which is the first of four annual payments stipulated in the Settlement and Release Agreement.

Sewer Fund

Fiscal Year Ended September 30, 2018 Compared to 2017

Total operating expenses amounted to \$14,474, a decrease of \$838 (-5.5%) over FY2017. This decrease is mostly attributable to the following elements:

- Permit fees decreased by \$2,373 (-50.2%) in FY2018 due to the termination of City's Pipeline Permit Fee assessments to the Department on December 31, 2017 as a result of the terms and conditions stated in the Settlement and Release Agreement.
- Personal services costs increased by \$442 (+11.7%) in FY2018 primarily as a result of increases in negotiated Cost of Living Allowance (COLA), fringe benefits, overtime, and pension costs.

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- Maintenance and other expenses increased by \$960 (+36.5%) compared to FY2017.
 The net increase is mostly attributable to the following major factors:
 - Contractual services increased by \$451 (+185.7%) mainly due to increased activity in sewer pipeline repair and maintenance and legal services in connection with the Settlement and Release Agreement.
 - In FY2018, professional services costs for Customer Information System (CIS) integration support and payment processing increased by \$440 (+157.2%).

FY2018 net nonoperating income totaled \$391, a net increase of \$1,478 (+136.0%) over FY2017. This is primarily due to the first of four annual payments received from the City in the amount of \$1,290. This transaction is stipulated in the terms and conditions of the Settlement and Release Agreement. In addition, sewer capital improvement projects charged to expense decreased by \$232 (-25.9%) over FY2017.

Capital Assets and Debt Administration

Capital assets. The Department's capital assets (net of accumulated depreciation and amortization) as of September 30, 2018 amounted to \$319,277 for the Water Fund and \$72,085 for the Sewer Fund. Capital assets include investments in production, transmission, patent, improvements on buildings and structures, and distribution related facilities, as well as general items such as office equipment and furniture. For FY2018, net capital assets increased \$11,920 (+3.9%) and \$2,204 (+3.2%) for Water Fund and Sewer Fund, respectively. The net increase is due primarily to machinery and equipment purchases and capitalization of major potable water and reclaimed water distribution systems, and sewer collection systems.

Management's Discussion and Analysis September 30, 2018

The Department's capital assets are summarized as follows for the years ended September 30, 2018 and 2017 (in thousands):

Long Beach Water Department Capital Assets September 30, 2018 and 2017 (in thousands)

()	,		Varia	nce
			2018/2	017
	2018	2017	Amount	%
Land	\$ 11,214	\$ 11,214	\$ -	-
Water Rights	40	40	-	-
Patent - Desalination	815	815	-	-
Buildings, structures, and facilities	149,204	144,951	4,253	2.9%
Distribution/collection systems	564,117	545,704	18,413	3.4%
Machinery and equipment	24,567	22,600	1,967	8.7%
Construction in progress	27,497	24,814	2,683	10.8%
Total capital assets	777,454	750,138	27,316	3.6%
Less: accumulated depreciation				
and amortization	(386,092)	(372,900)	(13,192)	3.5%
Net capital assets	\$ 391,362	\$ 377,238	\$14,124	3.7%

The Department's capital assets are further broken down as follows between the Department's Water Fund and the Sewer Fund for the years ended September 30, 2018 and 2017:

Water Fund Capital Assets September 30, 2018 and 2017 (in thousands)

·	,		Variar	nce
			2018/2	017
	2018	2017	Amount	%
Land	\$ 11,214	\$ 11,214	\$ -	-
Water Rights	40	40	-	-
Patent - Desalination	815	815	-	-
Buildings, structures, and facilities	139,582	135,446	4,136	3.1%
Distribution/collection systems	358,623	343,462	15,161	4.4%
Machinery and equipment	18,707	17,013	1,694	10.0%
Construction in progress	23,129	20,398	2,731	13.4%
Total capital assets	552,110	528,388	23,722	4.5%
Less: accumulated depreciation				
and amortization	(232,833)	(221,031)	(11,802)	5.3%
Net capital assets	\$ 319,277	\$ 307,357	\$ 11,920	3.9%

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Sewer Fund Capital Assets September 30, 2018 and 2017 (in thousands)

	,		Varian	ice
			2018/2	017
	2018	2017	Amount	%
Buildings, structures, and facilities	\$ 9,622	\$ 9,505	\$ 117	1.2%
Distribution/collection systems	205,494	202,242	3,252	1.6%
Machinery and equipment	5,860	5,587	273	4.9%
Construction in progress	4,368	4,416	(48)	-1.1%
Total capital assets	225,344	221,750	3,594	1.6%
Less: accumulated depreciation	(153,259)	(151,869)	(1,390)	0.9%
Net capital assets	\$ 72,085	\$ 69,881	\$ 2,204	3.2%

Additional information regarding capital assets can be found in notes 1 and 3 to the Department's financial statements.

Long-term debt. As of September 30, 2018, the Department had total outstanding long-term debt, net of current portion in the amount of \$20,702 for the Water Fund and \$10,148 for the Sewer Fund. All debt is supported by Water Fund revenues and Sewer Fund revenues. Total Department outstanding debt as of September 30, 2018 and 2017 is summarized as follows:

Water Fund Summary of Long-Term Debt September 30, 2018 and 2017 (in thousands)

			Variai	nce
			2018/2	2017
	2018	2017	Amount	%
Revenue refunding bonds Less:	\$ 22,095	\$ 24,910	\$ (2,815)	-11.3%
Current portion	(2,930)	(2,815)	(115)	4.1%
Long-term debt outstanding	19,165	22,095	(2,930)	-13.3%
Add:				
Unamortized bond premium	1,537	1,914	(377)	-19.7%
Total long-term debt	\$ 20,702	\$ 24,009	\$ (3,307)	-13.8%

Management's Discussion and Analysis September 30, 2018

Sewer Fund Summary of Long-Term Debt September 30, 2018 and 2017 (in thousands)

				Varian	се
				2018/20)17
	 2018	2017	_Ar	nount	%
Revenue refunding bonds Less:	\$ 9,040	\$ 9,370	\$	(330)	-3.5%
Current portion	(345)	(330)		(15)	4.5%
Long-term debt outstanding	 8,695	9,040		(345)	-3.8%
Add: Unamortized bond premium	1,453	1,584		(131)	-8.3%
Total long-term debt	\$ 10,148	\$ 10,624	\$	(476)	-4.5%

The Department maintains AA+ credit ratings from Standard & Poor's for the Water and Sewer Funds. Additional information on the Department's long-term debt can be found in note 4 of this report.

Economic Factors and Next Year's Budget and Rates

The Board of Water Commissioners (Board) approved the budget for the fiscal year-end September 30, 2019, with budgeted expenditures totaling approximately \$121,167 and \$27,118 for the Water Fund and Sewer Fund, respectively. In fiscal year 2019 (FY2019), there were 7.2% rate increases for potable water and reclaimed water. There were no rate increases for sewer collection services in FY2019.

Requests for Information

This financial report is designed to provide a general overview of the Department's finances. Questions concerning any information provided in this report or requests for additional financial information should be addressed to the Director of Finance, Long Beach Water Department, 1800 E. Wardlow Road, Long Beach, California 90807.

Statements of Net Position Business Type Activity - Enterprise September 30, 2018

(in thousands of dollars)

	W	ater Fund	Sewer Fund	Total	
ASSETS					
Current Assets:					
Pooled cash and cash equivalents	\$	31,256	16,073	47,329	
Non-pooled cash equivalents		34	-	34	
Interest receivable		13	-	13	
Due from other funds		327	49	376	
Due from other government		322	-	322	
Due from employee benefit fund		5,593	834	6,427	
Customer accounts receivable		6,991	931	7,922	
Allowance for doubtful accounts		(271)	(46)	(317)	
Material and supplies inventory		4,454	97	4,551	
Prepaid expense		2,552	-	2,552	
Restricted assets					
Pooled cash and cash equivalents:					
Funds held in trust		1,238	-	1,238	
Bond service funds		1,623	303	1,926	
Sub-total pooled cash and cash equivalents		2,861	303	3,164	
Non-pooled investments		2,659	<u>-</u>	2,659	
Total restricted assets		5,520	303	5,823	
Total current assets		56,791	18,241	75,032	
Noncurrent Assets:					
Capital assets:					
Land		11,214	-	11,214	
Water rights		40	-	40	
Patent desalination		815	-	815	
Buildings, structures and facilities		139,582	9,622	149,204	
Distribution/collection systems		358,623	205,494	564,117	
Machinery and equipment		18,707	5,860	24,567	
Construction in progress		23,129	4,368	27,497	
Total capital assets		552,110	225,344	777,454	
Less: Accumulated depreciation and					
amortization		(232,833)	(153,259)	(386,092)	
Total capital assets, net		319,277	72,085	391,362	
Total assets		376,068	90,326	466,394	
DEFERRED OUTFLOWS OF RESOURCES					
Economics loss from the refunding of debt	\$	1,105	-	1,105	
Pension contributions after measurement date		2,616	496	3,112	
Difference between actual and expected		4.42	0.4	525	
CalPERS investment returns		443	84	527	
Pension changes in assumptions		2,441	463	2,904	
Pension changes in proportions		535	122	657	
OPEB contributions after measurement date		39	8	47	
OPEB liability change in proportions		82	16	98	
OPEB change in assumptions		303	59	362	
Total deferred outflows of resources		7,564	1,248	8,812	

(Continued)

Statements of Net Position Business Type Activity - Enterprise September 30, 2018

(in thousands of dollars)

	W	ater Fund	Sewer Fund	Total
LIABILITIES				
Current Liabilities:				
Accounts payable	\$	11,142	1,200	12,342
Accrued wages payable		940	270	1,210
Accrued compensated absences		1,876	72	1,948
Due to other funds		1,510	1,394	2,904
Advances from developers		677	185	862
Accrued interest payable		402	159	561
Long-term debt due within one year		2,930	345	3,275
Customer deposits		1,226		1,226
Total current liabilities		20,703	3,625	24,328
Noncurrent Liabilities:				
Long-term debt, net of current portion		20,702	10,148	30,850
Compensated absences		4,649	905	5,554
Total OPEB liability		1,855	363	2,218
Net pension liability		35,183	6,677	41,860
Accrued site restoration cost		1,000	-	1,000
Total noncurrent liabilities		63,389	18,093	81,482
Total liabilities		84,092	21,718	105,810
DEFERRED INFLOWS OF RESOURCES				
CalPERS change in assumption		1,958	372	2,330
CalPERS change in experience		2,101	399	2,500
CalPERS change in proportion		-	95	95
CalPERS change in OPEB assumption		64	13	77
CalPERS change in OPEB chg in proportion		13	2	15
CalPERS change in OPEB experience		244	48	292
Total deferred inflows of resources		4,380	929	5,309
NET POSITION				
Net investment in capital assets		299,325	61,593	360,918
Restricted for:		1 (22	202	1.026
Bond Service Bond Reserve		1,623 83	303	1,926 83
Unrestricted		(5,871)	7,031	1,160
Total Net Position	\$	295,160	68,927	364,087
1 Ottal 1 tot 1 Oshtion	Ψ	273,100	00,721	JU T, 007

See accompanying notes to financial statements

Statements of Revenues, Expenses, and Changes in Fund Net Position Business Type Activity - Enterprise Year Ended September 30, 2018 (in thousands of dollars)

	Water Fund		Sewer Fund	Total	
Operating Revenues:					
Metered water sales	\$	60,886	6,005	66,891	
Reclaimed water sales		3,604	-	3,604	
Service charges		27,325	11,372	38,697	
Maintenance services		-	86	86	
Other services		7,358	1,409	8,767	
Total operating revenues		99,173	18,872	118,045	
Operating Expenses:					
Cost of water		29,927	-	29,927	
Personal services		22,500	4,206	26,706	
Commercial services		2,272	1,833	4,105	
Maintenance and other		25,397	3,587	28,984	
Permit fees		2,671	2,358	5,029	
Depreciation and amortization		12,553	2,490	15,043	
Total operating expenses		95,320	14,474	109,794	
Operating income		3,853	4,398	8,251	
Non-operating Income (Expense):					
Interest income		210	58	268	
Interest expense		(123)	(146)	(269)	
Gain/(loss) on disposition of property		138	(98)	40	
Rental income		905	-	905	
Other		1,291	577	1,868	
Total non-operating income		2,421	391	2,812	
Income before contributed capital		6,274	4,789	11,063	
Contributed capital		6,122	549	6,671	
Changes in net position		12,396	5,338	17,734	
Net position - October 1		282,764	63,589	346,353	
Net Position - September 30	\$	295,160	68,927	364,087	

See accompanying notes to financial statements

Statements of Cash Flows Business Type Activity - Enterprise Year Ended September 30, 2018 (in thousands of dollars)

	W	ater Fund	Sewer Fund	Total
Cash flows from operating activities:				
Cash received from customers	\$	98,820	18,902	117,722
Cash paid to employees		(19,811)	(3,870)	(23,681)
Cash paid for water		(29,270)	-	(29,270)
Cash paid for goods and services		(27,423)	(3,647)	(31,070)
Cash paid for permit fees		(2,671)	(2,358)	(5,029)
Other operating cash received		2,231	443	2,674
Net cash provided by operating activities		21,876	9,470	31,346
Cash flows from capital and related				
Proceeds from sale of capital assets		134	36	170
Contributions in aid of construction		6,146	549	6,695
Payments for capital acquisitions		(23,658)	(4,501)	(28,159)
Principal repayments-bonds		(2,815)	(330)	(3,145)
Interest payments		(1,077)	(395)	(1,472)
Net cash used for capital and				
related financing activities		(21,270)	(4,641)	(25,911)
Cash flows from investing activities:				
Interest income received		208	58	266
Net cash provided by investing activities		208	58	266
Net increase in cash and				
cash equivalents		814	4,887	5,701
Cash and cash equivalents, October 1		35,996	11,489	47,485
Cash and cash equivalents, September 30	\$	36,810	16,376	53,186

(Continued)

Statements of Cash Flows Business Type Activity - Enterprise Year Ended September 30, 2018 (in thousands of dollars)

	W	ater Fund	Sewer Fund	Total
Reconciliation of operating income to				
net cash provided by operating activities:				
Operating income	\$	3,853	4,398	8,251
Adjustments to reconcile operating income				
to net cash provided by operating activities:				
Depreciation expense and amortization		12,553	2,490	15,043
Amortization of other assets		37	-	37
Pension expense		2,819	375	3,194
Decrease property rental and other income		2,231	443	2,674
(Decrease) increase in customer accounts receivable		(110)	5	(105)
(Decrease) increase in due from City of Long Beach		(291)	25	(266)
Increase in material and supplies inventory		(612)	(21)	(633)
Decrease in accounts and retainage payable		663	498	1,161
Increase in accrued wages payable		(130)	(38)	(168)
Decrease in due to City of Long Beach		815	1,295	2,110
Increase in customer deposits		48	<u> </u>	48
Total adjustments		18,023	5,072	23,095
Net cash provided by operating activities	\$	21,876	9,470	31,346
Supplemental schedule of noncash transactions:				
Contributed capital assets		5,113	528	5,641
Accrued capital asset costs		1,844	238	2,082

See accompanying notes to financial statements

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Note 1 - Description of the Department and Summary of Significant Accounting Policies

Description of the Department

The Long Beach Water Department (the Department) was established in 1911 through adoption of the City Charter of the City of Long Beach, California (the City) to regulate and control the use, sale, and distribution of water owned or controlled by the City. In February 1988, the City Council of the City of Long Beach voted to transfer administrative, operational, and maintenance responsibility of the City's sewer system to the Department. In addition, in April 1990, the citizens of Long Beach passed a City Charter amendment that allowed greater autonomy of the Department in administering sewer operations. For accounting purposes, the transfer was effective July 1, 1988.

The Department services the City's sewer system that consists of 714 miles of sewer mains, 15,122 manholes, and 28 sewage pumping stations. This system is capable of transporting for treatment approximately 40 million gallons of raw sewage daily.

The Department obtains potable water for distribution from two sources. Historically, approximately half of the City's water is purchased from the Metropolitan Water District of Southern California; the other half is pumped from the Department's own groundwater wells. Potable water is stored in two reservoirs with a combined capacity of 105.6 million gallons. As of September 30, 2018, the Department also delivered over 1.8 billion gallons of reclaimed water to various users in the City.

Reporting Entity

The Department's financial activities are considered to be enterprise operations of the City of Long Beach; accordingly, such activities are included in the City's Comprehensive Annual Financial Report (CAFR) in the Water Utility Fund. Control and management of the Department is vested in the five-member Board of Water Commissioners (the Board). Each Commissioner is appointed by the Mayor, confirmed by the City Council, and may serve two five-year terms.

The accompanying Department financial statements include the Water and Sewer Fund operations of the City of Long Beach. The statements of the Department are intended to present the financial position, and changes in financial position, and cash flows of only that portion of the business-type activities of the City that is attributable to the transactions of the Department. They do not purport to, and do not, present fairly the financial position of the City, as of September 30, 2018, and the changes in its financial position, and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

The City's Comprehensive Annual Financial Report may be obtained by contacting:

City of Long Beach, California – Department of Financial Management 333 W. Ocean Blvd.

Long Beach, CA 90802

Basis of Accounting

The Department's accounts are maintained on a flow of economic resources measurement focus utilizing the accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned, regardless of when they are received, and expenses are recognized in the period incurred. The Department's operations are not subject to regulation by the Public Utilities Commission.

The Department applies all Governmental Accounting Standards Board (GASB) Statements and Interpretations.

Implementation of New Accounting Pronouncements

The Department is currently analyzing its accounting practices to determine the potential impact on the financial statements for the following GASB Statements:

In November 2016, the GASB issued Statement No. 83, Certain Asset Retirement Obligations. The purpose of this Statement is to address the accounting and financial reporting for a legally enforceable liability associated with the retirement of a tangible capital asset (Asset Retirement Obligations or ARO). This Statement establishes criteria for (1) determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources, (2) requires that recognition occur when the liability is both incurred and reasonably estimable, and (3) requires the measurement of an ARO to be based on the best estimate of the current value of outlays expected to be incurred. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. The Department is evaluating the impact of this standard.

In June 2017, the GASB issued Statement No. 87, *Leases*. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases. The Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. The Department is evaluating the impact of this standard.

In March of 2018, GASB issued Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. This Statement defines debt for purposes of disclosure in notes to financial statements and establishes additional financial

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

statement note disclosure requirements related to debt obligations of governments, including direct borrowings and direct placements. This Statement is effective for reporting periods beginning after June 15, 2018.

In June of 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period.* The objectives of this Statement are (a) to enhance the relevance and comparability of information about capital assets and the cost of borrowing and (b) to simplify accounting for certain interest costs. In financial statements prepared using the economic resources measurement focus, interest cost incurred before the end of a construction period should be recognized as an expense in the period in which the cost is incurred. This approach is also applied for funds using the current financial resources measurement focus. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019.

In August of 2018, GASB issued Statement No. 90, *Majority Equity Interests*. The primary objective of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. Except in situation when a majority equity interest meets the definition of an investment, a government should report the legally separate organization as a component unit, and the government that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018.

