THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Comprehensive Annual Financial Report
For the Fiscal Years Ended June 30, 2019 and 2018

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Prepared by:

Office of the Chief Financial Officer

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THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Executive Office

December 12, 2019

To the Board of Directors of
The Metropolitan Water District of Southern California:

We are pleased to present the Comprehensive Annual Financial Report for The Metropolitan Water District of Southern California (Metropolitan) for the fiscal years ended June 30, 2019 and 2018.

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 it has 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 basic financial statements are free of any material misstatements.

KPMG LLP, an independent public accounting firm, has issued an unmodified opinion on Metropolitan's basic financial statements for the fiscal years ended June 30, 2019 and 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 basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

Profile of Metropolitan

Metropolitan is a public agency and a quasi-municipal corporation, which was created by an act of the state Legislature in 1928. Metropolitan's primary purpose is to provide a supplemental supply of water for domestic and municipal uses and purposes at wholesale rates to its member public agencies. Most member agencies have other sources of water. Metropolitan is comprised of 26 member agencies consisting of 14 cities, 11 municipal water districts, and one county water authority, which collectively provide services in more than 300 cities and numerous unincorporated communities. Its service area spans some 5,200 square miles, and includes all or portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura.

Metropolitan has historically provided between 40 and 60 percent of the water used by nearly 19 million Southern Californians who reside within its service area. Metropolitan imports water from two principal sources, Northern California, via the Edmund G. Brown California Aqueduct of the State Water Project owned by the State of California, and the Colorado River, via the Colorado River Aqueduct (CRA) owned by Metropolitan.

Metropolitan is governed by a 38-member Board of Directors (Board), with each member agency having at least one representative on the Board. Representation and voting rights are based upon the assessed valuation of real property within the jurisdictional boundary of each member agency. The Board elects the Chair and Secretary, and the Vice Chairs are appointed by the Chair.

Metropolitan's biennial budget for fiscal years 2019-20 included 1,905 full time positions with approximately 1,812 positions filled at fiscal year ended June 30, 2019, and the remaining positions under recruitment or vacant. Employees are represented by the American Federation of State, County and Municipal Employees, Locals 1001 and 1902, the Association of Confidential Employees, and the Supervisors Association of Metropolitan. Metropolitan is an equal opportunity employer and encourages diversity in contracting and in the workforces of Metropolitan contractors.

Financial Policies and Highlights

Metropolitan has a comprehensive set of financial policies. These policies set forth guidelines to maintain control and accountability over revenue and expenses, maintain a reasonable balance between debt and assets in providing funding for capital assets, and ensure proper appropriation of reserves and restricted funds.

Rate Stabilization

Metropolitan's reserve policy provides for minimum reserve requirement and target amount of unrestricted reserves at June 30 of each year. The minimum reserve requirement at June 30 of each year is equal to the portion of fixed costs estimated to be recovered by water revenues for the 18 months beginning with the immediately succeeding July. Funds representing the minimum reserve requirement are held in the Revenue Remainder Fund. Any funds in excess of the minimum reserve requirement are held in the Water Rate Stabilization Fund. The target amount of unrestricted reserves is equal to the portion of the fixed costs estimated to be recovered by water revenues during the two years immediately following the 18-month period used to calculate the minimum reserve requirement. If the fixed charge coverage ratio is less than 1.2, funds in excess of the target amount are to be utilized for capital expenditures in lieu of the issuance of additional debt, or for the redemption, defeasance or purchase of outstanding bonds or commercial paper as determined by the Board. Provided that the fixed charge coverage ratio is at or above 1.2, amounts in excess of the target may be expended for any lawful purpose of Metropolitan, as determined by the Board.

Investment

Annually, the Board adopts an investment policy that is in compliance with the

California Government Code, Sections 53600 et seq. The investment of idle funds is delegated by the Board to Metropolitan's Treasurer who assumes full responsibility for the transactions of the investment program, which includes the investment of bond proceeds and debt service reserves. Metropolitan's investments are in compliance with the adopted investment policy. Refer to Note 3 in the Notes to the Basic Financial Statements for detailed investment information.

Ad Valorem Tax

In addition to water revenues, Metropolitan is expressly empowered under the Metropolitan Water District Act to levy and collect taxes on all taxable property within its boundaries for the purpose of carrying on its operations and paying its obligations. As a result of legislation enacted in 1984, tax levies beginning in fiscal year 1990-91, other than annexation taxes, are limited to the amount needed to pay debt service on Metropolitan's general obligation bonds and Metropolitan's proportionate share of state general obligation bond debt service under the State Water Contract. However, under the terms of the 1984 legislation, the Board may, following a public hearing, suspend this particular restriction upon a finding that doing so is essential to Metropolitan's fiscal integrity. The Board made such a finding for fiscal years ended June 30, 2014 through 2020, and maintained the tax rate for those fiscal years at the rate levied during fiscal year ended June 30, 2013 to pay a portion of State Water Contract costs other than debt service.

Budget and Rates

Metropolitan's budget system incorporates features of program budgeting, management by objectives, and performance reporting, which provides for funding, analysis, review, and control. Operating budgets are prepared by each group and department biennially. Each program and its required resources are reviewed by management and, upon acceptance, are incorporated into the overall budget for approval by the Board. Costs are maintained by project and activity, and expenditures are controlled by Board-approved appropriations.

The adopted biennial budget for fiscal years 2018-19 and 2019-20 meets the fixed charge coverage target, makes progress towards meeting the revenue bond coverage target, provides increased funding from revenues for the Capital Investment Plan, and promotes the long-term fiscal sustainability goals of Metropolitan. The total budgets for fiscal years 2018-19 and 2019-20 were $1.94 billion and $2.06 billion, respectively. The adopted biennial budget includes an overall water rates and charges increase of 3.0% effective January 1, 2019 and an additional 3.0% on January 1, 2020.

Each month, variances between budget estimates and actual receipts and expenditures are identified and evaluated. This review is performed as one of several control measures to assure progress in meeting Metropolitan's goals and program objectives.

Metropolitan's budgetary accounting method is done on a modified accrual basis. The modified accrual basis of accounting that Metropolitan uses varies from the accrual basis of accounting in the following respects: depreciation and amortization are not recorded and payments of debt service are recorded when due and payable. Under the modified accrual basis of accounting, revenues are recognized in the fiscal year in which they are earned and available and certain expenses are recognized when incurred.

Metropolitan's Economic Condition

Local Economy

Metropolitan's service area has an economic base that is diversified and well positioned to participate in U.S. and world economic growth over the next ten years. In 2018, the economy of the six county area served by Metropolitan (Six County Area) was larger than all but twelve nations of the world, ranking between South Korea and Australia, with an estimated gross domestic product of $1.54 trillion. In 2018, the major sectors of the economy providing employment in the Six County Area were education and health services; professional and business services, which include architecture, design, computer, research and development, advertising, legal, accounting, and internet-related and management services; government; leisure and hospitality; and retail trade. Educational and health services and leisure and hospitality have shown the largest growth since 2010. The Six County Area has an above-average share of four additional fast-growing sectors - wholesale trade and transportation, tied to the area's projected growth in foreign trade; information which, includes motion pictures; and the tourism component of leisure and hospitality, tied to growth in disposable income in the U.S. and worldwide. Longer-term, international trade has been a leading growth sector in the Six County Area, with Los Angeles and Long Beach ports being the nation's leading port complex in terms of trade volume.

The Six County Area has an employed labor force of approximately 9.6 million. The Six County Area had 22.3 million residents in 2018, approximately 56 percent of the State's population. High housing prices and large job losses have contributed to slowing population growth since 2005, yet the population grew by approximately 1.7 million residents between 2000 and 2010 and another 1.3 million between 2010 and 2018. It is anticipated that the Six County Area's population will increase to 25.8 million by 2040.

Long-term Financial Planning

Metropolitan currently has several major construction projects underway. These projects primarily involve infrastructure and system reliability, either as upgrades to existing capital assets or replacements and refurbishments of existing facilities, to ensure reliability as well as enhance operational efficiency and flexibility, and comply with water quality regulations. As set forth in the adopted biennial budget for fiscal years 2018-19 and 2019-20, Metropolitan's capital investment plan for the fiscal years ending June 30, 2020 through 2024 totals approximately $1.21 billion.

Metropolitan's capital investment plan is regularly reviewed and updated. Implementation and construction of specific elements of the program are subject to Board approval, and the amount and timing of borrowings will depend upon, among other factors, status of construction activity and water demands within Metropolitan's service area. Major projects in the capital investment plan are highlighted below.

Funding of the capital investment plan is accomplished with external and internal resources. The Board has adopted an internal funding objective to fund 60 percent of capital program expenditures. The amount of internal funding is determined by the Board as part of the biennial budget process. The remainder of capital program expenditures is funded primarily through the issuance of water revenue bonds payable from net operating revenues. Additional information on Metropolitan's capital investment plan can be found in Note 9g of the Notes to Basic Financial Statements.

Highlights of the Capital Investment Plan

Colorado River Aqueduct Facilities. Deliveries through the CRA began in 1941. Through annual inspections and maintenance activities, the performance and reliability of the various components of the CRA are regularly evaluated. Projects under the CRA facilities program are designed to replace or refurbish facilities and components on the CRA system in order to reliably convey water from the Colorado River to Southern California. A variety of projects have been completed over the past 10 years, including, among other things, replacement of high voltage circuit breakers and transformers at the five pumping plant switchyards, refurbishment of operators and power centers on the head gates downstream of the pumping plants, replacement of several miles of deteriorated concrete canal liner, new wastewater systems at the Hinds and Eagle Mountain Pumping Plants, replacement of the sand trap facilities upstream of the Hinds, Eagle, and Iron Mountain pumping plants, and replacement of the outlet gates and appurtenant electrical, mechanical, and control systems at the Copper Basin Reservoir. Refurbishment or replacement of many of the electrical system components, including the transformers, circuit breakers and motor control centers, is currently under way. Additionally, many of the mechanical and electrical components, including the nine main pumps and motors at each of the five pumping plants will be evaluated and replaced or refurbished over the next several years.

Distribution System - Prestressed Concrete Cylinder Pipe. Metropolitan's distribution system is comprised of approximately 830 miles of pipelines ranging in diameter from 30 inches to over 200 inches. 163 miles of the distribution system is made up of prestressed concrete cylinder pipe ("PCCP"). In response to PCCP failures experienced by several water agencies, Metropolitan initiated the PCCP Assessment Program in December 1996 to evaluate the condition of Metropolitan's PCCP lines and investigate inspection and refurbishment methods. As a result, Metropolitan has identified and made improvements to several sections of PCCP. The costs for these improvements through February 2019 were $96.7 million. Rather than continue to make spot repairs to pipe segments, Metropolitan has initiated a long-term capital program to rehabilitate approximately 100 miles of PCCP in five pipelines by relining with a welded steel liner. The first major contract to reline approximately 4.5 miles of PCCP on the Second Lower Feeder was completed in August 2018. The second major contract to reline approximately 1.9 miles of PCCP on the Second Lower Feeder was awarded in November 2018. Subsequent contracts are planned to be awarded annually depending on shutdown scheduling.

Distribution System - Refurbishments and Improvements. In addition to the long-term program to rehabilitate Metropolitan's PCCP lines, several other components of the distribution system are being refurbished and/or improved. Major projects completed to date include the $70 million replacement of the outlet facilities at Lake Mathews, the first two phases of the

Orange County Feeder and Etiwanda Pipeline relining projects and various other facility refurbishment and replacement projects. Ongoing projects to ensure the reliability of the distribution system, primarily due to age, include multiple replacements or refurbishments of isolation and control valves and gates, lining replacement of remaining portions of the Etiwanda Pipeline and Orange County Feeder, refurbishment to pressure control and hydroelectric power facilities, system improvements to provide drought relief, and various other upgrades.

System Reliability. System Reliability projects are implemented at facilities throughout Metropolitan's system to utilize new processes or technologies, to improve safety, or to increase overall reliability. Significant projects in this category include seismic strengthening of Metropolitan's headquarters building, construction of operations support facilities such as the La Verne machine and fabrication shops, security system enhancements, and information technology infrastructure projects.

F.E. Weymouth Treatment Plant Improvements. The F.E. Weymouth Treatment Plant, built in 1938, is Metropolitan's oldest water treatment facility. It has been subsequently expanded several times since its original construction. Metropolitan has completed several upgrades and refurbishment/replacement projects to maintain the plant's reliability and improve its efficiency. These include power systems upgrades, a residual solids dewatering facility, refurbishment/ replacement of the mechanical equipment in two of the eight flocculation and settling basins, a new plant maintenance facility, new chemical feed systems and storage tanks, replacement of the plant domestic/fire water system, seismic upgrades to the plant inlet structure and filter buildings, upgrades to the plants filters, and a new chlorine handling and containment facility. Significant projects over the next several years include refurbishment of four of the plant's settling basins, seismic retrofits to the administration building, and replacement of the valves used to control filter operation.

Robert B. Diemer Treatment Plant Improvements. The Robert B. Diemer Treatment Plant, built in 1963 and subsequently expanded in 1968, is Metropolitan's second oldest water treatment facility. Several upgrades and refurbishment/replacement projects have been completed at the Diemer plant, including power system upgrades, a new residual solids dewatering facility, new vehicle and plant maintenance facilities, new chemical feed systems and storage tanks, a new chlorine handling and containment facility, construction of a roller-compacted concrete slope stabilization system, a new secondary access road, and upgrades to half of the plant's settling basins and filter valves. Significant projects over the next several years include the completion of refurbishment of the plant's settling basins and replacement of the valves used to control filter operation, and seismic retrofits to the filter buildings and administration building.

Major Initiatives

Metropolitan faces a number of challenges in providing adequate, reliable, and high quality supplemental water supply for Southern California. These challenges include population growth in Metropolitan's service area, increased competition for low-cost water supplies, variable weather conditions, increased environmental regulations, and climate change. Metropolitan's resources and strategies for meeting these long-term challenges are identified in its Integrated Water Resources Plan (IRP).

The Board-adopted IRP was developed by Metropolitan, its member agencies, sub-agencies, and groundwater basin managers with the purpose of balancing local and imported water resources to meet the water supply reliability and water quality needs for the service area in a cost-effective and environmentally sound manner. On January 12, 2016, the IRP was updated (2015 IRP Update) enabling Metropolitan and its member agencies to manage future challenges and changes in California's water conditions and to balance investments with water reliability benefits. The 2015 IRP Update seeks to provide regional reliability by stabilizing Metropolitan's traditional imported water supplies and continuing to develop additional conservation programs and local resources. It also advances long-term planning for potential future contingency resources, such as storm water capture and seawater desalination. Metropolitan is preparing to undertake the next IRP update in 2020.

On July 10, 2018, Metropolitan's Board approved the funding of up to 64.6 percent, approximately $10.8 billion (in 2017 dollars) of the overall capital cost of the California WaterFix, a project designed as an improvement to the State Water Project by updating the aging infrastructure of Southern California's water delivery system to improve reliability of water supply. Metropolitan's funding commitment was intended to support the full two tunnel project. However, on February 12, 2019, on his State of the State address, Governor Gavin Newsom announced the shift from a twin tunnel California WaterFix project to a single tunnel project now referred to as the Delta Conveyance Project. Subsequently, on April 29, 2019, Governor Newsom issued an executive order calling for the development of a water resilience portfolio that meets the needs of California's communities, economy, and environment through the 21st century. Following the Governor's executive order, on May 2, 2019, the Department of Water Resources (DWR) withdrew the approval for the California WaterFix project, decertified the Environmentl Impact Report, and rescinded various permitting applications including those submitted to the State Water Resources Control Board, U.S. Army Corps of Engineers, and State and federal Endangered Species Acts permits. Concurrently, DWR announced that it would launch a new environmental review and planning process for a single tunnel project which is expected to take approximately 18 to 36 months.

Metropolitan will continue to add storage and conservation resources to its diverse water supply portfolio as well as focus on water quality improvements. In addition, Metropolitan will work to stabilize its traditional imported water supplies. Commitment of the resources to achieve these goals will enable Metropolitan to meet its member agencies' and the region's water reliability and quality needs in a fiscally responsible manner.

Awards and Acknowledgments

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to Metropolitan for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2018. This was the twenty-fifth consecutive year that Metropolitan has received this prestigious award. In order to be awarded a Certificate of Achievement, Metropolitan published an easily readable and efficiently organized CAFR. This report satisfies 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 of Achievement.

The preparation of this report would not have been possible without the efficient and dedicated services of the entire staff of the Office of the Assistant General Manager/Chief Financial Officer. I would like to express my appreciation to all staff that assisted and contributed to the preparation of this report. Credit must also be given to the General Manager and the Board for their unfailing support for maintaining the highest standards of professionalism in the management of Metropolitan's finances. Any questions regarding the content of this report may be directed to the Controller, Bernadette Robertson (213) 217-7547.

Respectfully,

Katano Kasaine

Katano Kasaine
Assistant General Manager/Chief Financial Officer

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

The Metropolitan Water District of Southern California

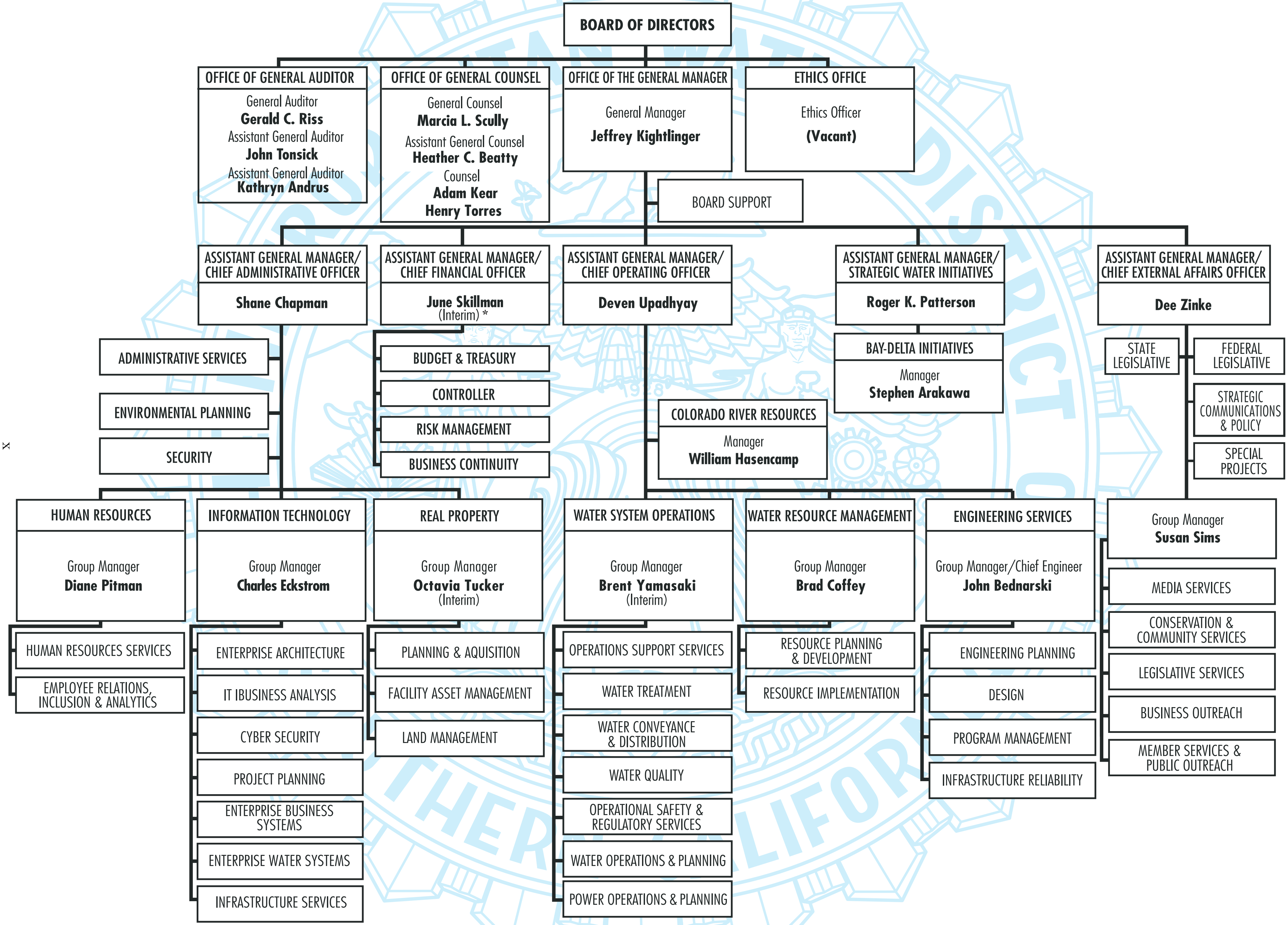
For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrill

Executive Director/CEO

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



Updated as of June 30, 2019

*Katano Kasaine assumed the Cheif Financial Officer position in August 2019

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Officers of the Board of Directors

(As of June 30, 2019)

Chair
GLORIA D. GRAY

Vice Chair	Vice Chair	Vice Chair	Secretary
CYNTHIA KURTZ	JERRY BUTKIEWICZ	LORRAINE PASKETT	JUDY ABDO

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Anaheim
STEPHEN J. FAESSEL

Beverly Hills
BARRY D. PRESSMAN

Burbank
MARSHA RAMOS

Calleguas Municipal Water District
STEVE BLOIS

Central Basin Municipal Water District
ROBERT APODOCA
FRANK M. HELDMAN

Compton
JANNA ZURITA

Eastern Municipal Water District
RANDY A. RECORD

Foothill Municipal Water District
RICHARD W. ATWATER

Fullerton
ADAN ORTEGA

Inland Empire Utilities Agency
JASMIN A. HALL

Las Virgenes Minicipal Water District
GLEN D. PETERSON

Long Beach
GLORIA CORDERO

Los Angeles
GLEN C. DAKE
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San Diego County Water Authority
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San Fernando
SYLVIA BALLIN

San Marino
JOHN T. MORRIS

Santa Ana
JOSE SOLORIO

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Three Valleys Municipal Water District
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Torrance
RUSSELL LEFEVRE

Upper San Gabriel Valley Municipal Water District
CHARLES M. TREVINO

West Basin Municipal Water District
HAROLD C. WILLIAMS
GLORIA D. GRAY

Western Municipal Water District of Riverside County
DONALD D. GALLEANO

Financial Section

KPMG LLP
Suite 1500
550 South Hope Street
Los Angeles, CA 90071-2629

Independent Auditors' Report

The Board of Directors
Metropolitan Water District of Southern California:

We have audited the accompanying financial statements of the Metropolitan Water District of Southern California (Metropolitan), as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise Metropolitan's basic financial statements for the years then ended as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these basic 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 basic financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these basic financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits 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 basic financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the basic financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the basic 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 basic 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 basic financial statements.

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

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the financial position of Metropolitan as of June 30, 2019 and 2018, and the changes in its financial position and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

KPMG

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that management's discussion and analysis on pages 3-16 and the pension and other postemployment benefits supplementary information on pages 92-95 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 audits 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.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise Metropolitan's basic financial statements. The accompanying 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 October 14, 2019 on our consideration of Metropolitan'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 Metropolitan'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 Metropolitan's internal control over financial reporting and compliance.

KPMG LLP

October 14, 2019

The following discussion and analysis of The Metropolitan Water District of Southern California's (Metropolitan) financial performance provides an overview of the financial activities for the fiscal years ended June 30, 2019 and 2018. This discussion and analysis should be read in conjunction with the basic financial statements and accompanying notes, which follow this section.

DESCRIPTION OF BASIC FINANCIAL STATEMENTS

Metropolitan operates as a utility enterprise and maintains its accounting records in accordance with generally accepted accounting principles for proprietary funds as prescribed by the Governmental Accounting Standards Board (GASB). The basic financial statements include statements of net position, statements of revenues, expenses and changes in net position, and statements of cash flows. The statements of net position include all of Metropolitan's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference reported as net position, some of which is restricted in accordance with bond covenants or other commitments. The statements of revenues, expenses and changes in net position report all of Metropolitan's revenues and expenses during the periods indicated. The statements of cash flows show the amount of cash received and paid out for operating activities, as well as cash received from taxes and investment income, and cash used for construction projects, State Water Project costs and principal and interest payments on borrowed money. Certain amounts reported in fiscal year 2018 have been reclassified to conform to the fiscal year 2019 presentation. Such reclassification had no effect on the previously reported change in net position.

During the fiscal year ended June 30, 2018, Metropolitan implemented GASB Statement No.75 (GASB 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which addresses the accounting and financial reporting for postemployment benefits other than pensions (OPEB). Metropolitan did not restate the financial statements for the fiscal year ended June 30, 2017 because the necessary actuarial information was not provided to Metropolitan by the California Public Employees' Retirement System (CalPERS). As of July 1, 2017, Metropolitan restated the beginning net position in the amount of $138.9 million to record the beginning deferred OPEB contributions and net OPEB liability.

CONDENSED FINANCIAL INFORMATION

Condensed Schedule of Net Position

(Dollars in millions)	June 30, 2019	2018	2017
Assets and deferred outflows of resources			
Capital assets, net	**$ 10,393.5**	$ 10,410.0	$ 10,534.1
Other assets	**1,845.0**	1,818.2	1,901.8
Total assets	**12,238.5**	12,228.2	12,435.9
Deferred outflows of resources	**182.1**	239.6	224.5
Total assets and deferred outflows of resources	**12,420.6**	12,467.8	12,660.4
Liabilities and deferred inflows of resources			
Long-term liabilities, net of current portion	**4,865.4**	5,235.0	5,063.2
Other liabilities	**686.9**	502.9	817.6
Total liabilities	**5,552.3**	5,737.9	5,880.8
Deferred inflows of resources	**32.1**	43.4	21.9
Total liabilities and deferred inflows of resources	**5,584.4**	5,781.3	5,902.7
Net position			
Net investment in capital assets, including State Water Project costs	**6,131.6**	5,968.8	6,067.0
Restricted	**418.6**	407.6	407.0
Unrestricted	**286.0**	310.1	283.7
Total net position	**$ 6,836.2**	$ 6,686.5	$ 6,757.7

Capital Assets, Net

Net capital assets include plant, participation rights, and construction work in progress, net of accumulated depreciation and amortization.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, net capital assets totaled $10.4 billion, or 83.7 percent of total assets and deferred outflows of resources, and were $16.5 million lower than the prior year. The decrease included depreciation and amortization of $352.1 million and $32.3 million retirements of capital assets and write-off of construction in progress upon determination that no operating assets would result from the cost incurred, offset by Metropolitan's continued expenditures on the capital investment plan of $227.7 million (including $4.7 million of capitalized interest) and a net increase of $140.2 million in participation rights in State Water Project (SWP) and other facilities. See the capital assets section on pages 14-15 for additional information.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, net capital assets totaled $10.4 billion, or 83.5 percent of total assets and deferred outflows of resources, and were $124.1 million lower than the prior year. This decrease included depreciation and amortization of $329.7 million and $128.5 million retirements of capital assets and write-off of construction in progress upon determination that no operating assets would result from the cost incurred, offset by Metropolitan's continued expenditures on the capital investment plan of $207.9 million (including $15.6 million of capitalized interest) and net capital payments for participation rights in SWP of $126.2 million. See the capital assets section on pages 14-15 for additional information.

Other Assets

Other assets include accounts receivable, inventories, prepaid costs, and cash and investments.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, other assets totaled $1.8 billion and were $26.8 million higher than the prior year. Deposits, prepaid costs, and other was $62.6 million higher primarily due to $41.5 million of prepaid costs related to the California WaterFix advance funding agreement with the California Department of Water Resources and a $11.2 million increase in Palos Verde Irrigation District (PVID) land fallowing cost. Inventory was $25.3 million higher due to an increase in water storage of 89.9 thousand acre feet (TAF). These increases were primarily offset by $55.7 million lower receivables of which, $51.2 million related to lower water revenues receivables as fiscal year 2019 May and June water transactions were 353.1 TAF less than the prior year's comparable months.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, other assets totaled $1.8 billion and were $83.6 million lower than the prior year. Cash and investments were $184.0 million lower primarily due to the $250.0 million repayment of short-term revolving notes, offset by $64.3 million proceed from the issuance of the Subordinate Water Revenue Bond 2018, Series B in June 2018. This decrease was partially offset by $74.6 million higher deposits, prepaid costs, and other primarily due to $73.0 million more of prepaid water costs, which included $42.4 million or 315.7 TAF of higher supply storage and $25.3 million more of PVID land fallowing costs. In addition, water revenues receivable were $23.4 million higher as May and June 2018 water transactions were 57.6 TAF more than prior year's comparable months.

Deferred Outflows of Resources

Deferred outflows of resources include deferred outflows related to loss on bond refundings and swap terminations, deferred outflows related to the net pension liability and net OPEB liability, and deferred outflows for effective interest rate swaps.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, deferred outflows totaled $182.1 million and were $57.5 million lower than the prior year. The decrease was primarily due to $31.5 million lower deferred outflows related to pension, which included $39.3 million lower deferred outflows due to changes of actuarial assumption and $16.4 million lower deferred outflows related to the net difference between projected and actual earnings on pension plan investments, offset by $25.1 million higher deferred outflows related to pension contributions subsequent to the measurement date. In addition, deferred loss on bond refundings was $14.4 million lower due to $8.7 million of refunding transactions and $5.7 million of scheduled amortization and deferred outflows related to loss on swap terminations was $8.9 million lower due to $6.1 million of refunding transactions and $2.8 million of scheduled amortization.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, deferred outflows totaled $239.6 million and were $15.1 million higher than the prior year. The increase was primarily due to $34.7 million deferred OPEB contributions due to the implementation of GASB 75. This increase was offset by $20.9 million lower deferred loss on bond refundings due to $14.4 million of refunding transactions and $6.5 million of scheduled amortization.