City of Long Beach Investment Pool

In order to maximize investment return and in accordance with City Charter requirements, the Department pools its available cash with other City funds into the City of Long Beach Investment Pool (the Pool). The Pool is an internal investment pool that is used as a demand deposit account by participating units. Investment decisions are made by the City Treasurer and approved by a general investment committee whose membership includes a member of the Department's management. Interest income and realized and unrealized gains and losses arising from the Pool are apportioned to each participating unit based on their average daily cash balances compared to aggregate pooled cash and investments.

At September 30, 2018, the Water Fund and Sewer Fund had equity in the Pool of \$34,116 and \$16,376, respectively, which represents approximately 2.10% and 1.01%, respectively, for a total departmental equity of \$50,492 or 3.11% of the Pool.

The Department's share of the Pool is stated at fair value.

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

For a complete description of the Pool and its underlying investments, refer to the City of Long Beach's separately issued financial statements.

Cash Equivalents

The Department classifies its investment in the Pool as cash and cash equivalents, regardless of the underlying maturity of the Pool's investments as the Department can withdraw amounts from the pool without penalty or notice.

The Department classifies all other investments with maturities of three months or less at the time of purchase as cash equivalents. These cash equivalents are reported at amortized cost in the accompanying financial statements.

Fair Value

Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction.

The Department categorizes investments reported at fair value within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset, as follows:

- Level 1: Quoted prices for identical investments in active markets:
- Level 2: Observable inputs other than quoted market prices; and,
- Level 3: Unobservable inputs

Material and Supplies Inventory

Material and supplies inventory is stated at the lower of average cost or market, determined on a first-in, first-out basis.

Capital Assets

Capital assets, which include property, plant, equipment, and transmission and distribution infrastructure, are composed of assets with an initial, individual cost of more than five thousand dollars and an estimated useful life in excess of one year. The cost of additions to capital assets and replacement of retired property is capitalized. Significant interest costs incurred during construction of assets are also capitalized. The costs of minor replacement expenditures are expensed as incurred. Upon retirement or sale of capital assets, the cost and related accumulated depreciation are removed from the accounts, with any resulting gain or loss recorded in the Department's financial statements (see note 3).

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Depreciation of capital assets is provided by the straight-line method based on the estimated service lives of the properties, as follows:

Buildings, structures, and facilities	10 to 50 years
Distribution/collection systems	20 to 75 years
Patents	20 years
Other machinery and equipment	5 to 10 years

Capitalized Interest

In fiscal year 2018, the Department incurred interest expense on Revenue Refunding Bonds in the amount of \$1,030 and \$390 for the Water and Sewer Funds, respectively, of which \$729 was capitalized for Water Fund and \$113 for Sewer Fund.

Capital Contributions

Advances received for construction of plant assets are recorded as unearned revenue when received. As construction progresses, advanced amounts equivalent to capitalized expenditures are recorded as capital contributions and included as other nonoperating revenue. Assets constructed by developers and contributed to the Department are capitalized at fair value.

The Department includes capital contributions for construction of plant assets as a nonoperating revenue in the accompanying statements of revenues, expenses, and changes in fund net position.

Revenue Recognition

Operating revenues include revenues derived from the sale of water, from providing sewer service, and from other activities closely related to providing water and sewer service. Principal revenues are derived from volumetric usage and service charges for water and sewer services. Nonoperating revenues and expenses are those not directly associated with the Department's normal business operations of supplying water and sewer service and include interest income and expense, rents received for Department property, and gains and losses on disposition of property. Revenues for water and sewer charges are recorded when billed to customers. Billings to customers are based on monthly meter readings.

Operating Expenses

The cost of water includes all purchases of water from the Metropolitan Water District of Southern California. Personal services include labor costs for operations, maintenance, and general and administrative functions. Commercial services cost is the Department's

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

share of the City's utility billing system. Maintenance and other costs include the operating costs of the Department and include costs of pumping and treating groundwater as well as general and administrative costs. Permit fees are transfers made to the City.

Employee Benefits, Compensated Absences and Termination Benefits

Excluding the residual balance of a City-administered Police and Fire Annuity Benefit Program that was terminated in 1945, historically, benefits for City employees have been paid and compensated leave balances at year-end have been reported in the City's Employee Benefits Internal Service Fund (EBF). For the fiscal year ended September 30, 2018, a proprietary fund liability is accrued for leave benefits in the respective fund's statement of net position. The City's policy is to pay all accumulated vacation and holiday pay when an employee retires or terminates. Beginning August 1, 2007, management employees, upon retirement, may have 75 percent of their outstanding vacation leave converted to sick leave. Vacation and holiday benefits are recognized when earned. The City also allows retirees the option of purchasing additional pension benefits from CalPERS with their unused sick leave balances.

The City makes annual contributions in varying amounts to deferred compensation plans for certain employee groups who serve in sensitive, confidential capacities. No other City employees received such benefit.

Accumulated sick leave becomes vested only when an employee meets the City's minimum requirements for retirement. Accumulated sick leave is forfeited upon termination for reasons other than retirement. In accordance with the City's Personnel Ordinance, upon retirement from the City, the City allows retirees, their spouses, and eligible dependents to use the cash value at retirement of the retiring employee's accumulated unused sick leave to pay for health, dental, and long-term care insurance premiums until such time as the unused sick leave is exhausted.

The conversion of unused sick leave for postemployment benefits is reflected as accrued compensated absences benefits and accrued OPEB liability in the accompanying financial statements. These liabilities are being funded over time through burden rates, applied as a percentage of current productive salaries, and charged to the Department

Pension Plan and Postretirement Benefits

All full-time Department employees are members of the City's Miscellaneous Plan. The Department's policy is to fund all pension costs accrued. The costs to be funded are determined annually as of October 1 and are incorporated into the payroll burden rate to reimburse the Employee Benefits Internal Service Fund for contributions made on behalf of Department employees (see note 5).

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

For purposes of measuring net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Miscellaneous Plan and additions to/deductions from Miscellaneous Plan's fiduciary net position have been determined on the same basis as they are reported by the Miscellaneous Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

The Department also participates in the City's Retired Employee Health Insurance Program (REHIP). This program is a single-employer defined benefit healthcare plan (see note 6).

Restricted Assets

Amounts restricted for bond indenture requirements and funds held in trust are recorded as restricted assets. Related liabilities of these funds are identified as amounts payable from restricted assets when such obligations are incurred.

Deferred Outflows/Inflows of Resources

In addition to assets, the Statement of Financial Position reports a separate section for deferred outflows of resources. This separate financial statement element, Deferred Outflows of Resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then.

In addition to liabilities, the Statement of Financial Position reports a separate section for deferred inflows of resources. The separate financial element, Deferred Inflows of Resources, represents an acquisition of net position that applies to future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. These amounts are deferred and recognized as an inflow of resources in the period that the amounts become available.

Risk Management

The Department, as an entity of the City, participates in the City's self-insured program for workers' compensation, property, and tort liability. The City and the Department's management believe that sufficient funds are being accumulated in the City's Insurance Internal Service Fund (Insurance Fund) to meet losses as they arise. The Department contributes to the Insurance Fund through payroll burden charges applied as a percent of current productive salaries. In addition, various risk control techniques, including safety training for all employees and the inclusion of appropriate legal provisions in third-party contracts, have been implemented to minimize risk losses.

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Estimates

The preparation of the Department's financial statements in conformity with the U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Net Position

The Department has adopted a policy of generally utilizing restricted funds, prior to unrestricted funds, when an expense is incurred for purposes for which both are available.

The Department's net position are classified into the following net position categories:

Net Investment in Capital Assets - Capital assets net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction, or improvement of those assets and unexpended bond proceeds and economic losses of refunding of debt.

Restricted - Amounts restricted for bond indenture requirements.

Unrestricted - All other categories of net position.

Note 2 - Cash Equivalents and Investments

The Department's unrestricted and restricted cash equivalents and investments are as follows:

Water Fund						
				Total Investments &		
	Un	restricted	Restricted	Cash Equivalent		
Equity in the City of Long Beach's investment pool	\$	31,256	2,861	34,117		
Other cash equivalents		34	-	34		
Investments - U.S. Treasury Notes	-		2,659	2,659		
Total cash and investments	\$	31,290	5,520	36,810		

Sewer Fund Total Investments & Cash Equivalent Sewer Fund Unrestricted Restricted Equity in the City of Long Beach's investment pool \$ 16,073 303 16,376 303 Total cash and investments \$ 16,073 16,376

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

The Departments investment policy allows funds to be invested with the City or to be held outside of the Pool based on the requirements of bond indentures or by actions of the Board. The City's investment policy limits the permitted investments in the Investment Pool to the following: Obligations of the U.S. government, federal agencies, local agency bonds, medium-term corporate notes, certificates of deposit; bankers' acceptances, commercial paper, Local Agency Investment Fund, repurchase agreements, reverse repurchase agreements, securities lending, asset-backed securities, mortgage-backed securities and money market mutual funds. Cash equivalents held outside of the Pool are governed by the provisions of the debt agreement.

As of September 30, 2018, the City's Investment Pool has weighted average maturity of less than 2 years and is not rated. The Department's investment in the Pool is not categorized nor leveled in the fair value hierarchy.

The Water Funds' investments in U.S. Treasury notes have a weighted average maturity of 1.59 years and are not rated. These investments are reported at fair value using observable inputs and are accordingly reported as a level 1 investment in the fair value hierarchy.

Note 3 - Capital Assets

Capital assets at September 30, 2018 were as follows:

	Balance otember 30,		Deletions, Retirements	Balance September 30,
Water Fund	 2017	Additions	and Transfers	2018
Capital assets, not being depreciated:				
Land	\$ 11,214	-	-	11,214
Construction in progress	20,398	24,320	(21,589)	23,129
Water Rights	 40	-		40
Total capital assets, not being depreciated	 31,652	24,320	(21,589)	34,383
Capital assets, being depreciated:				
Buildings, structures and facilities	135,446	4,158	(22)	139,582
Patents	815	-	-	815
Distribution/collection systems	343,462	15,476	(315)	358,623
Machinery and equipment	17,013	2,141	(447)	18,707
Total capital assets, being depreciated	 496,736	21,775	(784)	517,727
Less accumulated depreciation for:				
Buildings, structures and facilities	(62,842)	(3,760)	21	(66,581)
Patents	(449)	(41)	-	(490)
Distribution/collection systems	(142,811)	(7,487)	283	(150,015)
Machinery and equipment	(14,929)	(1,265)	447	(15,747)
Total accumulated depreciation	(221,031)	(12,553)	751	(232,833)
Total capital assets, being depreciated, net	 275,705	9,222	(33)	284,894
Total Water Fund capital assets, net	\$ 307,357	33,542	(21,622)	319,277

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Capital assets, not being depreciated: Construction in progress \$ 4,416 \$ 5,031 (5,079) 4,368 Total capital assets, not being depreciated: Buildings, structures and facilities 9,505 117 \$ 9,622 Distribution/collection systems 202,242 4,298 (1,046) 205,494 Machinery and equipment 5,587 457 (184) 5,860 Total capital assets, being depreciated 217,334 4,872 (1,230) 220,976 Less accumulated depreciation for: Buildings, structures and facilities (1,995) (226) \$ (12,221) Distribution/collection systems (146,616) (1,885) 916 (147,585) Machinery and equipment (3,258) (379) 184 (3,453) Total accumulated depreciation (151,869) (2,490) 1,100 (153,259) Total capital assets, being depreciated, net 65,465 2,382 (130) 67,717 Total Sewer Fund capital assets, net 869,881 7,413 (5,209) 72,085 Combined Total 811,214 \$ (26,668) 27,497 Water Rights 40 2-	Sewer Fund	Balance otember 30, 2017	Additions	Deletions, Retirements and Transfers	Balance September 30, 2018
Construction in progress \$ 4,416 5,031 (5,079) 4,368 Total capital assets, not being depreciated: 4,416 5,031 (5,079) 4,368 Capital assets, being depreciated: Buildings, structures and facilities 9,505 117 - 9,622 Distribution/collection systems 202,242 4,298 (1,046) 205,494 Machinery and equipment 5,587 457 (184) 5,860 Total capital assets, being depreciated 217,334 4,872 (1,230) 220,976 Less accumulated depreciation for: Buildings, structures and facilities (1,995) (226) - (2,221) Distribution/collection systems (146,616) (1,885) 916 (147,585) Machinery and equipment (3,258) (379) 184 (3,453) Total accumulated depreciation (151,869) (2,490) 1,100 (153,259) Total capital assets, being depreciated, net \$65,465 2,382 (130) 67,717 Total Sewer Fund capital assets, not being depreciated: \$69,881 7,413 <td></td> <td> 2017</td> <td>Additions</td> <td>and transfers</td> <td>2010</td>		 2017	Additions	and transfers	2010
Capital assets, being depreciated: Buildings, structures and facilities 9,505 117 205,494 205,494 206,		\$ 4,416	5,031	(5,079)	4,368
Buildings, structures and facilities 9,505 117 - 9,622 Distribution/collection systems 202,242 4,298 (1,046) 205,494 Machinery and equipment 5,587 457 (184) 5,860 Total capital assets, being depreciated 217,334 4,872 (1,230) 220,976 Less accumulated depreciation for: Buildings, structures and facilities (1,995) (226) - (2,221) Distribution/collection systems (146,616) (1,885) 916 (147,585) Machinery and equipment (3,258) (379) 184 (3,453) Total accumulated depreciation (151,869) (2,490) 1,100 (153,259) Total capital assets, being depreciated, net 65,465 2,382 (130) 67,717 Total Sewer Fund capital assets, net \$69,881 7,413 (5,209) 72,085 Balance September 30, 2017 Additions Retirements and Transfers 2018 Capital assets, not being depreciated: 11,214 29,351 (26,668) 27,497 Water Rights 40 - - 11,214 Construction in progress 24,814 29,351 (26,668) 27,497 Water Rights 40 - - 40 Total capital assets, not being depreciated 36,068 29,351 (26,668) 38,751 Capital assets, being depreciated: Buildings, structures and facilities 144,951 4,275 (22) 149,204 Patents 815 - 815 Distribution/collection systems 545,704 19,774 (1,361) 564,117 Machinery and equipment 22,600 2,598 (631) 24,567 Total capital assets, being depreciated 714,070 26,647 (2,014) 738,703 Less accumulated depreciation for: Buildings, structures and facilities (64,837) (3,986) 21 (68,802) Distribution/collection systems (289,427) (9,372) 1,199 (297,600) Machinery and equipment (18,187) (15,043) 1,851 (386,092) Total accumulated depreciation (372,900) (15,043) 1,851 (386,092)	Total capital assets, not being depreciated	 4,416	5,031	(5,079)	4,368
Less accumulated depreciation for: Buildings, structures and facilities (1,995) (226) - (2,221) Distribution/collection systems (146,616) (1,885) 916 (147,585) Machinery and equipment (3,258) (379) 184 (3,453) Total accumulated depreciation (151,869) (2,490) 1,100 (153,259) Total capital assets, being depreciated, net 65,465 2,382 (130) 67,717 Total Sew er Fund capital assets, net 89,881 7,413 (5,209) 72,085 Balance September 30, 2017 Additions Retirements September 30, 2018 2018 Capital assets, not being depreciated: 11,214 - - - 11,214 Land \$11,214 - - - 11,214 - - - 11,214 Construction in progress 24,814 29,351 (26,668) 27,497 Water Rights 40 - - 40 Total capital assets, being depreciated: 815 - -	Buildings, structures and facilities Distribution/collection systems	202,242	4,298	, ,	205,494
Buildings, structures and facilities (1,995) (226) - (2,221)	Total capital assets, being depreciated	 217,334	4,872	(1,230)	220,976
Total Sew er Fund capital assets, net \$ 69,881 7,413 (5,209) 72,085 Balance September 30, 2017 Additions Retirements and Transfers September 30, 2018 Capital assets, not being depreciated: \$ 11,214 - - 11,214 Construction in progress 24,814 29,351 (26,668) 27,497 Water Rights 40 - - 40 Total capital assets, not being depreciated 36,068 29,351 (26,668) 38,751 Capital assets, being depreciated: 815 - - 815 Buildings, structures and facilities 144,951 4,275 (22) 149,204 Patents 815 - - 815 Distribution/collection systems 545,704 19,774 (1,361) 564,117 Machinery and equipment 22,600 2,598 (631) 24,567 Total capital assets, being depreciated 714,070 26,647 (2,014) 738,703 Less accumulated depreciation for: 80,000 1,000 1,000	Buildings, structures and facilities Distribution/collection systems Machinery and equipment	(146,616) (3,258)	(1,885) (379)	184	(147,585) (3,453)
Total Sew er Fund capital assets, net \$ 69,881 7,413 (5,209) 72,085 Balance September 30, 2017 Additions Retirements and Transfers September 30, 2018 Capital assets, not being depreciated: \$ 11,214 - - 11,214 Construction in progress 24,814 29,351 (26,668) 27,497 Water Rights 40 - - 40 Total capital assets, not being depreciated 36,068 29,351 (26,668) 38,751 Capital assets, being depreciated: 815 - - 815 Buildings, structures and facilities 144,951 4,275 (22) 149,204 Patents 815 - - 815 Distribution/collection systems 545,704 19,774 (1,361) 564,117 Machinery and equipment 22,600 2,598 (631) 24,567 Total capital assets, being depreciated 714,070 26,647 (2,014) 738,703 Less accumulated depreciation for: 80,000 1,000 1,000	Total capital assets, being depreciated, net	65.465	2.382	(130)	67.717
Combined Total September 30, 2017 Additions Retirements and Transfers September 30, 2018 Capital assets, not being depreciated: 11,214 - - 11,214 Construction in progress 24,814 29,351 (26,668) 27,497 Water Rights 40 - - 40 Total capital assets, not being depreciated 36,068 29,351 (26,668) 38,751 Capital assets, being depreciated: 815 - - 815 Buildings, structures and facilities 144,951 4,275 (22) 149,204 Patents 815 - - - 815 Distribution/collection systems 545,704 19,774 (1,361) 564,117 Machinery and equipment 22,600 2,598 (631) 24,567 Total capital assets, being depreciated 714,070 26,647 (2,014) 738,703 Less accumulated depreciation for: 81 (449) (41) - (490) Distribution/collection systems (289,427)		\$		` ` ` `	
Land \$ 11,214 - - 11,214 Construction in progress 24,814 29,351 (26,668) 27,497 Water Rights 40 - - - 40 Total capital assets, not being depreciated 36,068 29,351 (26,668) 38,751 Capital assets, being depreciated: 815 - - 815 Buildings, structures and facilities 144,951 4,275 (22) 149,204 Patents 815 - - 815 Distribution/collection systems 545,704 19,774 (1,361) 564,117 Machinery and equipment 22,600 2,598 (631) 24,567 Total capital assets, being depreciated 714,070 26,647 (2,014) 738,703 Less accumulated depreciation for: 80,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000	Combined Total	tember 30,	Additions	Retirements	September 30,
Capital assets, being depreciated: Buildings, structures and facilities 144,951 4,275 (22) 149,204 Patents 815 - - 815 Distribution/collection systems 545,704 19,774 (1,361) 564,117 Machinery and equipment 22,600 2,598 (631) 24,567 Total capital assets, being depreciated 714,070 26,647 (2,014) 738,703 Less accumulated depreciation for: 80,000 80,000 10					
Capital assets, being depreciated: Buildings, structures and facilities 144,951 4,275 (22) 149,204 Patents 815 - - 815 Distribution/collection systems 545,704 19,774 (1,361) 564,117 Machinery and equipment 22,600 2,598 (631) 24,567 Total capital assets, being depreciated 714,070 26,647 (2,014) 738,703 Less accumulated depreciation for: 80,000 80,000 10	Land Construction in progress	\$ 24,814	- 29,351 -	- (26,668) -	27,497
Less accumulated depreciation for: (64,837) (3,986) 21 (68,802) Patents (449) (41) - (490) Distribution/collection systems (289,427) (9,372) 1,199 (297,600) Machinery and equipment (18,187) (1,644) 631 (19,200) Total accumulated depreciation (372,900) (15,043) 1,851 (386,092) Total capital assets, being depreciated, net 341,170 11,604 (163) 352,611	Land Construction in progress Water Rights	\$ 24,814 40	<u> </u>	-	27,497 40
Buildings, structures and facilities (64,837) (3,986) 21 (68,802) Patents (449) (41) - (490) Distribution/collection systems (289,427) (9,372) 1,199 (297,600) Machinery and equipment (18,187) (1,644) 631 (19,200) Total accumulated depreciation (372,900) (15,043) 1,851 (386,092) Total capital assets, being depreciated, net 341,170 11,604 (163) 352,611	Land Construction in progress Water Rights Total capital assets, not being depreciated Capital assets, being depreciated: Buildings, structures and facilities Patents Distribution/collection systems	\$ 24,814 40 36,068 144,951 815 545,704	29,351 4,275 - 19,774	(26,668) (22) - (1,361)	27,497 40 38,751 149,204 815 564,117
Total capital assets, being depreciated, net 341,170 11,604 (163) 352,611	Land Construction in progress Water Rights Total capital assets, not being depreciated Capital assets, being depreciated: Buildings, structures and facilities Patents Distribution/collection systems Machinery and equipment	\$ 24,814 40 36,068 144,951 815 545,704 22,600	29,351 4,275 - 19,774 2,598	(26,668) (22) - (1,361) (631)	27,497 40 38,751 149,204 815 564,117 24,567
Total capital assets, being depreciated, net 341,170 11,604 (163) 352,611	Land Construction in progress Water Rights Total capital assets, not being depreciated Capital assets, being depreciated: Buildings, structures and facilities Patents Distribution/collection systems Machinery and equipment Total capital assets, being depreciated Less accumulated depreciation for: Buildings, structures and facilities Patents Distribution/collection systems	\$ 24,814 40 36,068 144,951 815 545,704 22,600 714,070 (64,837) (449) (289,427)	29,351 4,275 - 19,774 2,598 26,647 (3,986) (41) (9,372)	(26,668) (22) - (1,361) (631) (2,014) 21 - 1,199	27,497 40 38,751 149,204 815 564,117 24,567 738,703 (68,802) (490) (297,600)
Total Department capital assets, net \$ 377,238 40,955 (26,831) 391,362	Land Construction in progress Water Rights Total capital assets, not being depreciated Capital assets, being depreciated: Buildings, structures and facilities Patents Distribution/collection systems Machinery and equipment Total capital assets, being depreciated Less accumulated depreciation for: Buildings, structures and facilities Patents Distribution/collection systems Machinery and equipment	\$ 24,814 40 36,068 144,951 815 545,704 22,600 714,070 (64,837) (449) (289,427) (18,187)	29,351 4,275 - 19,774 2,598 26,647 (3,986) (41) (9,372) (1,644)	(26,668) (22) - (1,361) (631) (2,014) 21 - 1,199 631	27,497 40 38,751 149,204 815 564,117 24,567 738,703 (68,802) (490) (297,600) (19,200)
	Land Construction in progress Water Rights Total capital assets, not being depreciated Capital assets, being depreciated: Buildings, structures and facilities Patents Distribution/collection systems Machinery and equipment Total capital assets, being depreciated Less accumulated depreciation for: Buildings, structures and facilities Patents Distribution/collection systems Machinery and equipment Total accumulated depreciation	\$ 24,814 40 36,068 144,951 815 545,704 22,600 714,070 (64,837) (449) (289,427) (18,187) (372,900)	29,351 4,275 19,774 2,598 26,647 (3,986) (41) (9,372) (1,644) (15,043)	(26,668) (22) (1,361) (631) (2,014) 21 - 1,199 631 1,851	27,497 40 38,751 149,204 815 564,117 24,567 738,703 (68,802) (490) (297,600) (19,200) (386,092)