Long-term Liabilities, Net of Current Portion

Long-term liabilities, net of current portion include long-term debt, revolving notes, customer deposits and trust funds, net pension liability, net OPEB liability, accrued compensated absences, workers' compensation and third party claims, fair value of interest rate swaps, and other long-term obligations.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, long-term liabilities, net of current portion totaled $4.9 billion and were $369.6 million lower than the prior year. The decrease in long-term debt, net of current portion of $389.0 million included $171.2 million of bond refundings, as the new debt issued was less than the amount of debt refunded, $142.0 million principal payments and $170.6 million more current portion of long-term debt as compared to prior year. See other liabilities section below for additional information. In addition, net pension liability was $26.9 million lower primarily due $139.0 million of pension plan investment earnings and employer contributions to the pension plan of $48.8 million offset by $161.0 million interest on the total pension liability. Net OPEB liability was also $12.2 million lower primarily due to $34.7 million of employer contributions to the OPEB plan and $18.5 million of OPEB plan investment earnings, offset by $30.3 million of interest on the total OPEB liability and $10.3 million of service costs. These decreases in long-term liabilities were offset by the $46.8 million Bank of America, N.A. notes issued for the California WaterFix advance funding and $11.9 million higher fair value of interest rate swaps due to lower interest rates as compared to prior year. See the long-term debt section on page 16 for additional information.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, long-term liabilities, net of current portion, totaled $5.2 billion and were $171.8 million higher than the prior year. The implementation of GASB 75 resulted in net OPEB liability that was $157.2 million more than the obligation for OPEB recorded in fiscal year 2017. The increase also included $73.3 million higher net pension liability due to $156.7 million of interest on total pension liability plus $125.7 million related to changes of assumptions from a 7.65 percent discount rate to 7.15 percent, offset by $171.6 million of pension plan investment earnings and $42.8 million of employer contributions. These increases were offset by $26.5 million of lower long-term debt, net of current portion primarily due to $164.1 million principal payments, a $62.6 million decrease related to bond refundings, as the new debt issued was less than the amount of debt refunded, offset by $144.3 million of new bonds issued, $9.7 million amortization of bond premium and discounts and $46.2 million less current portion of long-term debt as compared to prior year. See the other liabilities section below for additional information. Additionally, there was a $22.4 million decrease in the fair value of interest rate swaps due to higher interest rates as compared to prior year. See the long-term debt section on page 16 for additional information.

Other Liabilities

Other liabilities represent current liabilities that are due within one year. Current liabilities include accounts payable, accrued liabilities, and the current portion of long-term liabilities.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, other liabilities totaled $686.9 million and were $184.0 million higher than the prior year primarily due to $170.6 million more current portion of long-term debt as the outstanding Water Revenue Bonds 2000 Series B-3 and 2017 Series A in the amount of $88.8 million and $80.0 million, respectively, are supported by a Standby Bond Purchase Agreement that expires in March 2020.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, other liabilities totaled $502.9 million, and were $314.7 million lower than the prior year primarily due to $250.0 million repayment of short-term revolving notes and $46.2 million lower current portion of long-term debt as the required principal payments for some bond issues were lower than the prior year. In addition, the $180.0 million revolving credit agreement (RCA) that expired in June 2018 was replaced by a $200.0 million RCA increasing the self-liquidity bonds coverage by $20.0 million.

Deferred Inflows of Resources

Deferred inflows of resources represent deferred inflows related to the net pension liability, net OPEB liability and deferred inflows for effective interest rate swaps.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, deferred inflows of resources totaled $32.1 million and were $11.3 million lower than the prior year primarily due to an $18.0 million decrease in effective swaps due to lower interest rates, offset by $6.4 million higher deferred inflows related to pension which included $8.4 million higher changes of assumptions and $2.0 million lower difference between expected and actual experience.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, deferred inflows of resources totaled $43.4 million and were $21.5 million higher than the prior year primarily due to an $18.6 million increase in effective swaps due to higher interest rates.

Net Investment in Capital Assets, including State Water Project Costs

Net investment in capital assets, including State Water Project costs, include amounts expended for capital improvements and State Water Project, offset by accumulated depreciation and outstanding debt issued for these purposes.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, net investment in capital assets, including State Water Project costs totaled $6.1 billion and was $162.8 million higher than the prior year. This increase included $179.3 million decrease in outstanding debt and related deferred outflows of resources offset by $16.5 million net decrease in capital assets. See discussions of these items in the capital assets and long-term debt sections.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, net investment in capital assets, including State Water Project costs totaled $6.0 billion and was $98.2 million lower than the prior year. This decrease included $124.1 million decrease in capital assets offset by $25.9 million decrease in outstanding debt and related deferred outflows of resources. See discussions of these items in the capital assets and long-term debt sections.

Restricted Net Position

Restricted net position includes amounts restricted for debt service payments and operating expenses, both of which are required by bond covenants.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, restricted net position totaled $418.6 million which was $11.0 million higher than fiscal year 2018 primarily due to $32.2 million increase in restricted for operating expenses as the SWP operations, maintenance, power and replacement (OMP&R) costs are estimated to be higher in fiscal year 2020 offset by $20.6 million of lower restricted for debt service.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, restricted net position totaled $407.6 million which was $0.6 million higher than fiscal year 2017.

Unrestricted Net Position

Unrestricted net position consists of net position items that do not meet the definition of "restricted" or "net investment in capital assets, including State Water Project costs." Certain unrestricted net position items have been designated for purposes authorized by the Board.

Fiscal Year 2019 Compared to 2018. Unrestricted net position of $286.0 million decreased $24.1 million from the prior year, which included $162.8 million higher net investment in capital assets and $11.0 million higher restricted for debt service and operating expenses partially offset by the fiscal year 2019 changes in net position of $149.7 million.

Fiscal Year 2018 Compared to 2017. Unrestricted net position of $310.1 million increased $26.4 million from the prior year. The increase included $98.2 million of lower net investment in capital assets, including State Water Project costs and $67.7 million fiscal year 2018 changes in net position. These increases were offset by the recording of beginning deferred OPEB contribution and net OPEB liability of $138.9 million as a result of GASB 75 implementation in 2018.

CHANGES IN NET POSITION

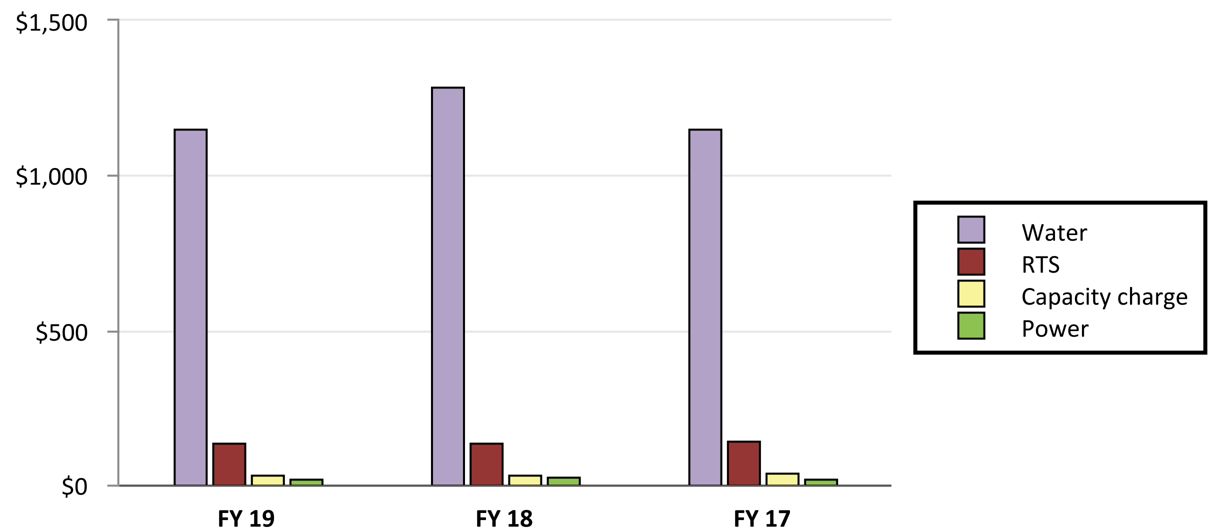
Condensed Schedule of Revenues, Expenses, and Changes in Net Position

	Fiscal Year Ended June 30,		
(Dollars in millions)	**2019**	2018	2017
Water revenues	**$ 1,148.7**	$ 1,285.2	$ 1,150.5
Readiness-to-serve charges	**136.5**	137.5	144.0
Capacity charge	**33.0**	34.6	39.7
Power sales	**18.3**	23.7	20.9
Operating revenues	**1,336.5**	1,481.0	1,355.1
Taxes, net	**142.7**	127.3	115.4
Investment income, net	**36.0**	10.6	6.2
Other	**10.4**	12.9	7.3
Nonoperating revenues	**189.1**	150.8	128.9
Total revenues	**1,525.6**	1,631.8	1,484.0
Power and water costs	**(375.8)**	(446.5)	(455.4)
Operations and maintenance	**(493.9)**	(507.4)	(487.5)
Depreciation and amortization	**(361.1)**	(330.3)	(301.7)
Operating expenses	**(1,230.8)**	(1,284.2)	(1,244.6)
Bond interest, net of amount capitalized	**(126.9)**	(124.5)	(134.6)
Loss on disposal of plant assets	**(13.7)**	(88.7)	(20.9)
Other	**(5.3)**	(68.2)	(10.0)
Nonoperating expenses	**(145.9)**	(281.4)	(165.5)
Total expenses	**(1,376.7)**	(1,565.6)	(1,410.1)
Changes in net position before contributions	**148.9**	66.2	73.9
Capital contributions	**0.8**	1.5	—
Changes in net position	**149.7**	67.7	73.9
Net Position			
Beginning of year, as previously reported	**6,686.5**	6,757.7	6,683.8
Cumulative effect of change in accounting principle	**—**	(138.9)	—
Beginning of year, as restated	**6,686.5**	6,618.8	6,683.8
Net position, end of year	**$ 6,836.2**	$ 6,686.5	$ 6,757.7

Operating Revenues

Metropolitan's principal source of revenue is derived from the sale and availability of water, including water rates and other exchange and wheeling transactions, which typically account for approximately 85 percent of operating revenues. Metropolitan's primary sources of water supply are the Colorado River and the State Water Project.

OPERATING REVENUES
(Dollars in millions)



Analytical Review of Operating Revenues

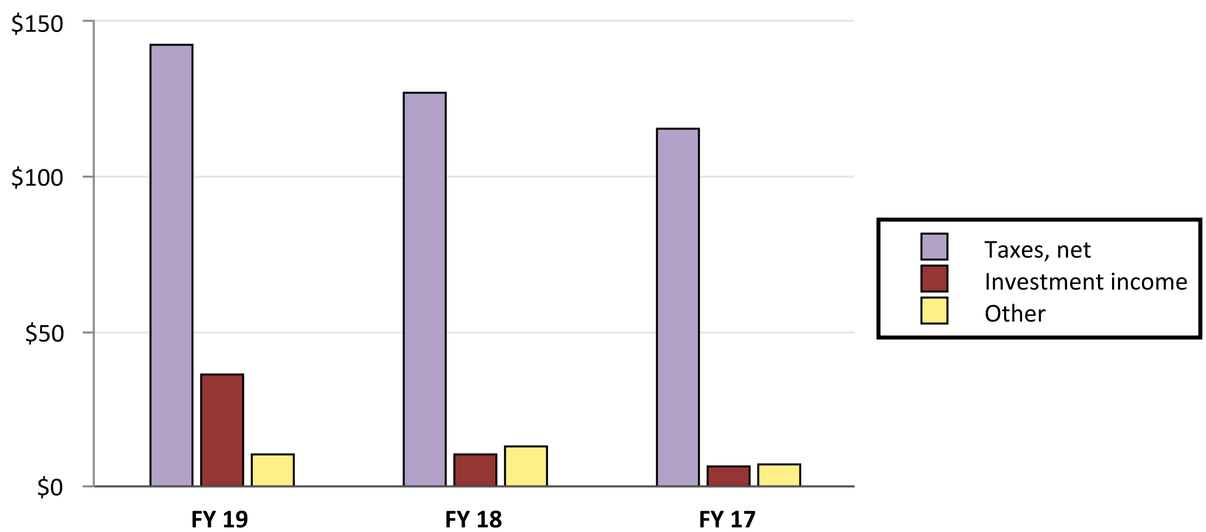
Fiscal Year 2019 Compared to 2018. Fiscal year 2019 operating revenues were $1.3 billion or $144.5 million less than the prior year. The decrease was primarily due to $136.5 million of lower water revenues, which included $153.5 million or 192.7 TAF of lower volumes sold offset by $17.0 million of higher price.

Fiscal Year 2018 Compared to 2017. Fiscal year 2018 operating revenues were $1.5 billion or $125.9 million more than the prior year. The increase was primarily due to $134.7 million of higher water sales, of which $82.4 million related to higher water rates and $52.3 million or 70.1 TAF of higher volumes sold. This increase was offset by $6.5 million lower readiness-to-serve charges as the Board approved amount was lower in fiscal year 2018 as compared to prior year.

Nonoperating Revenues

The primary source of nonoperating revenues is property taxes.

NONOPERATING REVENUES
(Dollars in millions)



Analytical Review of Nonoperating Revenues

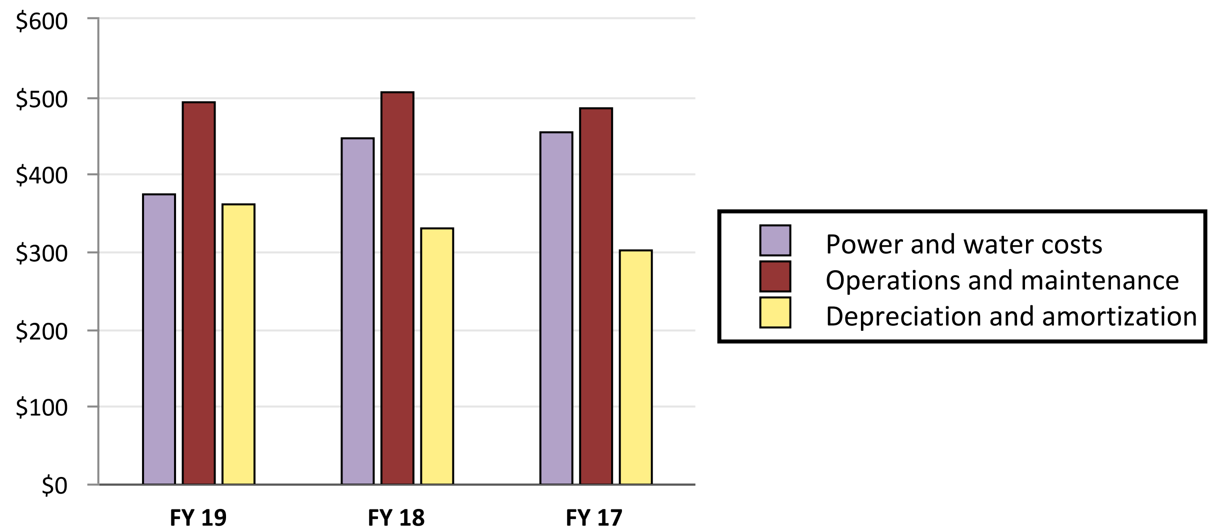
Fiscal Year 2019 Compared to 2018. Nonoperating revenues for fiscal year 2019 totaled $189.1 million and were $38.3 million higher than the prior year. The increase was primarily due to $25.4 million more of investment income, which included a $14.8 million favorable change in fair value of investments and $7.3 million higher rate of return. In addition, property tax revenue increased $15.4 million due to lower delinquencies and higher assessments resulting from increased property values.

Fiscal Year 2018 Compared to 2017. Nonoperating revenues for fiscal year 2018 totaled $150.8 million and were $21.9 million higher than the prior year. The increase was primarily due to $11.9 million of higher property tax revenue due to lower delinquencies and higher assessments resulting from increased property values, as well as a $4.4 million increase in investment income due to $3.9 million higher interest on investments.

Operating Expenses

Operating expenses fall into three primary cost areas: power and water, operations and maintenance, and depreciation and amortization.

OPERATING EXPENSES
(Dollars in millions)



Analytical Review of Operating Expenses

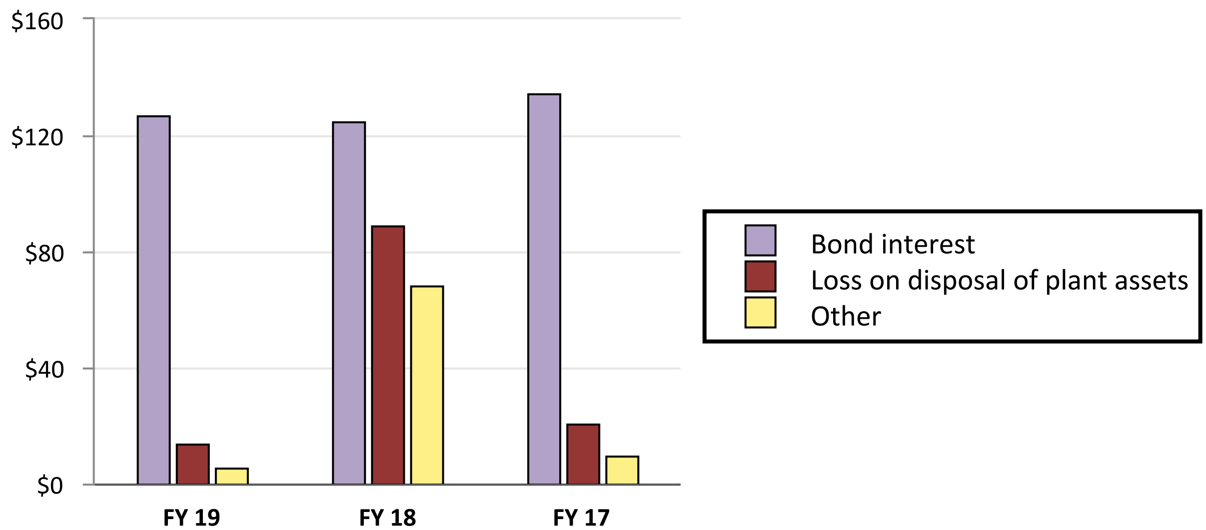
Fiscal Year 2019 Compared to 2018. Fiscal year 2019 operating expenses of $1.2 billion were $53.4 million lower than the prior year. The decrease was primarily due to $70.7 million lower power and water costs, which included $48.5 million cost reduction due to 192.7 TAF less water sold and $35.2 million lower SWP minimum OMP&R costs related to an over collection of prior year's charges. The decrease was offset by $30.8 million of higher depreciation and amortization due to a net increase in depreciable capital assets of $320.5 million.

Fiscal Year 2018 Compared to 2017. Fiscal year 2018 operating expenses of $1.3 billion were $39.6 million higher than the prior year. The increase included $28.6 million of depreciation and amortization due to a net increase in depreciable capital assets of $343.0 million and $19.9 million of higher operations and maintenance costs primarily related to higher labor costs resulting from the negotiations with bargaining units which concluded in fiscal year 2018. These increases were offset by $8.9 million lower power and water costs due to lower SWP minimum OMP&R costs related to an over collection of prior year's charges.

Nonoperating Expenses

The primary sources of nonoperating expenses are interest expense on bonds, loss on disposal of plant assets and other, net.

NONOPERATING EXPENSES
(Dollars in millions)



Analytical Review of Nonoperating Expenses

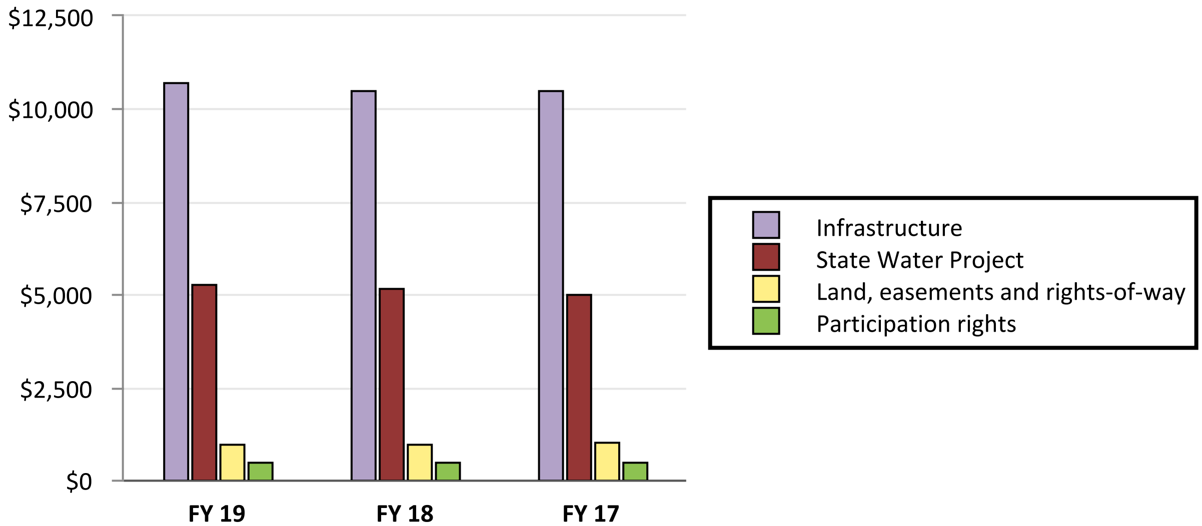
Fiscal Year 2019 Compared to 2018. Fiscal year 2019 nonoperating expenses of $145.9 million were $135.5 million lower than the prior year. The decrease was primarily due to $75.0 million less of loss on disposal of plant assets related to the write-off of Skinner Modules 4, 5 and 6 in the prior year. In addition, other expenses decreased $62.9 million due to $39.1 million less write-off of construction in progress programs and $24.0 million less recalculation of previously capitalized interest on construction in the prior year.

Fiscal Year 2018 Compared to 2017. Fiscal year 2018 nonoperating expenses of $281.4 million were $115.9 million higher than the prior year. The increase was primarily due to $67.8 million more of loss on disposal of plant assets related to the write-off of Skinner Modules 4, 5 and 6. In addition, other expenses increased $58.2 million, of which $18.8 million related to an increase in write-off of construction in progress programs upon determination that no operational asset would result from the costs incurred and $40.0 million related to a recalculation of previously capitalized interest on construction. These increases were offset by a $10.1 million reduction in bond interest, net of amount capitalized due to bond refunding transactions to take advantage of lower interest rates.

CAPITAL ASSETS

Capital assets include Metropolitan's water infrastructure, land and buildings, as well as participation rights in State Water Project and various other water programs. More detailed information on capital assets and commitments for construction contracts are presented in Note 2 and Note 9(g) to the basic financial statements, respectively.

GROSS CAPITAL ASSETS
(Dollars in millions)



Schedule of Capital Assets

(Dollars in millions)	June 30, 2019	2018	2017
Land, easements and rights of way	**$ 984.8**	$ 994.8	$ 1,009.9
Construction in progress	**545.8**	691.8	1,018.8
Parker power plant and dam	**13.0**	13.0	13.0
Power recovery plants	**210.6**	216.2	196.9
Other dams and reservoirs	**1,568.3**	1,560.7	1,549.8
Water transportation facilities	**3,892.6**	3,820.7	3,744.1
Pumping plants and facilities	**303.0**	302.4	294.3
Treatment plants and facilities	**3,185.8**	2,969.8	2,796.5
Buildings	**187.4**	162.5	138.9
Other plant assets	**750.2**	745.1	713.8
Pre-operating expenses of original aqueduct	**44.6**	44.6	44.6
Participation rights in State Water Project	**5,301.4**	5,160.7	5,034.4
Participation rights in other facilities	**459.0**	459.5	459.7
Gross capital assets	**17,446.5**	17,141.8	17,014.7
Less accumulated depreciation and amortization	**(7,053.0)**	(6,731.8)	(6,480.6)
Total capital assets, net	**$ 10,393.5**	$ 10,410.0	$ 10,534.1
Net increase (decrease) from prior year	**$ (16.5)**	$ (124.1)	$ 194.7
Percent change	**(0.2%)**	(1.2%)	1.9%

Fiscal Year 2019 Compared to 2018. Net capital assets totaled approximately $10.4 billion and decreased $16.5 million over the prior year. The decrease included depreciation and amortization of $352.1 million and $32.3 million retirements of capital assets and write-off of construction in progress upon determination that no operating assets would result from the cost incurred, offset by $227.7 million of construction spending and a net increase of $140.2 million in participation rights in SWP and other facilities.

The major capital asset additions for the current year, excluding capitalized interest, included:

- $46.4 million for the distribution system's rehabilitation program; this program will replace or refurbish existing facilities within Metropolitan's distribution system including reservoirs, pressure control structures, hydroelectric power plants, and pipelines in order to reliably meet water demands.
- $37.9 million for the improvements in infrastructure reliability at the treatment plants; this program will replace or refurbish facilities and components at Metropolitan's five water treatment plants in order to continue to reliably meet water demands.
- $34.5 million for the pre-stressed concrete cylinder pipe reliability (PCCP) program; this program identifies pipelines whose age, location and condition warrant refurbishment/replacement to ensure long-term reliability of Metropolitan's PCCP lines water delivery.
- $26.3 million for the supply reliability and system expansion program; this program is designed to improve the reliability and flexibility of delivering Colorado River water during drought or other State Water Project delivery constraints.
- $13.0 million for the system reliability program, which is designed to ensure the reliability and efficiency of the information technology infrastructure in support of Metropolitan's operational and business applications.

Metropolitan's fiscal year 2020 capital investment plan includes $259.8 million principally for the distribution system and rehabilitation projects, the Colorado River Aqueduct reliability programs, the PCCP feeders upgrade, systems and information technology improvements, and water treatment plants upgrades program.

Fiscal Year 2018 Compared to 2017. Net capital assets totaled approximately $10.4 billion and decreased $124.1 million over the prior year. This decrease included depreciation and amortization of $329.7 million and $128.5 million retirements of capital assets and write-off of construction in progress upon determination that no operating assets would result from the cost incurred, offset by $207.9 million of construction spending and a net increase of $126.2 million in participation rights in SWP and other facilities.

The major capital asset additions for fiscal year 2018, excluding capitalized interest, included:

- $44.6 million for the distribution system's rehabilitation program.
- $40.8 million for the PCCP program.
- $30.0 million for the improvements in infrastructure reliability at the treatment plants.
- $24.3 million for the supply reliability and system expansion program.
- $16.9 million for the system reliability program.
- $14.5 million for the oxidation retrofit program at the filtration plants; this program is designed to reduce the level of disinfection byproducts in the treated water supplied by these plants in order to meet state and federal standards.

DEBT ADMINISTRATION – LONG-TERM DEBT

Schedule of Long-term Debt, Including Current Portion

	June 30,		
(Dollars in millions)	**2019**	2018	2017
General obligation bonds *(a)*	**$ 48.1**	$ 60.6	$ 74.9
Revenue bonds *(a)*	**3,933.2**	4,233.9	4,302.0
Revolving notes	**46.8**	—	—
Other, net *(b)*	**307.3**	212.5	202.8
	$ 4,335.4	$ 4,507.0	$ 4,579.7
Increase (decrease) from prior year	**$ (171.6)**	$ (72.7)	$ 56.3
Percent change	**(3.8%)**	(1.6%)	1.2%

(a) Includes refunding bonds.
(b) Consists of unamortized bond discounts and premiums.

Fiscal Year 2019 Compared to 2018. At June 30, 2019, outstanding bonds and other long-term obligations totaled $4.3 billion, a net decrease of $171.6 million or 3.8 percent from the prior year. The decrease was due to $171.2 million of bond refundings, as the new debt issued was less than the amount of debt refunded and $142.0 million of scheduled principal payments. These decreases were offset by $94.8 million increase in premiums and discounts, which included $129.3 million increase related to bond refundings, as the premiums on new debt issued was more than the premiums outstanding on the debt refunded, offset by $34.5 million related to scheduled amortization. In addition, revolving notes increased $46.8 million related to the Bank of America, N.A. notes issued for the California WaterFix advance funding.

Fiscal Year 2018 Compared to 2017. At June 30, 2018, outstanding bonds and other long-term obligations totaled $4.5 billion, a net decrease of $72.7 million or 1.6 percent from the prior year. The decrease was due to $164.1 million of scheduled principal payments and $62.6 million related to bond refundings, as the new debt issued was less than the amount of debt refunded. These decreases were offset by the issuance $144.3 million in revenue bonds and $9.7 million of scheduled amortization of bond premiums and discounts.

Additional information on Metropolitan's long-term debt can be found in Notes 5 and 6 to the basic financial statements.

CREDIT RATINGS

Metropolitan's credit ratings at June 30, 2019 are shown below.