In FY2018, the Department capitalized enhancements to several facilities and structures, which amounted to \$4,158 and \$117 for Water Fund and Sewer Fund, respectively. These improvements included potable water tanks, chemical tanks, well rehabilitations, aboveground diesel fuel tank, roof and other building renovations. In addition, the Department completed numerous projects as part of ongoing improvements to its current water

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

distribution system and sewer collection system, which totaled \$15,476 for the Water Fund and \$4,298 for the Sewer Fund. These improvements include ongoing programs for Water Cast Iron Main replacement, Water Services installations, Fireline and Fire Hydrant installations, Water Meter replacement, Cathodic protection systems, sewer lift and pump station enhancements and Sewer Pipe rehabilitation. The Department also purchased machinery and equipment which totaled \$2,141 for the Water Fund and \$457 for the Sewer Fund. These machinery and equipment purchases included dump trucks, utility pick-up trucks, laboratory equipment, trailers, chemical pumps, sewer collection pumps, sewer lateral cleaning truck and a camera truck for closed-circuit television (CCTV) monitoring of sewer mains and lateral pipes.

Construction in Progress

Construction in progress at September 30, 2018 includes the following projects:

Project Project		2018
Water Main Replacement Program Reclaimed Water System Sewer Main Replacement Program		6,496 194 1,972
Other Projects		18,835
Total Combined Construction in Progress	\$	27,497
Such costs are allocated as follows: Water Enterprise Fund	\$	23,129
Sewer Enterprise Fund		4,368
Total Water Department	\$	27,497

It is the Department's policy to transfer the costs of projects after their completion to other capital asset classifications or to expense. For the fiscal year ended September 30, 2018, completed projects were transferred from Construction in progress as follows:

2040

	2018			
	Water Fund		Sewer Fund	
Transfers to Capital Assets	\$	20,759	4,414	
Transfers to Expense		830	665	
Total	\$	21,589	5,079	

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Note 4 – Noncurrent Liabilities:

Water Fund						
	Be	ginning of			End of	Due within
September 30, 2018		year	Additions	Reductions	year	one year
2010 Water Revenue Refunding Bonds	\$	17,645	-	(2,210)	15,435	2,300
2012 Water Revenue Refunding Bonds		7,265	-	(605)	6,660	630
_		24,910	-	(2,815)	22,095	2,930
Less current portion		(2,815)	(2,930)	2,815	(2,930)	_ `
Add 2010 unamortized bond premium		1,199	-	(261)	938	_
Add 2012 unamortized bond premium		715	-	(116)	599	_
Total long-term debt		24,009	(2,930)	(377)	20,702	2,930
Compensated Absences		4,256	1,228	(835)	4,649	-
Net Pension Liability		39,341	35,183	(39,341)	35,183	_ '
Total OPEB Liability		1,703	1,855	(1,703)	1,855	_ '
Accrued site restoration cost		1,000	-	-	1,000	_
Total noncurrent liabilities	\$	70,309	35,336	(42,256)	63,389	2,930

Sewer Fund						
	Be	ginning of			End of	Due within
September 30, 2018		year	Additions	Reductions	year	one year
2016 Sewer Revenue Refunding Bonds	\$	9,370	-	(330)	9,040	345
		9,370	-	(330)	9,040	345
Less current portion		(330)	(345)	330	(345)	-
Add 2016 unamortized bond premium		1,584	-	(131)	1,453	-
Total long-term debt		10,624	(345)	(131)	10,148	345
Compensated Absences		827	241	(163)	905	_
Net Pension Liability		7,385	6,677	(7,385)	6,677	-
Total OPEB Liability		332	363	(332)	363	-
Total noncurrent liabilities	\$	19,168	6,936	(8,011)	18,093	_

The bonds are payable from and secured by net revenues of the Department.

Second Lien Water Revenue Bonds - Series 2012A

On August 30, 2012, the Water Fund issued \$9,850 in Second Lien Water Revenue Bonds, Series 2012A (the Series 2012A Bonds) at a premium of \$1,342 to provide funds to (a) refund, on a current basis, \$11,000 aggregate principal outstanding in Subordinate Water Revenue Commercial Paper Notes, and (b) pay the cost of issuing the Series 2012A Bonds. There is no bond reserve requirement. The objective of this debt refinancing was to take advantage of historically low fixed bond rates, and provide the Department with

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

certainty in its future debt service payment requirements. The Commercial Paper program, as authorized by the Board under Resolution WD-1170, expired on October 1, 2012.

The Bonds bear interest ranging from 2.0% to 5.0% per annum payable on May 1 and November 1 of each year, commencing on November 1, 2012. Principal payments are due every May 1, commencing on May 1, 2013, with bond terms maturing through the year 2027. The initial issuance premium of \$1,342 on the Series 2012 Bonds is reported as an addition to long-term debt and is amortized using the effective-interest-rate method over the life of the Bonds.

Under Board Resolution WD-1300 adopted July 24, 2012 authorizing the issuance and sale of the Series 2012A Bonds, the Board also approved closure of the Serier Lien trust indentures pursuant to which the Department previously issued the Series 1997A City of Long Beach Water Revenue Refunding Bonds and Series 2010A City of Long Beach Water Revenue Refunding Bonds. The Board also irrevocably covenanted that the Department would not issue any additional Parity Obligations in the future that would have a lien on Net Revenues senior to its Subordinate Obligations, including the 2012A Bonds.

The Board, on behalf of the City, has covenanted under the Master Subordinate Indenture, to set rates and charges for the supply of water to its customers sufficient to yield net revenues each year equal to at least equal to 1.10 times the aggregate annual amount of principal and interest due on the Senior Lien Bonds and any Subordinate Obligations, including the Series 2012A Bonds.

Water Revenue Refunding Bonds - Series 2010A

On September 29, 2010, the Water Fund issued \$22,740 in Water Revenue Refunding Bonds, Series 2010A (the Series 2010A Bonds) at a premium of \$3,021 to (a) advance refund 82.4% or \$24,290 of the outstanding Series 1997A Water Revenue Refunding Bonds at a redemption premium of 2% over par value, (b) fund a reserve fund for the Series 2010A Bonds, and (c) pay the cost of issuing the 2010 Bonds. The Series 2010A Bonds bear interest ranging from 3.0% to 5.0% per annum payable on May 1 and November 1 of each year, commencing on November 1, 2010. Principal payments are due May 1, commencing on May 1, 2012.

The remaining Series 1997A Bonds maturing on May 1, 2015 were not subject to redemption prior to maturity and the \$1,825 outstanding was paid off on May 1, 2015.

The initial issuance premium of \$3,021 on the Series 2010A Bonds is reported as an addition to long-term debt and is amortized using the effective-interest-rate method over the life of the Bonds.

In addition, the refunding resulted in a difference between the reacquisition price and the net carrying amount of the Series 1997A Bonds of \$2,697. This difference is considered to

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

be a deferred outflow on the refunding and is reported in the Statement of Net Positon as a separate category under Deferred Outflows of Resources. The deferred outflow from the refunding is being amortized using the straight-line method over the life of the Series 2010A bonds, which have the same maturity as the old debt. The Refunded Series 1997A Bonds were refunded in order to take advantage of lower interest rates to achieve debt service savings. The Department reduced its aggregate debt service payments by \$3,286, with the refunding structured to achieve such savings upfront over fiscal years 2011 and 2012. The economic gain from the refunding (difference between the present value of the old and new debt service payments) was \$3,349.

The Series 2010A Bonds and any Parity Obligations are secured by a first lien upon and pledge of all of the net revenues of the entire water system (the Water Enterprise Fund) of the City of Long Beach. Net revenues are defined as all gross revenues derived by the ownership and operation of the Water Enterprise Fund less operation and maintenance costs. The Board has covenanted, on behalf of the City, to set rates and charges for the supply of water to its customers sufficient to provide net revenues each year equal to at least 1.10 times the aggregate annual amount of principal and interest due on the Bonds and any parity obligations.

Senior Sewer Revenue Refunding Bonds - Series 2016A

On September 7, 2016, the Sewer Fund issued \$9,830 in Senior Sewer Revenue Refunding Bonds, Series 2016A (the Series 2016A Bonds) at a premium of \$1,727 to provide funds to (a) refund, on a current basis, \$11,250 aggregate principal outstanding in Subordinate Sewer Revenue Obligations pursuant to the terms of a credit agreement with Wells Fargo Bank, National Association, and (b) pay the cost of issuing the Series 2016A Bonds. There is no bond reserve requirement. The objective of this debt refinancing was to take advantage of low fixed bond yield rates, and provide the Department with certainty in its future debt service payment requirements.

The Series 2016A Bonds bear interest ranging from 4.0% to 5.0% per annum payable on May 1 and November 1 of each year, commencing on November 1, 2016. Principal payments are due every May 1, commencing on May 1, 2017, with bond terms maturing through the year 2036. The initial issuance premium of \$1,727 on the Series 2016A Bonds is reported as an addition to long-term debt and is amortized using the effective-interest-rate method over the life of the Bonds.

The Series 2016A Bonds and any Parity Obligations are secured by a first lien upon and pledge of all of the net revenues of the Sewer Enterprise. Net revenues are defined as all gross revenues derived by ownership and operation of the Sewer Enterprise less operation and maintenance costs. The Board, on behalf of the City, has covenanted under the Senior Indenture to set rates and charges for sewer service to its customers sufficient to yield net

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

revenues each year which are at least equal to 1.25 times the aggregate annual amount of debt service on the Senior Bonds (including the Series 2016A Bonds) for such fiscal year.

Subordinate Sewer Revolving Line of Credit

On May 5, 2011, the Board approved Resolution WD-1282 authorizing the issuance from time to time of Subordinate Sewer Revenue Obligations pursuant to the terms of a credit agreement with Wells Fargo Bank, National Association, which provides for a Revolving Line of Credit (LOC) in an amount not to exceed \$20,000 at any time. Obligations under the LOC are secured by and payable from a subordinate lien upon the City's Sewer Enterprise net revenues (gross revenues less operation and maintenance costs). The original term of the LOC was for three years, with a Commitment Expiration Date of May 26, 2014. Effective July 8, 2013, the Commitment Expiration Date was extended by an additional three years to May 26, 2017. The LOC was secured to pay off the outstanding principal on Senior Sewer Revenue Commercial Paper Notes and to continue to provide interim financing of sewer system improvements and sewer pipe rehabilitation and replacement programs. The Department suspended the issuance of sewer commercial paper notes under the existing commercial paper program, but reserves the right to issue obligations in the future senior to its obligations created under the LOC.

On May 26, 2011, the Department drew \$6,000 on the LOC to retire \$4,000 of outstanding Sewer Revenue Commercial Paper notes and fund \$2,000 in sewer system improvements. On September 3, 2013, the Department drew \$3,750 to fund sewer system improvements. On August 12, 2015, the Department drew another \$1,500 again to fund sewer system improvements. Interest rates are based on 70% of the London Interbank Offered Rate (LIBOR) plus an applicable margin, and can be designated as fixed or variable for one-month, three-month, or six-month interest periods. Interest rates have ranged from 0.76% to 1.06%.

On September 7, 2016, the Department retired all outstanding notes, with an aggregate principal balance of \$11,250. As authorized by the Board under Resolution WD-1360, the Department amended the Credit Agreement with Wells Fargo Bank, National Association to extend the Commitment Expiration Date from May 26, 2017 to September 7, 2019. Additionally, the not-to-exceed amount of the LOC was reduced from \$20,000 to \$10,000. As of September 30, 2018, there were no draws on the LOC.

Accrued Site Restoration Cost

In FY2010, the Department completed its study on Seawater Nanofiltration Desalination Processes. The Department's prototype 300,000 gallons per day desalination research and development facility was located on land leased from Los Angeles Department of Water and Power. Under the terms of the lease, the Department was required to dismantle the facility and restore the site to its original condition. Estimated site restoration costs of \$400 had been accrued as a long-term liability in FY2007. During FY2010, the estimated

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

accrued site restoration costs were reduced and actual restoration costs relating to the dismantling of the prototype desalination research and development facility were recorded as expense.

In FY2008, the Department completed construction of a subsurface seawater intake and discharge facility. Facility construction costs totaling \$4,614 have been capitalized and were depreciated over a period of two years. A Coastal Development Permit granted by the California Coastal Commission in September 2007, required the Department to restore the project site to its preexisting condition no later than May 21, 2012. On July 14, 2011, the Department was granted an extension for the restoration of the coastal area to May 26, 2017. On October 13, 2016, the Department was granted an additional five year extension on the restoration from May 26, 2017 to May 27, 2022. Estimated site restoration costs of \$1,000 have been accrued as a long-term liability and recorded as nonoperating expenses. Operating costs of the facility are expensed as incurred.

Total Annual Debt Service Requirements to Maturity

Annual debt service requirements to maturity are as follows:

Water Fund

Fiscal Year		Series 201	0 Bonds	Series 201	2 Bonds	Tot	al	Total Debt
Ending Sept 30	Р	rincipal	Interest	Principal	Interest	Principal	Interest	Service
2019	\$	2,300	690	630	275	2,930	965	3,895
2020		2,395	598	655	250	3,050	848	3,898
2021		2,490	502	680	223	3,170	725	3,895
2022		2,590	396	710	196	3,300	592	3,892
2023		2,715	276	735	168	3,450	444	3,894
2024-2027		2,945	147	3,250	366	6,195	513	6,708
Total	\$	15,435	2,609	6,660	1,478	22,095	4,087	26,182

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Sewer Fund

Fiscal Year	9	Series 201	Total Debt	
Ending Sept 30	Pi	rincipal	Interest	Service
2019	\$	345	382	727
2020		360	368	728
2021		375	354	729
2022		390	339	729
2023		405	323	728
2024-2028		2,280	1,355	3,635
2029-2033		2,865	774	3,639
2034-2036		2,020	164	2,184
Total	\$	9,040	4,059	13,099

Note 5 - Retirement Program

Plan Description – Public Employees' Retirement System (CalPERS)

The Department contributes to the California Public Employees' Retirement System (CalPERS) agent multiple-employer defined benefit pension plan. The City is considered the employer and the Department is a department of the City. The plan functions as a cost sharing plan for the Department. The Department's employees are enrolled in the City Miscellaneous Plan. CalPERS provides retirement benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for its participating member employers. Benefit provisions under the Plan are established by State statute and City resolution. All City departments are considered collectively to be a single employer, and the actuarial present value of vested and non-vested accumulated plan benefits attributable to the Department's employees is determined as the Department's percentage of the City as a single employer. Similarly, the net assets available for benefits of Department employees is determined as the Department's percentage of the City's net assets. CalPERS issues publicly available reports that include a full description of the pension plans, including benefit provisions, assumptions and membership information. All qualified permanent employees of the Department are eligible to participate in the Miscellaneous Plan. The reports can be found on the CalPERS website.

Benefits Provided

CalPERS provides retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees or beneficiaries. Benefits are based on years of credited service equal to one year of full-time employment, age at retirement and final compensation. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. The cost of living adjustments for the plan is applied as specified by the Public Employees' Retirement Law.

Contributions - California Public Employees' Retirement Law requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in the rate. Funding

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

contributions for the Plans are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The City is required to contribute the difference between the actuarially determined rate and the contribution rate of employees.

The Plans' provisions and benefits in effect at September 30, 2018, are summarized in the following table:

	Miscellaneous				
		On or after			
		October 1, 2006			
	Prior to	and prior to	On or after		
Hire date	October 1, 2006	January 1, 2013	January 1, 2013		
Benefit formula	2.7% @ 55	2.5% @ 55	2.0% @ 62		
Benefit vesting schedule		5 years of service			
Benefit payments		Monthly for life			
Retirement age	50 - 55	50 - 55	52 - 62		
	Required Contribution Rates				
Employee	8.0%	8.0%	6.5%		
Employer	22.459%	22.459%	22.459%		
	Percentage of Eligible Compensation				
Monthly benefits	2.0% to 2.7%	2.0% to 2.5%	1.0% to 2.0%		

Allocation Methodology

The City used a calculated percentage based on the Department's share of the pensionable compensation to the City's total pensionable compensation amounts for each plan, to provide the Department's net pension liability and related GASB 68 accounting elements. The Department's calculated percentage was 7.0% (5.9% for Water and 1.1% for Sewer) for the Plan.

<u>Pension Liability, Pension Expense, and Deferred Outflows and Deferred Inflows Related to Pensions</u>

The City's net pension liability for the Plan was measured as the total pension liability, less the plan's fiduciary net position. Net pension liability is measured as of June 30, 2018 (measurement date). The Department's net pension liability for the Plan was \$41,860 (\$35,183 for Water and \$6,677 for Sewer) at September 30, 2018.

For the measurement period ended June 30, 2018 (the measurement date), the Department incurred a pension expense of \$6,948 (\$5,840 for Water and \$1,108 for Sewer).

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

As of September 30, 2018, the Department had deferred outflows and deferred inflows related to pensions as follows:

Deferred outflows of resources:	Water	Sewer	Total
Pension contributions after measurement date	\$ 2,616	496	3,112
Difference between actual			
and expected investment returns	443	84	527
Change in assumptions	2,441	463	2,904
Change in proportion	535	122	657
Total deferred outflows of resources	\$ 6,035	1,165	7,200
Deferred inflows of resources:			
Differences between actual and expected experience	\$ 2,101	399	2,500
Change in assumptions	1,958	372	2,330
Change in proportion		95	95
Total deferred inflows of resources	\$ 4,059	866	4,925

Exclusive of deferred outflows related to payments after the measurement date, the net amount of deferred outflows (inflows) of resources related to pensions that will be recognized in pension expense during the next five years and thereafter is as follows:

Measurement - Period ending June 30	Water	Sewer	Total
2019	\$ 1,816	247	2,063
2020	(974)	(162)	(1,136)
2021	(1,169)	(222)	(1,391)
2022	(313)	(60)	(373)
	\$ (640)	(197)	(837)

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Actuarial Methods and Assumptions Used to Determine Total Pension Liability

A summary of principal assumptions and methods used to determine the net pension liability is as follows:

	Miscellaneous			
Valuation Date	June 30, 2017			
Measurement Date	June 30, 2018			
Actuarial Cost Method	Entry Age Normal			
Actuarial Assumptions:				
Discount Rate	7.15%			
Inflation	2.75%			
Payroll Growth	3.00%			
Projected Salary Increase	Varies by entry age and service			
Investment Rate of Return	7.15% ¹			
Mortality	2			

¹ Net of Pension Plan Investment and Administrative Expenses; includes inflation.

All other actuarial assumptions used in the June 30, 2018 Actuarial Valuation Report were based on the results of an actuarial experience study for the period from 1997 to 2011. Further details of the experience study can be found on the CalPERS website.

Discount Rate

The discount rate used to measure the total pension liability was 7.15%. To determine whether the municipal bond rate should be used in the calculation of a discount rate for each plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. Based on the testing, none of the tested plans run out of assets. Therefore, the current 7.15% discount rate is adequate and the use of the municipal bond rate calculation is not necessary. The long-term expected discount rate of 7.15% is applied to all plans in the Public Employees Retirement Fund. The stress test results are presented in a detailed report called "GASB Crossover Testing Report" that can be obtained from the CalPERS website under the GASB Statement No. 68 section.

The long-term discount rate should be determined without reduction for pension plan administrative expense. The 7.15% investment return assumption used in this accounting valuation is net of administrative expenses. Administrative expenses are assumed to be 15 basis points. An investment return excluding administrative expenses would have been 7.30%. Using this lower discount rate has resulted in a slightly higher total pension liability and net pension liability. CalPERS checked the materiality threshold for the difference in calculation and did not find it to be a material difference to the Plans.

² The mortality table used was developed based on CalPERS' specific data. The table includes 20 years of mortality improvements using Society of Actuaries Scale BB. For more details on this table, refer to the 2017 experience study report.

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

The long-term expected rate of return on pension plan investments of 7.15% was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns of all the funds' asset classes, expected compound returns were calculated over the short-term (first 10 years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent.

The following table reflects the long-term expected real rate of return by asset class for both Safety and Miscellaneous Plans. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation. These geometric rates of return are net of administrative expenses.

New Strategic Asset Class Allocation		Real Return Years 1 - 10 ^a	Real Return Years 11+ ^b	
Global Equity	50.00%	4.80%	5.98%	
Fixed Income	28.00	1.00	2.62	
Inflation Sensitive	-	0.77	1.81	
Private Equity	8.00	6.30	7.23	
Real Assets	13.00	3.75	4.93	
Liquidity	1.00	-	(0.92)	

^a An expected inflation of 2.00% used for this period

^b An expected inflation of 2.92% used for this period

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following table presents the net pension liability of the City for each plan as of the measurement date, calculated using the discount rate of 7.15%, compared to a discount rate that is 1 percentage point lower (6.15%) or 1 percentage point higher (8.15%):

Net Pension Liability		Water		Sewer		Total	
1% Decrease (6.15%)	\$	55,342	\$	10,504	\$	65,846	
Current Discount Rate (7.15%)		35,183		6,677		41,860	
1% Increase (8.15%)		18,493		3,510		22,003	

Note 6 - Post Retirement Health Care Benefits

Plan Description

The Department participates in the City of Long Beach Retiree Health Care plan (the Plan), a single-employer plan administer by the City of Long Beach. The Plan covers all eligible full-time employees of the City. The plan functions as a cost-sharing plan for the Department. City Council has the authority to establish and amend the benefit terms currently permitted by Ordinance No. C-7556.

Benefits provided

The Plan provides health, dental and long-term care insurance for retirees and their dependents as long as (a) that employee participated in a City provided insurance program of that type (PPO or HMO) during the year immediately preceding retirement, (b) has not attained the eligibility age for Medicare payments, and (c) has attained the minimum retirement age for the employee's retirement plan. Benefits are administered through a third-party provider, and the full cost of the benefits is covered by the plan.

<u>Total OPEB Liability, OPEB expense, and Deferred Outflows of Resources Related to OPEB</u>

At September 30, 2018, the Department reported a total OPEB liability of \$2,218 (\$1,855 for Water and \$363 for Sewer) for its proportionate share of the total OPEB liability. The total OPEB liability was measured as of September 30, 2017 and the total OPEB liability used to calculate the total OPEB liability was determined by an actuarial valuation as of September 30, 2017. The Departments proportion of the total OPEB liability was based on the Department's share of sick leave balances. At September 30, 2018, the Department's proportion was 4.3% (3.6% for Water and 0.7% for Sewer).

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

For the year ended September 30, 2018, the Department recognized OPEB expense of \$100 (\$83 for Water and \$17 for Sewer). At September 30, 2018, the Department reported \$47 (\$39 for Water and \$8 for Sewer) of deferred outflows of resources related to OPEB from contributions made subsequent to the measurement date, \$362 (\$303 for Water and \$59 for Sewer) in deferred outflows of resources related to actuarial changes in assumptions, \$98 (\$82 for Water and \$16 for Sewer) in deferred outflows related to change in proportions for OPEB liability, \$292 (\$244 for Water and \$48 for Sewer) of deferred inflows of resources related to actuarial determined difference between expected and actual experience, \$15 (\$13 for Water and \$2 for Sewer) of deferred inflows of resources related to change in proportion, and \$77 (\$64 for Water and \$13 for Sewer) in deferred inflows for changes in assumptions.

Amounts reported as deferred outflows related to OPEB from the Department's contributions subsequent to the measurement date will be recognized as a reduction of the total OPEB liability in the year ending September 30, 2019. Amounts related to both the deferred outflow of resources and deferred inflow of resources will be amortized over the next 7.4 years. Amounts reported as deferred outflows and deferred inflows related to OPEB will be recognized in OPEB expense over the next five years as follows:

Wa	ter	Sewer			
Year Ended September 30	Amount to be Recognized	Year Ended September 30	Amount to be Recognized		
2019	1	2019	-		
2020	1	2020	-		
2021	1	2021	- '		
2022	1	2022	- '		
2023	1	2023	- '		
2024 - 2028	(10)	2024 - 2028	(2)		
Total	(5)		(2)		

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Actuarial Assumptions

The total OPEB liability in the September 30, 2017 actuarial valuation was determined using the following actuarial assumptions:

Valuation Date September 30, 2016 Measurement Date September 30, 2017

Actuarial Cost Method Entry Age

Actuarial Assumptions:

Inflation 2.75%

Discount Rate 3.50% Based on Fidelity Municipal Bond GO

AA 20-year Bond Index

Payroll Increases Aggregate 3.00%

Merit CalPERS 1997-2011 Experience Study 7.5% for 2019, decreasing to 4% for 2076 and later

Health Care Cost

Trend Rates

CalPERS 1997-2011 Experience Study

Mortality, Withdrawal, Disability, Retirement

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following presents the total OPEB liability of the Department, as well as what the Department's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.1%) or 1-percentage-point higher (4.1%) than the current discount rate:

	De	Percent crease .50 %)	ı	scount Rate .50 %)	In	Percent crease .50 %)
Total OPEB Liability - Water	\$	2,042	\$	1,855	\$	1,685
Total OPEB Liability - Sewer		400		363		330

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates

The following presents the total OPEB liability of the Department, as well as what the Department's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.1 percent) or 1-percentage-point higher (4.1 percent) than the current discount rate:

	1 Percent Decrease (6.50 %)		Cos	althcare st Trend Rate .50 %)	1 Percent Increase (8.50 %)	
Total OPEB Liability - Water	\$	1,633	\$	1,855	\$	2,116
Total OPEB Liability - Sewer		320		363		414

Termination Benefits

As of September 30, 2018, the City has recorded liabilities in Internal Service and Enterprise Funds in the amount of \$139.1 million based on an actuarial study of current and future retiree accumulated sick leave in accordance with GASB Statement No. 16, Accounting for Compensated Absences (GASB 16). The liability takes into account an estimate of future usage, additional leave accumulation and wage increases for both current retirees and active employees.

The \$139.1 million long-term portion of the liability is being funded over time through burden rates, applied as a percentage of current productive salaries, and charged to the various City funds.

Note 7 - Operating Leases

The Department owns approximately 820 acres of land, approximately 80 acres of which is leased for commercial purposes. Minimum future rental income due to the Water Fund under noncancelable operating leases which have an initial term in excess of one year is as follows:

Year ending September 30:	
2019	\$ 895
2020	927
2021	937
2022	962
2023	989
2024-2028	5,408
2029-2033	3,300
2034-2038	1,695
2039-2043	489
Total minimum future rentals	\$ 15,602

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

Note 8 - Commitments and Contingencies

Litigation

The Department is subject to claims and lawsuits arising from the normal course of business. Such claims are routinely evaluated by representatives of the City Attorney's office. Department management may make provision for probable losses if deemed appropriate on advice of legal counsel. To the extent that such provision for damages is considered necessary, appropriate amounts are reflected in the accompanying basic financial statements. Based upon information obtained from the City Attorney with respect to remaining cases, it is the opinion of management that any liability for unreserved claims and lawsuits will not have a material impact on the basic financial statements of the Department.

Commitments

Contract commitments and purchase orders for which materials or services were not received as of September 30, 2018 amount to \$6,715 and \$3,112 for the Water Fund and Sewer Fund, respectively.

Note 9 - Subsequent Events

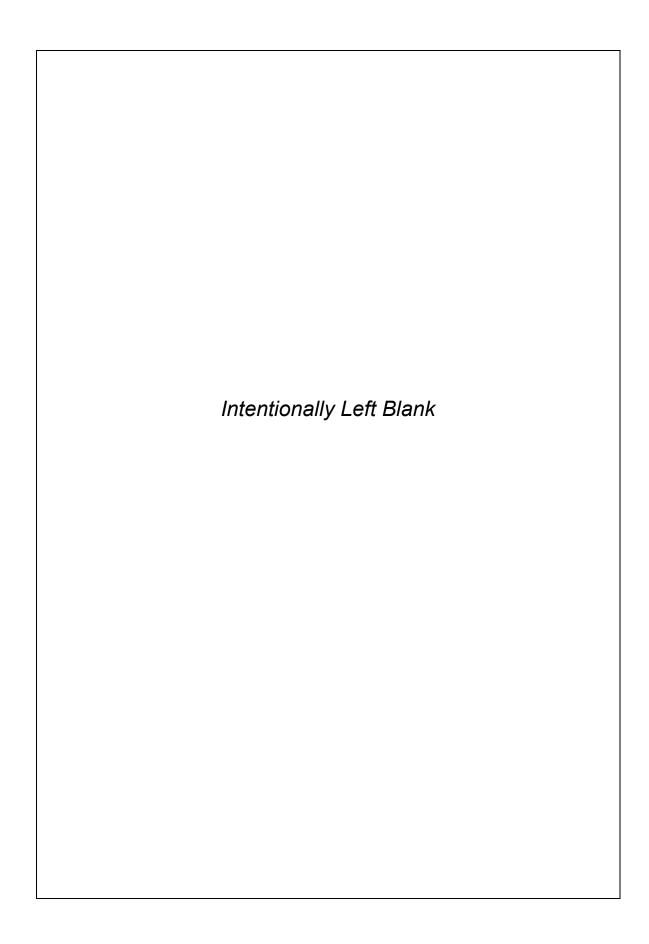
Lease-Purchase Agreement

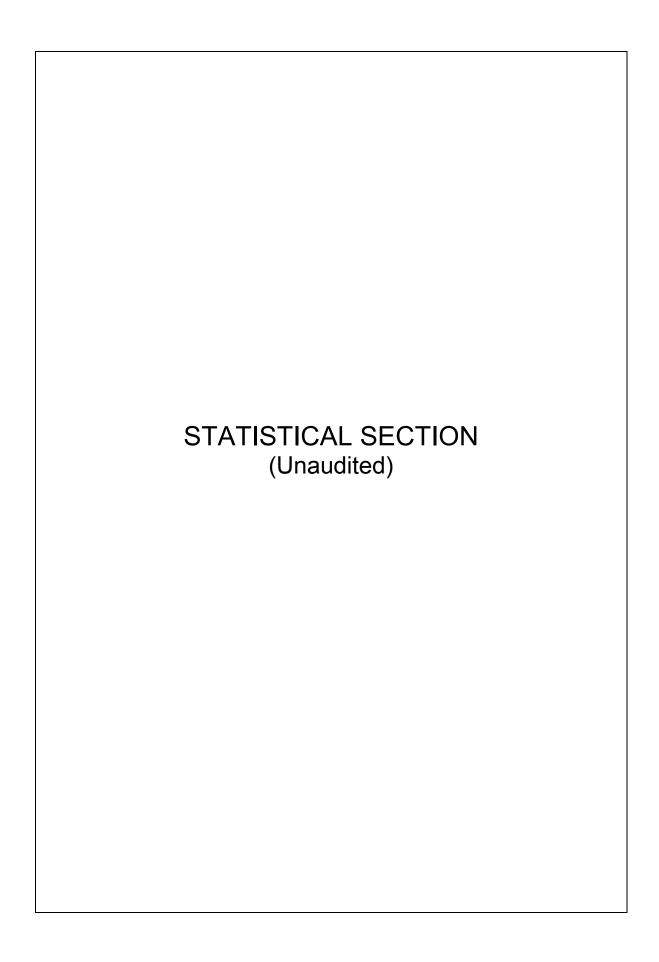
On November 1, 2018, the Board of Water Commissioners authorized the Long Beach Water Department to proceed with execution of a lease-purchase agreement and related financing documents with Banc of America Public Capital Corp, for the financing of the Advanced Meter Infrastructure (AMI) Project, in an amount not to exceed \$36,000, including cost of issuance, principal and interest, payable over a fifteen-year period.

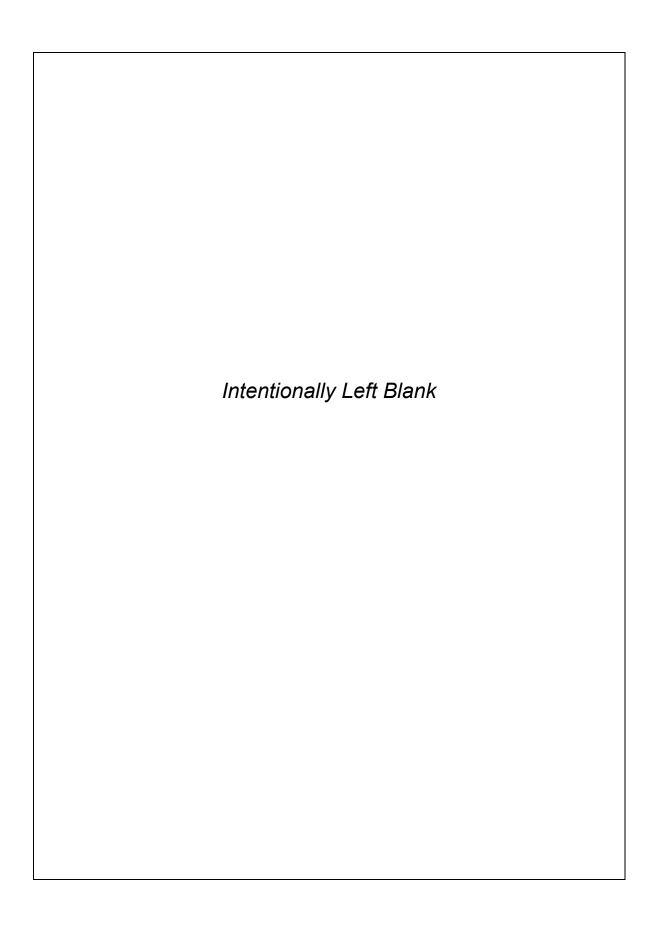
The AMI Project is an integrated network of smart meters, communication collectors, and data management systems that allow water meters to be read automatically and uploaded electronically. AMI Project costs to be financed total approximately \$27,400. Automating the meter reading process will allow the Department to increase operational efficiencies and achieve annual cost savings of approximately \$1,500 from elimination of the existing manual meter reading contract. The AMI Project will also allow customers to receive personal hourly consumption information by providing usage patterns and facilitate water efficiency and conservation.