	Moody's Investors Service	Standard & Poor's Global	Fitch Ratings
General obligation bonds	Aaa	AAA	AA+
Water revenue bonds-fixed rate	Aa1	AAA	AA+
Water revenue bonds-variable rate	VMIG 1	A-1+	F1+
Subordinate water revenue bonds-fixed rate	N/A	AA+	AA+
Subordinate water revenue bonds-variable rate	N/A	A-1+	F1+

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STATEMENTS OF NET POSITION

(Dollars in thousands)	June 30, 2019	2018
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES		
Current Assets:		
Cash and investments, at fair value (Notes 1b and 3):		
Unrestricted (cost: $153,444 and $282,354 for 2019 and 2018, respectively)	**$ 153,867**	$ 281,000
Restricted (cost: $425,332 and $492,097 for 2019 and 2018, respectively)	**426,503**	489,737
Total cash and investments	**580,370**	770,737
Receivables:		
Water revenues	**170,130**	221,301
Interest on investments	**4,725**	4,402
Other, net (Note 1e)	**29,737**	34,629
Total receivables	**204,592**	260,332
Inventories (Note 1f)	**123,003**	97,727
Deposits, prepaid costs, and other (Note 11)	**2,040**	1,611
Total current assets	**910,005**	1,130,407
Noncurrent Assets:		
Cash and investments, at fair value (Notes 1b and 3):		
Unrestricted (cost: $556,450 and $354,448 for 2019 and 2018, respectively)	**563,577**	352,748
Restricted (cost: $47,436 and $66,214 for 2019 and 2018, respectively)	**42,158**	67,985
Total cash and investments	**605,735**	420,733
Capital assets (Note 2):		
Plant and equipment - non depreciable (Notes 1g and 9g)	**1,530,628**	1,686,602
Plant and equipment - depreciable (Notes 1g and 9g)	**10,155,417**	9,834,905
Participation rights in State Water Project (Notes 1h and 10)	**5,301,433**	5,160,746
Participation rights in other facilities (Notes 1h and 4)	**459,049**	459,489
Total capital assets	**17,446,527**	17,141,742
Less accumulated depreciation and amortization	**(7,053,048)**	(6,731,791)
Total capital assets, net	**10,393,479**	10,409,951
Other assets, net of current portion:		
Deposits, prepaid costs, and other (Note 11)	**329,244**	267,103
Total other assets	**329,244**	267,103
Total noncurrent assets	**11,328,458**	11,097,787
Total assets	**12,238,463**	12,228,194
Deferred Outflows of Resources:		
Loss on bond refundings (Note 1q)	**24,629**	39,050
Loss on swap terminations (Note 1q)	**18,500**	27,446
Pension related (Notes 1k, 1q, and 7)	**106,935**	138,405
OPEB related (Notes 1l, 1q, and 8)	**32,067**	34,674
Total deferred outflows of resources	**182,131**	239,575
Total Assets and Deferred Outflows of Resources	**$ 12,420,594**	$ 12,467,769

See accompanying notes to basic financial statements

STATEMENTS OF NET POSITION

(Dollars in thousands)	June 30, 2019	2018
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION		
Current Liabilities:		
Accounts payable and accrued expenses (Note 1i)	**$ 131,952**	$ 103,192
Current portion of long-term debt (Notes 5 and 6)	**468,037**	297,422
Current portion of accrued compensated absences (Notes 1j and 6)	**22,000**	19,700
Current portion of customer deposits and trust funds (Note 6)	**8,335**	6,312
Current portion of workers' compensation and third party claims (Notes 6 and 14)	**3,284**	4,083
Current portion of other long-term liabilities (Note 6)	**5**	2,871
Accrued bond interest	**51,558**	67,577
Matured bonds and coupons not presented for payment	**1,754**	1,760
Total current liabilities	**686,925**	502,917
Noncurrent Liabilities:		
Long-term debt, net of current portion (Notes 5 and 6)	**3,820,568**	4,209,537
Revolving notes (Notes 5a and 6)	**46,800**	—
Accrued compensated absences, net of current portion (Notes 1j and 6)	**26,397**	27,945
Customer deposits and trust funds, net of current portion (Note 6)	**41,062**	39,860
Net pension liability (Note 7)	**634,037**	660,917
Net OPEB liability (Note 8)	**228,334**	240,569
Workers' compensation and third party claims, net of current portion (Notes 6 and 14)	**9,674**	9,496
Fair value of interest rate swaps (Notes 5e and 6)	**56,274**	44,411
Other long-term liabilities, net of current portion (Note 6)	**2,204**	2,219
Total noncurrent liabilities	**4,865,350**	5,234,954
Total liabilities	**5,552,275**	5,737,871
Commitments and Contingencies (Note 9)	**—**	—
Deferred Inflows of Resources:		
Effective swaps (Note 1q)	**626**	18,649
Pension related (Notes 1k, 1q and 7)	**24,206**	17,836
OPEB related (Notes 1l, 1q, and 8)	**7,288**	6,928
Total deferred inflows of resources	**32,120**	43,413
Total Liabilities and Deferred Inflows of Resources	**5,584,395**	5,781,284
Net Position (Note 13):		
Net investment in capital assets, including State Water Project costs	**6,131,572**	5,968,786
Restricted for:		
Debt service	**180,724**	201,361
Other	**237,893**	206,237
Unrestricted	**286,010**	310,101
Total net position	**6,836,199**	6,686,485
Total Liabilities, Deferred Inflows of Resources, and Net Position	**$ 12,420,594**	$ 12,467,769

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STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	Fiscal Year Ended June 30,	
(Dollars in thousands)	**2019**	2018
Operating Revenues (Note 1c):		
Water revenues	**$ 1,148,674**	$ 1,285,164
Readiness-to-serve charges	**136,500**	137,500
Capacity charge	**33,024**	34,653
Power sales	**18,257**	23,694
Total operating revenues	**1,336,455**	1,481,011
Operating Expenses:		
Power and water costs	**375,780**	446,486
Operations and maintenance	**493,962**	507,450
Total operating expenses	**869,742**	953,936
Operating income before depreciation and amortization	**466,713**	527,075
Less depreciation and amortization (Note 2)	**(361,091)**	(330,262)
Operating income	**105,622**	196,813
Nonoperating Revenues (Expenses) (Note 1n):		
Taxes, net (Note 1d)	**142,683**	127,367
Bond interest, net of $4,700 and $15,600 of interest capitalized in fiscal years 2019 and 2018, respectively (Note 1g)	**(126,925)**	(124,523)
Investment income, net	**36,003**	10,577
Loss on disposal of plant assets	**(13,678)**	(88,690)
Other, net	**5,169**	(55,357)
Total nonoperating expenses, net	**43,252**	(130,626)
Changes in Net Position Before Contributions	**148,874**	66,187
Capital contributions (Note 1m)	**840**	1,496
Changes in net position	**149,714**	67,683
Net Position		
Beginning of year, as previously reported	**6,686,485**	6,757,685
Less: Cumulative effect of change in accounting principle (Note 1s)	**—**	(138,883)
Beginning of year, as restated	**6,686,485**	6,618,802
Net position, End of Year	**$ 6,836,199**	$ 6,686,485

See accompanying notes to basic financial statements.

STATEMENTS OF CASH FLOWS

(Dollars in thousands)	Fiscal Year Ended June 30, 2019	2018
Cash Flows from Operating Activities:		
Cash received from water sales	**$ 1,101,721**	$ 1,164,017
Cash received from readiness-to-serve charges	**137,158**	137,580
Cash received from capacity charge	**33,293**	34,560
Cash received from power sales	**17,536**	27,325
Cash received from other exchange transactions	**97,855**	88,274
Cash paid for operations and maintenance expenses	**(268,692)**	(248,014)
Cash paid to employees for services	**(226,645)**	(220,220)
Cash paid for power and water costs	**(378,180)**	(481,271)
Other cash flows for operating activities	**1,618**	2,037
Net cash provided by operating activities	**515,664**	504,288
Cash Flows from Noncapital Financing Activities:		
Proceeds from other collections	**10,047**	7,675
Net cash provided by noncapital financing activities	**10,047**	7,675
Cash Flows from Capital and Related Financing Activities:		
Acquisition and construction of capital assets	**(231,747)**	(222,119)
Payments for State Water Project costs	**(182,188)**	(126,371)
Proceeds from short and long-term debt	**46,833**	159,833
Payments for bond issuance costs	**(3,418)**	(2,113)
Principal paid on debt	**(175,973)**	(414,125)
Interest paid on debt	**(184,487)**	(181,006)
Payments for other long-term obligations	**—**	(10,832)
Proceeds from tax levy	**145,154**	129,666
Transfer from (to) escrow trust accounts	**10,571**	(37,027)
Payments of rebatable arbitrage	**(10)**	—
Proceeds from sale of capital assets	**9,730**	—
Net cash used by capital and related financing activities	**(565,535)**	(704,094)
Cash Flows from Investing Activities:		
Purchase of investment securities	**(6,377,345)**	(7,571,221)
Proceeds from sales and maturities of investment securities	**6,223,438**	7,909,354
Investment income	**31,374**	15,475
Net cash (used) provided by investing activities	**(122,533)**	353,608
Net change in cash	**(162,357)**	161,477
Cash at July 1, 2018 and 2017	**162,379**	902
Cash at June 30, 2019 and 2018 (Note 1b)	**$ 22**	$ 162,379

See accompanying notes to basic financial statements.

STATEMENTS OF CASH FLOWS

(Dollars in thousands)	Fiscal Year Ended June 30, 2019	2018
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating Income	**$ 105,622**	$ 196,813
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities:		
Depreciation and amortization expense	**361,091**	330,262
Decrease (increase) in accounts receivable	**51,464**	(35,589)
(Increase) decrease in inventories	**(25,276)**	12,807
Increase in deposits, prepaid costs, and other	**(21,007)**	(66,832)
Increase in accounts payable, and accrued expenses	**30,175**	7,012
(Decrease) increase in pension liabilities	**(22,943)**	62,267
(Decrease) increase in OPEB liabilities	**(10,522)**	15,546
Decrease (increase) in deferred outflows related to pension	**27,064**	(6,851)
Increase (decrease) in deferred inflows related to pension	**5,478**	(3,451)
Decrease (increase) in deferred outflows related to OPEB	**2,242**	(29,473)
Increase in deferred inflows related to OPEB	**310**	5,889
Increase in other items	**11,966**	15,888
Total Adjustments	**410,042**	307,475
Net cash provided by operating activities	**$ 515,664**	$ 504,288
Significant Noncash Investing, Capital and Financing Activities		
Refunding bonds proceeds received in escrow trust fund	**$ 808,053**	$ 956,810
Debt defeased through escrow trust fund with refunding debt	**$ (785,030)**	$ (741,240)
Deferred gain on refunding debt	**$ 8,694**	$ 14,392
RECONCILIATION OF CASH AND INVESTMENTS TO CASH		
Unrestricted cash and investments (at June 30, 2019 and 2018 includes $22 and $162,379 of cash, respectively)	**$ 717,444**	$ 633,748
Restricted cash and investments	**468,661**	557,722
Total cash and investments, at fair value	**1,186,105**	1,191,470
Less: carrying value of investments	**(1,186,083)**	(1,029,091)
Total Cash (Note 1b)	**$ 22**	$ 162,379

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1. REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Reporting Entity

The Metropolitan Water District of Southern California (Metropolitan), a special district of the State of California, was organized in 1928 by vote of the electorates of several Southern California cities following adoption of the Metropolitan Water District Act (Act) by the California Legislature. Metropolitan's primary purposes under the Act are to develop, store, and distribute water, at wholesale, to its member public agencies for domestic and municipal purposes. Surplus water is sold for other beneficial uses, including agricultural use. Metropolitan's service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. There are 26 independent member agencies of Metropolitan, consisting of 14 cities, 11 municipal water districts, and one county water authority. Metropolitan has no financial accountability for its member agencies. Metropolitan is governed by a 38-member Board of Directors (Board) comprised of representatives of the member agencies. Representation and voting rights are based on assessed valuations of property pursuant to Section 55 of the Act. Each member agency is entitled to have at least one representative on the Board plus an additional representative for each full five percent of the assessed valuation of real property within the jurisdictional boundary of each member agency. Changes in relative assessed valuation do not terminate any director's term. Accordingly, the Board may, from time to time, have more or fewer than 38 directors. No single member agency has a voting majority.

The Metropolitan Water District Asset Financing Corporation (MWDAFC) was incorporated on June 19, 1996. The MWDAFC is a California nonprofit public benefit corporation formed to assist Metropolitan by acquiring, constructing, operating and maintaining facilities, equipment, or other property needed by Metropolitan and leasing or selling such property to Metropolitan. The MWDAFC is governed by a board of five directors, each of whom must be a member of Metropolitan's Board. MWDAFC had no financial operations during fiscal years 2019 or 2018. MWDAFC is a component unit of Metropolitan and its activities will be blended with those of Metropolitan for financial reporting purposes should it commence operations.

(b) Principles of Presentation

Metropolitan operates as a utility enterprise and the accompanying basic financial statements reflect the flow of economic resources measurement focus and the full accrual basis of accounting. Under full accrual accounting, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred regardless of the timing of related cash flows.

Metropolitan is accounted for as an enterprise fund and applies all applicable Governmental Accounting Standards Board (GASB) pronouncements in its accounting and reporting.

For purposes of the statements of cash flows, Metropolitan defines cash as demand account balances and cash on hand.

(c) Revenue Policies

Water revenues, which include funds received from charges for the sale and availability of water, including water rates and other exchange and wheeling transactions, is the principal source of Metropolitan's revenues. Other sources of operating revenue include readiness-to-serve charges, capacity charge, and hydroelectric power sales. Other revenues include ad valorem property taxes and investment income.

Water rates are established by the Board on a biennial basis. Water rates are supported by cost of service studies. Water rates are not subject to regulation by the California Public Utilities Commission or by any other local, state, or federal agency. Water is delivered to the member agencies on demand and revenue is recognized at the time of sale.

Metropolitan's rate structure consists of unbundled rate elements (supply, treatment, conveyance and distribution, power, and demand management) designed to provide transparency regarding the cost of specific functions to member agencies. It is designed to improve regional water resources management and accommodate a water transfer market. The rate structure also includes tiered pricing for supply, a capacity charge, and a readiness-to-serve charge.

(d) Taxing Authority

Metropolitan is expressly empowered under the Act to levy and collect taxes on all taxable property within its boundaries for the purpose of carrying on its operations and paying its obligations, subject to certain limitations in the Act, the California Revenue and Taxation Code, and the California Constitution. Property taxes are levied annually by the Board effective as of July 1, using a lien date of January 1, and are payable by property owners in two equal installments that are due on November 1 and February 1, and become delinquent after December 10 and April 10, respectively. Property taxes levied by Metropolitan are billed and collected by the counties in its service area and are remitted to Metropolitan periodically throughout the year.

Property tax revenue is used to pay Metropolitan's general obligation bond debt service and a portion of its obligations under its contract with the state for a water supply and participation in the State Water Project (the State Water Contract). In setting the annual levy, Metropolitan takes into account potential delinquencies, tax allocations to the successor agencies of former redevelopment agencies, and supplemental tax collections. Metropolitan recognizes property taxes receivable on July 1 of each fiscal year and recognizes revenue over the following 12-month period beginning July 1 through June 30 (the period for which the tax is levied).

As a result of legislation enacted in 1984, commencing with the fiscal year ended June 30, 1991, tax levies, other than annexation taxes, are limited to the amount needed to pay debt service on Metropolitan's general obligation bonds and Metropolitan's proportionate share of general obligation bond debt service of the state under the State Water Contract. However, under the terms of the 1984 legislation, the Board may suspend this particular restriction upon a finding that doing so is essential to Metropolitan's fiscal integrity. The Board made such a finding for fiscal years ended June 30, 2014 through 2020, and maintained the tax rate for those fiscal years at the rate levied during fiscal year ended June 30, 2013 to pay a portion of State Water Contract costs other than general obligation debt service.

(e) Other Receivables

Other receivables include amounts for taxes, hydroelectric power sales, readiness-to-serve charges, and other billings.

(f) Inventories

Metropolitan's inventories are valued based on a moving-average cost. Expenses are recorded when inventories are used. Components of inventories at June 30, 2019 and 2018 were as follows:

	June 30,			
(Dollars in thousands)		**2019**		2018
Water in storage	**$**	**109,612**	$	84,813
Operating supplies		**13,391**		12,914
Total inventories	**$**	**123,003**	$	97,727

(g) Capital Assets

Metropolitan's capital assets include plant and equipment, which are recorded at cost. Construction costs are capitalized if they exceed $50,000 and the asset has a useful life of at least five years. The cost of constructed assets may include labor, materials, certain general and administrative expenses, and interest incurred during construction periods. Depreciation is calculated using the straight-line method based on the estimated average useful lives of the assets, which are 10 to 80 years for buildings, storage, and distribution facilities, 10 to 50 years for treatment plants and hydroelectric power recovery facilities, and 10 to 80 years for miscellaneous assets. Improvements or refurbishments with aggregated costs that meet capitalization thresholds and that extend the useful life of an existing asset by at least five years are capitalized.

Major computer systems software, whether purchased or internally developed, is capitalized if the cost exceeds $250,000 and the useful life is at least three years. Vehicles and operating equipment are capitalized if the cost equals or exceeds $5,000 and the useful life is at least four years. Depreciation is calculated using the straight-line method based on the estimated useful lives and ranges from 3 to 10 years for major computer systems software and 4 to 10 years for vehicles and operating equipment.

(h) Participation Rights

Metropolitan participates in various storage and water management programs entitling it to certain water rights. Projects include the SWP and various storage and water management programs. Metropolitan's participation in these projects is through cash payments. The value of participation rights is equal to the amounts spent for the construction of capital assets, such as pipelines, pumping facilities, and storage facilities, and amortized over the life of the agreements. These assets are not owned by Metropolitan. Certain projects also require payments for ongoing maintenance; those payments are charged to expense as incurred. (See Notes 2, 4, and 10.)

(i) Disaggregation of Payable Balances

Accounts payable and accrued expenses at June 30, 2019 and 2018 were as follows:

	June 30,	
(Dollars in thousands)	**2019**	2018
Department of Water Resources (SWP):		
Capital, operating, maintenance, power, replacement, and variable power	**$ 72,910**	$ 46,407
Vendors	**42,989**	36,128
Accrued power costs	**1,578**	4,542
Accrued salaries	**8,699**	8,569
Readiness-to-serve overcollection	**1,368**	1,381
Conservation credits	**4,408**	6,165
Total accounts payable and accrued expenses	**$ 131,952**	$ 103,192

(j) Compensated Absences

Metropolitan's employees earn vacation, sick, and compensatory leave in varying amounts depending primarily on length of service. Upon termination from Metropolitan service, employees are entitled to full payment for accrued vacation and compensatory leave at their final pay rates, and are entitled to payment for approximately one-half of their accrued sick leave at such rates. Metropolitan records its obligations for vacation, sick, and compensatory leave earned by eligible employees based on current pay rates. The allocations to the current and long-term portions of these vested obligations were based on experience and projections of turnover.

(k) Pension Accounting

For purposes of measuring the 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 Plan and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the California Public Employees' Retirement System (CalPERS) Financial Office. For this purpose, benefit payments (including refunds of employee contributions) are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

GASB requires that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:
Valuation Date (VD): June 30, 2017
Measurement Date (MD): June 30, 2018
Measurement Period: July 1, 2017 to June 30, 2018

(l) OPEB Accounting

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of Metropolitan's plan (OPEB Plan), the assets of which are held by the California Employer's Retiree Benefit Trust (CERBT), and additions to/ deductions from the OPEB Plan's fiduciary net position have been determined on the same basis. For this purpose, benefit payments are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

GASB requires that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:
Valuation Date (VD): June 30, 2017
Measurement Date (MD): June 30, 2018
Measurement Period: July 1, 2017 to June 30, 2018

(m) Capital Contributions

Capital contributions are comprised of federal, state, and private grants. These grants are typically of a reimbursable nature: Metropolitan first pays for the project and then the granting agency reimburses Metropolitan for its eligible expenses. The portion of the grants restricted for capital purposes are reflected as capital contributions in the statements of revenues, expenses and changes in net position when they are earned, irrespective of the timing of the receipts. Examples of capital projects where grants are received include water treatment plant improvements, such as fluoridation and water storage programs.

(n) Operating and Nonoperating Revenues and Expenses

Metropolitan's primary purpose is to provide a supplemental supply of water for domestic and municipal uses. Accordingly, Metropolitan defines operating revenues as revenues derived from the sale and availability of water, including water rates and other exchange and wheeling transactions. It also includes readiness-to-serve charges, capacity charge, and hydroelectric power sales. Operating expenses include the cost of sales and services, administrative expenses, and depreciation and amortization of capital assets.

Revenues from property taxes and investment income, as well as interest expense on outstanding debt, are related to capital and financing activities and are defined as nonoperating revenues and expenses.

(o) Restricted and Unrestricted Resources

When both restricted and unrestricted resources are available for use, it is Metropolitan's practice to use restricted resources first, then unrestricted resources as they are needed.

(p) Use of Estimates

The preparation of basic financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the basic financial statements and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(q) Deferred Outflows/Inflows of Resources

The net investment in capital assets, including State Water Project costs of $6.1 billion and $6.0 billion at June 30, 2019 and 2018, respectively, includes the effect of deferring the recognition of losses from bond refundings. The deferred outflows from losses on bond refundings at June 30, 2019 and 2018 were $24.6 million and $39.1 million, respectively. This is amortized and recognized as a component of interest expense in a systematic and rational manner over the remaining life of the old or the new debt, whichever is shorter.

The unrestricted net position amount of $286.0 million and $310.1 million at June 30, 2019 and 2018, respectively, includes the effect of deferring the recognition of losses from swap terminations resulting in defeasance of debt, the increase or decrease in fair value of Metropolitan's effective interest rate swaps, and deferred amounts related to pension and OPEB.

The deferred outflows from losses on swap terminations resulting in debt defeasance at June 30, 2019 and 2018, respectively, were $18.5 million and $27.4 million. These deferred outflows of resources are amortized and recognized as a component of interest expense in a systematic and rational manner over the remaining life of the old debt or the life of the new debt, whichever is shorter.

The deferred outflows related to pension at June 30, 2019 and 2018 were $106.9 million and $138.4 million, respectively. The deferred inflows related to pension at June 30, 2019 and 2018 were $24.2 million and $17.8 million, respectively. See note 7(d) for additional information.

The deferred outflows related to OPEB at June 30, 2019 and 2018 were $32.1 million and $34.7 million, respectively. The deferred inflows related to OPEB at June 30, 2019 and 2018 were $7.3 million and $6.9 million, respectively. See notes 8(j) and (k) for additional information.

The deferred inflow from the increase in fair value of interest rate swaps of $0.6 million and $18.6 million at June 30, 2019 and June 30, 2018, respectively, would be recognized as an investment gain upon the early termination of the swaps. Metropolitan will only terminate its interest rate swap agreements in advance of the contractual termination dates if market conditions permit. The deferred inflow also would be recognized as an investment gain if the swaps were determined no longer to be effective hedges. Finally, if the bond associated with a swap is refunded, the deferred inflow would be reduced and the deferred gain on refunding would be increased by the same amount. The deferred gain would be amortized as a component of interest expense over the life of the old debt or the new debt, whichever is shorter.

(r) Fair Value Measurements

GASB Statement No. 72, *Fair Value Measurement and Application* (GASB 72) requires a government to use valuation techniques that are appropriate under the circumstances and for which sufficient data are available to measure fair value. The techniques should be consistent with one or more of the following approaches: the market approach, the cost approach, or the income approach. Metropolitan reports its investments and liabilities at fair value using market approach and cost approach.

Additionally, GASB 72 establishes a hierarchy of inputs to valuation techniques used to measure fair value. This hierarchy has three levels which are: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that a government can access at the measurement date; Level 2 inputs are inputs—other than quoted prices—that are observable for identical assets or liabilities, either directly or indirectly; and Level 3 inputs are unobservable inputs, such as management's assumption of the default rate among underlying mortgages of a mortgage-backed security. The fair value hierarchy to Metropolitan's assets and liabilities are presented in Notes 3 and 5.

(s) Cumulative Effect of Change in Accounting Principle

Metropolitan implemented GASB Statement No. 75, *Accounting and Financial Reporting for Post-Employment Benefits Other than Pension* (GASB 75), in the fiscal year ended June 30, 2018. The implementation of GASB 75 required

Metropolitan to record beginning total OPEB liability and the effects on net position of benefit payments and administrative expenses paid by Metropolitan during the measurement period (fiscal year ended June 30, 2017). As a result, net position decreased $138.9 million as of June 30, 2017.

(t) New Accounting Pronouncements

Metropolitan implemented the following GASB Statements in fiscal year 2019:

In November 2016, the GASB issued Statement No. 83, *Certain Asset Retirement Obligations*. This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs) which are legally enforceable liabilities associated with the retirement of a tangible capital asset and should be recognized as a liability based on the guidelines in this Statement. In addition, this Statement requires disclosure of information about the nature of AROs, the methods and assumptions used for the estimates of the the liabilities, and the estimated remaining useful life of the associate tangible capital assets. The requirements of this statement are effective for fiscal year 2019 but Metropolitan does not currently have any AROs based on the guidelines in this Statement. Therefore, there were no impacts on previously reported balances in the Statements of Net Position or the Statements of Revenues, Expenses and Changes in Net Position and there was no impact on note disclosures for the current year.

In June 2017, the GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. The primary objective of this Statement is to improve the information that is disclosed in notes to the financial statements related to debt, including direct borrowings and direct placements. This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. The requirements of this statement are effective for fiscal year 2019. Metropolitan's disclosures of debt in accordance with this Statement are presented in Notes 5 and 6.

Metropolitan is currently evaluating its accounting practices to determine the potential impact on the financial statements for the following GASB Statements that will be implemented in a future fiscal year:

- GASB Statement No. 87, *Leases*.
- GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*.
- GASB Statement No. 90, *Majority Equity Interests - an amendment of GASB Statements No. 14 and No. 61*.
- GASB Statement No. 91*, Conduit Debt Obligations*.

The following pronouncements were issued by GASB but were determined to not be applicable to Metropolitan's financial statements:

- GASB Statement No. 84, *Fiduciary Activities*.

2. CAPITAL ASSETS

Capital asset activity for the fiscal years ended June 30, 2019 and 2018 was as follows:

(Dollars in thousands)	June 30, 2017	Additions
Capital assets not being depreciated:		
Land, easements and rights of way	$ 1,009,933	$ 2,109
Construction in progress	1,018,788	200,845
Total capital assets not being depreciated	2,028,721	202,954
Other capital assets:		
Parker power plant and dam	13,009	—
Power recovery plants	196,881	19,656
Other dams and reservoirs	1,549,833	10,887
Water transportation facilities	3,744,078	80,433
Pumping plants and facilities	294,262	8,084
Treatment plants and facilities	2,796,493	334,011
Power lines and communciation facilities	32,678	—
Computer systems software	115,056	—
Buildings	138,937	23,966
Miscellaneous	466,290	28,805
Major equipment	99,753	4,943
Pre-operating expenses of original aqueduct	44,595	—
Participation rights in State Water Project (Note 10)	5,034,375	172,289
Participation rights in other facilities (Note 4)	459,709	—
Total other capital assets at historical cost	14,985,949	683,074
Accumulated depreciation and amortization:		
Parker Power Plant and Dam	(12,137)	(163)
Power recovery plants	(98,238)	(4,406)
Other dams and reservoirs	(379,301)	(22,844)
Water transportation facilities	(962,005)	(56,317)
Pumping plants and facilities	(96,964)	(7,219)
Treatment plants and facilities	(750,486)	(69,533)
Power lines and communication facilities	(10,695)	(400)
Computer systems software	(106,311)	(3,087)
Buildings	(30,682)	(4,098)
Miscellaneous	(131,921)	(10,295)
Major equipment	(83,010)	(5,389)
Pre-operating interest and other expenses of original aqueduct	(40,454)	(1,035)
Participation rights in State Water Project (Note 10)	(3,588,104)	(131,121)
Participation rights in other facilities (Note 4)	(190,263)	(13,814)
Total accumulated depreciation and amortization	(6,480,571)	(329,721)
Other capital assets, net	8,505,378	353,353
Total capital assets, net	$ 10,534,099	$ 556,307
Depreciation and amortization was charged as follows:		
Depreciation of water related assets		
Amortization of State Water Project entitlements (Note 10)		
Amortization of participation rights (Note 4)		
Depreciation and amortization expense related to capital assets		
Plus: Net retirements adjusted to expense		
Total depreciation and amortization expense		

Reductions	June 30, 2018	**Additions**	**Reductions**	**June 30, 2019**
$ (17,205)	$ 994,837	**$ 2,965**	**$ (12,977)**	**$ 984,825**
(527,868)	691,765	**218,423**	**(364,385)**	**545,803**
(545,073)	1,686,602	**221,388**	**(377,362)**	**1,530,628**
—	13,009	**—**	**—**	**13,009**
(383)	216,154	**468**	**(6,045)**	**210,577**
(17)	1,560,703	**7,862**	**(235)**	**1,568,330**
(3,830)	3,820,681	**89,490**	**(17,603)**	**3,892,568**
—	302,346	**1,115**	**(429)**	**303,032**
(160,726)	2,969,778	**223,818**	**(7,815)**	**3,185,781**
—	32,678	**—**	**—**	**32,678**
—	115,056	**—**	**(246)**	**114,810**
(357)	162,546	**24,859**	**—**	**187,405**
(51)	495,044	**8,559**	**(5,790)**	**497,813**
(2,381)	102,315	**6,352**	**(3,848)**	**104,819**
—	44,595	**—**	**—**	**44,595**
(45,918)	5,160,746	**177,022**	**(36,335)**	**5,301,433**
(220)	459,489	**—**	**(440)**	**459,049**
(213,883)	15,455,140	**539,545**	**(78,786)**	**15,915,899**
—	(12,300)	**(163)**	**—**	**(12,463)**
377	(102,267)	**(4,540)**	**4,289**	**(102,518)**
17	(402,128)	**(20,803)**	**235**	**(422,696)**
3,548	(1,014,774)	**(56,015)**	**10,280**	**(1,060,509)**
—	(104,183)	**(5,441)**	**429**	**(109,195)**
72,036	(747,983)	**(85,698)**	**7,249**	**(826,432)**
—	(11,095)	**(400)**	**—**	**(11,495)**
—	(109,398)	**(2,200)**	**246**	**(111,352)**
71	(34,709)	**(3,222)**	**—**	**(37,931)**
82	(142,134)	**(11,755)**	**4,298**	**(149,591)**
2,370	(86,029)	**(5,351)**	**3,836**	**(87,544)**
—	(41,489)	**(1,035)**	**—**	**(42,524)**
—	(3,719,225)	**(141,700)**	**—**	**(3,860,925)**
—	(204,077)	**(13,796)**	**—**	**(217,873)**
78,501	(6,731,791)	**(352,119)**	**30,862**	**(7,053,048)**
(135,382)	8,723,349	**187,426**	**(47,924)**	**8,862,851**
$ (680,455)	$ 10,409,951	**$ 408,814**	**$ (425,286)**	**$ 10,393,479**
	$ 184,786			**$ 196,623**
	131,121			**141,700**
	13,814			**13,796**
	329,721			**352,119**
	541			**8,972**
	$ 330,262			**$ 361,091**

3. CASH AND INVESTMENTS

As a public agency, Metropolitan's investment practices are prescribed by various provisions of the California Government Code and the Act, as well as by administrative policies. Metropolitan's statement of investment policy is approved annually by the Board and describes the Treasurer's investment authority, practices, and limitations. The basic investment policy objectives, in order of importance, are safety of principal, liquidity, and return on investment.

Cash and investments may or may not be restricted as to use, depending on the specific purposes for which such assets are held (see Notes 3d and 13).

A summary of Metropolitan's deposit and investment policies, information on interest and credit risks, and restricted cash and investments is provided below.

(a) Deposits

The California Government Code requires California banks and savings and loan associations to secure a local government agency's deposits by pledging government securities as collateral.

As of June 30, 2019 and 2018, Metropolitan's cash balances with financial institutions were $17,000 and $162,374,000 respectively, and cash on hand was $5,000 at each year-end.

(b) Investments

Metropolitan is permitted by State law and Board policy to invest in a variety of instruments including U.S. Treasury securities, federal agencies, repurchase agreements, negotiable certificates of deposit, bankers' acceptances, prime commercial paper, asset and mortgage-backed securities, California local agency securities, including securities issued by Metropolitan, medium-term corporate notes, time deposits, investment contracts, shares of beneficial interest, and Local Agency Investment Fund (LAIF). As of June 30, 2019 and 2018, Metropolitan had the following investments at fair value:

	June 30,	
(Dollars in thousands)	**2019**	2018
U.S. Treasury securities	**$ 88,340**	$ 253,645
U.S. Guarantees – GNMAs	**—**	3
Federal agency securities	**82,406**	82,090
Prime commercial paper	**134,176**	173,600
Medium-term corporate notes	**277,392**	102,553
Negotiable certificates of deposit	**230,648**	281,978
Money Market Funds	**241,988**	355
Government-sponsored enterprise (GSE)	**64,022**	61,470
Municipal bonds	**2,111**	10,324
Local Agency Investment Fund	**65,000**	63,073
Total investments	**$ 1,186,083**	$ 1,029,091

Metropolitan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure fair value of the assets. Level 1 are quoted prices in an active market for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

The following is the summary of the fair value hierarchy of the fair value of investments of Metropolitan as of June 30, 2019 and 2018:

	Fair Value Measurement Using					
(Dollars in thousands)	**6/30/2019**	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	6/30/2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Investments by fair value level:						
U.S. Treasury securities	**$ 88,340**	**$ 88,340**	**$ —**	$ 253,645	$ 253,645	$ —
U.S. Guarantees – GNMAs	**—**		**—**	3	3	—
Federal agency securities	**82,406**	**82,406**	**—**	82,090	82,090	—
Prime commercial paper	**134,176**	**—**	**134,176**	173,600	36,078	137,522
Medium-term corporate notes	**277,392**	**277,392**	**—**	102,553	102,553	—
Negotiable certificates of deposit	**230,648**	**170,596**	**60,052**	281,978	251,978	30,000
Government-sponsored enterprise (GSE)	**64,022**	**64,022**	**—**	61,470	61,470	—
Municipal bonds	**2,111**	**2,111**	**—**	10,324	10,324	—
Total investments by fair value level	**$ 879,095**	**$ 684,867**	**$ 194,228**	$ 965,663	$ 798,141	$ 167,522
Investments not subject to fair value level:						
Money Market Funds [1]	**241,988**			355		
Local Agency Investment Fund	**65,000**			63,073		
Total investments	**$ 1,186,083**			$ 1,029,091		

[1] As of June 30, 2019, the balance was invested in Dreyfus Gov't Cash Management and Dreyfus AMT-Free Tax Exempt (DGCXX & DEIXX) and BlackRock Treasury Trust (TTXX). As of June 30, 2018, the balance was invested in BlackRock Treasury Trust (TTXX).

Investments classified in Level 1 of the fair value hierarchy, valued at $684.9 million and $798.1 million as of June 30, 2019 and 2018, respectively, are valued using quoted prices in active markets.

Prime commercial paper totaling $134.2 million and $137.5 million and negotiable certificates of deposit totaling $60.1 million and $30.0 million, as of June 30, 2019 and 2018, respectively, classified in Level 2 of the fair value hierarchy were valued using matrix pricing.

Interest rate risk. In accordance with Metropolitan's investment policy, interest rate risk was managed by limiting the duration of the various portfolio segments. Each segment has limitations on the amount of duration exposure (see the following for specific durations).

Internally Managed Segment

This segment of the portfolio was managed against the Intercontinental Exchange Bank of America Merrill Lynch (ICE BoAML) 3-Month Treasury Bill Index, approved by the Finance and Insurance Committee. For fiscal years 2019 and 2018, the benchmark duration was 0.23 and 0.24, respectively, and the portfolio duration was permitted to vary from the duration by plus or minus 0.24. As of June 30, 2019 and 2018, Metropolitan's investments and portfolio durations for this segment were as follows:

	June 30,			
	2019		2018	
(Dollars in thousands)	**Fair value**	**Duration**	Fair value	Duration
U.S. Treasury securities	**$ 33,900**	**1.26**	$ 28,397	1.66
Federal agency securities	**82,157**	**0.57**	75,662	0.12
Prime commercial paper	**134,176**	**0.22**	173,236	0.09
Medium-term corporate notes	**207,391**	**0.77**	30,588	0.06
Negotiable certificates of deposit	**230,648**	**0.33**	281,978	0.06
Municipal bonds	**768**	**5.05**	722	6.02
Money Market Funds	**241,039**	**—**	—	—
Local Agency Investment Fund	**65,000**	**—**	63,073	—
Total portfolio segment	**$ 995,079**		$ 653,656	
Portfolio duration		**0.36**		0.15

Externally Managed Segment

This segment of the portfolio was managed against the ICE BoAML, U.S. Corporate and Government, one to five years, A-Rated and above index approved by the Finance and Insurance Committee. For fiscal years 2019 and 2018, the benchmark durations were 2.61 and 2.63, respectively, and the portfolio duration was permitted to vary from the duration by plus or minus 1.50. As of June 30, 2019 and 2018, Metropolitan's investments and portfolio durations for this segment were as follows:

	June 30,			
	2019		2018	
(Dollars in thousands)	**Fair value**	**Duration**	Fair value	Duration
U.S. Treasury securities	**$ 50,873**	**2.08**	$ 208,251	2.56
U.S. Guarantees – GNMAs	**—**	**—**	3	3.79
Federal agency securities	**—**	**—**	5,620	9.4
Medium-term corporate notes	**70,001**	**2.36**	69,667	2.73
Money Market Funds	**194**	**—**	355	—
Government-sponsored enterprise (GSE)	**64,022**	**2.20**	61,470	2.19
Total portfolio segment	**$ 185,090**		$ 345,366	
Portfolio duration		**2.22**		2.64

Bond Reserves and Lake Mathews Segment

Investments in the bond reserves were managed based on the requirements of each of the bond issues. The Lake Mathews trust funds were managed in a manner that preserved the principal and provided the necessary liquidity to pay its operating expenses. Per Board authorization, the Treasurer was authorized to invest these monies in excess of five years.

As of June 30, 2019 and 2018, Metropolitan's investments and portfolio durations for this segment were as follows:

	June 30,			
	2019		2018	
(Dollars in thousands)	**Fair value**	**Duration**	Fair value	Duration
U.S. Treasury securities	**$ 3,567**	**1.24**	$ 16,997	3.33
Federal agency securities	**249**	**0.77**	808	0.11
Prime commercial paper	**—**	**—**	364	0.06
Medium-term corporate notes	**—**	**—**	2,298	0.08
Money Market Funds	**755**	**—**	—	—
Municipal bonds	**1,343**	**4.13**	9,602	7.61
Total portfolio segment	**$ 5,914**		$ 30,069	
Weighted average duration		**1.71**		4.32

Credit risk. Credit risk was managed by purchasing investments with the nationally recognized credit ratings specified in Metropolitan's investment policy. Additionally, the policy required monitoring the credit ratings of securities held in the portfolio, and if the securities' credit ratings were downgraded, evaluating for potential sale. For certain securities, additional requirements included consideration of net worth, length of time in business, and specified market values.

Presented in the following table is the minimum rating required, if applicable, by investment type pursuant to Metropolitan's investment policy and State law:

Investment Type	Minimum Rating
U.S. Government and agencies	Not applicable.
Bankers' acceptances Prime commercial paper Negotiable certificates of deposit Time deposits	Prime quality of the highest ranking or highest letter and numerical rating ('A1', 'P1', 'F1' or higher) as provided by Moody's Investors Service, Inc., Standard & Poor's Global Ratings Services, and Fitch Ratings. Credit requirement may be waived for the maximum deposit that is insured by the Federal Deposit Insurance Corporation.
Repurchase agreements	Only with primary dealers in government securities or financial institutions with a Moody's Investors Service, Inc. or equivalent rating of 'A' or better.
Investment contracts	Not applicable. Limited to guaranteed investment contracts, or agreements collateralized with U.S. Treasury or agency securities.
Medium-term corporate notes	Rating category of at least 'A' or better, or the equivalent, by a nationally recognized rating agency.
Government-sponsored enterprise (e.g., FannieMae, FreddieMac)	Issuer's debt must be rated 'A' or higher as provided by a nationally recognized rating agency and the security must be rated in a category of 'AAA' by a nationally recognized rating agency.
Local Agency Investment Fund	Not applicable.
Shares of beneficial interest/ Money Market Funds	Highest ranking of the highest letter and numerical rating provided by not less than two nationally recognized rating agencies.
California local agency securities Municipal bonds	Securities with a maturity in excess of five years must have a credit rating of at least 'AA' (may be insured) and an underlying credit rating of 'A' or better by a nationally recognized rating agency.

Metropolitan's minimum rating for government-sponsored enterprises (GSE) of 'AAA' is more restrictive than the California Government Code requirement of 'AA'.

At June 30, 2019 and 2018, Metropolitan's portfolio was invested in the following securities by rating:

		June 30,			
		2019		2018	
(Dollars in thousands)	Rating	**Fair value**		Fair value	
U.S. Treasury securities	N/A[1]	**$**	**88,340**	$	253,645
U.S. Guarantees – GNMAs	N/A[1]		**—**		3
Federal agency securities	AAA[2]		**82,406**		82,090
Prime commercial paper	A1/P1[3]		**134,176**		173,600
Medium-term corporate notes	A[3]		**277,392**		102,553
Negotiable certificates of deposit	F1[3]		**230,648**		281,978
Money Market Funds	AAA		**241,988**		355
Government-sponsored enterprise (GSE)	AAA		**64,022**		61,470
Municipal bonds	A[3]		**2,111**		10,324
Local Agency Investment Fund	N/A[4]		**65,000**		63,073
Total portfolio		**$**	**1,186,083**	$	1,029,091

[1] *Credit ratings are not applicable to obligations of the U.S. Government or obligations explicitly guaranteed by the U.S. Government.*
[2] *Federal Agencies are rated "AAA" by two nationally recognized rating agencies and "AA" by one nationally recognized rating agency.*
[3] *A or better e.g. F1+, A1+, AA, or AAA.*
[4] *Local Agency Investment Fund is not rated.*

Concentration of credit risk. In accordance with Metropolitan's investment policy, the minimum requirements for limiting concentration of credit risk defined the maximum percent allowable for investment in each security type as well as the percent allowable for investment by issuer per type. Generally, the maximum allowable for investment by security type varied from 20 percent, for GSE, to 100 percent for U.S. Treasury and agency securities. The percentages of investments that can be purchased by a single issuer, within each security type, ranged from 5 percent, for asset-backed securities, to 10 percent for bankers' acceptances.

The following table identifies Metropolitan's limits and the percent invested by security type based on fair value, as of June 30, 2019 and 2018.

	Investment Policy Limits	Percent of Portfolio	
		2019	2018
U.S. Treasury securities	100%	**8 %**	25 %
Federal agency securities	100%	**7 %**	8 %
Prime commercial paper	25%	**11 %**	17 %
Medium-term corporate notes	30%	**23 %**	10 %
Negotiable certificates of deposit	30%	**20 %**	27 %
Money Market Funds	20%	**20 %**	— %
Government-sponsored enterprise (GSE)	20%	**5 %**	6 %
Municipal bonds	30%	**— %**	1 %
Local Agency Investment Fund	N/A	**6 %**	6 %
Total portfolio		**100 %**	100 %

At June 30, 2019 and 2018, Metropolitan had the following investments (obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government not listed) representing five percent or more of its investments:

(Dollars in thousands)		**2019**	
Local Agency Investment Fund	**$**	**65,000**	**5.48 %**
Federal National Mortgage Association [1]	**$**	**60,064**	**5.06 %**

[1] *Invested in Federal agency securities*

(Dollars in thousands)		2018	
Local Agency Investment Fund	$	63,073	6.13 %
Mizuho Bank [1]	$	55,847	5.43 %

[1] *Invested in prime commercial paper and certificates of deposit*

Custodial credit risk. At June 30, 2019 and 2018, Metropolitan's investments were insured, registered or held, in Metropolitan's name, in safekeeping at Metropolitan's bank, which was not a counterparty to the investment transactions. The exceptions were $65.0 million and $63.1 million in deposits in the California State managed LAIF as of June 30, 2019 and 2018, respectively.

The LAIF, created by California statute, is part of a pooled money investment account (PMIA). The LAIF has oversight by the Local Investment Advisory Board, which consists of five members designated by statute. The Chairwoman is the State Treasurer, or her designated representative.

The total amount invested by all public agencies in LAIF as of June 30, 2019 and 2018 was $24.6 billion and $22.5 billion, respectively. At June 30, 2019 and 2018, the PMIA had a balance of $105.7 billion and $88.8 billion, respectively, of which, 1.77 percent and 2.67 percent were invested in medium-term and short-term notes and asset-backed securities, respectively. The average maturity of LAIF investments as of June 30, 2019 and 2018 was 173 days and 193 days, respectively.

(c) Reverse Repurchase Agreements

Metropolitan is permitted, subject to conditions imposed by State law, to sell securities owned under written agreements and to buy back the securities on or before a specified date for a specified amount. No such reverse repurchase agreements were entered into during the fiscal years ended June 30, 2019 and 2018.

(d) Restricted Cash and Investments

Metropolitan has established a number of separate accounts, also referred to as funds, to provide for specific activities in accordance with special regulations, bond covenants, and trust arrangements. The accounts are classified as "restricted." Most restricted accounts have the minimum cash and investment balance requirements and all are nondiscretionary in terms of the use of assets. Among other things, the restricted amounts provide for payments of debt service on Metropolitan's bonds; reserves for principal and interest on outstanding bonds; payments for arbitrage tax rebate; construction of capital assets; payment of Metropolitan's operations and maintenance expenses; and payment of the costs related to the closure and postclosure maintenance of Metropolitan's solid waste landfill facility.

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4. PARTICIPATION RIGHTS

Participation rights activity, excluding participation rights in State Water Project, for the fiscal years ended June 30, 2019 and 2018 was as follows:

(Dollars in thousands)	June 30, 2017	Additions
Participation rights:		
Imperial Irrigation District	$ 112,313	$ —
Palo Verde Irrigation District	82,804	—
Kern Water District	39,007	—
South County Pipeline	72,371	—
Semitropic Water Storage District	34,919	—
Arvin-Edison Water Storage District	47,187	—
Chino Basin	27,500	—
Orange County	23,000	—
Conjunctive Use Programs	20,608	—
Total	459,709	—
Accumulated amortization:		
Imperial Irrigation District	(56,692)	(2,270)
Palo Verde Irrigation District	(28,731)	(2,343)
Kern Water District	(15,115)	(2,172)
South County Pipeline	(22,195)	(912)
Semitropic Water Storage District	(16,935)	(976)
Arvin-Edison Water Storage District	(20,287)	(1,467)
Chino Basin	(11,994)	(1,454)
Orange County	(9,858)	(1,195)
Conjunctive Use Programs	(8,456)	(1,025)
Total	(190,263)	(13,814)
Participations rights, net	$ 269,446	$ (13,814)

Reductions	June 30, 2018	**Additions**	**Reductions**	**June 30, 2019**
$ —	$ 112,313	**$ —**	**$ —**	**$ 112,313**
—	82,804	**—**	**—**	**82,804**
—	39,007	**—**	**—**	**39,007**
—	72,371	**—**	**—**	**72,371**
(220)	34,699	**—**	**(440)**	**34,259**
—	47,187	**—**	**—**	**47,187**
—	27,500	**—**	**—**	**27,500**
—	23,000	**—**	**—**	**23,000**
—	20,608	**—**	**—**	**20,608**
(220)	459,489	**—**	**(440)**	**459,049**
—	(58,962)	**(2,270)**	**—**	**(61,232)**
—	(31,074)	**(2,343)**	**—**	**(33,417)**
—	(17,287)	**(2,172)**	**—**	**(19,459)**
—	(23,107)	**(912)**	**—**	**(24,019)**
—	(17,911)	**(958)**	**—**	**(18,869)**
—	(21,754)	**(1,467)**	**—**	**(23,221)**
—	(13,448)	**(1,454)**	**—**	**(14,902)**
—	(11,053)	**(1,195)**	**—**	**(12,248)**
—	(9,481)	**(1,025)**	**—**	**(10,506)**
—	(204,077)	**(13,796)**	**—**	**(217,873)**
$ (220)	$ 255,412	**$ (13,796)**	**$ (440)**	**$ 241,176**

(a) Imperial Irrigation District

In December 1988, Metropolitan and the Imperial Irrigation District (IID) entered into a water conservation agreement that became effective in December 1989. Under the terms of the conservation agreement, Metropolitan paid for capital costs and continues to pay annual costs for specific conservation projects within IID. From 1998 to 2003, Metropolitan diverted from the Colorado River a quantity of water equal to the amount of water conserved by the conservation projects, which totaled between 104,940 and 109,460 acre-feet annually. Under the October 2003 amendment to an agreement and at the request of the Coachella Valley Water District (CVWD), up to 20,000 acre-feet of the total conserved volume was made available to CVWD. Under the May 2007 amendment to the agreement and a December 2014 letter agreement, at least 85,000 and 105,000 acre-feet will be/was available in calendar years 2019 and 2018, respectively (see Note 9c). The water must be used in the calendar year the water is conserved, unless stored in a Colorado River reservoir pursuant to a separate agreement.

As capital projects were completed, the costs contributed by Metropolitan were capitalized as participation rights in Metropolitan's accounting records. The construction phase of this program was completed as of September 30, 1998, and the operation and maintenance phase commenced on October 1, 1998. The October 2003 amendment to the agreement extended the term through December 31, 2041 or 270 days beyond the termination of the Quantification Settlement Agreement plus any extension applicable over the agreement (see Note 9e).

Participation rights for this project totaled $112.3 million as of June 30, 2019 and 2018, and are amortized using the straight-line method over the remaining life of the agreement. Amortization expense totaled $2.3 million in fiscal years 2019 and 2018.

(b) Palo Verde Irrigation District

In August 2004, Metropolitan entered into an agreement with PVID to implement a 35-year land management and crop rotation program. This fallowing program commenced in January 2005 and will extend through July 2040 and will make available up to 130,000 acre-feet of water in certain years for transfer to Metropolitan from PVID.

Under the terms of the agreement, Metropolitan paid for all program start-up costs that have been capitalized as participation rights. These costs included sign-up payments to individual landowners, funding for a community improvement program and program setup costs.

Participation rights for this program totaled $82.8 million as of June 30, 2019 and 2018, and are being amortized using the straight-line method over 35 years. Amortization expense totaled $2.3 million in fiscal years 2019 and 2018.

(c) Kern Delta Water District

Metropolitan entered into an agreement with the Kern Delta Water District for the development of a water management program. The agreement includes a Regulation Program and a Transportation Program. Under the terms of the Regulation Program, Kern Delta will regulate the storage and delivery for Metropolitan of up to 250,000 acre-feet of water and currently has 154,421 acre-feet in the program. The program is intended to provide a minimum recharge and return capability of 50,000 acre-feet annually. Construction of infrastructure is required in order to meet the program's dry year minimum return. The transportation program provides Metropolitan with priority rights to convey water acquired by Metropolitan from third parties through the Kern-Delta facilities to the

California Aqueduct for ultimate delivery to Metropolitan. This program terminates on December 31, 2029. The facilities became operational in June 2010.

Participation rights for the Kern Delta totaled $39.0 million as of June 30, 2019 and 2018, and are being amortized using the straight-line method over the remaining life of the agreement. Amortization expense totaled $2.2 million in fiscal years 2019 and 2018.

(d) South County Pipeline

In 1989, Metropolitan entered into an agreement with two member agencies and one of their subagencies to participate in the construction of an upsized version of a 26-mile long pipeline serving the south Orange County portion of its service area. Participation in this project provides Metropolitan capacity to transport its water in the central part of its service area.

Participation rights for this project totaled $72.4 million as of June 30, 2019 and 2018. These participation rights are amortized using the straight-line method over 80 years, which is the life of the agreement. Amortization expense totaled $0.9 million in fiscal years 2019 and 2018.

(e) Semitropic Water Storage District

In December 1994, Metropolitan entered into a water banking and exchange program with Semitropic Water Storage District and its improvement districts that entitles it to storage, withdrawal, and exchange rights for its State Water Project supplies. The agreement terminates in November 2035.

In 1999, Metropolitan became fully vested for 35 percent of the one million acre-foot banking project. Metropolitan has a storage allocation of 350,000 acre-feet and currently has 220,515 acre-feet in the program. Metropolitan is entitled to a minimum of 31,500 acre-feet per year of pump back capacity. In addition, assuming a 100 percent State Water Project allocation, Metropolitan is entitled to a minimum of 46,550 acre-feet per year of entitlement exchange rights. Finally, Metropolitan has the ability to use other banking partners' rights when they are not being used. As a result, the potential maximum return capability for Metropolitan is estimated at 223,000 acre-feet per year assuming a 100 percent State Water Project allocation and usage of the other banking partners' rights. In fiscal year 2015, Metropolitan spent $5.8 million to increase the return capacity by 13,200 acre-feet per year. Since then, the additional return capacity has been reduced to 6,700 acre-feet per year after Metropolitan received reimbursement of $2.9 million.

Participation rights for this program totaled $34.3 million and $34.7 million as of June 30, 2019 and 2018, respectively. These participation rights are amortized using the straight-line method over the remaining life of the agreement. Amortization expense totaled $1.0 million in fiscal years 2019 and 2018.

(f) Arvin-Edison Water Storage District

In December 1997, Metropolitan entered into an agreement for a water management program with Arvin-Edison Water Storage District (Arvin-Edison). The agreement includes a regulation program, a transportation program, and a water quality exchange program. Under the terms of the regulation program, Arvin-Edison will regulate the storage and delivery for Metropolitan of up to 350,000 acre-feet of water and currently has 143,338 acre-feet in the program. The minimum estimated return capability for the Arvin-Edison program varies from 40,000 acre-feet per year to 75,000 acre-feet per year depending on hydrologic/groundwater conditions. Return water will be delivered to Metropolitan upon request through a new intertie pipeline to the California Aqueduct and by exchange of existing Arvin-Edison supplies in the California Aqueduct. In 2008, Metropolitan amended the agreement to construct the south canal improvement project that will improve the operational flexibility of the program as well as increase the ability to return high quality water to the California Aqueduct. The project was completed in early 2009. The agreement terminates on November 4, 2035 with provisions for automatic extension if all stored water has not been returned.

The agreement also provides a transportation program whereby Metropolitan is provided priority rights to convey water acquired by Metropolitan from third parties through the Arvin-Edison facilities to the California Aqueduct for ultimate delivery to Metropolitan.

Participation rights for the Arvin-Edison program totaled $47.2 million as of June 30, 2019 and 2018. These participation rights are amortized using the straight-line method over the remaining life of the agreement. Amortization expense totaled $1.5 million in fiscal years 2019 and 2018.

(g) Chino Basin

In June 2003, Metropolitan entered into a groundwater storage agreement with Inland Empire Utilities Agency, Three Valleys Municipal Water District, and the Chino Basin Watermaster. Under the terms of the agreement, Metropolitan may store up to 25,000 acre-feet per year to a maximum of 100,000 acre-feet and may withdraw up to 33,000 acre-feet per year for overlying demand during dry, drought, or emergency conditions. The facilities became operational during fiscal year 2009. As of June 2018, Metropolitan had 46,320 acre-feet water in storage. The agreement terminates on March 1, 2028, unless the parties agree to extend for an additional maximum period of 25 years.

Participation rights in the Chino basin groundwater storage program totaled $27.5 million as of June 30, 2019 and 2018. These participation rights are amortized using the straight-line method over the remaining life of the agreement. Amortization expense totaled $1.5 million in fiscal years 2019 and 2018.

(h) Orange County

In 2003, Metropolitan entered into a groundwater storage agreement with the Orange County Water District and the Municipal Water District of Orange County to allow Metropolitan to store 66,000 acre-feet in the Orange County Basin. Metropolitan may store up to 16,500 acre-feet per year and withdraw up to 22,000 acre-feet for overlying demand during dry, drought, or emergency conditions. The facilities became operational during fiscal year 2009. As of June 2019, Metropolitan had no acre-feet in storage. The program included the construction of wells and barrier improvements for protection of groundwater supplies from seawater intrusion. The agreement terminates in June 2028, unless the parties agree to extend for an additional maximum period of 25 years.

Participation rights in the Orange County groundwater storage program totaled $23.0 million as of June 30, 2019 and 2018. These participation rights are amortized using the straight-line method over the remaining life of the agreement. Amortization expense totaled $1.2 million in fiscal years 2019 and 2018.

(i) Conjunctive Use Programs

Conjunctive use is the operation of a groundwater basin in coordination with a surface water system to increase total water supply availability, thus improving the overall reliability of supplies. Metropolitan has entered into seven agreements with its member agencies for conjunctive use programs whereby Metropolitan provides funding for construction of water storage and related facilities in exchange for water storage and withdrawal rights. The conjunctive use programs were funded with State Proposition 13 grant dollars. The seven projects are with Long Beach, Long Beach-Lakewood, Compton, Three Valleys, Three Valleys MWD-La Verne, Foothill MWD, and Western MWD-Elsinore Valley MWD. Collectively, these seven projects allow Metropolitan to store up to 45,889 acre-feet with storage of 11,472 acre-feet per year and withdrawal of 15,296 acre-feet per year for overlying demand during dry, drought, or emergency conditions. As of June 2019, Metropolitan had a total of 5,836 acre-feet in storage in these seven accounts. The term of each agreement is 25 years, unless the parties agree to extend for an additional maximum period of 25 years. Termination dates range from July 2027 to December 2031. The programs became operational during fiscal year 2009.

Participation rights in these projects totaled $20.6 million at June 30, 2019 and 2018. These participation rights are amortized using the straight-line method over the remaining lives of the agreements. Amortization expense totaled $1.0 million in fiscal years 2019 and 2018.

5. SHORT-TERM AND LONG-TERM DEBT

Metropolitan's enabling Act specifies that its indebtedness shall be limited to 15 percent of the assessed value of all taxable property within Metropolitan's service area. Existing outstanding debt of $4.335 billion and $4.507 billion at June 30, 2019 and 2018, respectively, represents less than one percent of the June 30, 2019 and 2018 total taxable assessed valuation of $2,917 billion and $2,741 billion, respectively.

Metropolitan's long-term debt consists of general obligation and revenue bond issues as well as other obligations. The general obligation bonds are secured by Metropolitan's authority to levy ad valorem property taxes. The revenue bond obligations are special limited obligations of Metropolitan and are secured by a pledge of Metropolitan's net operating revenues. Such obligations contain certain restrictive covenants, with which Metropolitan has complied. Substantially all of the bond issues contain call provisions. Substantially all of the debt proceeds have been, and are expected to continue to be, utilized to fund new facilities, improvements and betterments, and to refund outstanding bonds.

(a) Commercial Paper and Revolving Notes

Metropolitan may issue up to $200.0 million in commercial paper to fund a portion of its capital investment plan, as approved by Metropolitan's Board. There was no commercial paper issued in fiscal years 2019 and 2018 and no commercial paper was outstanding at June 30, 2019 and 2018. Metropolitan may also issue other forms of short-term debt such as variable rate water revenue bonds and revolving notes (see Notes 5c and 5g).

There were no short-term notes issued or refunded during the fiscal year ended June 30, 2019. No short-term notes were issued during the fiscal year ended June 30, 2018.

Short-term note refunded during the fiscal year ended June 30, 2018 was as follows:

- On November 1, 2017, Metropolitan prepaid the $250.0 million Short-Term Revolving Credit Facilities notes issued in April 2017.

Long-term note issued during the fiscal year ended June 30, 2019 was as follows:

- On August 1, 2018, Metropolitan entered into a Note Purchase and Continuing Covenant Agreement with Bank of America N.A. (BANA, and the 2018 BANA Agreement), for the purchase by BANA and sale by Metropolitan of up to $86.0 million of Metropolitan's Short-Term Revenue Certificates, 2018 Series A (the Series 2018 Notes). Proceeds were used to provide advances or contributions of money to pay for costs related to the California WaterFix. The Series 2018 Notes will bear interest at a variable rate of interest, at a spread of 32 basis points to one-month LIBOR. Under the 2018 BANA Agreement, upon a failure by Metropolitan to perform or observe its covenants, a default in other specified indebtedness of Metropolitan, or other specified events of default, BANA could terminate its commitments and declare all amounts then outstanding to be immediately due and payable. Metropolitan has secured its obligation to pay principal and interest under the 2018 BANA Agreement as a Subordinate Lien Parity Obligation. As of June 30, 2019, $46.8 million of Series 2018 Notes were outstanding.

Long-term note issued during the fiscal year ended June 30, 2018 was as follows:

- In December 2017, Metropolitan sold $198.3 million of notes under the US Bank facility, which was paid down on June 27, 2018, when Metropolitan terminated the US Bank Short-Term Revolving Credit Facility.

(b) General Obligation Bonds

In 1966, voters authorized Metropolitan to incur up to $850.0 million of general obligation bond indebtedness to finance a portion of Metropolitan's capital investment plan. The original amounts, issued as Series A through H under the 1966 authorization, totaled $850.0. Metropolitan has refunded a portion of these general obligation bond issues through the issuance of refunding bonds. A total of $48.1 million and $60.6 million in general obligation refunding bonds were outstanding at June 30, 2019 and 2018, respectively.

The general obligation refunding bond issues include both serial and term bonds that mature in varying amounts through March 2037 at interest rates ranging from 1.5 percent to 5.0 percent. The term bonds are subject to mandatory redemption prior to maturity. All general obligation bonds maturing on or after the earliest applicable call date are subject to optional redemption prior to maturity, callable on interest payment dates, and subject to early redemption.

No general obligation bonds were issued during the fiscal years ended June 30, 2019 and 2018.