Notes to Financial Statements September 30, 2018 (in thousands of dollars)

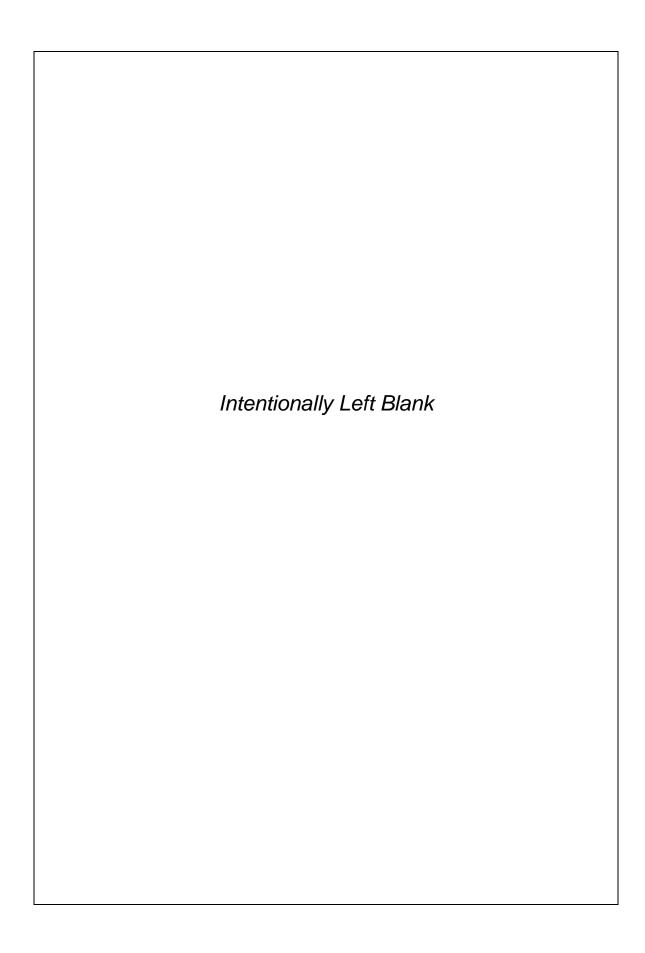
On December 11, 2018, City Council approved the execution of the 15-year lease-purchase agreement through the City's Master Lease Agreement with Banc of America Public Capital Corporation to finance the AMI Project. The lease-purchase agreement was executed and funded on December 20, 2018. The total purchase price was \$27,400, at an interest rate of 3.35%. Monthly rental payments including principal and interest total \$194, to be paid equally from Water Enterprise Fund and Sewer Enterprise Fund revenues.











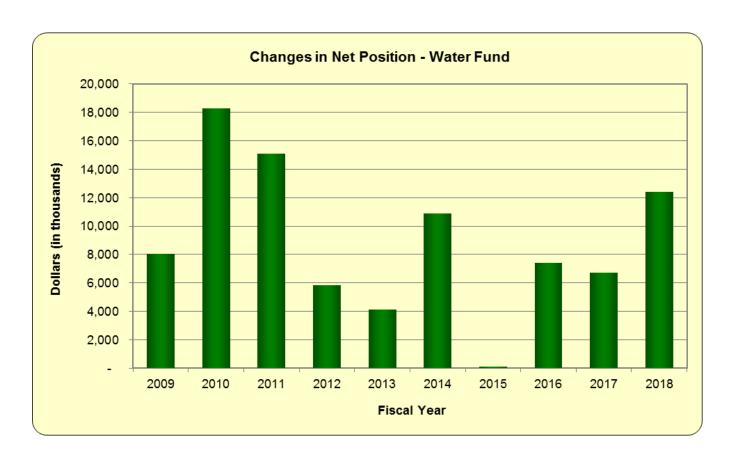
LONG BEACH WATER DEPARTMENT CHANGES IN NET POSITION - WATER FUND LAST TEN FISCAL YEARS

(in thousands of dollars)

Fiscal Year Ended	Total Operating Revenue ⁽¹⁾	Total Operating Expense	Operating Income (Loss)	Total Non-Operating Income (Expense)	Total Contributed <u>capital</u>	Changes in <u>Net Position</u>
9/30/2009	80,777	73,916	6,861	(1,029)	2,221	8,053
9/30/2010	87,151	79,422	7,729	8,302	2,263	18,294
9/30/2011	88,576	80,403	8,173	(1,374)	8,283	15,082
9/30/2012	86,515	79,342	7,173	(1,573)	247	5,847
9/30/2013	91,949	85,783	6,166	(2,152)	131	4,145 (2)
9/30/2014	100,187	91,992	8,195	(216)	2,924	10,903
9/30/2015	99,475	102,134	(2,659)	1,051	1,726	118
9/30/2016	97,650	92,253	5,397	(672)	2,710	7,435
9/30/2017	97,383	91,893	5,490	510	734	6,734
9/30/2018	99,173	95,320	3,853	2,421	6,122	12,396

Notes: (1) Total Operating Revenue is net of Provision for doubtful accounts expense.

Source: Department's annual reports



⁽²⁾ Changes in Net Position amount excludes adjustment reflecting the removal of deferred charges relating to the issuance of debt in compliance with GASB Statement No. 65.

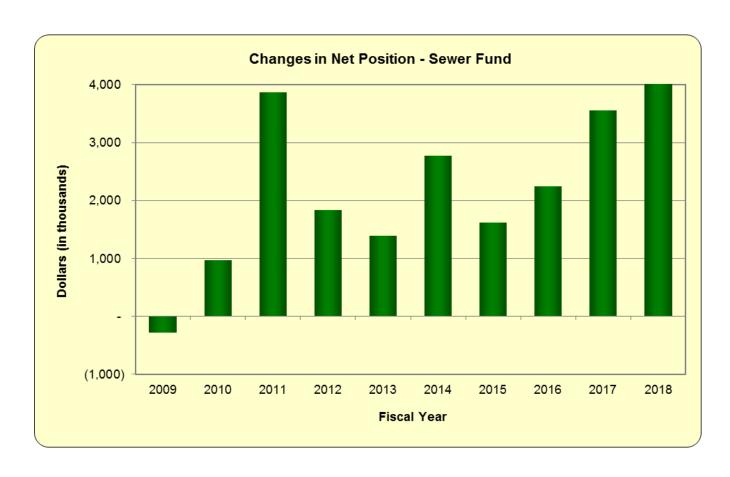
LONG BEACH WATER DEPARTMENT CHANGES IN NET POSITION - SEWER FUND

LAST TEN FISCAL YEARS (in thousands of dollars)

Fiscal Year Ended	Total Operating Revenue ⁽¹⁾	Total Operating Expense	Operating Income (Loss)	Total Non-Operating Income (Expense)	Total Contributed capital	Changes in Net Position
9/30/2009	12,455	13,003	(548)	258	-	(290)
9/30/2010	15,186	14,015	1,171	(517)	310	964
9/30/2011	16,448	14,795	1,653	(650)	2,868	3,871
9/30/2012	17,325	14,411	2,914	(1,260)	185	1,839
9/30/2013	17,311	15,165	2,146	(761)	-	1,385 (2)
9/30/2014	17,953	15,479	2,474	(462)	759	2,771
9/30/2015	17,903	16,024	1,879	(257)	-	1,622
9/30/2016	18,355	15,835	2,520	(280)	-	2,240
9/30/2017	19,949	15,312	4,637	(1,087)	-	3,550
9/30/2018	18,872	14,474	4,398	391	-	4,789

Notes: (1) Total Operating Revenue is net of Provision for doubtful accounts expense.

Source: Department's annual reports



⁽²⁾ Changes in Net Position amount excludes adjustment reflecting the removal of deferred charges relating to the issuance of debt in compliance with GASB Statement No. 65.

LONG BEACH WATER DEPARTMENT NET POSITION BY COMPONENT - WATER FUND LAST TEN FISCAL YEARS

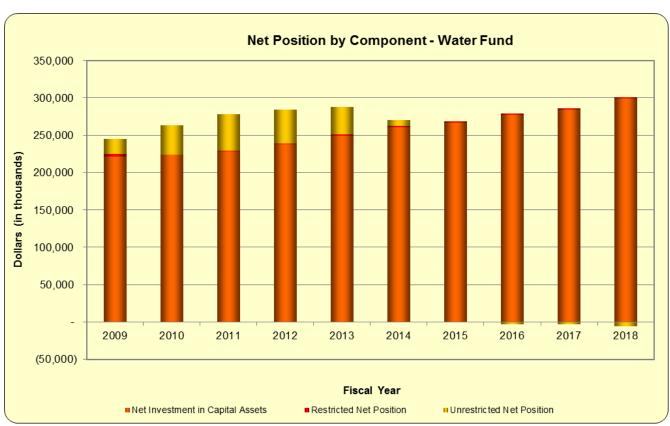
(in thousands of dollars)

Fiscal Year Ended	Net Investment in Capital Assets	Restricted Net Position	Unrestricted Net Position (deficit)	Total Net Position
9/30/2009	220,974	4,240	19,684	244,898
9/30/2010	223,560	153	39,479	263,192
9/30/2011	228,196	736	49,342	278,274
9/30/2012	237,793	1,350	44,978	284,121
9/30/2013	249,256	1,656	36,814	287,726 ⁽¹⁾
9/30/2014	260,538	1,673	7,725	269,936
9/30/2015 (2)	267,041	1,697	(143)	268,595
9/30/2016	277,394	1,716	(3,080)	276,030
9/30/2017	284,413	1,700	(3,349)	282,764
9/30/2018	299,325	1,706	(5,871)	295,160

Notes: (1) Total Net Position amount includes adjustment reflecting the removal of deferred charges relating to the issuance of debt in compliance with GASB Statement No. 65.

(2) Amounts adjusted due to implementation of GASB Statement No. 75.

Source: Department's annual reports



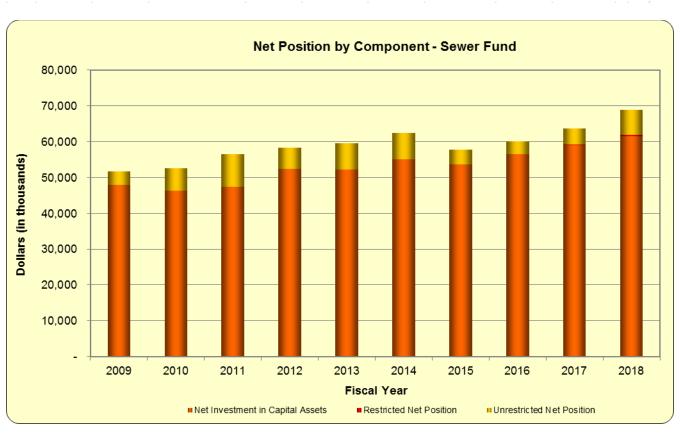
(Unaudited) Exhibit 4

LONG BEACH WATER DEPARTMENT NET POSITION BY COMPONENT - SEWER FUND LAST TEN FISCAL YEARS (in thousands of dollars)

Fiscal Year Ended	Net Investment in Capital Assets	Restricted Net Position	Unrestricted Net Position	Total <u>Net Position</u>
9/30/2009	47,891	-	3,749	51,640
9/30/2010	46,383	-	6,221	52,604
9/30/2011	47,378	-	9,097	56,475
9/30/2012	52,465	-	5,849	58,314
9/30/2013	52,151	-	7,412	59,563 ⁽¹⁾
9/30/2014	55,006	-	7,328	62,334
9/30/2015 (2)	53,604	-	4,195	57,799
9/30/2016	56,462	84	3,493	60,039
9/30/2017	58,927	302	4,360	63,589
9/30/2018	61,593	303	7,031	68,927

Notes: (1) Total Net Position amount includes adjustment reflecting the removal of deferred charges relating to the issuance of debt in compliance with GASB Statement No. 65.

Source: Department's annual reports



⁽²⁾ Amounts adjusted due to implementation of GASB Statement No. 75.

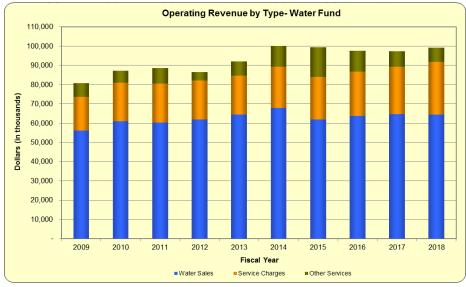
LONG BEACH WATER DEPARTMENT WATER FUND REVENUE BY TYPE - LAST TEN FISCAL YEARS

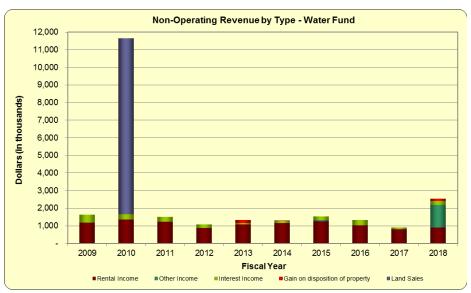
(in thousands of dollars)

		OPER/	TING		NON-OPERATING					
Fiscal Year Ended	Water Sales ⁽¹⁾	Service Charges	Other Services	Total Operating Revenue	Interest Income	Rental Income	Land sales	Other Income	Gain on disposition of property	Total Non-Operating Income
9/30/2009	56,256	17,299	7,222	80,777	456	1,181	-	-	-	1,637
9/30/2010	60,975	19,983	6,193	87,151	302	1,345	10,000	-	-	11,647
9/30/2011	60,398	20,251	7,927	88,576	294	1,221	-	-	-	1,515
9/30/2012	61,884	20,223	4,408	86,515	193	885	-	-	-	1,078
9/30/2013	64,347	20,363	7,239	91,949	58	1,087	-	-	196	1,341
9/30/2014	67,818	21,548	10,821	100,187	120	1,158	-	-	36	1,314
9/30/2015	61,995	22,061	15,419	99,475	223	1,256	-	62	-	1,541
9/30/2016	63,658	23,121	10,871	97,650	299	1,027	-	-	-	1,326
9/30/2017	64,721	24,599	8,063	97,383	87	811	-	-	-	898
9/30/2018	64,490	27,325	7,358	99,173	210	905	-	1,291	138	2,544

Notes: (1) Water Sales are net of Provision for doubtful accounts expense.

Source: Department's annual reports



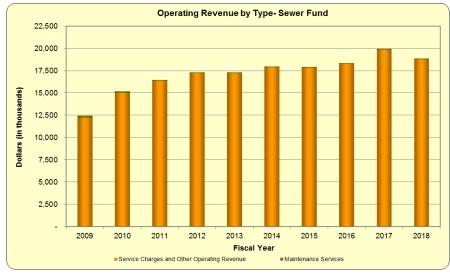


LONG BEACH WATER DEPARTMENT SEWER FUND REVENUE BY TYPE - LAST TEN FISCAL YEARS

(in thousands of dollars)

	OP	ERATING		NON-OPERATING					
Fiscal Year Ended	Service Charges and Other Operating Revenue	Maintenance Services	Total Operating Revenue	Interest Income	Other Income	Gain on disposition of property	Total Non-Operating Income		
9/30/2009	12,203	252	12,455	70	219	-	289		
9/30/2010	15,013	173	15,186	50	0.01	-	50		
9/30/2011	16,362	86	16,448	63	-	-	63		
9/30/2012	17,239	86	17,325	25	-	2	27		
9/30/2013	17,225	86	17,311	11	-	2	13		
9/30/2014	17,867	86	17,953	23	-	-	23		
9/30/2015	17,817	86	17,903	52	-	2	54		
9/30/2016	18,269	86	18,355	94	-	5	99		
9/30/2017	19,863	86	19,949	32	-	-	32		
9/30/2018	18,786	86	18,872	58	577	-	635		

Source: Department's annual reports





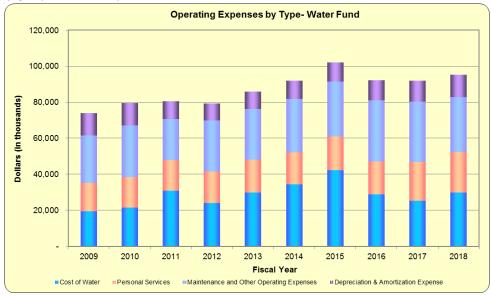
LONG BEACH WATER DEPARTMENT WATER FUND EXPENSES BY TYPE - LAST TEN FISCAL YEARS

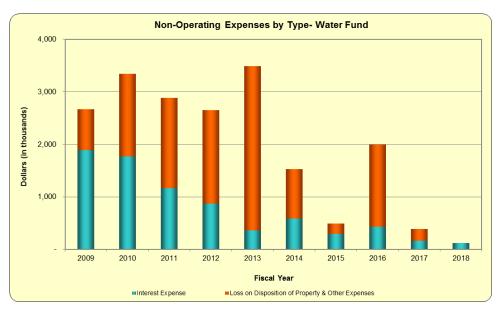
(in thousands of dollars)

Exhibit 7

			OPERATING	NON-OPERATING				
Fiscal Year Ended	Cost of Water	Personal Services	Maintenance and Other Operating Expenses	Depreciation & Amortization Expense	Total Operating Expenses	Interest Expense	Loss on Disposition of Property & Other Expenses	Total Non-Operating Expense
9/30/2009	19,509	15,654	26,319	12,434	73,916	1,891	775	2,666
9/30/2010	21,588	16,855	28,648	12,331	79,422	1,773	1,572	3,345
9/30/2011	30,825	17,095	22,644	9,839	80,403	1,167	1,722	2,889
9/30/2012	23,887	17,594	28,502	9,359	79,342	872	1,779	2,651
9/30/2013	29,753	18,309	28,155	9,566	85,783	363	3,130	3,493
9/30/2014	34,378	17,822	29,566	10,226	91,992	587	943	1,530
9/30/2015	42,178	18,923	30,294	10,739	102,134	292	198	490
9/30/2016	28,743	18,405	33,936	11,169	92,253	433	1,565	1,998
9/30/2017	25,374	21,389	33,436	11,694	91,893	161	227	388
9/30/2018	29,927	22,500	30,340	12,553	95,320	123	-	123