(c) Revenue Bonds

Pursuant to a 1974 voter authorization, additional funds, primarily for funding the capital investment plan, are obtained through the sale of water revenue bonds. Revenue bonds may be issued subject to certain conditions, including a requirement that the total of revenue bonds outstanding does not exceed the equity (net position) of

Metropolitan as of the fiscal year end prior to such issuance. Metropolitan has refunded some of these revenue bonds through the issuance of refunding bonds. A total of $3.933 billion and $4.234 billion of revenue bonds and revenue refunding bonds were outstanding at June 30, 2019 and 2018, respectively.

Each fixed rate revenue and revenue refunding bond issue consists of either serial or term bonds or both that mature in varying amounts through July 2045 at interest rates ranging from 1.49 percent to 6.95 percent. The term bonds are subject to mandatory redemption prior to maturity. Substantially all revenue bonds maturing on or after the earliest applicable call date are subject to optional redemption prior to maturity, callable on any interest payment dates, and subject to early redemption.

There were no revenue bonds issued during the fiscal year ended June 30, 2019.

Revenue bond issued during the fiscal year ended June 30, 2018 were as follows:

- On July 3, 2017, Metropolitan issued $80.0 million of Subordinate Water Revenue Bonds, 2017 Series C (Securities Industry and Financial Markets Association [SIFMA] Index Mode), to finance a portion of Metropolitan's capital expenditures. The maturities extend to July 1, 2047 and are subject to an unscheduled mandatory redemption at Metropolitan's option.
- On June 28, 2018, Metropolitan issued $64.3 million of Subordinate Water Revenue Bonds, 2018 Series B, to finance a portion of Metropolitan's capital expenditures. The maturities extend to September 1, 2028 and are not subject to optional and mandatory redemption provisions.

(d) Bond Refundings and Defeasances

Metropolitan has issued Waterworks General Obligation Refunding Bonds, Water Revenue Refunding Bonds, Special Variable Rate Water Revenue Refunding Bonds, and short-term notes to refund various issues of Waterworks General Obligation Bonds, Waterworks General Obligation Refunding Bonds, Water Revenue Bonds, Water Revenue Refunding Bonds, Special Variable Rate Water Revenue Refunding Bonds, and revolving notes previously issued. The net proceeds from these sales were used to redeem the refunded bonds and fund certain swap termination payments or to purchase U.S. Treasury securities that were deposited in irrevocable escrow trust accounts with a bank acting as an independent fiscal agent to provide for all future debt service on the bonds being refunded. As a result, those bonds are considered defeased and the related liabilities have been excluded from Metropolitan's basic financial statements.

Refunding and defeasance transactions during fiscal year 2019 were as follows:

- On January 28, 2019, Metropolitan sold $16.8 million of Waterworks General Obligation Refunding Bonds, 2019 Series A, to refund $20.9 million, Waterworks General Obligation Refunding Bonds, 2009 Series A. The maturities extends to March 1, 2028 and are not subject to redemption provisions prior to maturity.
- On December 20, 2018, Metropolitan issued $137.5 million of Water Revenue Refunding Bonds, 2018 Series B, to refund $169.8 million of Water Revenue Bonds, 2008 Authorization, Series A. The maturity extends to January 1, 2039 and is subject to optional redemption provisions.

- On June 6, 2019, Metropolitan sold $218.1 million of Water Revenue Refunding Bonds, 2019 Series A to refund $5.4 million of Water Revenue Bonds, 2008 Authorization, Series B, $18.7 million of Water Revenue Bonds, 2008 Authorization, Series C, $29.6 million of Water Revenue Bonds, 2008 Authorization, Series D, $106.7 million of Water Revenue Refunding Bonds, 2009 Series B, $91.2 of Water Revenue Refunding Bonds, 2009 Series C, $31.0 million of Water Revenue Refunding Bonds, 2009 Series D, $6.6 million of Water Revenue Refunding Bonds, 2009 Series E, and $13.0 million of Water Revenue Refunding Bonds, 2014 Series C-1. The maturities extends to July 1, 2039 and are subject to optional redemption provisions.
- On June 27, 2019, Metropolitan issued $241.5 million of Subordinate Water Revenue Refunding Bonds, 2019 Series A to refund $59.7 million of Water Revenue Bonds, 2008 Authorization, Series C, $220.4 million of Water Revenue Bonds, 2008 Authorization, Series D, and $11.6 million of Water Revenue Refunding Bonds, 2014 Series G-4. The maturities extend to July 1, 2029, and are not subject to redemption provisions prior to maturity.

Refunding and defeasance transactions during fiscal year 2018 were as follows:

- On July 3, 2017 Metropolitan issued $178.2 million of Subordinate Water Revenue Refunding Bonds, 2017 Series B, to refund $137.4 million of Water Revenue Bonds, 2006 Authorization, Series A, $12.2 million of Water Revenue Refunding Bonds, 2009 Series A2, $52.4 million of Water Revenue Refunding Bonds, 2011 Series A1 and A3, and $12.3 million of Tax-Exempt Flexible Rate Revolving Notes, Series 2017 B-1. The maturity extends to August 1, 2024 and is subject to optional redemption provisions.
- On July 3, 2017 Metropolitan also issued $95.6 million of Subordinate Water Revenue Refunding Bonds, 2017 Series D (SIFMA Index Mode), and $95.6 million of Subordinate Water Revenue Refunding Bonds, 2017 Series E (SIFMA Index Mode), to refund $119.9 million of Water Revenue Bonds, 2006 Authorization Series A, $63.9 million of Water Revenue Refunding Bonds, 2011 Series A1 and A3, and $14.3 million of Water Revenue Refunding Bonds, 2014 Series G-2. The maturities extend to July 1, 2037 and are subject to an unscheduled mandatory redemption at Metropolitan's option.
- On December 18, 2017, Metropolitan sold $198.3 million of tax-exempt variable rate parity obligations under the Short-Term Revolving Credit Facility with US Bank to refund $49.8 million of Water Revenue Refunding Bonds, 2011 Series A-2, $49.8 million of Water Revenue Refunding Bonds, 2011 Series A-4, $49.3 million of Water Revenue Refunding Bonds, 2012 Series B-1, and $49.3 million of Water Revenue Refunding Bonds, 2012 Series B-2.
- On June 27, 2018, Metropolitan issued $210.0 million of Special Variable Rate Water Revenue Refunding Bonds, 2018 Series A-1 and A-2, to prepay $198.3 million of Tax-Exempt Flexible Rate Revolving Notes, 2016 Series B-2, and refund $11.2 million of Water Revenue Refunding Bonds, 2014 Series G-3. The maturities extend to July 1, 2037, and the bonds are subject to optional and mandatory redemption provisions.
- On June 28, 2018, Metropolitan issued $99.1 million, Subordinate Water Revenue Refunding Bonds, 2018 Series A, to refund $112.3 million, Water Revenue Refunding Bonds, 2008 Series B, and $19.5 million, Water Revenue Refunding Bonds, 2008 Series C. The maturities extend to July, 1, 2023, and the bonds are not subject to optional or mandatory redemption provisions.

These refundings and defeasances were accomplished to take advantage of lower interest rates, to realize economic savings or to eliminate or mitigate certain risks associated with managing its variable rate debt. The transactions resulted in cash flow savings of $182.0 million and $198.9 million and economic gains (difference between the present values of the debt service payments on the old debt and new debt) of $165.2 million and $131.6 million for fiscal years 2019 and 2018, respectively. The net carrying amount of the old debt exceeded the reacquisition price by $8.7 million and $14.4 million is fiscal years 2019 and 2018, respectively, which is deferred and amortized over the original remaining life of the old debt or the life of the new debt, whichever is less. Deferred outflows of loss on bond refundings at June 30, 2019 and 2018 were $24.6 million and $39.1 million, respectively, and the deferred outflows on swap terminations for the same periods were $18.5 million and $27.4 million, respectively.

(e) Interest Rate Swaps

Metropolitan has eight outstanding interest rate swap agreements as of June 30, 2019. These agreements require that Metropolitan pay fixed interest rates and receive interest at variable interest rates which are Metropolitan's hedging derivative instruments.

Metropolitan's interest rate swap portfolio as of June 30, 2019, 2018, and 2017 are summarized on the following table.

(Dollars in thousands)

Associated Bond Issue [1]		Notional Amount	Effective Date	Fixed Rate Paid	Variable Rate Received	Counterparty Credit Rating[2]
2002 A Payor	$	75,838	09/12/02	3.300 %	57.74% of 1MoLIBOR[4]	A3/BBB+/A
2002 B Payor		28,372	09/12/02	3.300 %	57.74% of 1MoLIBOR	Aa2/A+/AA
2003 Payor C-1 C-3		158,597	12/18/03	3.257 %	61.20% of 1MoLIBOR	Aa2/A+/AA-
2003 Payor C-1 C-3		158,597	12/18/03	3.257 %	61.20% of 1MoLIBOR	Aa2/A+/AA
2004 C Payor		7,760	11/16/04	2.980 %	61.55% of 1MoLIBOR	A3/BBB+/A
2004 C Payor		6,350	11/16/04	2.980 %	61.55% of 1MoLIBOR	A3/BBB+/A
2005 Payor		29,058	07/06/05	3.360 %	70.00% of 1MoLIBOR	Aa2/A+/AA
2005 Payor		29,058	07/06/05	3.360 %	70.00% of 1MoLIBOR	A3/BBB+/A
Total swaps	$	493,630				

[1] *These swaps lock in a fixed rate for an equivalent amount of variable rate debt.*

[2] *Credit Ratings - Moody's Investors Service, Standard & Poor's, Fitch Ratings, respectively.*

[3] *Excludes accrued interest.*

[4] *London Interbank Offered Rate.*

	Fair Value as of 6/30[3]			Change in Fair Value in FY	
Swap Termination	**2019**	2018	2017	**2019**	2018
07/01/25	**$ (5,317)**	$ (4,977)	$ (7,991)	**$ (340)**	$ 3,014
07/01/25	**(1,989)**	(1,863)	(2,989)	**(126)**	1,126
07/01/30	**(19,448)**	(15,259)	(22,570)	**(4,189)**	7,311
07/01/30	**(19,449)**	(15,260)	(22,570)	**(4,189)**	7,310
10/01/29	**(897)**	(658)	(996)	**(239)**	338
10/01/29	**(734)**	(538)	(816)	**(196)**	278
07/01/30	**(4,220)**	(2,928)	(4,458)	**(1,292)**	1,530
07/01/30	**(4,220)**	(2,928)	(4,458)	**(1,292)**	1,530
	$ (56,274)	$ (44,411)	$ (66,848)	**$ (11,863)**	$ 22,437

As with its investments, Metropolitan categorizes its liabilities using fair value measurements within the fair value hierarchy established by generally accepted accounting principles and are discussed in Note 3.

Metropolitan has the following recurring fair value measurements as of June 30, 2019 and 2018:

(Dollars in thousands)

		Fair Value Measurements Using		
Associated Bond Issue	**6/30/2019**	**Significant Other Observable Inputs (Level 2)**	6/30/2018	Significant Other Observable Inputs (Level 2)
2002 A Payor	**$ (5,317)**	**$ (5,317)**	$ (4,977)	$ (4,977)
2002 B Payor	**(1,989)**	**(1,989)**	(1,863)	(1,863)
2003 Payor C-1 C-3	**(19,448)**	**(19,448)**	(15,259)	(15,259)
2003 Payor C-1 C-3	**(19,449)**	**(19,449)**	(15,260)	(15,260)
2004 C Payor	**(897)**	**(897)**	(658)	(658)
2004 C Payor	**(734)**	**(734)**	(538)	(538)
2005 Payor	**(4,220)**	**(4,220)**	(2,928)	(2,928)
2005 Payor	**(4,220)**	**(4,220)**	(2,928)	(2,928)
Total swaps	**$ (56,274)**	**$ (56,274)**	$ (44,411)	$ (44,411)

Derivative instruments classified in Level 2 of the fair value hierarchy are valued using an income approach that considers benchmark interest rates, yield curves, and credit spreads.

Pay-Fixed, Receive-Variable

Objective of the Swaps: In order to take advantage of low interest rates in the marketplace, Metropolitan entered into eight separate pay-fixed, receive-variable interest rate swaps at costs that were less than what Metropolitan otherwise would have paid to issue fixed rate debt in the tax-exempt municipal bond market.

Terms: The notional amounts of the swaps match the principal amounts of the associated debt in total. Metropolitan's swap agreements contain scheduled reductions to outstanding notional amounts that are expected to approximately follow scheduled or anticipated reductions in the associated long-term debt.

Fair Values: At June 30, 2019, all pay-fixed, receive-variable swaps had a negative fair value. Because the coupons on Metropolitan's variable rate bonds adjust to changing interest rates, the bonds do not have corresponding fair value changes. The fair values of the swaps were estimated using the zero-coupon method and exclude accrued interest. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps.

Credit Risks: As of June 30, 2019, Metropolitan was not exposed to credit risk on the outstanding pay-fixed, receive-variable swaps that had negative fair values. However, should interest rates change and the fair values of the swaps become positive, Metropolitan would be exposed to credit risk to each swap counterparty in the amount of the derivatives' fair value. Should the counterparties to the transactions fail to perform according to the terms of the swap contract, Metropolitan would face a maximum possible loss equal to the fair value of these swaps.

All swap agreements contain specific collateral requirements that are in effect for Metropolitan and the counterparties. The swaps require different collateral levels based on credit ratings and the fair value of the swap. Generally, the fair value threshold levels are also reduced as the credit ratings are reduced. Collateral on all swaps is to be in the form of U.S. government securities that may be held by the party posting the collateral. Metropolitan had no posted collateral as of June 30, 2019.

Each swap contains cross-default provisions that allow the nondefaulting party to accelerate and terminate all outstanding transactions and to net the transactions' fair values into a single sum to be owed by, or owed to, the nondefaulting party.

As of June 30, 2019, Metropolitan has pay-fixed, receive-variable swap transactions with one counterparty in the amount of $216.0 million or 43.8 percent of the notional amount of Metropolitan's outstanding pay-fixed, receive-variable swap transactions. This counterparty is rated Aa2/A+/AA by Moody's, Standard & Poor's, and Fitch Ratings, respectively.

Basis Risk: The interest rates on Metropolitan's variable rate bonds are expected to be equivalent, but not necessarily equal to the variable rate payments received from counterparties on pay-fixed, receive-variable interest rate swaps. To the extent these variable payments differ, Metropolitan is exposed to basis risk. When the rates received from the counterparties are less than the rates on variable rate bonds associated with the respective swap transactions there is a basis loss. When the rates received from the counterparties are greater than the rates on variable rate bonds associated with the respective swap transactions there is a basis gain. As of June 30, 2019, the interest rates of the variable rate debt associated with these swap transactions range from 1.45 percent to 2.72 percent. Metropolitan's variable rate payments received from the counterparties of these swaps ranged from 1.38 percent to 1.62 percent.

Termination Risk: Metropolitan may terminate any of the swaps if the other party fails to perform under the terms of the swap agreements. If any of the swaps are terminated, the associated variable rate bonds would no longer carry a synthetic fixed interest rate. Also, if at the time of termination the swap has a negative fair value, Metropolitan would be liable to the counterparty for a payment equal to the swap's fair value.

Tax Risk: As with other forms of variable rate exposure and the relationship between the taxable and tax-exempt markets, Metropolitan is exposed to tax risk should tax-exempt interest rates on variable rate debt issued in conjunction with the swaps rise faster than taxable interest rates received by the swap counterparties, due particularly to reduced federal or state income tax rates, over the term of the swap agreement.

(f) Swap Payments and Associated Debt

Using rates as of June 30, 2019, debt service requirements on Metropolitan's swap-related variable rate debt and net swap payments are as follows. As rates vary, variable rate bond interest payments and net swap payments will vary.

(Dollars in thousands)	Variable Rate Bonds Principal	Variable Rate Bonds Interest	Interest Rate Swaps, Net	Total
Year ending June 30:				
2020	$ —	$ 8,683	$ 8,893	$ 17,576
2021	54,965	7,797	8,250	71,012
2022	32,715	7,189	7,394	47,298
2023	33,260	6,605	6,842	46,707
2024	34,630	5,998	6,211	46,839
2025-2029	283,640	13,305	13,612	310,557
2030-2031	54,420	622	651	55,693
Total	$ 493,630	$ 50,199	$ 51,853	$ 595,682

(g) Variable Rate Bonds

The variable rate bonds bear interest at daily and weekly rates ranging from 1.45 percent to 2.72 percent as of June 30, 2019 and 0.55 percent to 2.48 percent as of June 30, 2018. Metropolitan can elect to change the interest rate period of the bonds with certain limitations.

Metropolitan has entered into standby bond purchase agreements (SBPA) with commercial banks to provide liquidity for six separate variable rate bond issues listed in the table below. Bondholders have the right to tender such variable rate bonds to the paying agent on any business day with same day notice. In the event that tendered bonds are not remarketed, the paying agent will draw on the SBPA to pay such bondholders. The draw on the SBPA creates a new debt obligation between Metropolitan and the Bank, called a Bank Bond.

The Bank Bonds that would be issued under the SBPA would initially bear interest at a per annum interest rate equal to, depending on the applicable SBPA, either: (a) one month LIBOR plus 7.50 percent; or (b) the highest of the (i) the Prime Rate plus one percent, (ii) Federal Funds Rate plus two percent, and (iii) seven percent (with the spread or rate increasing in the case of each of (i), (ii) and (iii) of this clause (b) after 90 days). To the extent such bank bonds have not been remarketed or otherwise retired as of the earlier of the 90th day following the draw on the SBPA or the stated expiration date of the related SBPA, Metropolitan's obligation to repay the principal of the Bank Bonds would be payable in semi-annual installments over a period of approximately one, three, or five years, depending on the applicable SBPA. Metropolitan has secured its obligation to repay principal and interest under the SBPAs as a senior lien obligation.

In addition, such bonds are subject to mandatory tender for purchase under certain circumstances, including upon the expiration of the SBPA. Metropolitan intends to either renew the facility or exercise its right to remarket the debt as a long-term financing. The portion that would be due in the next fiscal year in the event that the outstanding variable rate bonds were tendered and purchased by the commercial banks under the standby agreements was $45.4 million and $129.8 million at June 30, 2019 and 2018, respectively.

Metropolitan has the following six variable rate bonds that are supported by a SBPA as of June 30, 2019 and 2018:

(Dollars in thousands)

Bond Issue		Amount	Expiration Date	Interest Rate	Current Amount 2019		2018
Water Revenue Bonds							
2000 Series B-3	$	88,800	3/27/20	Reset Daily	**$ 88,800**	$	—
2017 Series A		80,000	3/27/20	Reset Daily	**80,000**		—
Water Revenue Refunding Bonds							
2018 Series A-1, A-2		210,040	6/25/21	Reset Daily	**—**		—
2016 Series B-1, B-2		103,670	7/19/21	Reset Daily	**—**		—
Total	$	482,510			**$ 168,800**	$	—

Metropolitan has the following eight variable rate bonds that are not supported by a SBPA as of June 30, 2019 and 2018:

(Dollars in thousands)

Bond Issue		Amount	Interest Rate
Water Revenue Refunding Bonds			
2013 Series D	$	87,445	Reset Weekly
2014 Series D		38,465	Reset Weekly
2015 Series A-1, A-2		188,900	Reset Weekly
Subordinate Water Revenue Bonds			
2016 Series A		175,000	1M LIBOR plus % spread
2017 Series C		80,000	SIFMA Index plus % spread
Subordinate Water Revenue Refunding Bonds			
2017 Series D		95,630	SIFMA Index plus % spread
2017 Series E		95,625	SIFMA Index plus % spread
Total	$	761,065	

The Subordinate Water Revenue Bonds, 2016 Series A were issued by Metropolitan through a Continuing Covenant Agreement with BANA (2016 BANA Agreement). The Subordinate 2016 Series A bonds will bear interest at a variable rate at a spread of 32 basis points to one-month LIBOR. The Subordinate 2016 Series A bonds are subject to mandatory tender for purchase on the scheduled mandatory tender date of December 21, 2020, or if directed by BANA upon the occurrence and continuance of an event of default under the 2016 BANA Agreement, five business days after receipt of such direction. A failure by Metropolitan to pay the purchase price of such bonds on the mandatory tender date would constitute an event of default under Metropolitan's Subordinate Debt Resolutions if not remedied within five business days. Metropolitan intends to either extend the 2016 BANA Agreement or remarket the bonds in the public debt market prior to the scheduled mandatory tender date. Metropolitan has secured its obligation to pay principal and interest under the 2016 BANA Agreement as a Subordinate Lien Parity Obligation.

The current terms of the Subordinate Water Revenue Refunding Bonds, 2017 Series D and Series E (SIFMA Index Mode), and the Subordinate Water Revenue Bonds, 2017 Series C (SIFMA Index Mode), require bondholders to tender their bonds for purchase on the scheduled mandatory tender date of July 10, 2020. A failure by Metropolitan to pay the purchase price from the proceeds of remarketing or other funds, for a period of five business days following written notice by any owner of such bonds, will constitute an event of default under Metropolitan's Subordinate Debt Resolutions. Upon the occurrence and continuance of such events of default, the owners of 25 percent in aggregate principal amount of the Subordinate Revenue Bonds then outstanding may elect a bondholders' committee to exercise rights and powers of such owners under the Subordinate Debt Resolutions, including the right to declare the entire unpaid principal of the Subordinate Revenue Bonds then outstanding to be immediately due and payable.

Four series of the variable rate bonds that are not supported by a SBPA are self-liquidity bonds. These variable rate bonds outstanding at June 30, 2019 and 2018 had no long-term take out provisions therefore, the entire principal amount of $314.8 million, may be tendered for purchase upon one week's notice from bondholders. However, on June 25, 2018, Metropolitan entered into a Revolving Credit Agreement (RCA), under which Metropolitan may borrow up to $200.0 million, to pay the purchase price (principal and accrued interest) of any self-liquidity bonds tendered for purchase. Borrowings made by Metropolitan under the RCA initially bear interest at a fluctuating per annum interest rate equal to, at Metropolitan's discretion, either: (a) one month LIBOR plus 1.50 percent; or (b) the higher of (i) the Federal Funds Rate plus 0.50 percent, and (ii) the Prime Rate (increasing in any case periodically, beginning after 90 days). The RCA permits repayment of any borrowed principal funds over ten semi-annual installments beginning 180 days after the funds are borrowed. The RCA has a stated expiration date of June 23, 2023. As a result of the RCA, $114.8 million was reported as current liabilities as of June 30, 2019 and as of June 30, 2018.

As of June 30, 2019 and 2018, the four series of variable rate self-liquidity bonds not supported by a SBPA but are covered by the RCA are as follows:

(Dollars in thousands)

Bond Issue		Amount	Expiration Date	Interest Rate		Borrowing Amount		Current Amount
Water Revenue Refunding Bonds								
2013 Series D	$	87,445	6/23/23	Reset Weekly	$	87,445	$	—
2014 Series D		38,465	6/23/23	Reset Weekly		38,465		—
2015 Series A-1, A-2		188,900	6/23/23	Reset Weekly		74,090		114,810
Total	$	314,810			$	200,000	$	114,810

(h) Long-term Debt Obligation Summary

Interest rates at June 30, 2019 on all outstanding fixed-rate obligations range from 1.49 percent to 6.95 percent. Interest on the variable rate debt is reset either daily or weekly based upon market conditions. Future principal and interest payments in accordance with the debt agreements as of June 30, 2019 are as follows:

(Dollars in thousands)	Principal	Interest	Total
Year ending June 30:			
2020	$ 141,500	$ 148,948	$ 290,448
2021	169,650	141,746	311,396
2022	178,735	133,387	312,122
2023	180,625	124,973	305,598
2024	198,720	116,534	315,254
2025-2029	937,435	473,531	1,410,966
2030-2034	730,475	305,571	1,036,046
2035-2039	855,200	183,715	1,038,915
2040-2044	376,200	50,499	426,699
2045-2048	212,755	6,099	218,854
	$ 3,981,295	$ 1,685,003	$ 5,666,298

Unamortized bond discount and premium, net	307,310
Total debt	4,288,605
Less current portion	(468,037)
Long-term portion of debt	$ 3,820,568

6. LONG-TERM LIABILITIES

Long-term liability activity for the fiscal years ended June 30, 2019 and 2018 is shown on the following table. Payments on the bonds are made from the restricted debt service funds; other long-term debt and the compensated absences liability will be liquidated primarily with water revenues.

(Dollars in thousands)	Maturity Dates	Range of Interest Rates	June 30, 2017	Additions
Waterworks general obligation refunding bonds (Note 5b):				
2009 Series A	3/1/17-3/1/28	4.00%-5.00%	$ 27,000	$ —
2010 Series A	3/1/17-3/1/37	1.50%-5.00%	18,735	—
2014 Series A	3/1/17-3/1/21	2.00%-5.00%	29,170	—
2019 Series A	3/1/20-3/1/28	5.00 %	—	—
Total general obligation and general obligation refunding bonds			74,905	—
Water revenue bonds (Note 5c):				
2000 Series B-3	7/1/29-7/1/35	Variable	88,800	—
2006 Series A	7/1/17-7/1/37	5.00 %	264,475	—
2008 Series A	1/1/18-1/1/39	3.00%-5.00%	174,530	—
2008 Series B	7/1/16-7/1/20	2.75%-4.00%	10,360	—
2008 Series C	7/1/26-7/1/39	5.752%-6.250%	78,385	—
2008 Series D	7/1/21-7/1/39	5.906%-6.538%	250,000	—
2010 Series A	7/1/38-7/1/40	6.95 %	250,000	—
2015 Series A	7/1/18-7/1/45	5.00 %	208,255	—
2016 Subordinate Series A	7/1/41-7/1/45	Variable	175,000	—
2017 Series A	7/1/41-7/1/47	Variable	80,000	—
2017 Subordinate Series C	7/1/45-7/1/47	Variable	—	80,000
2018 Subordinate Series B	9/1/23-9/1/28	5.00 %	—	64,345
Water revenue refunding bonds (Note 5d):				
1993 Series A	8/14/15-7/1/21	5.75 %	70,340	—
2008 Series B	7/1/16-7/1/22	4.00%-5.00%	119,830	—
2008 Series C	7/1/16-7/1/23	3.40%-5.00%	27,255	—
2009 Series A-1, A-2	7/1/20-7/1/30	Variable	12,170	—
2009 Series B	7/1/20-7/1/30	4.00%-5.25%	106,690	—
2009 Series C	7/1/29-7/1/35	5.00 %	91,165	—
2009 Series D	7/1/16-7/1/21	3.00%-5.00%	50,005	—
2009 Series E	7/1/16-7/1/20	4.00%-5.00%	12,715	—
2010 Series B	7/1/16-7/1/28	2.60%-5.00%	74,325	—
2011 Series A-1-A-4	7/1/16-7/1/36	Variable	216,415	—
2011 Series B	7/1/16-7/1/20	3.00%-5.00%	5,080	—
2011 Series C	10/1/17-10/1/36	2.25%-4.00%	147,435	—
2012 Series A	10/1/23-10/1/36	3.25%-5.00%	181,180	—
2012 Series B-1, B-2	7/1/23-7/1/27	Variable	98,585	—
2012 Series C	7/1/16-7/1/21	3.00%-5.00%	175,635	—
2012 Series F	7/1/16-7/1/28	3.00%-5.00%	59,335	—
2012 Series G	7/1/20-7/1/31	3.00%-5.00%	111,890	—
2013 Series D	7/1/29-7/1/35	Variable	87,445	—
2014 Series A	7/1/18-7/1/21	4.00%-5.00%	95,935	—
2014 Series B	7/1/18	1.49 %	10,575	—
2014 Series C-1-C-3	7/1/22-7/1/27	3.00 %	30,335	—
2014 Series D	7/1/16-7/1/32	Variable	38,465	—
2014 Series E	7/1/21-7/1/24	3.50%-5.00%	86,060	—
2014 Series G-2-G-5	7/1/37	2.00%-3.00%	43,275	—
2015 Series A-1, A-2	7/1/35	Variable	188,900	—
2016 Series A	7/1/28-7/1/37	2.00%-5.00%	239,455	—
2016 Series B-1, B-2	7/1/25-7/1/37	Variable	103,670	—
2017 Subordinate Series A	7/1/20-7/1/27	2.00%-2.50%	238,015	—
2017 Subordinate Series B	8/1/20-8/1/24	3.00%-5.00%	—	178,220
2017 Subordinate Series D	7/1/33-7/1/37	Variable	—	95,630
2017 Subordinate Series E	7/1/33-7/1/37	Variable	—	95,625
2018 Series A1, A-2	7/1/19-7/1/37	Variable	—	210,040
2018 Subordinate Series A	7/1/19-7/1/23	5.00 %	—	99,075
2018 Series B	7/1/20-1/1/39	5.00 %	—	—
2019 Series A	7/1/30-7/1/39	5.00 %	—	—
2019 Subordinate Series A	7/1/20-7/1/29	5.00 %	—	—
Total water revenue and water revenue refunding bonds			4,301,985	822,935
Other long-term debt (Note 5e):				
Revolving notes			—	—
Unamortized bond discount and premiums, net			202,848	50,891
Total long-term debt			4,579,738	873,826
Other long-term liabilities (see table next page)			190,570	50,706
Total long-term liabilities			$ 4,770,308	$ 924,532

NOTES TO BASIC FINANCIAL STATEMENTS

(CONTINUED)

June 30, 2019 and 2018

Reductions	June 30, 2018	**Additions**	**Reductions**	**June 30, 2019**	**Amounts Due Within One Year**
$ (6,135)	$ 20,865	$ —	$ (20,865)	$ —	$ —
—	18,735	—	—	18,735	—
(8,170)	21,000	—	(8,440)	12,560	(8,020)
—	—	16,755		16,755	(2,730)
(14,305)	60,600	16,755	(29,305)	48,050	(10,750)
—	88,800	—	—	88,800	(88,800)
(264,475)	—	—	—	—	—
(4,735)	169,795	—	(169,795)	—	—
(2,455)	7,905	—	(7,905)	—	—
—	78,385	—	(78,385)	—	—
—	250,000	—	(250,000)	—	—
—	250,000	—	—	250,000	—
—	208,255	—	(1,990)	206,265	(2,145)
—	175,000	—	—	175,000	—
—	80,000	—	—	80,000	(80,000)
—	80,000	—	—	80,000	—
—	64,345	—	—	64,345	—
(21,200)	49,140	—	(27,300)	21,840	(9,615)
(119,830)	—	—	—	—	—
(27,255)	—	—	—	—	—
(12,170)	—	—	—	—	—
—	106,690	—	(106,690)	—	—
—	91,165	—	(91,165)	—	—
(9,265)	40,740	—	(40,740)	—	—
(2,985)	9,730	—	(9,730)	—	—
(5,170)	69,155	—	(5,355)	63,800	(7,795)
(216,415)	—	—	—	—	—
(1,195)	3,885	—	(1,245)	2,640	(1,295)
(9,155)	138,280	—	(9,530)	128,750	(9,950)
—	181,180	—	—	181,180	—
(98,585)	—	—	—	—	—
(70,705)	104,930	—	(50,135)	54,795	(34,960)
—	59,335	—	—	59,335	(10,450)
—	111,890	—	—	111,890	—
—	87,445	—	—	87,445	—
—	95,935	—	(12,070)	83,865	(45,995)
—	10,575	—	(10,575)	—	—
—	30,335	—	(13,505)	16,830	—
—	38,465	—	—	38,465	—
—	86,060	—	—	86,060	—
(25,465)	17,810	—	(11,605)	6,205	—
—	188,900	—	—	188,900	(114,810)
—	239,455	—	—	239,455	—
—	103,670	—	—	103,670	—
—	238,015	—	—	238,015	—
—	178,220	—	—	178,220	—
—	95,630	—	—	95,630	—
—	95,625	—	—	95,625	—
—	210,040	—	—	210,040	(170)
—	99,075	—	—	99,075	(4,400)
—	—	137,485	—	137,485	(3,975)
—	—	218,090	—	218,090	—
—	—	241,530	—	241,530	—
(891,060)	4,233,860	597,105	(897,720)	3,933,245	(414,360)
—	—	46,800	—	46,800	—
(41,240)	212,499	146,302	(51,491)	307,310	(42,927)
(946,605)	4,506,959	806,962	(978,516)	4,335,405	(468,037)
(84,379)	156,897	52,120	(39,782)	169,235	(33,624)
$ (1,030,984)	$ 4,663,856	$ 859,082	$ (1,018,298)	$ 4,504,640	$ (501,661)

(Dollars in thousands)	June 30, 2017	Additions	Reductions	June 30, 2018	**Additions**	**Reductions**	**June 30, 2019**	**Amounts Due Within One Year**
Off-aqueduct power facilities (Note 9f)	$ 10,832	$ —	$ (10,832)	$ —	**$ —**	**$ —**	**$ —**	**$ —**
Accrued compensated absences	46,323	20,616	(19,294)	47,645	**24,929**	**(24,177)**	**48,397**	**(22,000)**
Customer deposits and trust funds	45,757	23,950	(23,535)	46,172	**9,493**	**(6,268)**	**49,397**	**(8,335)**
Workers' Compensation and third party claims (Note 14)	15,677	6,140	(8,238)	13,579	**5,835**	**(6,456)**	**12,958**	**(3,284)**
Fair value of interest rate swaps (Note 5e)	66,848	—	(22,437)	44,411	**11,863**	**—**	**56,274**	**—**
Other long-term liabilities	5,133	—	(43)	5,090	**—**	**(2,881)**	**2,209**	**(5)**
Total other long-term liabilities	$ 190,570	$ 50,706	$ (84,379)	$ 156,897	**$ 52,120**	**$ (39,782)**	**$ 169,235**	**$ (33,624)**

7. PENSION PLAN

(a) General Information about the Pension Plan

Plan Description

All full-time Metropolitan employees are required to participate in Metropolitan's Miscellaneous Plan with CalPERS, an agent multiple-employer public employee defined benefit pension plan. CalPERS acts as a common investment and administrative agent for participating public entities within the State of California. A menu of benefit provisions as well as other requirements is established by State statutes within the Public Employee's Retirement Law. Metropolitan selects optional benefit provisions from the benefit menu by contract with CalPERS and adopts those benefits through Board approval. CalPERS issues a separate comprehensive annual report. Copies of CalPERS' annual financial report may be obtained from its Executive Office, 400 Q Street, Sacramento, CA 95811.