Source: Department's annual reports





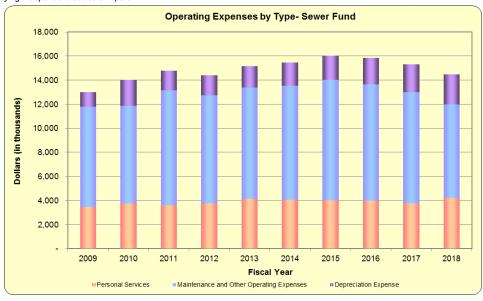
LONG BEACH WATER DEPARTMENT SEWER FUND EXPENSES BY TYPE - LAST TEN FISCAL YEARS

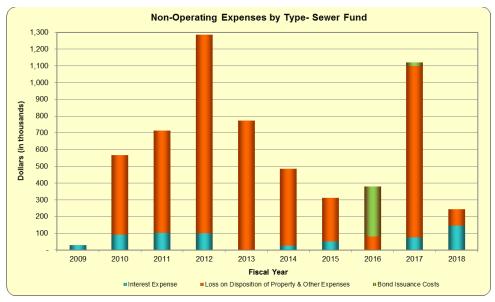
Exhibit 8

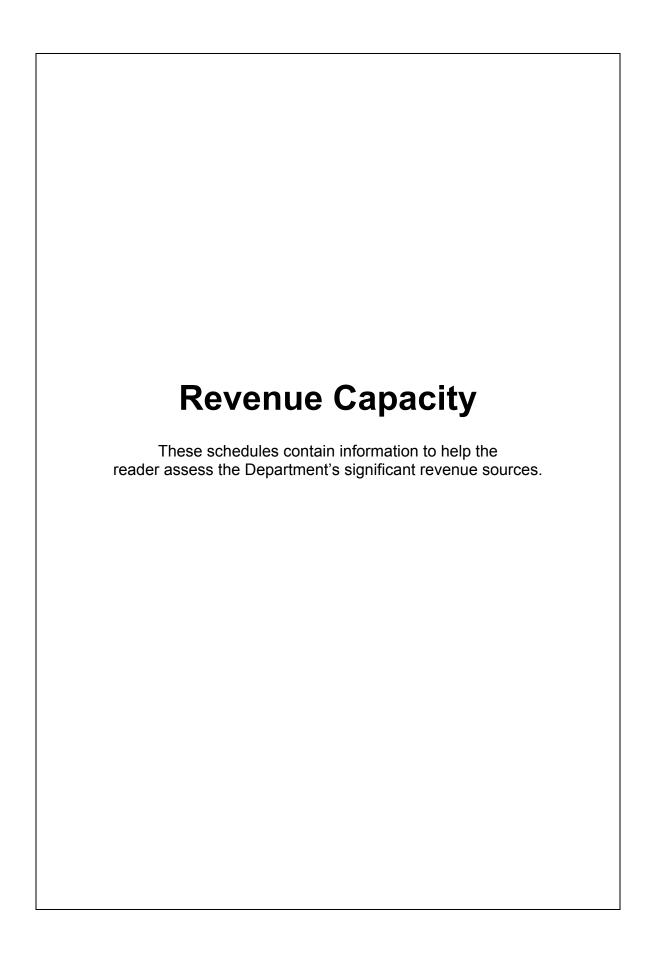
(in thousands of dollars)

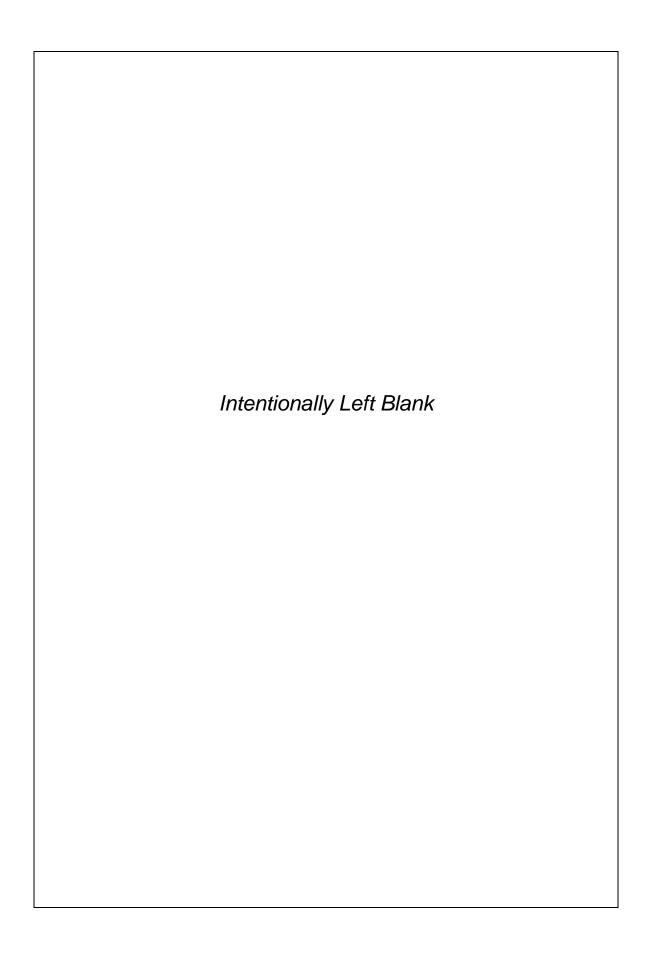
		OPERATI	NG		NON-OPERATING				
		Maintenance		Total		Loss on Disposition			
Fiscal Year	Personal	and Other	Depreciation	Operating	Interest	of Property &	Bond Issuance	Non-Operating	
Ended	Services	Operating Expenses	Expense	Expenses	Expense	Other Expenses	Costs	Expense	
9/30/2009	3,440	8,363	1,200	13,003	31	-	-	31	
9/30/2010	3,735	8,113	2,167	14,015	91	476	-	567	
9/30/2011	3,607	9,528	1,660	14,795	102	611	-	713	
9/30/2012	3,748	8,988	1,675	14,411	101	1,186	-	1,287	
9/30/2013	4,122	9,246	1,797	15,165	2	772	-	774	
9/30/2014	4,043	9,475	1,961	15,479	27	458	-	485	
9/30/2015	4,021	9,993	2,010	16,024	51	260	-	311	
9/30/2016	3,968	9,680	2,187	15,835	-	81	298	379	
9/30/2017	3,764	9,225	2,323	15,312	77	1,021	21	1,119	
9/30/2018	4,206	7,778	2,490	14,474	146	98	-	244	

Source: Department's annual reports







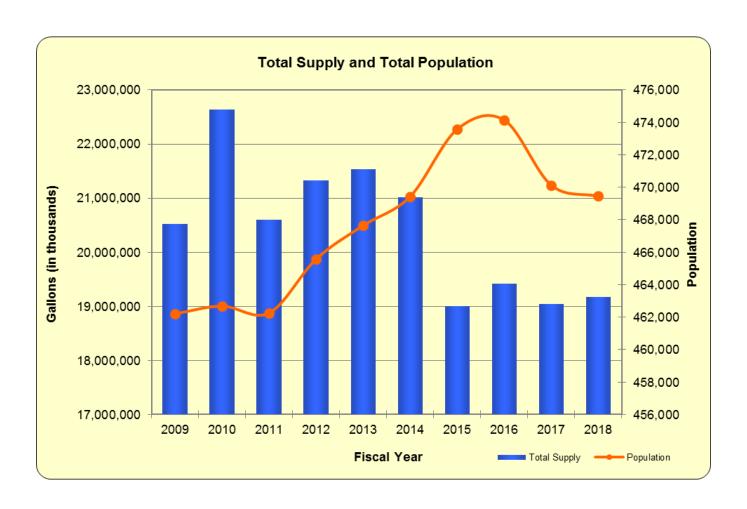


SOURCE OF WATER (PUMPED, PURCHASED, AND RECLAIMED) AND CONSUMPTION - LAST TEN FISCAL YEARS (in thousands of gallons, except population)

		SOURCE C	OF SUPPLY		CONSUMPTION					
Fiscal Year	Fiscal Year Potable Water		Reclaimed	Total	Average Daily Demand	Peak Day	Average Daily Sales			
Ended	Pumped	Purchased	Water Supply		Potable Water (1)	Distribution	Per Capita	Population		
9/30/2009	11,038,496	7,462,640	2,021,971	20,523,107	50,688	72,650	122	462,211		
9/30/2010	11,789,387	8,651,083	2,197,803	22,638,273	56,001	71,220	134	462,685		
9/30/2011	5,856,585	12,725,394	2,022,264	20,604,243	50,910	72,300	122	462,257		
9/30/2012	10,772,406	8,302,455	2,255,671	21,330,532	52,260	74,700	126	465,576		
9/30/2013	10,125,461	9,248,531	2,164,954	21,538,946	53,079	68,700	126	467,646		
9/30/2014	9,131,485	9,990,526	1,897,724	21,019,735	52,389	72,000	123	469,428		
9/30/2015	7,169,276	10,146,544	1,684,650	19,000,470	47,441	68,600	110	473,577		
9/30/2016	10,455,223	6,487,074	2,470,635	19,412,932	46,417	63,300	112	474,140		
9/30/2017	10,283,141	6,459,051	2,303,734	19,045,926	45,869	60,300	111	470,130		
9/30/2018	9,479,592	7,901,528	1,790,910	19,172,030	47,620	64,200	112	469,450		

Note: (1) Does not include reclaimed water which is used for irrigation only.

Source: Department's annual reports



LONG BEACH WATER DEPARTMENT WATER RATES: VOLUMETRIC RATE CHARGES LAST TEN FISCAL YEARS

Potable Water (1) **Reclaimed Water** Non-Peaking Interruptible Rate Per Cubic **Peaking Rate** Rate Per Cubic **Effective** TIER I (2) TIER II (3) TIER III (4) Per Cubic Foot (5) Foot (6) Foot (7) Date 1.472 10/1/2008 1.893 2.103 3.155 1.052 10/1/2009 2.196 2.439 3.659 1.708 1.220 10/1/2010 2.196 2.439 3.659 1.708 1.220 10/1/2011 2.439 1.220 2.196 3.659 1.708 1.220 10/1/2012 2.196 2.439 3.659 1.708 1.220 1.220 10/1/2013 2.283 2.537 3.806 1.269 1.269 1.776 10/1/2014 2.374 2.638 3.957 1.319 1.319 1.847 10/1/2015 2.470 2.744 4.116 1.921 1.372 1.372 10/1/2016 2.569 2.854 4.281 1.998 1.427 1.427 7/1/2017⁽⁸⁾ 1.921 3.678 5.366 1.859 1.578 1.578 10/1/2017 1.998 3.825 5.581 1.933 1.641 1.641 1/1/2018 1 914 3.664 5 347 1.852 1.572 1.572

Note: (1) Volumetric rate charges for Single family residence, not granted an exemption (one billing unit equals 100 cubic feet).

- (2) From 10/1/2007 to 10/1/2016, Tier I is billed for first five (5) billing units. Starting 7/1/2017, Tier I is billed for first six (6) billing units.
- (3) All non-residential customers are charged at the Tier II rate. From 10/1/2007 to 10/1/2016, Tier II is billed for next ten (10) billing units. Starting 7/1/2017, Tier I is billed for first seven (7) billing units.
- $(4) From \ 10/1/2007 \ to \ 10/1/2016, Tier \ III \ is \ billed \ for \ over \ fifteen \ (15) \ billing \ units. Starting \ 7/1/2017, Tier \ III \ is \ billed \ for \ over \ thirteen \ (13) \ billing \ units.$
- (5) Rate for total average daily demand occurring between the hours of 9:00pm and 6:00am.
- (6) Rate for total average daily demand occurring at a continuous, constant level over a 24 hour period.
- (7) Rate for reclaimed water service that can be suspended at anytime at the Board of Water Commissioner's discretion, without liability and dependent upon the Department's reclaimed water system needs for such service.
- (8) Restructured water rates effective July 1, 2017.

Source: Department's records

See accompanying independent auditors' report

(Unaudited)

Exhibit 11

LONG BEACH WATER DEPARTMENT WATER RATES: DAILY SERVICE CHARGE BY SIZE LAST TEN FISCAL YEARS

Effective											
Date	3/4"	1" ⁽¹⁾	1-1/2"	2"	3"	4"	6"	8"	10"	12"	16"
10/1/2008	0.360	0.543	1.013	1.502	3.110	4.921	9.068	14.234	23.311	28.490	47.152
10/1/2009	0.418	0.630	1.175	1.742	3.608	5.708	10.519	16.511	27.041	33.048	54.696
10/1/2010	0.418	0.630	1.175	1.742	3.608	5.708	10.519	16.511	27.041	33.048	54.696
10/1/2011	0.418	0.630	1.175	1.742	3.608	5.708	10.519	16.511	27.041	33.048	54.696
10/1/2012	0.418	0.630	1.175	1.742	3.608	5.708	10.519	16.511	27.041	33.048	54.696
10/1/2013	0.435	0.655	1.222	1.812	3.752	5.936	10.940	17.171	28.123	34.370	56.884
10/1/2014	0.452	0.681	1.271	1.884	3.902	6.173	11.378	17.858	29.248	35.745	59.159
10/1/2015	0.470	0.708	1.322	1.959	4.058	6.420	11.833	18.572	30.418	37.175	59.159
10/1/2016	0.489	0.736	1.375	2.037	4.220	6.677	12.306	19.315	31.635	38.662	63.986
7/1/2017 ⁽²⁾	0.550	0.815	1.478	2.273	4.790	8.102	18.039	37.251	55.800	70.374	103.497
10/1/2017	0.572	0.848	1.537	2.364	4.982	8.426	18.761	38.741	58.032	73.189	107.637
1/1/2018	0.548	0.812	1.472	2.265	4.773	8.072	17.973	37.114	55.595	70.115	103.116

Note: (1) Normal residential size.

(2) Restructured water rates effective 7/1/2017.

Source: Department's records

LONG BEACH WATER DEPARTMENT WATER RATES: DAILY FIRELINE SERVICE CHARGE BY SIZE LAST TEN FISCAL YEARS

Effective Date	2"	3"	4"	6"	8"	10"	12"	16"
10/1/2008	0.752	1.285	1.899	3.236	4.744	6.417	8.089	11.860
10/1/2009	0.872	1.491	2.203	3.754	5.503	7.444	9.383	13.758
10/1/2010	0.872	1.491	2.203	3.754	5.503	7.444	9.383	13.758
10/1/2011	0.872	1.491	2.203	3.754	5.503	7.444	9.383	13.758
10/1/2012	0.872	1.491	2.203	3.754	5.503	7.444	9.383	13.758
10/1/2013	0.907	1.551	2.291	3.904	5.723	7.742	9.758	14.308
10/1/2014	0.943	1.613	2.383	4.060	5.952	8.052	10.148	14.880
10/1/2015	0.981	1.678	2.478	4.222	6.190	8.374	10.554	15.475
10/1/2016	1.020	1.745	2.577	4.391	6.438	8.709	10.976	16.094
7/1/2017 ⁽¹⁾	0.325	0.654	1.221	3.256	6.767	12.047	19.365	41.095
10/1/2017	0.338	0.680	1.270	3.386	7.038	12.529	20.140	42.739
1/1/2018	0.324	0.651	1.217	3.244	6.742	12.003	19.294	40.944

Note: (1) Restructured water rates effective 7/1/2017.

Source: Department's records

See accompanying independent auditors' report

(Unaudited)

Exhibit 13

LONG BEACH WATER DEPARTMENT TEN LARGEST POTABLE WATER USERS IN CITY OF LONG BEACH CURRENT YEAR AND NINE YEARS AGO

	Fis	cal Year 2018		Fiscal Year 2009						
Industry	Ranking	Sales in thousands	Acre Feet (AF)	AF Percent of Total	Industry	Ranking	Sales in thousands	Acre Feet (AF)	AF Percent of Total	
Government	1	\$ 4,926	2,959	5.55 %	Government	1	\$ 3,431	2,738	4.54 %	
Education	2	1,185	604	1.13	Education	2	874	742	1.23	
Utility	3	800	622	1.17	Education	3	460	472	0.78	
Education	4	682	471	0.88	Utility	4	438	474	0.79	
Utility	5	548	414	0.78	Utility	5	431	454	0.75	
Cruise Line	6	499	380	0.71	Utility	6	416	450	0.75	
Utility	7	385	277	0.52	Government	7	312	271	0.45	
Healthcare	8	384	258	0.48	Healthcare	8	274	291	0.48	
Healthcare	9	365	269	0.50	Healthcare	9	262	274	0.45	
Education	10	242	94	0.18	Cruise Line	10	209	225	0.37	
Total Ten Largest Users		10,016	6,348	11.90	Total Ten Largest Users		7,107	6,391	10.59	
Total All Other Users		78,195	46,993	88.10	Total All Other Users		64,145	53,983	89.41	
Total City		\$ 88,211	53,341	100.00	Total City		\$ 71,252	60,374	100.00	

Source: Department's utility billing records

LONG BEACH WATER DEPARTMENT TEN LARGEST RECLAIMED WATER USERS IN CITY OF LONG BEACH CURRENT YEAR AND NINE YEARS AGO

Fiscal Year 2018 Fiscal Year 2009 Acre Feet AF Percent Acre Feet **AF Percent** Ranking Ranking of Total Industry of Total (AF) (AF) Oil Production 1 1,724 31.37 % Water Resource Management 1 1,835 29.57 % Golf Course 2 1,431 2 26.04 Golf Course 1,404 22.63 3 20.02 Government 1,081 19.67 Government 1,242 Water Resource Management 375 6.82 Oil Production 893 14.39 Education 174 3.17 Education 5 168 2.70 5 Education Memorial Park 6 148 2.69 6 126 2.03 Memorial Park 140 2.55 Golf Course 115 1.85 Education 8 100 1.82 Memorial Park 8 92 1.48 Memorial Park 9 95 1.73 Education 9 90 1 45 Plant Nursery 10 0.69 Education 10 0.82 38 51 5,306 96.55 6,016 96.94 Total Ten Largest Users Total Ten Largest Users Total All Other Users Total All Other Users 3.45 189 3.06 190 **Total City** 5,496 100.00 **Total City** 6,205 100.00

Source: Department's records

See accompanying independent auditors' report

(Unaudited)

Exhibit 15

LONG BEACH WATER DEPARTMENT SEWER RATES: VOLUMETRIC RATE CHARGES & CAPACITY CHARGES LAST TEN FISCAL YEARS

Effective		
Date	Volumetric Rate Charges (1)	Capacity Charges ⁽²⁾
10/1/2008	0.248	84.710
10/1/2009	0.303	88.520
10/1/2010	0.330	90.380
10/1/2011	0.347	91.370
10/1/2012	0.347	93.200
10/1/2013	0.347	93.390
10/1/2014	0.361	97.310
10/1/2015	0.375	99.520
10/1/2016	0.390	101.110
7/1/2017 ⁽³⁾	0.390	101.110
10/1/2017	0.398	108.390
1/1/2018	0.357	108.390

Note: (1) Volumetric rate charges one (1) billing unit equals 100 cubic feet.