Benefits Provided

CalPERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. Benefits are based on years of credited service, equal to one year of full-time employment. Employees hired prior to January 1, 2013 (Classic members) with five years of total service are eligible to retire at age 50 with statutorily reduced benefits; employees hired after January 1, 2013 (PEPRA members) with at least five years of credited service are eligible to retire at age 52 with statutorily reduced benefits. All members are eligible for improved non-industrial disability benefits after five years of service. The death benefit is one of the following: the Basic Death Benefit, the 1959 Survivor Benefit, or the Optional Settlement 2W Death Benefit.

Contribution Description

Section 20814(c) of the 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. The total plan contributions are determined through CalPERS' annual actuarial valuation process. 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. Metropolitan is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. Metropolitan's total employer contributions were $56.5 million and $31.4 million for the fiscal years ended June 30, 2019 and 2018, respectively. The employee contribution rate was 6.0 percent of annual pay for PEPRA members for the fiscal years ended June 30, 2019 and 2018, respectively, and 7.0 percent of annual pay for Classic members in both years. Metropolitan contributes the full 7.0 percent for Classic members while PEPRA members contribute the full 6.0 percent. At June 30, 2019 and 2018, Metropolitan's pickup of the employee's 7.0 percent share were $11.8 million and $12.5 million, respectively. Payments made by Metropolitan to satisfy contribution requirements that are identified by the pension plan terms as plan member contribution requirements are classified as plan member contributions.

The Plans' provisions and benefits in effect at June 30, 2019 and 2018 are summarized as follows:

	Miscellaneous	
Hire date	Prior to January 1, 2013	On or after January 1, 2013
Benefit formula	2.0% @ 55	2.0% @ 62
Benefit vesting schedule	5 years	5 years
Benefit payments	Monthly for life	Monthly for life
Final average compensation period	12 months	36 months
Sick leave credit	Yes	Yes
Retirement age	50-67	52-67
Monthly benefits as a % of eligible compensation	1.426% to 2.418%	1.0% to 2.5%
Cost of living adjustment	2.0 %	2.0 %
Required employee contribution rates		
2019	7.0 %	6.00 %
2018	7.0 %	6.00 %
Required employer contribution rates		
2019	25.971 %	25.971 %
2018	22.888 %	22.888 %

At June 30, 2017 and 2016, the valuation dates for fiscal years 2019 and 2018, respectively, the following current and former employees were covered by the benefit terms:

	2019	2018
Valuation date	**6/30/2017**	6/30/2016
Inactive employees (or their beneficiaries) currently receiving benefits	**2,136**	2,040
Inactive employees entitled to but not yet receiving benefits	**932**	949
Active members	**1,746**	1,782
Total	**4,814**	4,771

(b) Actuarial Methods and Assumptions Used to Determine Total Pension Liability

Metropolitan's net pension liability is measured as the total pension liability, less the pension plan's fiduciary net position. The net pension liability at June 30, 2019 and 2018 was measured as of June 30, 2018 and 2017, respectively, using an annual actuarial valuation as of June 30, 2017 and 2016, respectively. The actuarial valuations as of June 30, 2017 and 2016 were rolled forward to June 30, 2018 and 2017, respectively, using standard update procedures.

The total pension liabilities for the measurement dates of June 30, 2018 and 2017 were based on the following actuarial methods and assumptions:

Actuarial cost method	Entry Age Normal in accordance with the requirements of GASB 68
Actuarial assumptions	
Discount rate	7.15% in 2018 and 2017
Inflation	2.50% in 2018 and 2.75% in 2017
Salary increases	Varies by entry age and service
Mortality rate table[1]	Derived using CalPERS' Membership Data for all Funds
Post-retirement benefit increase	Contract COLA up to 2.00% and 2.75% in 2018 and 2017, respectively, until Purchasing Power Protection Allowance Floor on Purchasing Power applies, 2.50% and 2.75% thereafter in 2018 and 2017, respectively.

[1] *The mortality table used was developed based on CalPERS' specific data. The table includes 15 years of mortality improvements using Society of Actuaries Scale 90% of scale MP 2016.*

All other actuarial assumptions used in the June 30, 2017 and 2016 valuations were based on the results of an actuarial experience study for the period from 1997 to 2015, including updates to salary increase, mortality and retirement rates. The Experience Study report can be obtained at CalPERS' website under Forms and Publications.

Long-term Expected Rate of Return

The long-term expected rate of return on pension plan investments of 7.15 percent was determined using a building-block method in which 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. Taking into account historical returns of all the funds' asset classes, expected compound (geometric) returns were calculated over the short-term (first 10 years) and the long-term (11+ 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 rounded 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 equal to the single equivalent rate calculated above and and adjusted to account for assumed administrative expenses.

The table below reflects long-term expected real rates of return by asset class.

	Current Target Allocation		Real Return Years 1-10 [2]		Real Return Years 11+ [3]	
Asset Class[1]	**2018**	2017	**2018**	2017	**2018**	2017
Global Equity	**50.00 %**	47.00 %	**4.80 %**	4.90 %	**5.98 %**	5.38 %
Fixed Income	**28.00**	19.00	**1.00**	0.80	**2.62**	2.27
Inflation Assets	**—**	6.00	**0.77**	0.60	**1.81**	1.39
Private Equity	**8.00**	12.00	**6.30**	6.60	**7.23**	6.63
Real Estate	**13.00**	11.00	**3.75**	2.80	**4.93**	5.21
Infrastructure and Forestland	**—**	3.00	**—**	3.90	**—**	5.36
Liquidity	**1.00**	2.00	**—**	(0.40)	**(0.92)**	(0.90)
Total	**100.00 %**	100.00 %				

[1] *In the CalPERS Comprehensive Annual Financial Report, Fixed Income is included in Global Debt Securities; Liquidity is included in Short-term Investments; Inflation Assets are included in both Global Equity Securities and Global Debt Securities.*
[2] *An expected inflation of 2.0 percent used for this period*
[3] *An expected inflation of 2.92 percent used for this period*

Discount Rate

The discount rate used to measure the total pension liability at June 30, 2018 and 2017 measurement dates was 7.15 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers will be made at the current member contribution rates and that contributions from employers will be made at a statutorily required rates, actuarially determined. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

(c) Changes in the Net Pension Liability

The following tables show the changes in net pension liability recognized over the measurement periods of June 30, 2018 and 2017:

	Increase (Decrease)		
(Dollars in thousands)	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (c) = (a) - (b)
Balance at June 30, 2017 (VD)[1]	**$ 2,315,248**	**$ 1,654,331**	**$ 660,917**
Changes recognized for the measurement period:			
Service cost	33,583	—	33,583
Interest on the total pension liability	161,023	—	161,023
Differences between expected and actual experience	(10,039)	—	(10,039)
Changes of assumptions	(15,391)	—	(15,391)
Net plan to plan resources movement		(4)	4
Contributions from the employer	—	48,780	(48,780)
Contributions from employees	—	15,749	(15,749)
Net investment income	—	139,003	(139,003)
Benefit payments, including refunds of employee contributions	(107,646)	(107,646)	—
Administrative expenses	—	(2,577)	2,577
Other miscellaneous income/expense[2]	—	(4,895)	4,895
Net Changes	**$ 61,530**	**$ 88,410**	**$ (26,880)**
Balance at June 30, 2018 (MD)[1]	**$ 2,376,778**	**$ 1,742,741**	**$ 634,037**

[1] The fiduciary net position includes receivables for employee service buybacks, deficiency reserves, and fiduciary self-insurance.

[2] During Fiscal Year 2017-18, as a result GASB 75, CalPERS reported its proportionate share of activity related to post-employment benefits for participation in the State of California's agent OPEB plan. Accordingly, CalPERS recorded a one-time expense as a result of the adoption of GASB 75. Additionally, CalPERS employees participate in various State of California agent pension plans and during Fiscal Year 2017-18, CalPERS recorded a correction to previously reported financial statements to properly reflect its proportionate share of activity related to pensions in accordance with GASB 68.

(Dollars in thousands)	Increase (Decrease) Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (c) = (a) - (b)
Balance at June 30, 2016 (VD)[1]	**$ 2,115,064**	**$ 1,527,402**	**$ 587,662**
Changes recognized for the measurement period:			
Service cost	33,685	—	33,685
Interest on the total pension liability	156,661	—	156,661
Differences between expected and actual experience	(15,804)	—	(15,804)
Changes of assumptions	125,734	—	125,734
Contributions from the employer	—	42,819	(42,819)
Contributions from employees	—	14,895	(14,895)
Net investment income	—	171,562	(171,562)
Benefit payments, including refunds of employee contributions	(100,092)	(100,092)	—
Administrative expenses	—	(2,255)	2,255
Net Changes	**$ 200,184**	**$ 126,929**	**$ 73,255**
Balance at June 30, 2017 (MD)[1]	**$ 2,315,248**	**$ 1,654,331**	**$ 660,917**

[1] *The fiduciary net position includes receivables for employee service buybacks, deficiency reserves, and fiduciary self-insurance.*

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

The following presents the net pension liability of the Plan as of the June 30, 2018 and 2017 measurement dates, calculated using the discount rate of 7.15 percent for both years. The table also shows what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

(Dollars in thousands)	**2019**	2018
Discount Rate -1%	**6.15 %**	6.15 %
Net Pension Liability	**$ 931,668**	$ 960,984
Current Discount Rate	**7.15 %**	7.15 %
Net Pension Liability	**$ 634,037**	$ 660,917
Discount Rate +1%	**8.15 %**	8.15 %
Net Pension Liability	**$ 384,526**	$ 409,894

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued CalPERS GASB 68 Accounting Report for Metropolitan.

Subsequent Events

There were no subsequent events that would materially affect the results presented in this disclosure.

Amortization of Deferred Outflows and Deferred Inflows of Resources

Under GASB 68, gains and losses related to changes in total pension liability and fiduciary net position are recognized in pension expense systematically over time.

The first amortized amounts are recognized in pension expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to pensions and are to be recognized in future pension expense.

The amortization period differs depending on the source of the gain or loss:

Net difference between projected and actual earnings on pension plan investments	5 year straight-line amortization
All other amounts	Straight-line amortization over the expected average remaining service lifetime (EARSL) of all members that are provided with benefits (active, inactive, and retired) as of the beginning of the measurement period

The EARSL for the Plan for the period ending June 30, 2018 measurement date is 3.2 years, which was obtained by dividing the total service years of 15,612 (the sum of remaining service lifetimes of the active employees) by 4,814 (the total number of participants: active, inactive, and retired). The EARSL for the Plan for the June 30, 2017 measurement date is 3.2 years, which was calculated by dividing the total service years of 15,347 by the total number of participants of 4,771. Inactive employees and retirees have remaining service lifetimes equal to zero and total future service is based on the members' probability of decrementing due to an event other than receiving a cash refund.

(d) Pension Expense, Deferred Outflows and Deferred Inflows of Resources Related to Pensions

For the years ended June 30, 2019 and 2018, Metropolitan recognized pension expense of $84.8 million and $92.5 million, respectively. At June 30, 2019 and 2018, Metropolitan has deferred outflows and inflows of resources related to pensions as follows:

	Deferred Outflows of Resources Outflows		Deferred Inflows of Resources Inflows	
(Dollars in thousands)	**2019**	2018	**2019**	2018
Pension contributions subsequent to measurement date	**$ 56,497**	$ 31,404	**$ —**	$ —
Differences between expected and actual experience	**—**	917	**(13,625)**	(15,648)
Changes of assumptions	**47,150**	86,442	**(10,581)**	(2,188)
Net difference between projected and actual earnings on pension plan investments	**3,288**	19,642	**—**	—
Total	**$ 106,935**	$ 138,405	**$ (24,206)**	$ (17,836)

The amounts above are net of outflows and inflows recognized in the pension expense for the fiscal years ended June 30, 2019 and 2018. At June 30, 2019 and 2018, the deferred outflows of resources related to contributions subsequent to the measurement date of $56.5 million and $31.4 million, respectively, will be/was recognized as a reduction of the net pension liability in the fiscal years ended June 30, 2020 and 2019, respectively.

The net differences between projected and actual earnings on pension plan investments, difference between expected and actual experience, and changes of assumptions will be recognized in future pension expense as follows:

(Dollars in thousands)	**Deferred Outflows /(Inflows) of Resources**
Fiscal year ending June 30,	
2020	$ 46,472
2021	3,321
2022	(19,002)
2023	(4,559)
2024	—
Thereafter	—

8. POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS (OPEB)

(a) Plan Description and Benefits Provided

Through CalPERS, Metropolitan offers medical insurance to active and retired employees, as well as their qualified dependents under the Public Employees' Medical and Hospital Care Act (PEMHCA). Under PEMHCA, health coverage for the employee continues into retirement. Current plans offered are PERS Care PPO, PERS Choice PPO, PERS Select PPO, Blue Shield HMO, and Kaiser HMO. Metropolitan participates in the CERBT Fund, which is an agent multiple-employer plan available to employers to pre-fund OPEB benefits. Benefit provisions are established through negotiations between Metropolitan and its various bargaining units, which also apply to retirees. For employees hired on or after January 1, 2012, retirees must have a minimum of 10 years of PERS service and no less than five years of Metropolitan service in order to receive post-employment health benefits in accordance with PERS as per Government Code Section 22893. For employees hired prior to January 1, 2012, retirees are not required to meet the eligibility criteria. This benefit was provided to 1,772 and 1,706 retired Metropolitan employees at June 30, 2019 and 2018, respectively. CalPERS issues a separate comprehensive annual report that includes financial statements for its CERBT Fund. Copies of CalPERS' annual financial report may be obtained from its Executive Office, 400 Q Street, Sacramento, CA 95811.

(b) Funding Policy and Contributions

Contribution requirements are established by Memorandum of Understandings negotiated between Metropolitan and its various bargaining units. During fiscal years 2019 and 2018, Metropolitan contributed up to 100 percent of Blue Shield Access + HMO Bay area regional basic plan rate for represented retirees and up to 90 percent of the PERS Care PPO Los Angeles regional basic plan rate for unrepresented retirees. During fiscal years 2019 and 2018, Metropolitan contributed the full actuarially determined contribution rate of 13.8 percent or $27.3 million and 15.2 percent or $30.1 million, respectively. Employees are not required to contribute to the plan.

(c) Employees Covered

At June 30, 2018 and 2017, the measurement date for fiscal year 2019 and 2018, respectively, the following current and former employees were covered by the benefit terms:

	2019	2018
Measurement Date	**6/30/2018**	6/30/2017
Inactives employees (or their beneficiaries) currently receiving benefits	**1,569**	1,658
Inactive employees entitled to but not yet receiving benefits	**137**	137
Active members	**1,698**	1,747
Total	**3,404**	3,542

(d) Actuarial Assumptions Used to Determine Total OPEB Liability

The total OPEB liability used to calculate the net OPEB liability as of June 30, 2019 and 2018 was determined by an actuarial valuation dated June 30, 2017. For the year end June 30, 2019, the actuarial valuation dated June 30, 2017 was rolled forward to the measurement date of June 30, 2018. The June 30, 2017 actuarial valuation was based on the following actuarial methods and assumptions:

Actuarial cost method	Entry age normal cost
Actuarial assumptions	
Funding policy	Metropolitan pre-funds full ADC
Discount rate	6.75%
Long-term expected rate of return on assets	6.75%
General inflation	2.75% per annum
Crossover test assumptions	Employer contributes full ADC
	Administrative expenses = .05% of assets
Salary increases	3.0% per annum
Mortality, disability, termination, retirement[1]	Derived using CalPERS Membership Data
Mortality improvement	Mortality projected fully generational with Society of Actuaries mortality improvement Scale MP-17
Healthcare cost trend rate	Pre-Medicare: 7.5% for 2019 decreasing to 4.0% for 2076 and later
	Medicare: 6.5% for 2019, decreasing to 4.0% for 2076 and later
Healthcare participation for future retirees	Currently covered: 100%; Currently waived: 90%

[1] *Pre-retirement mortality information was derived from data collected during 1997 to 2011 CalPERS Experience Study dated January 2014 and post-retirement mortality information was derived from the 2007 to 2011 CalPERS Experience Study. The pre-retirement turnover information was developed based on CalPERS' specific data collected during the 2007 to 2011 Experience Study Report.*

The long-term expected rate of return on OPEB plan investments was determined using a building block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class as of June 30, 2019 and 2018 are summarized in the following table:

Asset class	**Target Allocation**	**Long-term expected real rate of return**
Global equity	**57.0 %**	**4.8 %**
Fixed income	**27.0**	**1.5**
TIPS	**5.0**	**1.3**
Commodities	**3.0**	**0.8**
REITs	**8.0**	**3.8**
Total	**100.0 %**	

(e) Discount Rate

The discount rate used to measure the total OPEB liability at June 30, 2018 and 2017 measurement dates was 6.75 percent. The projection of cash flows used to determine the discount rate assumed that Metropolitan contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees and beneficiaries. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

(f) Changes in the OPEB Liability

The following tables shows the changes in the net OPEB liability recognized over the measurement periods of June 30, 2018 and 2017:

	Increase (Decrease)		
(Dollars in thousands)	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) - (b)
Balance at June 30, 2017 (MD)	**$ 448,095**	**$ 207,526**	**$ 240,569**
Changes recognized for the measurement period:			
Service cost	10,325	—	10,325
Interest	30,252	—	30,252
Contributions - employer	—	34,674	(34,674)
Net investment income	—	18,538	(18,538)
Benefit payments	(20,487)	(20,487)	—
Administrative expense	—	(400)	400
Net changes	**$ 20,090**	**$ 32,325**	**$ (12,235)**
Balance at June 30, 2018 (MD)	**$ 468,185**	**$ 239,851**	**$ 228,334**

	Increase (Decrease)		
(Dollars in thousands)	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) - (b
Balance at June 30, 2016 (MD)	**$ 428,645**	**$ 172,720**	**$ 255,925**
Changes recognized for the measurement period:			
Service cost	10,024	—	10,024
Interest	28,951	—	28,951
Contributions - employer	—	33,646	(33,646)
Net investment income	—	20,792	(20,792)
Benefit payments	(19,525)	(19,525)	—
Administrative expense	—	(107)	107
Net changes	**$ 19,450**	**$ 34,806**	**$ (15,356)**
Balance at June 30, 2017 (MD)	**$ 448,095**	**$ 207,526**	**$ 240,569**

(g) Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability of the OPEB Plan as of the June 30, 2018 and June 30, 2017 measurement dates, calculated using the discount rate of 6.75 percent. This table also shows what the net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

(Dollars in thousands)	**2019**	2018
Discount Rate -1%	**5.75 %**	5.75 %
Net OPEB Liability	**$ 288,683**	$ 299,261
Current Discount Rate	**6.75 %**	6.75 %
Net OPEB Liability	**$ 228,334**	$ 240,569
Discount Rate +1%	**7.75 %**	7.75 %
Net OPEB Liability	**$ 178,349**	$ 192,021

(h) Sensitivity of the Net OPEB Liability to Changes in the Health Care Cost Trend Rates

The following presents the net OPEB liability of the OPEB Plan if it were calculated using a healthcare trend rate that is one percentage point lower or one percentage point higher than the current rate, for measurement periods ended June 30, 2018 and 2017:

(Dollars in thousands)	**2019**	2018
Healthcare Trend Rate -1%	**6.5%/5.5 % decreasing to 3.0 %**	6.5%/5.5 % decreasing to 3.0 %
Net OPEB Liability	**$ 170,535**	$ 188,057
Current Healthcare Trend Rate	**7.5%/6.5 % decreasing to 4.0 %**	7.5%/6.5 % decreasing to 4.0 %
Net OPEB Liability	**$ 228,334**	$ 240,569
Healthcare Trend Rate +1%	**8.5%/7.5 % decreasing to 5.0 %**	8.5%/7.5 % decreasing to 5.0 %
Net OPEB Liability	**$ 298,893**	$ 304,532

(i) OPEB Plan Fiduciary Net Position

Detailed information about the OPEB plan's fiduciary net position is available in the separately issued California Employer's Retiree Benefit Trust (CERBT) Fund financial reports.

(j) Recognition of Deferred Outflows and Deferred Inflows of Resources

Gains and losses related to changes in total OPEB liability and fiduciary net position are recognized in OPEB expense systematically over time.

Amounts are first recognized in OPEB expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to OPEB and are to be recognized in future OPEB expense.

The recognition period differs depending on the source of the gain or loss:

Net difference between projected and actual earnings on OPEB plan investments	5 year straight-line amortization
All other amounts	Straight-line amortization over the expected average remaining service lives of all members that are provided with benefits (active, inactive, and retired) as of the beginning of the measurement period

(k) OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB

For the years ended June 30, 2019 and 2018, Metropolitan recognized OPEB expense of $22.8 million and $25.2 million. At June 30, 2019 and 2018, Metropolitan has deferred outflows and inflows of resources related to OPEB as follows:

	Deferred Outflows of Resources		Deferred Inflows of Resources	
(Dollars in thousands)	**2019**	2018	**2019**	2018
OPEB contributions subsequent to measurement date	**$ 32,067**	$ 34,674	**$ —**	$ —
Net difference between projected and actual earnings on OPEB plan investments	**—**	—	**(7,288)**	(6,928)
Total	**$ 32,067**	$ 34,674	**$ (7,288)**	$ (6,928)

The $32.1 million and $34.7 million reported as deferred outflows of resources related to contributions subsequent to the June 30, 2018 and 2017 measurement dates, respectively, will be/was recognized as a reduction of the net OPEB liability during the fiscal years ending June 30, 2020 and 2019, respectively. The $7.3 million and $6.9 million reported as deferred inflows of resources related to OPEB at June 30, 2019 and 2018 will be recognized as expense as follows:

(Dollars in thousands)		Deferred Inflows of Resources
Fiscal year ending June 30,		
2020	$	(2,255)
2021		(2,255)
2022		(2,255)
2023		(523)
2024		—
Thereafter		—

9. COMMITMENTS AND CONTINGENCIES

(a) State Water Contract (see Note 10)

Estimates of Metropolitan's share of the projected fixed costs of the SWP are provided annually by the State. The estimates are subject to future increases or decreases resulting from changes in planned facilities, refinements in cost estimates, and inflation. During the next five years, payments under the State Water Contract, exclusive of variable power costs, are currently estimated by the State to be as follows:

(Dollars in thousands)		State Water Contract Payments
Year ending June 30:		
2020	$	436,659
2021		481,395
2022		475,254
2023		471,481
2024		468,548

According to the State's latest estimates, Metropolitan's long-term commitments under the contract, for capital and minimum operations and maintenance costs, including interest to the year 2035, are as follows:

(Dollars in thousands)		State Water Long Term Commitments
Transportation facilities	$	3,814,200
Conservation facilities		2,495,737
Off-aqueduct power facilities (see Note 9f) (1)		13,036
East Branch enlargement		359,445
Revenue bond surcharge		595,635
Total long-term SWP contract commitments	$	7,278,053

(1) These commitments represent operations and maintenance costs. Metropolitan was relieved of its obligation for capital costs in 2018.

Metropolitan intends to exercise its option to extend its agreement with the State through 2085, which will result in annual minimum operations and maintenance costs through 2085. In addition, the amounts shown above do not contain any escalation for inflation, are subject to significant variation over time because the amounts are based on a number of assumptions, and are contingent on future events. None of the estimated long-term commitments are recorded as liabilities in the accompanying basic financial statements.

(b) Bay/Delta Regulatory and Planning Activities

The State Water Resources Control Board (State Board) is the agency responsible for setting water quality standards and administering water rights throughout California. Decisions of the State Board can affect the availability of water to Metropolitan and other water users throughout California. The State Board exercises its regulatory authority over Bay/Delta watershed supplies by means of public proceedings leading to regulations and decisions.

In September 2006, then Governor Schwarzenegger established a Delta Vision Process to identify a strategy for managing the Delta as a sustainable resource. The process was tied to legislation that created a Blue Ribbon Task Force (BRTF) and cabinet-level committee tasked with developing a durable vision for sustainable management of the Delta over the long-term which addressed a full array of issues, including land use, infrastructure, flood protection, and natural resources including water supply. The BRTF released its final Delta Vision Strategic Plan in October 2008 and a final implementation report was submitted to the Governor in January 2009. Subsequently, the Delta Reform Act of 2009 was enacted, which created the Delta Stewardship Council (DSC), a seven member appointed body charged with developing a Delta Plan to support carrying out the Delta Vision, which the DSC completed on September 1, 2013. The Delta Plan anticipated the need for periodic reviews and updates in response to changing circumstances and conditions in the Delta. The DSC amended the Delta Plan in February 2016 to include an initial set of performance measures in September 2016 to exempt single-year water transfers from consideration as covered actions. DSC adopted three amendments to the Delta Plan in April 2018, with another proposed update on Ecosystem due for completion.

To avoid endangering listed species or adversely modifying their critical habitat, agencies consult with the California Department of Fish and Wildlife Service (CDFW) or similar agencies under section 7 of the California Endangered Species Act (ESA). If a project may adversely affect a listed species, a formal consultation is held with the fish agencies. The consulting service then issues a biological opinion about whether a project is likely to jeopardize a listed species or destroy or adversely modify its critical habitat. The U.S. Bureau of Reclamation (USBR) and the California Department of Water Resources (DWR) have been working with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) on the reconsultation for the Coordinated Long-Term Operation of the Central Valley Project and State Water Project. Earlier this year, USBR released a biological assessment to support consultation under the Endangered Species Act. In June 2019, the USFWS and NMFS completed the effects analyses and submitted them for peer review. A revised draft biological opinion was released on July 31, 2019, for another round of independent peer review and for review by the public water agencies. The final biological opinions are expected to be released before the end of the calendar year. Similarly, the State Department of Water Resources will be consulting with the CDFW regarding permits for operation of the State Water Project under the ESA.