- (2) A one-time capacity charge per equivalent fixture unit is applied to all new developments in the City.
- (3) Restructured sewer rates effective July 1, 2017

Source: Department's records

(Unaudited) Exhibit 16

LONG BEACH WATER DEPARTMENT SEWER RATES: DAILY SERVICE CHARGE BY SIZE LAST TEN FISCAL YEARS

3/4" ⁽¹⁾	1"	1-1/2"	2"	3"	4"	6"	8"	10"	12"	16"
0.179	0.284	0.516	0.749	1.550	2.455	4.522	7.105	11.623	14.207	23.248
0.218	0.346	0.630	0.914	1.891	2.990	5.517	8.668	14.180	17.333	28.363
0.238	0.377	0.687	0.990	2.061	3.265	6.014	9.448	15.456	18.893	30.916
0.250	0.396	0.721	1.046	2.164	3.428	6.315	9.920	16.229	19.838	32.462
0.250	0.396	0.721	1.046	2.164	3.428	6.315	9.920	16.229	19.838	32.462
0.250	0.396	0.721	1.046	2.164	3.428	6.315	9.920	16.229	19.838	32.462
0.260	0.412	0.750	1.088	2.251	3.565	6.568	10.317	16.878	20.632	33.760
0.270	0.428	0.780	1.132	2.341	3.708	6.831	10.731	17.553	21.457	35.110
0.281	0.445	0.811	1.177	2.435	3.856	7.104	11.159	18.255	22.315	36.514
0.246	0.365	0.957	1.649	3.842	5.558	15.482	16.412	25.405	32.042	47.125
0.251	0.372	0.976	1.682	3.919	5.669	15.792	16.740	25.913	32.683	48.068
0.225	0.333	0.874	1.507	3.511	5.079	14.150	14.999	23.218	29.284	43.069
	0.179 0.218 0.238 0.250 0.250 0.250 0.260 0.270 0.281 0.246 0.251	0.179 0.284 0.218 0.346 0.238 0.377 0.250 0.396 0.250 0.396 0.250 0.396 0.260 0.412 0.270 0.428 0.281 0.445 0.246 0.365 0.251 0.372	0.179 0.284 0.516 0.218 0.346 0.630 0.238 0.377 0.687 0.250 0.396 0.721 0.250 0.396 0.721 0.250 0.396 0.721 0.260 0.412 0.750 0.270 0.428 0.780 0.281 0.445 0.811 0.246 0.365 0.957 0.251 0.372 0.976	0.179 0.284 0.516 0.749 0.218 0.346 0.630 0.914 0.238 0.377 0.687 0.990 0.250 0.396 0.721 1.046 0.250 0.396 0.721 1.046 0.250 0.396 0.721 1.046 0.260 0.412 0.750 1.088 0.270 0.428 0.780 1.132 0.281 0.445 0.811 1.177 0.246 0.365 0.957 1.649 0.251 0.372 0.976 1.682	0.179 0.284 0.516 0.749 1.550 0.218 0.346 0.630 0.914 1.891 0.238 0.377 0.687 0.990 2.061 0.250 0.396 0.721 1.046 2.164 0.250 0.396 0.721 1.046 2.164 0.250 0.396 0.721 1.046 2.164 0.260 0.412 0.750 1.088 2.251 0.270 0.428 0.780 1.132 2.341 0.281 0.445 0.811 1.177 2.435 0.246 0.365 0.957 1.649 3.842 0.251 0.372 0.976 1.682 3.919	0.179 0.284 0.516 0.749 1.550 2.455 0.218 0.346 0.630 0.914 1.891 2.990 0.238 0.377 0.687 0.990 2.061 3.265 0.250 0.396 0.721 1.046 2.164 3.428 0.250 0.396 0.721 1.046 2.164 3.428 0.250 0.396 0.721 1.046 2.164 3.428 0.260 0.412 0.750 1.088 2.251 3.565 0.270 0.428 0.780 1.132 2.341 3.708 0.281 0.445 0.811 1.177 2.435 3.856 0.246 0.365 0.957 1.649 3.842 5.558 0.251 0.372 0.976 1.682 3.919 5.669	0.179 0.284 0.516 0.749 1.550 2.455 4.522 0.218 0.346 0.630 0.914 1.891 2.990 5.517 0.238 0.377 0.687 0.990 2.061 3.265 6.014 0.250 0.396 0.721 1.046 2.164 3.428 6.315 0.250 0.396 0.721 1.046 2.164 3.428 6.315 0.250 0.396 0.721 1.046 2.164 3.428 6.315 0.250 0.396 0.721 1.046 2.164 3.428 6.315 0.250 0.396 0.721 1.046 2.164 3.428 6.315 0.260 0.412 0.750 1.088 2.251 3.565 6.568 0.270 0.428 0.780 1.132 2.341 3.708 6.831 0.281 0.445 0.811 1.177 2.435 3.856 7.104 0.246 0.365 <	0.179 0.284 0.516 0.749 1.550 2.455 4.522 7.105 0.218 0.346 0.630 0.914 1.891 2.990 5.517 8.668 0.238 0.377 0.687 0.990 2.061 3.265 6.014 9.448 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 0.260 0.412 0.750 1.088 2.251 3.565 6.568 10.317 0.270 0.428 0.780 1.132 2.341 3.708 6.831 10.731 0.281 0.445 0.811 1.177 2.435 3.856 7.104 11.159	0.179 0.284 0.516 0.749 1.550 2.455 4.522 7.105 11.623 0.218 0.346 0.630 0.914 1.891 2.990 5.517 8.668 14.180 0.238 0.377 0.687 0.990 2.061 3.265 6.014 9.448 15.456 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 16.229 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 16.229 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 16.229 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 16.229 0.260 0.412 0.750 1.088 2.251 3.565 6.568 10.317 16.878 0.270 0.428 0.780 1.132 2.341 3.708 6.831 10.731 17.553	0.179 0.284 0.516 0.749 1.550 2.455 4.522 7.105 11.623 14.207 0.218 0.346 0.630 0.914 1.891 2.990 5.517 8.668 14.180 17.333 0.238 0.377 0.687 0.990 2.061 3.265 6.014 9.448 15.456 18.893 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 16.229 19.838 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 16.229 19.838 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 16.229 19.838 0.250 0.396 0.721 1.046 2.164 3.428 6.315 9.920 16.229 19.838 0.260 0.412 0.750 1.088 2.251 3.565 6.568 10.317 16.878 20.632 0.270

Note: (1) Normal residential size

(2) Restructured sewer rates effective July 1, 2017

Source: Department's records

See accompanying independent auditors' report

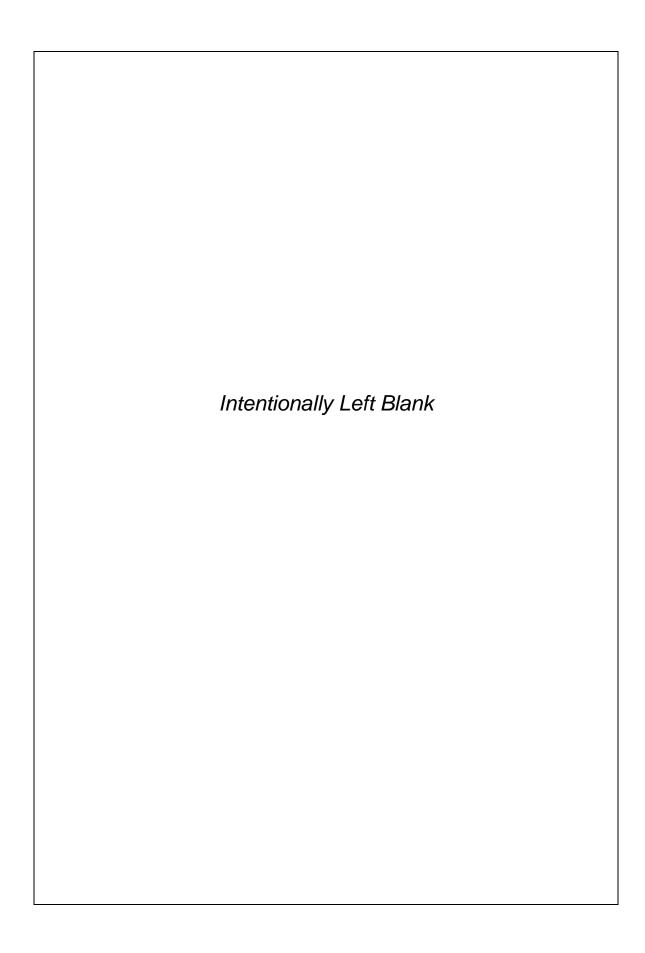
(Unaudited)

Exhibit 17

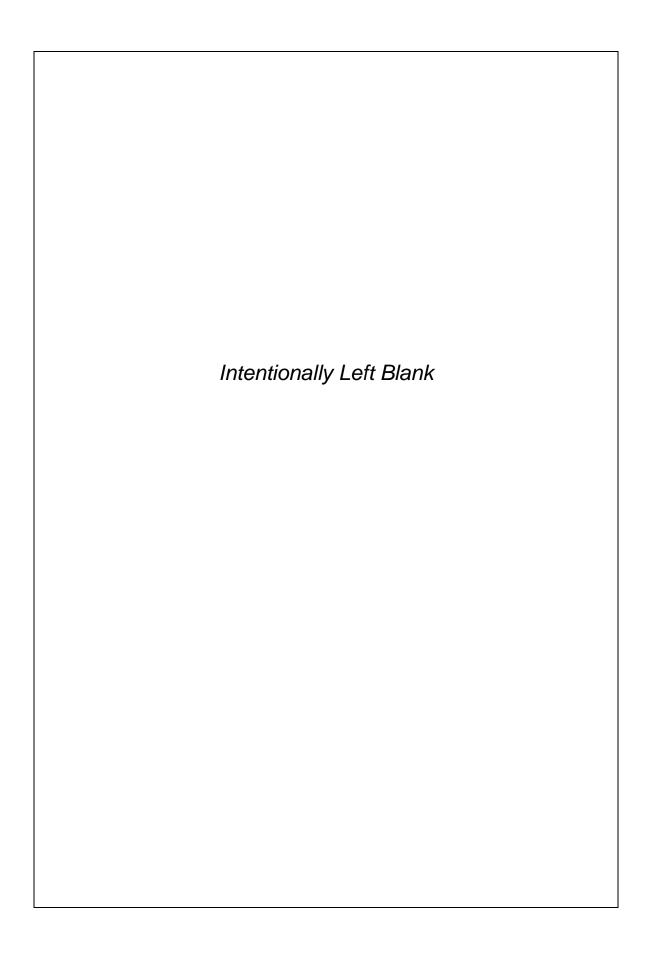
LONG BEACH WATER DEPARTMENT TEN LARGEST SEWER USERS IN CITY OF LONG BEACH CURRENT YEAR AND NINE YEARS AGO

			Year 2018			Fiscal Year 2009					
Industry	Ranking	Sales in thousands	Acre Feet (AF)	AF Percent of Total	Industry	Ranking	Sales in thousands	Acre Feet (AF)	of Total		
Government	1	\$ 447	1,236	3.30 %	Government	1	\$ 261	1,571	3.66 %		
Education	2	264	346	0.92	Education	2	124	384	0.90		
Education	3	119	468	1.25	Education	3	64	443	1.04		
Healthcare	4	73	258	0.69	Healthcare	4	37	264	0.62		
Education	5	65	92	0.25	Government	5	29	133	0.31		
Real Estate	6	34	96	0.26	Residential Community	6	20	135	0.32		
Healthcare	7	31	102	0.27	Hotel	7	18	69	0.16		
Manufacturing	8	28	135	0.36	Education	8	16	65	0.15		
Government	9	26	33	0.09	Residential Community	9	14	85	0.20		
Manufacturing	10	25	43	0.11	Manufacturing	10	13	101	0.24		
Total Ten Largest Users		1,112	2,809	7.50	Total Ten Largest Users		596	3,250	7.60		
Total All Other Users		16,265	34,662	92.50	Total All Other Users		11,398	39,520	92.40		
Total City		\$ 17,377	37,471	100.00	Total City		\$ 11,994	42,770	100.00		

Source: Department's utility billing records



Debt Capacity Information These schedules contain information to help the reader assess the affordability of the Department's current levels of outstanding debt and ability to issue additional debt in the future.



LONG BEACH WATER DEPARTMENT WATER FUND DEBT SERVICE COVERAGE - LAST TEN FISCAL YEARS (in thousands of dollars)

Fiscal Year Ended	Total Operating Revenue ⁽¹⁾	Operating Expenses (2)	Net Operating Income	Net Non-Operating Income/ (Expense) (3)	Amount Available for Debt Service	Principal	Interest	Total Debt Service ⁽⁴⁾	Times Coverage
9/30/2009	80,777	61,482	19,295	904	20,199	1,330	1,661	2,991	6.75
9/30/2010	87,151	67,091	20,060	10,245	30,305	1,405	1,588	2,993	10.13
9/30/2011	88,576	70,564	18,012	(152)	17,860	-	861	861	(5) 20.74
9/30/2012	86,515	69,983	16,532	(331)	16,201	490	1,249	1,739	9.32
9/30/2013	91,949	76,217	15,732	(1,985)	13,747	2,110	1,485	3,595	3.82
9/30/2014	100,187	81,766	18,421	335	18,756	2,385	1,502	3,887	4.83
9/30/2015	99,475	91,395	8,080	1,541	9,621	2,510	1,390	3,900	2.47
9/30/2016	97,650	81,084	16,566	44	16,610	2,630	1,264	3,894	4.27
9/30/2017	97,383	80,199	17,184	764	17,948	2,730	1,165	3,895	4.61
9/30/2018	99,173	82,767	16,406	2,406	18,812	2,815	1,077	3,892	4.83

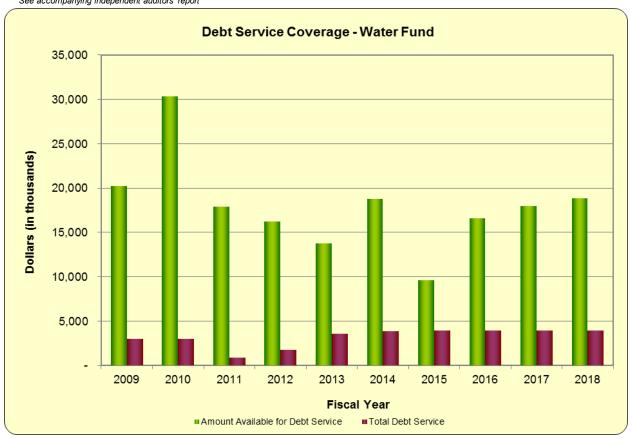
Bond Issues: Water Revenue Refunding Bonds - 1997 Series A, 2010 Series A, & 2012 Series A

7	Average Coverage, ten years	7.18
1	Rate Covenant (Series: 1997A, 2010A, & 2012A)	1.10

Notes:(1) Total Operating Revenue is net of Provision for doubtful accounts expense.

- (2) Operating Expenses are exclusive of depreciation expense.
- (3) Net Non-Operating Income (Expense) is exclusive of bond interest, amortization of bond issue costs, contributed capital and loss on disposition of property.
- (4) Total Debt Service is the current year's scheduled principal interest payments on November 1st and May 1st.
- (5) Debt Service for FY2010 includes interest only, reflecting the issuance of Water Revenue Refunding Bonds Series 2010A to advance refund 82.4% of outstanding Series 1997A Water Revenue Refunding Bonds. The refunding reduced the Department's aggregate debt service payments by \$3.3 million, with the refunding structured to achieve such savings upfront over fiscal years 2011 and 2012.

Source: Department's annual reports



LONG BEACH WATER DEPARTMENT SEWER FUND DEBT SERVICE COVERAGE - LAST TEN FISCAL YEARS

(in thousands of dollars)

Fiscal Year Ended	Total Operating Revenue ⁽¹⁾	Operating Expenses (2)	Net Operating Income	Net Non-Operating Income (Expense) (3)	Amount Available for Debt Service	Principal	Interest	Total Debt Service ⁽⁴⁾	Times Coverage
9/30/2009	12,455	11,803	652	289	941	-	4	4	235.25
9/30/2010	15,186	11,848	3,338	(426)	2,912	-	10	10	291.20
9/30/2011	16,448	13,135	3,313	(538)	2,775	-	27	27	102.78
9/30/2012	17,325	12,736	4,589	(1,161)	3,428	-	57	57	60.14
9/30/2013	17,311	13,368	3,943	(761)	3,182	-	54	54	58.93
9/30/2014	17,953	13,518	4,435	(434)	4,001	-	76	76	52.64
9/30/2015	17,903	14,014	3,889	(208)	3,681	-	79	79	46.59
9/30/2016	18,355	13,648	4,707	13	4,720	-	125	125	37.76
9/30/2017	19,949	12,989	6,960	(969)	5,991	460	269	729	8.22
9/30/2018	18,872	11,984	6,888	635	7,523	330	395	725	10.38
						Average Cov	erage, ten year	S	90.39

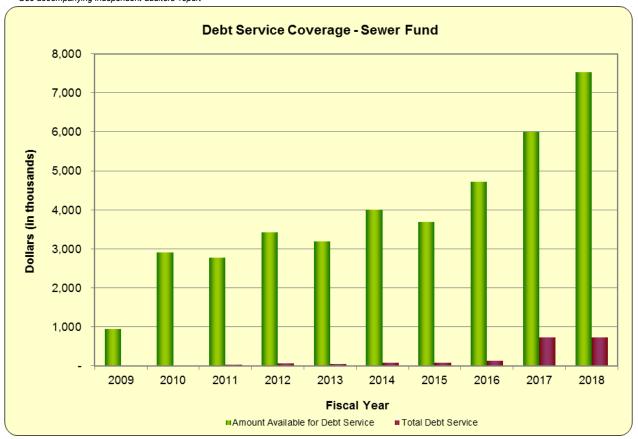
Bond Issues: None

Average Coverage, ten years 90.39
Rate Covenant 1.25

Notes: (1) Total Operating Revenue is net of Provision for doubtful accounts expense.

- (2) Operating Expenses are exclusive of depreciation expense.
- (3) Net Non-Operating Income (Expense) is exclusive of contributed capital, bond issuance costs, and loss on disposition of property.
- (4) Total Debt Service is the current year's scheduled principal interest payments on November 1st and May 1st.

Source: Department's annual reports



LONG BEACH WATER DEPARTMENT WATER FUND RATIOS OF OUTSTANDING DEBT BY TYPE - LAST TEN FISCAL YEARS

(in thousands of dollars)

Fiscal Year	Year Revenue Refunding Bonds		Subordinate Water Revenue	Current portion discounts, premiums,		Percentage of Personal	Per	
Ended	Series 1997	Series 2010	Series 2012	Commercial Paper Notes	& adjustments	Total	Income (1)	Capita (1)
9/30/2009	30,870	-	-	11,000	(4,011)	37,859	0.30%	0.082
9/30/2010	5,175	22,740	-	11,000	(94)	38,821	0.30%	0.084
9/30/2011	5,175	22,740	-	11,000	(516)	38,399	0.28%	0.083
9/30/2012	5,175	22,250	9,850	-	(768)	36,507	0.26%	0.078
9/30/2013	3,545	22,125	9,495	-	1,101	36,266	0.25%	0.078
9/30/2014	1,825	21,995	8,960	-	592	33,372	0.21%	0.071
9/30/2015	-	21,860	8,410	-	73	30,343	0.19%	0.064
9/30/2016	-	19,795	7,845	-	(427)	27,213	0.16%	0.057
9/30/2017	-	17,645	7,265	-	(901)	24,009	0.13%	0.050
9/30/2018	-	15,435	6,660	-	(1,393)	20,702	0.11%	0.044

Notes: (1) See Exhibit 22-Demographic Statistics for Personal Income and Population Data.