The Bay Delta Conservation Plan (BDCP), which began in 2007, is a voluntary collaboration of state, federal, and local water agencies, state and federal fish agencies, environmental organizations, and other interested parties to provide a comprehensive habitat conservation and restoration program for the Delta. In addition, the BDCP would provide the basis for permits under federal and state endangered species laws for activities covered by the plan based on the best available science, identified sources of funding, and an adaptive management and monitoring program. On April 30, 2015, the state announced its intent to include new alternatives separating the conveyance facilities and habitat restoration measures into two separate permitting efforts namely: California WaterFix and California EcoRestore. Under the California WaterFix, the new water conveyance facilities with proposed design changes would be constructed and operated. On February 12, 2019, Governor Newsom announced the shift to a single tunnel project now referred to as the Delta Conveyance Project. As a result, DWR withdrew the approval of California WaterFix, decertified the Environmental Impact Report, and rescinded various permitting applications including those submitted to the State Water Resources Control Board (SWRCB), U.S. Army Corps of Engineers, and State and federal Endangered Species Acts permits on May 2 and rescinded the California WaterFix Bond Resolution on May 7. The Delta Conveyance Design and Construction Authority (DCA) executive director has been authorized to execute an amendment to the Joint Exercise of Powers Agreement for Planning and Environmental Services in support of the environmental analysis for a potential Delta Conveyance Project. This amendment outlines the agency's relationship with DWR and its scope of activities in support of environmental planning for a new single tunnel Delta conveyance proposal.

On April 29, 2019, Governor Newsom issued an executive order calling for the development of a water resilience portfolio meeting the needs of California's communities, economy, and environment through the 21st century. This includes the governor's vision for a modern water supply infrastructure, a more climate resilient water supply for people and the environment, and the State Water Project in particular must be updated to respond to climate change.

(c) Imperial Irrigation District

As of June 30, 2019, Metropolitan had advanced to the Imperial Irrigation District (IID) a total of $337.0 million for construction costs, operations and maintenance costs, and indirect costs of the conservation projects. Metropolitan remains obligated to pay IID for actual operation and maintenance costs for the remainder of this agreement through at least 2041. In return, Metropolitan will receive 85,000-105,000 acre-feet in 2019 and annually thereafter depending upon the amount used by the CVWD. A total of at least 85,000 and 105,000 acre-feet will be/was available in calendar years 2019 and 2018, respectively, for diversion by Metropolitan (see Note 4a).

(d) Sale of Water by the Imperial Irrigation District to San Diego County Water Authority

In April 1998, the San Diego County Water Authority (SDCWA) and IID executed an agreement (Transfer Agreement) for SDCWA's purchase from IID of Colorado River water that is conserved within IID. SDCWA is a Metropolitan member agency and one of the largest water purchasers from Metropolitan. In October 2003 the Transfer Agreement was revised as part of the Quantification Settlement Agreement (see Note 9e). The amended Transfer Agreement sets the maximum transfer amount at 205,000 acre-feet in 2021, with the transfer gradually ramping up to that amount over an approximately twenty-year period, stabilizing at 200,000 acre-feet per year beginning in 2023.

No facilities exist to provide for delivery of water from IID to SDCWA. In 1998, Metropolitan and SDCWA entered into an agreement for the exchange of the IID water to be acquired by SDCWA under the Transfer Agreement, with water to be delivered by Metropolitan. In 2003, the boards of directors of Metropolitan and SDCWA agreed to an increase in the price that SDCWA would pay to Metropolitan for this exchange of water, in return for Metropolitan's assignment to SDCWA of Metropolitan's rights to water conserved as a result of the lining of the All-American and Coachella Canals and $235 million, as set forth in an amended exchange agreement (Exchange Agreement) and an Allocation Agreement. Under the Exchange Agreement, SDCWA makes available to Metropolitan at its intake at Lake Havasu on the Colorado River the conserved Colorado River water acquired by SDCWA from IID and the conserved canal lining water allocated to SDCWA. In exchange, Metropolitan delivers an equal volume of water from its own sources of supply through its delivery system to SDCWA. The deliveries to both Metropolitan and SDCWA are deemed to be made in equal monthly increments. SDCWA pays Metropolitan a volumetric price for each delivery by Metropolitan. The price payable by SDCWA is calculated using the charges set by Metropolitan's Board from time to time to be paid by its member agencies for the conveyance of water through Metropolitan's facilities (see Note 1c). SDCWA has challenged the validity of Metropolitan's charges for conveyance of water that became effective January 1, 2011 and January 1, 2012, in San Diego County Water Authority v. Metropolitan Water District of Southern California; et al. On June 8, 2012, SDCWA filed a separate lawsuit challenging the rates adopted by Metropolitan's Board on April 10, 2012 and effective on January 1, 2013 and January 1, 2014. On May 30, 2014, SDCWA filed a separate lawsuit challenging the rates adopted by Metropolitan's Board on April 8, 2014 and effective on January 1, 2015 and January 1, 2016. On April 13, 2016, SDCWA filed a separate lawsuit challenging the rates and charges adopted by Metropolitan's Board on April 12, 2016 and effective on January 1, 2017 and January 1, 2018. On June 8, 2018, SDCWA filed a separate lawsuit challenging the rates and charges adopted by Metropolitan's Board on April 10, 2018 and effective on January 1, 2019 and January 1, 2020. The Exchange Agreement requires Metropolitan to pay the disputed portion of the amount paid by SDCWA under the Exchange Agreement and interest thereon to SDCWA, if SDCWA prevails in a dispute over the price payable by SDCWA under the Exchange Agreement. See Claims and Litigation, Note 9h.

(e) Quantification Settlement Agreement

The Quantification Settlement Agreement (QSA) is part of the California Plan, which is a plan to reduce California's use of Colorado River water to its basic apportionment of 4.4 million acre-feet per year when necessary through water conservation, transfers from higher priority agricultural users to Metropolitan's service area, and storage programs. The QSA was executed in October 2003 and establishes Colorado River water use limits for IID and the CVWD. It also provides for specific acquisitions of conserved water and water supply arrangements for up to 75 years and restores the opportunity for Metropolitan to receive any special surplus water.

(f) Abandoned Off-Aqueduct Power Facilities

DWR financed the construction of certain off-aqueduct power facilities in order to provide power for water transportation purposes for the State Water Project system. Two geothermal facilities were abandoned by DWR due to insufficient steam supply to operate the plants at their planned capacities. As a result of these actions by DWR, Metropolitan recorded losses of $204.1 million in prior fiscal years. Metropolitan's estimated remaining long-term contractual obligations as of June 30, 2017, was $9.6 million which was based on the State's latest estimates, including average interest of 5.2 percent through the year 2027. However, the State relieved Metropolitan of its obligation during the year ended June 30, 2018.

(g) Construction Programs and Contracts

The estimated cost, excluding contingencies, of Metropolitan's capital program for fiscal years 2020 through 2024 totals approximately $1.46 billion. However, due to various uncertainties such as lower than anticipated construction bids, permitting delays, and facility shutdowns constraints, capital spending is budgeted at $250 million per year for the fiscal years 2020 through 2024.

Over the next three years, Capital Investment Plan spending totals approximately $845 million with over $650 million targeted for major efforts such as mechanical and electrical refurbishments to major components of the Colorado River Aqueduct and Metropolitan's water treatment plants, refurbishment/replacement of pressure control facilities throughout the distribution system, replacement of reservoir floating covers and liners and seismic upgrades to appurtenant components, rehabilitation through relining of the Prestressed Concrete Cylinder Pipe portions of the Allen McColloch and Rialto Pipelines, and Calabasas, Second Lower, and Sepulveda feeders, replacement/upgrade to the Supervisory Control and Data Acquisition (SCADA) system, and the Los Angeles headquarters building seismic and security upgrades.

Metropolitan had commitments under construction contracts in force as follows:

	June 30,	
(Dollars in thousands)	**2019**	2018
Second Lower Feeder PCCP rehabilitation - reach 2	**$ 52,273**	$ —
MWD headquarters building improvements	**36,470**	—
Diemer west basin and filter building rehabilitation	**27,607**	—
Colorado River Aqueduct pumping plants sump rehabilitation	**26,497**	—
Greg Avenue pressure control structure - pump modifications and new control building	**18,360**	—
Colorado River Aqueduct pumping plants 69kV power cables replacement	**16,289**	—
Jensen water treatment plant - modules 2 and 3 flocculator rehabilitation	**8,888**	—
Weymouth chlorination system upgrades	**7,614**	—
Orange County region service center	**4,872**	8,726
Orange County feeder and extension relining - reach 2	**3,512**	—
Refurbish filter valve actuators for Diemer water treatment plant	**3,222**	—
Second Lower Feeder PCCP rehabilitation - reach 4	**2,673**	—
Weymouth domestic water systems improvement	**2,666**	3,740
Electrical upgrades at 15 structures in the Orange County region	**2,456**	—
Furnishing one double column vertical machining center for La Verne shops	**1,964**	—
Intake pumping plant 2.4kV power line relocation	**1,574**	5,554
Furnishing lubricated plug valves for Second Lower Feeder	**1,499**	2,247
Furnishing horizontal axially split centrifugal pumps for the Greg Avenue pump station	**1,314**	1,419
Palos Verdes reservoir cover and liner replacement	**1,200**	4,021
Mills electrical upgrades - stage 1A	**782**	2,308
Furnishing butterfly valves for Weymouth water treatment plant	**772**	—
Colorado River Aqueduct uninterruptible power supply replacement	**708**	920
Garvey reservoir drainage and erosion improvements - areas 2, 3, and 4	**649**	—
Jensen inlet water quality instrumentation enclosure	**437**	949
Eagle Mountain pumping plant reservoir spillway radial gate replacement	**182**	986
Advanced water treatment demonstration facility	**86**	6,774
Colorado River Aqueduct surge chambers discharge line bypass covers	**71**	2,471
Furnishing steel pipe for Second Lower Feeder PCCP rehabilitation - reaches 2 and 4	**—**	12,069
Furnishing valve actuators for Diemer water treatment plant	**—**	5,413
Furnishing butterfly valves for Weymouth water treatment plant	**—**	4,866
Diemer filter outlet conduit seismic upgrade	**—**	3,998
Weymouth west washwater tank seismic upgrades	**—**	2,428
Colorado River Acqueduct pumping plants seismic retrofit 6.9 kV switch houses	**—**	853
Second Lower Feeder PCCP Rehabilitation - reach 1	**—**	497
Jensen solar power facility	**—**	145
Diemer administration building seismic upgrades	**—**	118
Weymouth chemical upgrades	**—**	88
Other	**1,234**	4,352
Total	**$ 225,871**	**$ 74,942**

These commitments are being financed with operating revenues and debt financing.

(h) Claims and Litigation

SDCWA filed San Diego County Water Authority v. Metropolitan Water District of Southern California, et al. on June 11, 2010. The complaint alleges that the rates adopted by the Board on April 13, 2010, which became effective January 1, 2011 and January 1, 2012, misallocate certain State Water Contract costs to the System Access Rate and the System Power Rate, and thus affect charges for transportation of water, resulting in an overcharge to SDCWA by at least $24.5 million per year. The complaint alleges that all State Water Project costs should be allocated instead to Metropolitan's Supply Rate, even though under the State Water Contract Metropolitan is billed separately for transportation, power and supply costs. It states additionally that Metropolitan will overcharge SDCWA by another $5.4 million per year by including the Water Stewardship Rate in transportation charges.

The complaint requested a court order invalidating the rates adopted April 13, 2010, and that Metropolitan be mandated to allocate costs associated with the State Water Contract and the Water Stewardship Rate to water supply rates and not to transportation rates. Rates in effect in prior years are not challenged in this lawsuit.

SDCWA filed its First Amended Petition for Writ of Mandate and Complaint on October 27, 2011, adding five new claims to this litigation, two of which were eliminated from the case on January 4, 2012. The three remaining new claims were for breach of the water Exchange Agreement between Metropolitan and SDCWA (see note 9d) due to a price based on allegedly illegal rates; improper exclusion of SDCWA's payments under this Exchange Agreement from calculation of SDCWA's preferential rights to purchase Metropolitan supplies; and illegality of the rate structure integrity provision in conservation and local resources incentive agreements between Metropolitan and SDCWA. The rate structure integrity provision permitted the Board to terminate incentives payable under conservation and local resources incentive agreements between Metropolitan and a member agency due to certain actions by the member agency to challenge the rates that are the source of incentive payments. In June 2011, Metropolitan's Board authorized termination of two incentive agreements with SDCWA under the rate structure integrity provision in such agreements after SDCWA filed its initial complaint challenging Metropolitan's rates. SDCWA filed a Second Amended Petition for Writ of Mandate and Complaint on April 17, 2012, which contained additional allegations but no new causes of action.

On June 8, 2012, SDCWA filed a new lawsuit challenging the rates adopted by Metropolitan on April 10, 2012 and effective on January 1, 2013 and January 1, 2014. The complaint contained allegations similar to those in the Second Amended Petition for Writ of Mandate and Complaint and new allegations asserting that Metropolitan's rates, adopted in April 2012, violate Proposition 26.

SDCWA filed a Third Amended Petition for Writ of Mandate and Complaint on January 23, 2013, to add new allegations that Metropolitan's rates adopted in April 2010 did not meet the requirements of Proposition 26. The court granted Metropolitan's motion to strike allegations relating to Proposition 26 on March 29, 2013, expressly ruling that SDCWA may not allege a violation of Proposition 26 in its challenge to the rates adopted in April 2010. This ruling did not affect SDCWA's separate challenge to Metropolitan's rates adopted in April 2012, which also includes Proposition 26 allegations.

Following trial of both lawsuits in two phases, concluding on January 23, 2014 and April 30, 2015, respectively, the Superior Court of the State of California, County of San Francisco (the "Superior Court"), issued its Final Judgment and a Peremptory Writ of Mandate in the 2010 and 2012 SDCWA v. Metropolitan cases. Metropolitan appealed the trial court's decision in each case, and SDCWA filed a cross-appeal of the court's ruling on the rate structure integrity claim and an attorneys' fees order.

On June 21, 2017, the California Court of Appeal released its decision in the appeals and cross-appeal filed by Metropolitan and SDCWA, respectively. The Court of Appeal ruled that Metropolitan may lawfully include its State Water Project transportation costs in the System Access Rate and System Power Rate that are part of the Exchange Agreement's price term, and that Metropolitan may also lawfully include the System Access Rate in its wheeling rate, reversing the trial court decision on this issue. The Court held Metropolitan's allocation of the State Water Project transportation costs as its own transportation costs is proper and does not violate the wheeling statutes (Water Code, § 1810, et seq.), Proposition 26 (Cal. Const., Article XIIIC, §1, subd.(e)), California Government Code section 54999.7, the common law, or the terms of the parties' Exchange Agreement.

The Court of Appeal also ruled that the administrative record before it for the rates in calendar years 2011 through 2014 did not support Metropolitan's inclusion of its Water Stewardship Rate as a transportation cost in the Exchange Agreement price or the wheeling rate, under the common law and wheeling statutes. Having made that determination, the Court of Appeal stated it need not evaluate the issue under any other law. The court did not address the allocation of the Water Stewardship Rate in subsequent years based on a different record. The court noted, and in a subsequent modification confirmed, that its holding does not preclude Metropolitan from including the Water Stewardship Rate in Metropolitan's full service rate.

The Court of Appeal held that because the Water Stewardship Rate was included in the Exchange Agreement price, there was a breach by Metropolitan of the Exchange Agreement in 2011 through 2014. The court remanded the case to the trial court for a redetermination of damages in light of its ruling concerning the Water Stewardship Rate. The Court of Appeal agreed with the trial court that statutory prejudgment interest applies with respect to any damages award, not a lesser contractual interest. The Court of Appeal reversed the trial court by finding that the Exchange Agreement may entitle SDCWA to attorneys' fees for the second phase of the case concerning breach of contract; but directed the trial court on remand to make a new determination of the prevailing party, if any. The cases were therefore remanded to the trial court for a review of both damages and attorneys' fees.

With respect to other issues considered on appeal, the Court of Appeal upheld the trial court's ruling that Metropolitan improperly excludes SDCWA's payments under the Exchange Agreement in Metropolitan's calculation of SDCWA's preferential rights. The court also ruled that SDCWA had the constitutional right to challenge the rate structure integrity provision in Metropolitan's conservation and local resources incentive agreements, and found that the rate structure integrity provision was invalid and unenforceable as an unconstitutional condition on the provision of a public benefit.

On September 27, 2017, the California Supreme Court denied SDCWA's petition for review, declining to consider the Court of Appeal's decision. The Court of Appeal's decision is therefore final.

On July 25, 2018, the Superior Court issued an order regarding the scope of the matters to be reconsidered by the Superior Court on remand pursuant to the Court of Appeal decision. With respect to the Superior Court's re-determination of damages in light of the Court of Appeal's ruling that the administrative record for calendar years 2011 through 2014 did not support Metropolitan's inclusion of its demand management costs in the Exchange Agreement price, the Superior Court ruled that it will award SDCWA $28,678,190.90 in contract damages for breach of the Exchange Agreement, plus prejudgment interest at 10 percent per annum. The Superior Court determined that Metropolitan is not entitled in the remand proceedings to show what it could have lawfully charged SDCWA for demand management costs and to deduct that from SDCWA's damages.

The Superior Court further ruled that SDCWA is not entitled in the remand proceedings to litigate the issue of "offsetting benefits" under the wheeling statutes for the parties' Exchange Agreement. The Superior Court found that such claim is both outside the scope of remand and waived.

The Superior Court also ruled that SDCWA is entitled to judgment on its declaratory relief cause of action declaring the rate structure integrity provision in Metropolitan's conservation and local resources incentive agreements invalid and unenforceable, SDCWA is entitled to further proceedings to litigate the issue of an entitlement to monetary restitution for 2011 through 2014, and the parties shall also litigate in further proceedings the issue of what prospective relief SDCWA may be entitled to in connection with this cause of action. Finally, the Superior Court confirmed, as the parties agreed, that it will conduct further proceedings for a redetermination of the prevailing party and attorneys' fees in this matter.

On September 14, 2018, Metropolitan filed a Petition for Writ of Mandate with the California Court of Appeal, requesting the court to require the Superior Court to recalculate contract damages for breach of the Exchange Agreement from years 2011 through 2014, to include a set-off for the additional sums SDCWA would have paid had Metropolitan collected the Water Stewardship Rate through its full service sales as SDCWA argued was correct. On November 1, 2018, the Court of Appeal determined that it would not review the issue at this stage of the cases. Metropolitan may raise this issue again on any later appeal from the cases' final judgment.

Due to SDCWA's litigation challenging Metropolitan's rates, and pursuant to the Exchange Agreement between Metropolitan and SDCWA, as of June 30, 2019, Metropolitan held $56.5 million in a designated fund, the Exchange Agreement Set-Aside Fund. This amount includes the disputed Water Stewardship Rate payments for calendar years 2011 through the present, and interest earned by Metropolitan thereon. The amount held does not include statutory prejudgment interest or any post-judgment interest, attorneys' fees, or costs the Court may award. The Exchange Agreement Set-Aside Fund also does not include any amounts applicable to the rate structure integrity provision declaratory relief cause of action, because that claim does not involve disputed payments under the Exchange Agreement.

On February 14, 2019, Metropolitan tendered to SDCWA payment of $44.4 million for the San Francisco Superior Court's contract damages award for Water Stewardship Rate payments from 2011 through 2014, plus statutory interest through February 15, 2019, with a reservation of appeal rights, in the San Diego County Water Authority v. Metropolitan Water District of Southern California, et al., 2010 and 2012 actions. This tender was made under compulsion to cease accrual of statutory interest in excess of market rates, but did not affect Metropolitan's rights to appeal, including its right to challenge the amount of the damages award. The tendered payment included $31.6 million of amounts withdrawn from the Exchange Agreement Set-Aside Fund and $12.8 million withdrawn from reserves (representing statutory interest). On March 7, 2019, SDCWA rejected the tendered payment and returned the uncashed check for the tendered payment. The returned funds were credited back to the Exchange Agreement Set-Aside Fund and Metropolitan reserves in the amounts drawn. The balance in the Exchange Agreement Set-Aside Fund set forth above includes the returned funds.

In May 2014, SDCWA filed a new lawsuit asserting essentially the same rate claims and breach of contract claim in connection with the Board's April 2014 rate adoption. Metropolitan filed its answer on June 30, 2014. On February 9, 2015, pursuant to stipulation by the parties, the San Francisco Superior Court ordered that the case be stayed. Metropolitan is unable to assess at this time the likelihood of success of this case, any possible appeal or any future claims.

On April 13, 2016, SDCWA filed a new lawsuit that alleges all rates and charges for 2017 and 2018 adopted by Metropolitan's Board on April 12, 2016 violate the California Constitution, statutes, and common law. The Petition for Writ of Mandate and Complaint asserts misallocation of costs as alleged in the previous cases listed above and additional claims of over-collection and misallocation of costs and procedural violations. Following a stipulated order issued by the court on November 10, 2016, SDCWA filed a First Amended Petition for Writ of Mandate and Complaint and the court ordered the case stayed pending final resolution of the 2010 and 2012 SDCWA v. Metropolitan cases' appeals. The amended petition/complaint adds allegations of the same Exchange Agreement breach as in the previous cases listed above and breach of a provision that requires Metropolitan to set aside disputed amounts, relating to the manner in which Metropolitan has set aside the amounts; requests a judicial declaration that, if a judgment is owed to SDCWA under the Exchange Agreement, SDCWA will not be required to pay any portion of that judgment; and requests a refund to SDCWA of any amount Metropolitan has collected in excess of the reasonable costs of the services provided or, alternatively, a reduction in SDCWA's future fees. Metropolitan is unable to assess at this time the likelihood of success of this case, any possible appeal or any future claims.

On June 9, 2017, SDCWA filed a new Petition for Writ of Mandate and Complaint challenging the Readiness-to-Serve Charge and Capacity Charge for 2018 adopted by Metropolitan's Board on April 11, 2017. These two charges are set annually, and SDCWA's 2016 lawsuit included a challenge to these two charges for 2017. The new lawsuit similarly alleges the 2018 Readiness-to-Serve Charge and Capacity Charge violate the California Constitution, statutes, and common law. The petition/complaint asserts misallocation of costs. Metropolitan was served with the petition/complaint on June 20, 2017. On July 18, 2017, SDCWA filed a first amended petition/complaint to add Metropolitan's Board action of July 11, 2017 to make minor corrections to the Readiness-to-Serve Charge. On July 31, 2018, pursuant to stipulation by the parties, the San Francisco Superior Court ordered that the case be stayed. Metropolitan is unable to assess at this time the likelihood of success of this case, any possible appeal or any future claims.

On June 8, 2018, SDCWA filed a new lawsuit that alleges all rates and charges for 2019 and 2020 adopted by Metropolitan's Board on April 10, 2018 violate the California Constitution, statutes, and common law. The Petition for Writ of Mandate and Complaint asserts the Water Stewardship Rate is unlawful per se and its collection in transportation charges is also unlawful; failure to provide wheelers a reasonable credit for "offsetting benefits" pursuant to Water Code Section 1810, et seq., which SDCWA contends (and Metropolitan disputes) applies to the parties' Exchange Agreement; over-collection and misallocation of costs, including misallocation of Metropolitan's California WaterFix costs as its transportation costs; and specified procedural violations. SDCWA states in the Petition and Complaint that it intends to amend its complaint to allege additional claims against Metropolitan, including but not limited to a claim for breach of contract. Following a stipulated order issued by the San Francisco Superior Court on January 10, 2019, SDCWA filed a First Amended Petition for Writ of Mandate and Complaint and the court ordered the case stayed pending final resolution of the 2010 and 2012 SDCWA v. Metropolitan cases. The amended petition/complaint adds a cause of action for breach of the Exchange Agreement alleging Metropolitan charged an unlawful price that includes the Water Stewardship Rate (despite suspension of this charge), failing to provide credit for offsetting benefits, charging transportation rates that are not based on costs of service, including California WaterFix costs, and not following procedural requirements; and requests a refund to SDCWA of any amount Metropolitan has collected in excess of the reasonable costs of the services provided or, alternatively, a reduction in SDCWA's future fees. This 2018 lawsuit has not yet been assigned to a department in the San Francisco Superior Court. Metropolitan is unable to assess at this time the likelihood of success of this case, any possible appeal or any future claims.

(i) Drinking Water Quality Standards

Under the Safe Drinking Water Act Amendments of 1996, Congress required the United States Environmental Protection Agency to set new drinking water quality standards. New standards to control microbial pathogens and disinfection byproducts (DBPs) became effective in 2002. These rules are known as the Interim Enhanced Surface Water Treatment Rule and the Stage 1 Disinfectants/Disinfection By-Product Rule. These standards became more stringent in a second set of regulations effective 2006. The second set of regulations (the Stage 2 Disinfectants/ Disinfection Byproducts Rule and the Long-Term 2 Enhanced Surface Water Treatment Rule) did not require additional capital investment by Metropolitan.

Metropolitan identified ozone disinfection as the most cost-effective option to minimize the production of DBPs and achieve other water quality objectives. Ozone is now used as the primary disinfectant at the Diemer, Jensen, Mills, and Skinner plants. Construction of ozonation facilities at the Weymouth plant was completed in October 2017. The estimated cost of implementing ozone treatment at all five plants is approximately $1.1 billion.

(j) Reid Gardner Generating Station

Reid Gardner Generating Station (Plant) is a 557 megawatt coal-fired plant located near Moapa, Nevada. The Plant is owned and operated by Nevada Energy (NE). In 1983, DWR entered in to a Participation Agreement to import power from the Plant to serve the State Water Project energy needs. DWR's interest in the Plant terminated on July 25, 2013. DWR and NE negotiated the terms of the divestiture including DWR's obligations to mitigate any environmental impacts associated with the electricity generated for DWR over the past thirty years. Metropolitan paid approximately 75.0 percent of DWR's costs associated with the generation of electricity at the Plant and will pay this proportion of DWR's assigned mitigation costs.

(k) Landfill Obligation

Federal and State laws and regulations require that Metropolitan perform certain maintenance and monitoring functions at its sole landfill site for 30 years after closure. They further require that a separate funding mechanism be established to ensure that sufficient funds are available for closure and postclosure costs. In October 1995, the landfill was closed and management's estimate of closure and postclosure costs for this site totaled approximately $2.0 million. The required thirty-year postclosure maintenance and monitoring of the landfill officially started in January 1998; after the installation of the landfill's final cover was completed. Approximately $5,000 and $6,000 were expended during fiscal year 2019 and 2018, respectively, for post closure maintenance and monitoring activities.

The actual cost of postclosure care may be higher due to inflation, changes in technology, or changes in landfill laws or regulations. Funding of these costs has been derived from a separate trust account that has been established for closure and postclosure costs. The balance of the trust account is sufficient to cover the landfill liability. At June 30, 2019 and 2018, approximately $800,000 net of interest receipts and disbursements was available in this account.

10. PARTICIPATION RIGHTS IN STATE WATER PROJECT

Metropolitan is one of 29 water suppliers contracting with the State of California for a system to provide water throughout much of California. Under the terms of the State Water Contract, as amended, Metropolitan is obligated to pay allocable portions of the cost of construction of the system and ongoing operations and maintenance costs through at least the year 2035, regardless of the quantities of water available from the project (see Note 9a). Metropolitan and the other contractors may also be responsible to the State for certain obligations of any contractor who defaults on its payments to the State.

Approximately 32 percent and 34 percent of Metropolitan's total expenditures during fiscal years ended June 30, 2019 and 2018, respectively, pertained to its net payment obligations for the State Water Project. These payments were primarily based on the contractual water delivery request, the annually requested and actual deliveries received, and the cost of power required for such deliveries, offset by credits received from the project.

The State Water Contract provides Metropolitan rights to water through 2052 but Management's present intention is to exercise Metropolitan's option to extend the contractual period to at least 2085, under similar terms, based on the Agreement in Principle reached in 2014. This corresponds to an estimated 125-year service life for the original facilities. The State is obligated to provide specified quantities of water throughout the life of the contract, subject to certain conditions.

The State has power generation facilities associated with its reservoirs and aqueducts. The power generated is utilized by the system for water transportation purposes. Power generated in excess of system needs is marketed to various utilities and California's power market. The revenues resulting from sales of excess power reduce the costs of pumping. Metropolitan and the other water contractors are responsible for repaying the capital and operating costs of the power facilities regardless of the amount of power generated (see Note 9f).

Metropolitan capitalizes its share of system construction costs as participation rights when such costs are billed by the State (see Notes 1h, 2, and 9a). Metropolitan's share of system operations and maintenance costs is charged to expense.

Metropolitan amortizes a portion of capitalized participation rights each month using a formula that considers the total estimated cost of the project, the estimated useful life, and estimated production capacity of the assets based upon information provided by the State of California. In fiscal year 2006, the formula was modified to use maximum annual contracted deliveries as the production capacity estimate as previous estimates of total production were less reliable than expected. Amortization expense totaled $141.7 million and $131.1 million in fiscal years 2019 and 2018, respectively.

11. DEPOSITS, PREPAID COSTS, AND OTHER

Balances at June 30, 2019 and 2018 were as follows:

	June 30,	
(Dollars in thousands)	**2019**	2018
Prepaid water costs	**$ 196,488**	$ 173,736
Prepaid costs-Delta Habitat conservation and conveyance	**58,627**	58,627
Prepaid costs-California WaterFix	**41,500**	—
Prepaid expenses	**10,365**	9,486
Preliminary design/reimbursable projects	**13,116**	13,413
Other	**11,188**	13,452
Total deposits, prepaid costs, and other	**331,284**	268,714
Less current portion	**(2,040)**	(1,611)
Noncurrent portion	**$ 329,244**	$ 267,103

(a) Prepaid Water Costs

Metropolitan has entered into several water exchange and storage agreements with other agencies. These agreements provide Metropolitan with additional reliable water supplies to supplement deliveries of Colorado River and State Water Project water. Metropolitan is also actively pursuing other agreements, both within and outside its service area, to provide additional water supplies. The exchange and storage agreements generally provide for advance delivery of water during periods when water is available. At a later time when water is needed, these programs can then return water to improve Metropolitan's reliability. Expenditures associated with these agreements have been recorded as prepaid costs and are charged to cost of water as the water is withdrawn. At June 30, 2019 and 2018, prepaid water costs totaled approximately $196.5 million and $173.7 million, respectively, based on volumes of 963,000 acre-feet and 856,000 acre-feet, as of such dates.