Source: Department's annual reports

See accompanying independent auditors' report

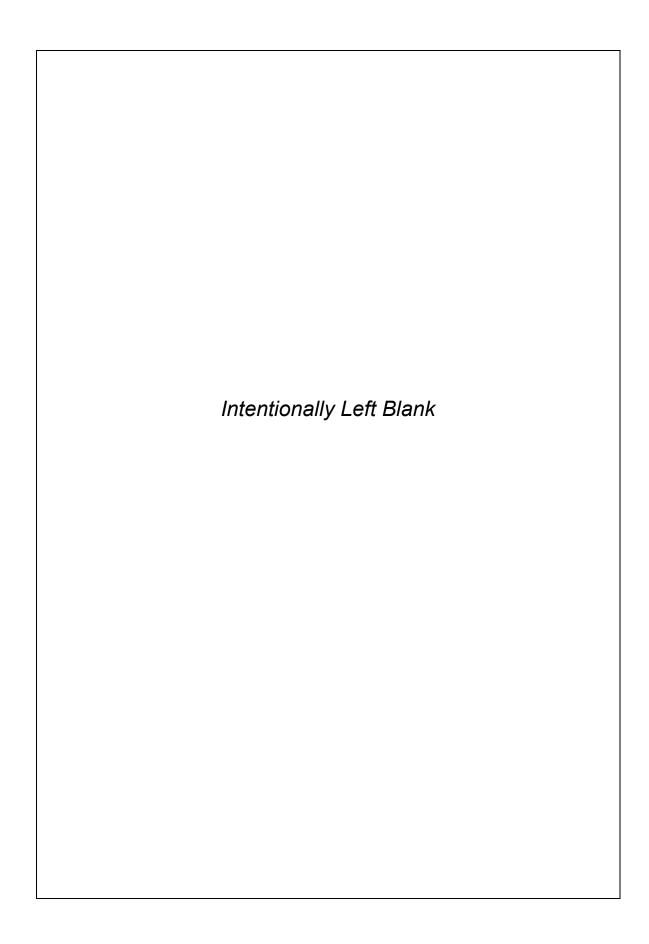
(Unaudited) Exhibit 21

LONG BEACH WATER DEPARTMENT SEWER FUND RATIOS OF OUTSTANDING DEBT - LAST TEN FISCAL YEARS (in thousands of dollars)

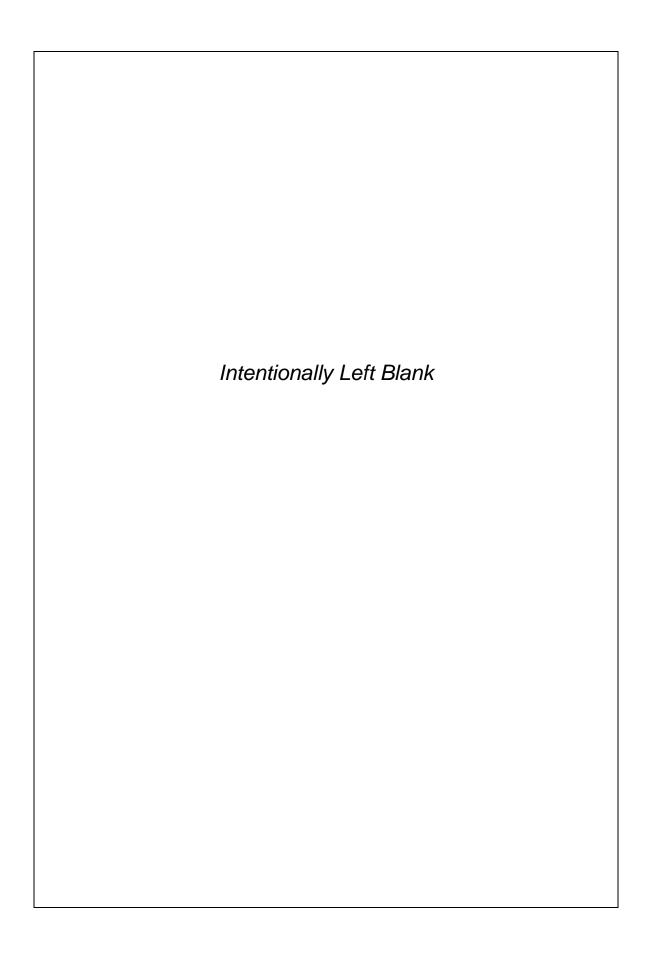
Fiscal Year Ended	Revenue Refunding Bonds Series 2016A	Subordinate Sewer Revenue Commercial Paper Notes	Sewer Revolving Line of Credit	Current portion & premiums	Total	Percentage of Personal Income ⁽¹⁾	Per Capita ⁽¹⁾
9/30/2009	-	4,000	-	-	4,000	0.03%	0.009
9/30/2010	-	4,000	-	-	4,000	0.03%	0.009
9/30/2011	-	-	6,000	-	6,000	0.04%	0.013
9/30/2012	-	-	6,000	-	6,000	0.04%	0.013
9/30/2013	-	-	9,750	-	9,750	0.07%	0.021
9/30/2014	-	-	9,750	-	9,750	0.06%	0.021
9/30/2015	-	-	11,250	-	11,250	0.07%	0.024
9/30/2016	9,830	-	-	1,259	11,089	0.07%	0.023
9/30/2017	9,370	-	-	1,254	10,624	0.06%	0.022
9/30/2018	9,040	-	-	1,108	10,148	0.06%	0.022

Notes: (1) See Exhibit 22-Demographic Statistics for Personal Income and Population Data.

Source: Department's annual reports



Demographic and Economic
Information
Information
These schedules offer demographic and economic indicators to help the reader understand the environment within which the
Department's financial activities take place.

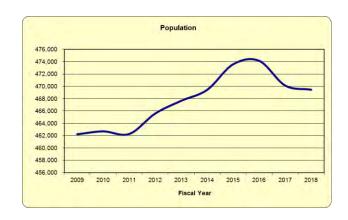


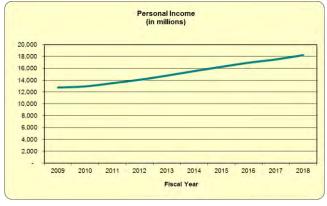
LONG BEACH WATER DEPARTMENT DEMOGRAPHIC STATISTICS LAST TEN FISCAL YEARS

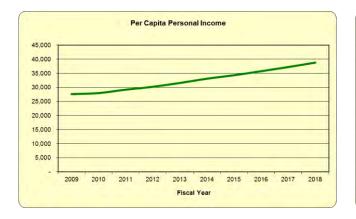
Fiscal Year Ended	Estimated Population (1) (4)	Personal Income (in millions) (2) (4)	Per Capita Personal Income ⁽²⁾ (4)	Unemployment Rate ⁽³⁾
9/30/2009	462,211	12,752	27,589	12.8%
9/30/2010	462,685	12,938	27,964	13.9%
9/30/2011	462,257	13,486	29,173	13.4%
9/30/2012	465,576	14,058	30,196	12.2%
9/30/2013	467,646	14,757	31,556	10.3%
9/30/2014	469,428	15,525	33,072	8.6%
9/30/2015	473,577	16,242	34,296	6.8%
9/30/2016	474,140	16,939	35,725	5.7%
9/30/2017	470,130	17,490	37,203	5.3%
9/30/2018	469,450 ⁽⁵⁾	18,209	38,789	4.7%

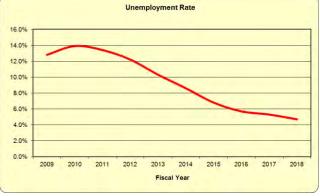
Source: (1) California Department of Finance Demographic Reports

- (2) U.S. Department of Commerce, Bureau of Economic Analysis: Personal Income and per capita personal income are based on percent change of per capita personal income for Los Angeles-Long Beach-Anaheim, CA (Metropolitan Statistic Are). The BEA's Report does not have personal income available for 2015, so an average of the last five years was used.
- (3) Average annual rate reported by California Employment Development Department (EDD) for Long Beach city.
- (4) Data from 2009-2017 restated due to the annual revisions.
- (5) Data is estimated value from previous year.









LONG BEACH WATER DEPARTMENT MAJOR EMPLOYERS CURRENT YEAR AND NINE YEARS AGO

	Fiscal Year 2018				l Year 2009	
Employer	Ranking	Number of Employees ⁽¹⁾	Percentage of Total City Employment ⁽²⁾	Ranking	Number of Employees ⁽¹⁾	Percentage of Total City Employment ⁽²⁾
Long Beach Unified School District	1	12,511	5.14%	1	8,304	3.57%
Long Beach Memorial Medical Center	2	4,923	2.02%	5	5,570	2.40%
City of Long Beach	3	4,852	1.99%	4	5,805	2.50%
Veteran Affairs Medical Center	4	3,255	1.34%	6	2,332	1.00%
California State University Long Beach	5	3,136	1.29%	3	6,690	2.88%
Long Beach City College	6	2,735	1.12%	7	2,276	0.98%
Molina Healthcare Inc	7	1,869	0.77%			
California State Univ Long Beach Research Foundation	n 8	1,649	0.68%			
St. Mary Medical Center	9	1,517	0.62%	2	7,684	3.31%
The Boeing Company	10	897	0.37%	9	1,479	0.64%
United States Postal Service				10	1,434	0.62%
Verizon				8	1,500	0.65%

Sources: (1) Department of Financial Management Accounting and Business License

This data was compiled from various sources by the City of Long Beach Departments of Development Services and Financial Management. Employment data is intended for use as a general guide only. The City of Long Beach does not warrant the accuracy of this data. Inquiries should be directed to the respective employer.

See accompanying independent auditors' report

(Unaudited) Exhibit 24

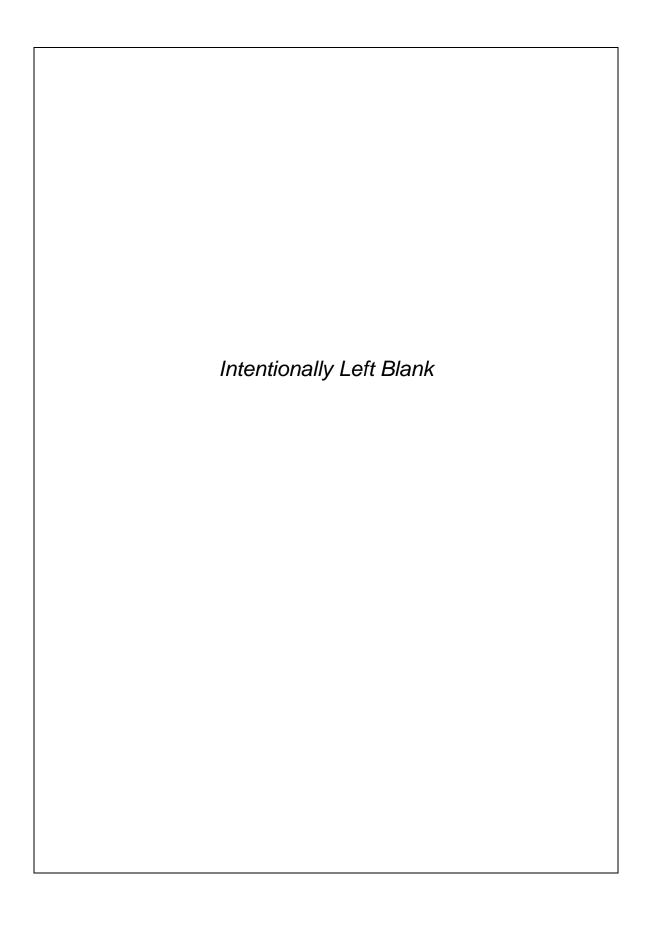
LONG BEACH WATER DEPARTMENT NUMBER OF EMPLOYEES BY FUND LAST TEN FISCAL YEARS

Fiscal Year Ended	Water Fund	Sewer Fund	Total
9/30/2009	172	37	209
9/30/2010	175	44	219
9/30/2011	174	43	217
9/30/2012	184	48	232
9/30/2013	179	47	226
9/30/2014	170	49	219
9/30/2015	172	47	219
9/30/2016	180	44	224
9/30/2017	183	47	230
9/30/2018	207	47	254

Sources: Department's Personnel records

⁽²⁾ State of California Employment Development Department Labor Market Info for 2009 and 2018.

Onevetica Information
Operating Information
These schedules contain information about operations and resources to help the reader understand how the
Department's financial information relates to the services the Department provides and the activities it performs.



LONG BEACH WATER DEPARTMENT WATER DEMAND - LAST TEN FISCAL YEARS

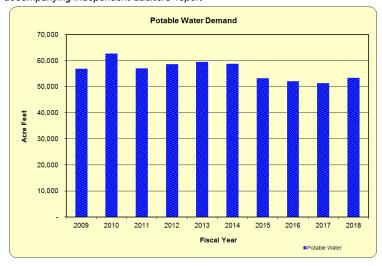
(in acre feet)

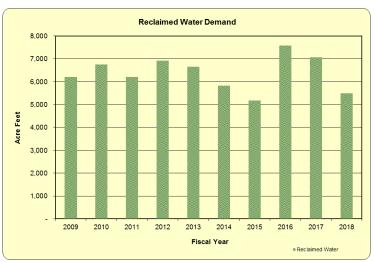
Potable Water

		i otabio iratoi			
Fiscal Year Ended	Pumped	Purchased	Total Potable Demand	Reclaimed Water	Total Demand
9/30/2009	33,876	22,902	56,778	6,205	62,983
9/30/2010	36,180	26,549	62,729	6,744	69,473
9/30/2011	17,973	39,053	57,026	6,206	63,232
9/30/2012	33,059	25,479	58,538	6,922	65,460
9/30/2013	31,074	28,383	59,457	6,644	66,101
9/30/2014	28,024	30,660	58,683	5,824	64,507
9/30/2015	22,002	31,139	53,141	5,170	58,311
9/30/2016	32,086	19,908	51,994	7,582	59,576
9/30/2017	31,558	19,822	51,380	7,070	58,450
9/30/2018	29,092	24,249	53,341	5,496	58,837

Note: One acre foot equals 43,560 cubic feet or 325,851 gallons.

Source: Department's annual reports





(Unaudited) Exhibit 26

LONG BEACH WATER DEPARTMENT METROPOLITAN WATER DISTRICT'S RATE CHANGES - LAST TEN FISCAL YEARS (in dollars per acre foot)

Effective Date	Non- Interruptible Treated Water	Percent Change Non- Interruptible Treated Water	Seasonal Treated Water ⁽¹⁾
1/1/2009	579	14.0	-
9/1/2009	701	21.1	-
1/1/2010	701	-	-
1/1/2011	744	6.1	-
1/1/2012	794	6.7	-
1/1/2013	847	6.7	-
1/1/2014	890	5.1	-
1/1/2015	923	3.7	-
1/1/2016	942	2.1	-
1/1/2017	979	3.9	-
1/1/2018	1,015	3.7	-

Note: (1) Seasonal Water Treated Rate in accordance to Metropolitan Water District and Long Beach Water Department Agreement No. A04959 started on October 1, 1997 up to May 1, 2008.

Source: Metropolitan Water District of Southern California

See accompanying independent auditors' report

(Unaudited)

Exhibit 27

LONG BEACH WATER DEPARTMENT WATER REPLENISHMENT DISTRICT ASSESSMENT (PUMP TAX) LAST TEN FISCAL YEARS

Effective Date	Rate per Acre- Foot	Percent Change
7/1/2009	181.85	18.9
7/1/2010	205.00	12.7
7/1/2011	244.00	19.0
7/1/2012	244.00	-
7/1/2013	268.00	9.8
7/1/2014	268.00	-
7/1/2015	283.00	5.6
7/1/2016	297.00	4.9
7/1/2017	318.00	7.1
7/1/2018	339.00	6.6

Source: Water Replenishment District of Southern California (WRD)

LONG BEACH WATER DEPARTMENT OPERATING AND CAPITAL ASSETS STATISTICS - WATER FUND LAST TEN FISCAL YEARS

	Water System				Water Quality		Reclaimed System
Fiscal Year Ended	Number of active Groundwater wells	Miles of water mains	Number of active water service	Number of fire hydrants	Number of water samples collected	Number of tests performed	Miles of Pipeline
9/30/2009	31	908	89,630	6,525	19,238	118,799	33
9/30/2010	31	909	89,706	6,529	17,126	84,923	33
9/30/2011	31	911	89,851	6,603	15,814	71,472	33
9/30/2012	31	911	89,957	6,594	12,292	57,310	33
9/30/2013	31	912	89,996	6,589	14,388	60,819	34
9/30/2014	31	912	89,895	6,604	13,750	58,968	34
9/30/2015	31	912	89,897	6,631	13,050	57,070	34
9/30/2016	31	912	90,955	6,894	14,635	72,587	34
9/30/2017	31	912	89,147	6,910	15,370	79,442	34
9/30/2018	30	912	89,354	6,953	16,421	82,033	34

Source: Department's records

See accompanying independent auditors' report

(Unaudited) Exhibit 29

LONG BEACH WATER DEPARTMENT OPERATING AND CAPITAL ASSETS STATISTICS - SEWER FUND LAST TEN FISCAL YEARS

Fiscal Year Ended	Number of sewer pump stations	Miles of sewer pipelines	Number of sewer manholes
9/30/2009	28	712	16,129
9/30/2010	28	712	16,135
9/30/2011	28	712	16,147
9/30/2012	28	712	16,148
9/30/2013	28	714	16,158
9/30/2014	28	714	16,170
9/30/2015	28	714	15,129
9/30/2016	28	714	15,127
9/30/2017	28	714	15,112
9/30/2018	28	714	15,122
Source: Departmer	nt's records		

Source: Department's records

LONG BEACH WATER DEPARTMENT INFRASTRUCTURE MAINTENANCE AND IMPROVEMENTS LAST TEN FISCAL YEARS

Fiscal Year Ended	Cast Iron Water Mains Replaced (in feet)	Fire Hydrants Repaired	Water Meters Repaired	Sewer Mains & Laterals Repaired ⁽¹⁾	Sewer Mains Cleaned (in miles)	Sewer Manholes Chemically Treated
9/30/2009	23,676	485	6,350	215	424	5,000
9/30/2010	21,137	94	8,441	182	547	5,000
9/30/2011	21,294	223	5,428	259	470	5,000
9/30/2012	25,733	269	3,690	261	414	5,000
9/30/2013	24,595	266	3,348	241	535	5,000
9/30/2014	19,475	208	1,835	213	498	5,000
9/30/2015	16,366	544	760	224	492	5,000
9/30/2016	20,427	259	2,037	215	405	7,719
9/30/2017	20,360	156	2,939	169	446	7,734
9/30/2018	22,198	492	6,438	157	439	8,100

Note: (1) Repairs are tracked according to the number of jobs.

Source: Department's records