(b) Prepaid Costs—Delta Habitat Conservation and Conveyance

In March 2009, Metropolitan, other State Water Project contractors, federal Central Valley Project contractors, and the U.S. Department of Interior's Bureau of Reclamation entered into funding agreements with DWR. The agreements are known collectively as the Delta Habitat Conservation and Conveyance Program (DHCCP) Funding Agreement and the Bay Delta Conservation Plan and Delta Habitat Conservation and Conveyance Plan (BDCP - DHCCP) Supplemental Funding Agreement. Metropolitan's three-year DHCCP agreement provides funding of approximately $35.0 million for Metropolitan's share (24 percent). Metropolitan's two-year BDCP-DHCCP agreement provides funding of approximately $25.0 million (25 percent). The funding provided by both agreements supports development of the BDCP which was later on adapted as California WaterFix (see Note 9b) through environmental analysis, planning and design of Delta conservation measures including Delta water conveyance options. Total prepaid costs at June 30, 2019 and 2018 were $58.6 million.

(c) Prepaid Costs—California WaterFix

As of June 30, 2019, Metropolitan disbursed a total of $41.5 million to DWR for preconstruction planning costs of the California WaterFix in accordance with the advance funding agreement entered into in August 2018. The $41.5 million was Metropolitan's share (31 percent) of the funding and DWR intends to refund Metropolitan for funds advanced through this agreement through bond financing actions. However, as a result of the shift to a single tunnel project and DWR's withdrawal of approval of the California WaterFix Project as well as the rescission of other permitting applications (see Note 9b), Metropolitan has requested, on June 27, 2019, that DWR return its contributions that have not been spent as of May 2, 2019. DWR responded that all unspent funds will be remitted after a full accounting has been completed.

(d) Preliminary Design/Reimbursable Projects

Metropolitan engages in preliminary design activities prior to obtaining Board approval of capital projects. The costs of these designs are recorded as prepaid costs. Once Board approval is obtained, these costs are added to the cost of the relevant construction project.

Reimbursable projects include work Metropolitan is contracted to perform for outside, non-related parties, and is subsequently billed for reimbursement.

12. DEFERRED COMPENSATION AND SAVINGS PLANS

For the benefit of its employees, Metropolitan has adopted a deferred compensation plan in accordance with Section 457 of the Internal Revenue Code. Generally, eligible employees may defer receipt of a portion of their salary until termination, retirement, death, or unforeseeable emergency. Until the funds are paid or otherwise made available to the employee, the employee is not obligated to report the deferred salary for income tax purposes.

Investment of the funds is managed by a third-party administrator, accordingly, at June 30, 2019 and 2018, neither the plan assets nor the related liability were included in the accompanying basic financial statements.

The third-party administrator coordinates the investment of the deferred amounts in available investment vehicles per the instructions of each participant. Metropolitan's Treasurer serves as Trustee for the deferred compensation plan. Metropolitan is not liable to its employees for any losses that may be incurred in connection with their participation in this plan.

Metropolitan has established another compensation deferral arrangement in accordance with Section 401(k) of the Internal Revenue Code. The 401(k) Consolidated Savings Plan is available to substantially all employees. At June 30, 2019 and 2018, 1,584 and 1,626 employees, respectively, participated in the consolidated 401(k) plan. Amounts deferred by participants, Metropolitan matching contributions, and accumulated earnings thereon are fully vested. Deferred amounts and matching contributions are transferred by Metropolitan each pay period to a third-party administrator who coordinates the investment of such proceeds in a variety of investment vehicles in accordance with the instructions of each participant. The Treasurer serves as Trustee for the savings plan. Metropolitan is not liable to its employees for any losses that may be incurred in connection with their participation in this plan.

Metropolitan has established a matching contribution program on behalf of each participating employee in the savings plan. Metropolitan's contribution is subject to a maximum of 4.5 percent of the employee's total cash compensation.

Contributions to the savings plan were as follows:

	June 30,	
(Dollars in thousands)	**2019**	2018
Employees	**$ 21,180**	$ 20,543
Metropolitan	**9,135**	8,803
	$ 30,315	$ 29,346
Eligible payroll	**$ 234,018**	$ 222,089
Employee contributions as percent of eligible payroll	**9.1 %**	9.2 %

13. NET POSITION

Net position is classified as either restricted, unrestricted, or net investment in capital assets, including State Water Project Costs.

Net investment in capital assets, including State Water Project costs consist of capital assets, net of accumulated depreciation and amortization, and reduced by the outstanding balances of any bonds, notes, or other borrowings attributable to the acquisition or construction of those assets and deferred outflows and inflows of resources related to debt. Metropolitan's capital assets, including State Water Project costs include plant and equipment (Notes 1g and 2), participation rights in State Water Project (Notes 1h, 2, and 10), and participation rights in other facilities (Notes 2 and 4). Net investment in capital assets, including State Water Project costs were approximately $6.1 billion and $6.0 billion at June 30, 2019 and 2018, respectively.

The restricted component of net position are those items that have external constraints placed on them by creditors, grantors, contributors, or laws or regulations of other governments, or imposed by law through constitutional provisions of enabling legislation. Restricted net position totaled $418.6 million and $407.6 million at June 30, 2019 and 2018, respectively, of which $180.7 million and $201.4 million, respectively, represents principal and interest set aside for the next bond payment. The remaining $237.9 million and $206.2 million, respectively, relates to estimated operating and maintenance expense for July and August of the subsequent fiscal year. Each of these requirements is related to bond covenants.

The unrestricted component of net position are those items that do not meet the definition of "restricted" or "net investment in capital assets, including State Water Project costs." Unlike the restricted net position, the Board has discretion in determining the use and establishing minimum/maximum balance requirements for the unrestricted cash and investment portion of net position. The Board may at any time change or eliminate amounts established for these purposes. Unrestricted net position totaled $286.0 million and $310.1 million at June 30, 2019 and 2018, respectively.

14. RISK MANAGEMENT

Metropolitan is exposed to various risks of loss related to the design, construction, treatment, and delivery of water resources. Metropolitan self-insures most of its property losses, the first $25.0 million for general liability, fiduciary liability and directors' and officers' liability, and $5.0 million for workers' compensation. Metropolitan supplements its self-insurance program with $75.0 million excess general liability coverage, $60.0 million excess fiduciary liability coverage, $65.0 million excess for directors' and officers' liability coverage, and statutory limits excess workers' compensation coverage. Special insurance policies carried include aircraft hull and liability, a limited property damage policy, crime insurance, specialty crime coverage, and travel accident coverage. Coverage types and limits for fiscal year 2019 were unchanged from fiscal year 2018. Settlement amounts did not exceed the self-insurance or insurance coverage limits in any of the past three years.

Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an estimated amount for claims that have been incurred but not reported (IBNR). Claims liabilities are calculated considering the effects of inflation, recent claim settlement trends including frequency and amount of payouts, and other economic and social factors. The present value of liabilities for unpaid claims is based on a 1.5 percent annual interest rate over the life of the claims. Changes in the balances of claims liabilities during the past three fiscal years were included in accounts payable as follows:

	June 30,		
(Dollars in Thousands)	**2019**	2018	2017
Unpaid claims, beginning of fiscal year	**$ 13,579**	$ 15,677	$ 20,047
Incurred claims (including IBNR)	**5,835**	6,140	4,514
Claim payments and adjustments	**(6,456)**	(8,238)	(8,884)
Unpaid claims, end of fiscal year	**12,958**	13,579	15,677
Less current portion	**(3,284)**	(4,083)	(5,109)
Noncurrent portion	**$ 9,674**	$ 9,496	$ 10,568

15. SUBSEQUENT EVENT

On August 1, 2019, Metropolitan entered into an Amended and Restated Note Purchase and Continuing Covenant Agreement with BANA (2019 BANA Amended and Restated Agreement), for the purchase by BANA and sale by Metropolitan of $46.8 million of Metropolitan's Short-Term Revenue Refunding Certificates, 2019 Series A-1 (the Series 2019 A-1 Notes). This Agreement amends and restates that certain Note Purchase and Continuing Covenant Agreement dated as of August 1, 2018 (the "Original Agreement"), between the Bank and Metropolitan. The Series 2019 A-1 Notes are being issued by Metropolitan and purchased by the Bank hereunder in order to refund the Series 2018 Notes issued pursuant to the Original Agreement. The Series 2019 A-1 Notes will bear interest at a variable rate of interest, at a spread of 32 basis points to one-month LIBOR. Under the 2019 BANA Amended and Restated Agreement, upon a failure by Metropolitan to perform or observe its covenants, a default in other specified indebtedness of Metropolitan, or other specified events of default, BANA could terminate its commitments and declare all amounts then outstanding to be immediately due and payable. Metropolitan has secured its obligation to pay principal and interest under the 2019 BANA Amended and Restated Agreement as a Subordinate Lien Parity Obligation. The Series 2019 A-1 Notes have a Note Maturity date of August 1, 2021. As of August 1, 2019, $46.8 million of Series 2019 A-1 Notes were outstanding.

On August 8, 2019 Metropolitan entered into a Note Purchase and Continuing Covenant Agreement dated as of August 1, 2019, with BANA (2019 BANA Agreement) for the purchase by the Bank and sale by Metropolitan of the Series 2019 Notes and the refunding and exchange of maturing Series 2019 Notes with the Refunding Notes, up to an amount not to exceed $39.2 million. The Series 2019 Notes will bear interest at a variable rate of interest, at a spread to one-month LIBOR. Under the 2019 BANA Agreement, upon a failure by Metropolitan to perform or observe its covenants, a default in other specified indebtedness of Metropolitan, or other specified events of default, BANA could terminate its commitments and declare all amounts then outstanding to be immediately due and payable. Metropolitan has secured its obligation to pay principal and interest under the 2019 BANA Agreement as a Subordinate Lien Parity Obligation. The 2019 BANA Agreement has a Commitment Expiration Date of July 30, 2021, unless extended as provided therein.

On August 29, 2019, as a result of changes in reorganization of assignments at the San Francisco Superior Court, the 2010, 2012, 2016, and 2017 *SDCWA v. Metropolitan* cases were reassigned to a different department of the Court. SDCWA filed a motion for peremptory disqualification of the new judge and on September 6, 2019, the motion was sustained. On September 27, 2019, the 2010, 2012, 2016, and 2017 cases were assigned to Department 304, a different complex division in which the 2014 case is already pending.

On October 1, 2019, Metropolitan issued $100.0 million of The Metropolitan Water District of Southern California Index Notes (Tax-Exempt and New Money), Subseries A-1 (the "Subseries A-1 Notes"), at a rate equal to the SIFMA Municipal Swap Index plus 33 basis points. The Subseries A-1 Notes were issued under Metropolitan's existing noteholder's agreement, executed on April 1, 2016, with RBC Municipal Products, LLC ("RBC"), as amended, under which Metropolitan may borrow, pay down and re-borrow up to $200 million, through the issuance and sale from time to time of notes issued by Metropolitan and purchased by RBC. Proceeds of the Subseries A-1 Notes will be used to fund capital expenditures and reimburse prior capital expenditures. Upon a failure by Metropolitan to perform or observe its covenants, a default in other specified indebtedness of Metropolitan, or other specified events of default, RBC could terminate its commitment and declare all amounts then outstanding to be immediately due and payable. Metropolitan has secured its obligation to pay principal and interest on the Subseries A-1 Notes as senior parity obligations. Any principal remaining outstanding at the April 5, 2022 commitment end date is required to be paid by Metropolitan in quarterly installments over a period of approximately one year.

(Dollars in thousands)	**2019**	2018	2017	2016	2015
TOTAL PENSION LIABILITY					
Service cost	**$ 33,583**	$ 33,685	$ 29,142	$ 28,890	$ 28,505
Interest on total pension liability	**161,023**	156,661	152,500	146,852	139,190
Changes of assumptions	**(15,391)**	125,734	—	(35,008)	—
Difference between expected and actual experience	**(10,039)**	(15,804)	(12,754)	14,665	—
Benefit payments, including refunds of employee contributions	**(107,646)**	(100,092)	(92,401)	(86,154)	(81,391)
Net change in total pension liability	**61,530**	200,184	76,487	69,245	86,304
Total pension liability - beginning	**2,315,248**	2,115,064	2,038,577	1,969,332	1,883,028
Total pension liability - ending (a)	**$ 2,376,778**	$ 2,315,248	$ 2,115,064	$ 2,038,577	$ 1,969,332
PLAN FIDUCIARY NET POSITION					
Contribution - Employer	**$ 48,780**	$ 42,819	$ 38,393	$ 34,306	$ 33,853
Contribution - Employee	**15,749**	14,895	15,034	14,787	15,185
Net investment income[1]	**139,003**	171,562	8,304	35,301	236,746
Benefit payments, including refunds of employee contributions	**(107,646)**	(100,092)	(92,401)	(86,154)	(81,391)
Net plan to plan resource management	**(4)**	—	—	—	—
Administrative expense	**(2,577)**	(2,255)	(950)	(1,756)	—
Other miscellaneous expense[3]	**(4,895)**	—	—	—	—
Net change in fiduciary net position	**88,410**	126,929	(31,620)	(3,516)	204,393
Plan fiduciary net position - beginning[4]	**1,654,331**	1,527,402	1,559,022	1,562,538	1,358,145
Plan fiduciary net position - ending (b)	**$ 1,742,741**	$ 1,654,331	$ 1,527,402	$ 1,559,022	$ 1,562,538
Plan net pension liability - ending (a) - (b)	**$ 634,037**	$ 660,917	$ 587,662	$ 479,555	$ 406,794
Plan fiduciary net position as a percentage of the total pension liability	**73.32 %**	71.45 %	72.22 %	76.48 %	79.34 %
Covered payroll	**$ 204,635**	$ 199,186	$ 195,878	$ 190,423	$ 186,850
Plan net pension liability as a percentage of covered payroll	**309.84 %**	331.81 %	300.01 %	251.84 %	217.71 %

[1] *2015 amount was net of administrative expenses of $1,972.*

[2] *GASB 68 requires ten years of information be presented but only four years are available at this time. Additional years' information will be displayed as it becomes available.*

[3] *During Fiscal Year 2017-18, as a result GASB 75, CalPERS reported its proportionate share of activity related to post-employment benefits for participation in the State of California's agent OPEB plan. Accordingly, CalPERS recorded a one-time expense as a result of the adoption of GASB 75. Additionally, CalPERS employees participate in various State of California agent pension plans and during Fiscal Year 2017-18, CalPERS recorded a correction to previously reported financial statements to properly reflect its proportionate share of activity related to pensions in accordance with GASB 68.*

[4] *Includes any beginning of year adjustment.*

See accompanying independent auditor's report

Notes to Schedule:

Benefit Changes: The figures above do not include any liability impact that may have resulted from plan changes which occurred after June 30, 2017 valuation date. This applies for voluntary benefit changes as well as any offers of Two Years Additional Service Credit.

Changes of Assumptions: In 2018, demographic assumptions and inflation rate were changed in accordance with CalPERS experience Study and Review of Actuarial Assumptions December 2017. There were no changes in the discount rate. In 2017, the discount rate was reduced from 7.65 percent to 7.15 percent. In 2016, there were no changes. In 2015, amounts reported reflect an adjustment of the discount rate from 7.5 percent (net of administrative expense) to 7.65 percent (without a reduction for pension plan administrative expense). In 2014, amounts reported were based on the 7.5 percent discount rate.

(Dollars in thousands)	**2019**	2018	2017	2016	2015
Actuarially determined contribution	**$ 38,172**	$ 31,404	$ 42,820	$ 38,393	$ 34,305
Contributions in relation to the actuarially determined contribution	**(38,172)**	(31,404)	(42,820)	(38,393)	(34,305)
Contribution deficiency (excess)	**$ —**	$ —	$ —	$ —	$ —
Covered payroll	**$ 212,558**	$ 204,635	$ 199,186	$ 195,878	$ 190,423
Contributions as a percentage of covered payroll	**17.96 %**	15.35 %	21.5 %	19.6 %	18.02 %

[1] *GASB 68 requires ten years of information be presented but only four years are available at this time. Additional years' information will be displayed as it becomes available.*

See accompanying independent auditor's report

Notes to Schedule:

Methods and assumptions used to set the actuarially determined contribution rates for fiscal year 2019:

Valuation date: June 30, 2016

Actuarial Cost Method	Entry age, level percentage of payroll
Amortization Method/Period	Level percentage of payroll over 20 year period
Asset Valuation Method	Investment gains/losses spread over 5 year rolling period with 20% market value corridor
Discount rate	7.375%
Inflation	2.75%
Mortality, disability, termination, retirement	CalPERS 1997-2011 Experience Study
Mortality improvement	Mortality projected fully generational with Scale BB

(Dollars in thousands)		2019		2018
TOTAL OPEB LIABILITY				
Service cost	$	**10,325**	$	10,024
Interest on total OPEB liability		**30,252**		28,951
Benefit payments		**(20,487)**		(19,525)
Net change in total OPEB liability		**20,090**		19,450
Total OPEB liability - beginning		**448,095**		428,645
Total OPEB liability - ending (a)	$	**468,185**	$	448,095
PLAN FIDUCIARY NET POSITION				
Contribution - Employer	$	**34,674**	$	33,646
Net investment income		**18,538**		20,792
Benefit payment		**(20,487)**		(19,525)
Administrative expense		**(400)**		(107)
Net change in fiduciary net position		**32,325**		34,806
Plan fiduciary net position - beginning		**207,526**		172,720
Plan fiduciary net position - ending (b)	$	**239,851**	$	207,526
Plan net OPEB liability - ending (a) - (b)	$	**228,334**	$	240,569
Plan fiduciary net position as a percentage of the total OPEB liability		**51.23 %**		46.31 %
Covered payroll	$	**204,635**	$	199,186
Plan net OPEB liability as a percentage of covered payroll		**111.58 %**		120.78 %

[1] *Historical information is required only for measurement periods for which GASB 75 is applicable. Future years' information will be displayed up to 10 years as information becomes available.*

See accompanying independent auditor's report

Schedule of Plan Contributions

(Dollars in thousands)		**2019**		2018
Actuarially determined contribution	**$**	**27,328**	$	30,086
Contributions in relation to the actuarially determined contribution		**(32,067)**		(34,674)
Contribution deficiency (excess)	**$**	**(4,739)**	$	(4,588)
Covered payroll	**$**	**212,558**	$	204,635
Contributions as a percentage of covered payroll		**15.09 %**		16.94 %

[1] *Historical information is required only for measurement periods for which GASB 75 is applicable. Future years' information will be displayed up to 10 years as information becomes available.*

See accompanying independent auditor's report

Notes to Schedule:

Methods and assumptions used to set the actuarially determined contribution rates for fiscal year 2019 were from the June 30, 2017 actuarial valuation:

Actuarial Cost Method	Entry age, level percentage of payroll
Amortization Method/Period	Level percentage of payroll over 23 year closed period (19 years remaining on 6/30/18).
Asset Valuation Method	Investment gains/losses spread over 5 year rolling period with corridor of 80% and 120% of market value
Discount rate	6.75%
Inflation	2.75%
Mortality, disability, termination, retirement	CalPERS 1997-2011 Experience Study
Medical trend	Pre-Medicare - 7.5% for 2019, decreasing to 4.0% for 2076 and later Medicare - 6.5% for 2019, decreasing to 4.0% for 2076 and later
Mortality improvement	Mortality projected fully generational with Scale MP-2017.

STATISTICAL SECTION

This part of Metropolitan's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about Metropolitan's overall financial health.

<u>Contents</u> **<u>Page</u>**

Sources: Unless otherwise noted, the information in these schedules was derived from the comprehensive annual financial report for the relevant year.

The Metropolitan Water District of Southern California
Table 1
Ten-Year Summary of Net Position by Component (Unaudited)-Accrual Basis [1]
(Dollars in millions)

	Fiscal Year Ended June 30,									
	2019	2018 [2]	2017	2016	2015 [3]	2014	2013 [4]	2012 [4]	2011 [4]	2010
		As Adjusted			As Adjusted			As Adjusted		
Net investment in capital assets, including State Water Project costs	$ 6,131.6	$ 5,968.8	$ 6,067	$ 5,772.4	$ 5,572.5	$ 5,593	$ 5,399.5	$ 5,293.3	$ 5,309.8	$ 5,243.8
Restricted for:										
Debt service	180.7	201.4	224.6	199.5	263.2	171.6	205.2	195.5	308.4	315.2
Other expenses	237.9	206.2	182.4	183.3	178.8	147.7	170.1	174.9	167.3	170.3
Unrestricted	286	310.1	283.7	528.6	867.2	1,288.7	1,025.4	763.4	466.7	417.1
Total Net Position	$ 6,836.2	$ 6,686.5	$ 6,757.7	$ 6,683.8	$ 6,881.7	$ 7,201	$ 6,800.2	$ 6,427.1	$ 6,252.2	$ 6,146.4

(1) Metropolitan implemented Governmental Accounting Standards Board (GASB) Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position,* in fiscal 2012. This pronouncement requires that the difference between assets and liabilities be reported as net position, therefore, net assets are now referred to as net position.

(2) Adjustment relates to Metropolitan's implementation of GASB Statement No. 75 (GASB 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pension.* GASB 75 requires the reporting of a net Other Postemployment Benefit (OPEB) liability in the basic financial statements when an organization's OPEB liability exceeds the net position available for paying benefits. Fiscal years 2009 through 2017 have not been adjusted.

(3) Net investment in capital assets, including State Water Project costs, restricted for other expenses and unrestricted net position in fiscal years 2018 and 2017 were adjusted to conform to fiscal year 2019 presentation. Fiscal years 2016 through 2010 were not adjusted.

(4) Adjustment relates to Metropolitan's implementation of GASB Statement No. 68 (GASB 68), *Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27,* and GASB Statement No. 71. (GASB 71), *Pension Transition for Contributions Made Subsequent to the Measurement Date - an amendment of GASB Statement No. 68.* GASB 68 requires the reporting of net pension liability in the basic financial statements when an organization's pension liability exceeds the net position available for paying benefits while GASB 71 requires the recognition of beginning deferred outflow of resources for pension contributions made after the measurement date. Fiscal years 2009 through 2014 have not been adjusted.

(5) Adjustment relates to the adoption of GASB No. 65, *Items Previously Reported as Assets and Liabilities.* This pronouncement requires debt issuance costs (except prepaid insurance costs) to be recognized as expense in the period incurred. Fiscal years 2009 and 2010 have not been adjusted.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California
Table 2
Ten-Year Summary of Changes in Net Position (Unaudited)-Accrual Basis [1]
(Dollars in millions)

	Fiscal Year Ended June 30,									
	2019	2018 [2]	2017	2016	2015 [3]	2014	2013	2012 [4] As Adjusted	2011 [4] As Adjusted	2010
Water revenues [6]	$ 1,148.7	$ 1,285.2	$ 1,150.5	$ 1,166.0	$ 1,382.9	$ 1,484.7	$ 1,282.5	$ 1,123.3	$ 1,001.0	$ 1,010.9
Readiness-to-serve charges	136.5	137.5	144.0	155.5	162.0	154.0	144.0	135.5	119.5	103.0
Capacity charge	33.0	34.6	39.7	44.7	37.5	28.4	28.7	33.0	34.4	33.4
Power sales	18.3	23.7	20.9	7.5	8.4	14.6	24.5	31.5	22.9	18.3
Operating revenues	1,336.5	1,481.0	1,355.1	1,373.7	1,590.8	1,681.7	1,479.7	1,323.3	1,177.8	1,165.6
Taxes, net	142.7	127.3	115.4	107.9	102.3	94.5	94.8	79.2	79.3	98.1
Investment income (loss)	36.0	10.6	6.2	19.4	(3.6)	5.7	(0.4)	4.1	2.0	40.6
Other	10.4	12.9	7.3	10.2	5.4	—	6.1	0.6	22.0	6.4
Nonoperating revenues	189.1	150.8	128.9	137.5	104.1	100.2	100.5	83.9	103.3	145.1
Total revenues	1,525.6	1,631.8	1,484.0	1,511.2	1,694.9	1,781.9	1,580.2	1,407.2	1,281.1	1,310.7
Power and water costs	(375.8)	(446.5)	(455.4)	(552.3)	(473.6)	(510.1)	(371.3)	(384.0)	(364.8)	(433.7)
Operations and maintenance	(493.9)	(507.4)	(487.5)	(650.1)	(543.4)	(439.7)	(419.8)	(433.5)	(394.9)	(395.6)
Depreciation and amortization	(361.1)	(330.3)	(301.7)	(376.5)	(374.8)	(261.5)	(265.4)	(290.1)	(286.4)	(246.4)
Operating expenses	(1,230.8)	(1,284.2)	(1,244.6)	(1,578.9)	(1,391.8)	(1,211.3)	(1,056.5)	(1,107.6)	(1,046.1)	(1,075.7)
Bond interest, net of amount capitalized	(126.9)	(124.5)	(134.6)	(126.9)	(132.5)	(146.7)	(150.2)	(135.8)	(135.7)	(133.3)
Interest and adjustments on OAPF [7]	—	—	(0.6)	(0.8)	(1.2)	(1.6)	(2.1)	(2.6)	(3.0)	(3.4)
Loss on disposal of plant assets	(13.7)	(88.7)	(20.9)	—	—	—	—	—	—	—
Other	(5.3)	(68.2)	(9.4)	(4.6)	—	(23.7)	—	—	—	—
Nonoperating expenses	(145.9)	(281.4)	(165.5)	(132.3)	(133.7)	(172.0)	(152.3)	(138.4)	(138.7)	(136.7)
Total expenses	(1,376.7)	(1,565.6)	(1,410.1)	(1,711.2)	(1,525.5)	(1,383.3)	(1,208.8)	(1,246.0)	(1,184.8)	(1,212.4)
Capital contributions	0.8	1.5	—	2.1	2.3	2.2	1.7	13.6	17.7	4.6
Changes in net position	$ 149.7	$ 67.7	$ 73.9	$ (197.9)	$ 171.7	$ 400.8	$ 373.1	$ 174.8	$ 114.0	$ 102.9

(1) Metropolitan implemented Governmental Accounting Standards Board (GASB) Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position,* in fiscal 2012. This pronouncement requires that the difference between assets and liabilities be reported as net position, therefore, net assets are now referred to as net position.

(2) Metropolitan implemented GASB Statement No. 75 (GASB 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pension*. GASB 75 requires the reporting of a net Other Postemployment Benefit (OPEB) liability in the basic financial statements when an organization's OPEB liability exceeds the net position available for paying benefits. Fiscal years 2010 through 2017 have not been adjusted.

(3) Metropolitan implemented GASB Statement No. 68 (GASB 68), *Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27*, and GASB Statement No. 71. (GASB 71), *Pension Transition for Contributions Made Subsequent to the Measurement Date - an amendment of GASB Statement No. 68.* GASB 68 requires the reporting of net pension liability in the basic financial statements when an organization's pension liability exceeds the net position available for paying benefits while GASB 71 requires the recognition of beginning deferred outflow of resources for pension contributions made after the measurement date. Fiscal years 2010 through 2014 have not been adjusted.

(4) Adjustment relates to the adoption of GASB No. 65, *Items Previously Reported as Assets and Liabilities*. This pronouncement requires debt issuance costs (except prepaid insurance costs) to be recognized as expense in the period incurred. Fiscal year 2010 has not been adjusted.

(5) Adjustment relates to implementation of GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. This pronouncement requires derivative instruments to be reported at their fair value on the statements of net position along with a related deferred outflow to be recorded for effective hedges.

(6) Water revenues includes revenues from water sales, exchanges, and wheeling.

(7) Off-Aqueduct Power Facilities. The State relieved Metropolitan of its obligation during the year ended June 30, 2018.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California
Table 3
Ten-Year Summary of Water Revenues by Component (Unaudited)-Accrual Basis
(Dollars in thousands)

Fiscal Year Ended June 30,	Water Sales [1]			Exchange	Total
	Treated	Untreated	Tier 2 [2] [3]		
2019	$ 727,511.1	$ 318,940.9	$ —	$ 102,221.8	$ 1,148,673.8
2018	805,392.6	383,632.6	—	96,139	1,285,164.2
2017	704,254.2	358,841.4	—	87,437	1,150,532.6
2016	681,045.9	401,837.7	(1,180.3)	84,337	1,166,040.3
2015	805,798	489,016.4	9,252.8	78,830.9	1,382,898.1
2014	884,280	501,778.9	17,210.8	81,346.5	1,484,616.2
2013	805,277.9	399,865.2	2,914.9	74,469.7	1,282,527.7
2012	743,721.2	288,545.4	—	90,923.2	1,123,189.8
2011	712,766	230,404.8	4,026.8	53,848	1,001,045.6
2010	669,016.3	278,443.4	6,881.6	56,515.8	1,010,857.1

[1] Water sales rates vary based on the program. See Table 4 for rates.

[2] Tier 2 dollars reflect the premium paid by the member agency for water taken in excess of their maximum purchase commitment. Either treated/untreated or both could have caused the agency to exceed their maximum.

[3] The 2016 credit resulted from a correction of water sales between member agencies.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California
Table 4
Ten-Year Summary of Water Revenues Rate Structure (Unaudited)
(Dollars per acre-foot-unless otherwise specified)

	Calendar Year [1]									
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Tier 1 Supply Rate	$ 209	$ 209	$ 201	$ 156	$ 158	$ 148	$ 140	$ 106	$ 104	$ 101
Tier 2 Supply Rate	295	295	295	290	290	290	290	290	280	280
Water Supply Surcharge	—	—	—	—	—	—	—	—	—	—
System Access Rate	326	299	289	259	257	243	223	217	204	154
Water Stewardship Rate	69	55	52	41	41	41	41	43	41	41
System Power Rate	127	132	124	138	126	161	189	136	127	119
Full Service Untreated:										
Tier 1	731	695	666	594	582	593	593	560	527	484
Tier 2	817	781	760	728	714	735	743	686	652	594
Replenishment Water Rate: [2]										
Untreated	n/a	n/a	n/a	n/a	n/a	n/a	n/a	442	409	366
Treated	n/a	n/a	n/a	n/a	n/a	n/a	n/a	651	601	558
Interim Agricultural Water Program [3]										
Untreated	n/a	n/a	n/a	n/a	n/a	n/a	n/a	537	482	416
Treated	n/a	n/a	n/a	n/a	n/a	n/a	n/a	765	687	615
Treatment Surcharge	319	320	313	348	341	297	254	234	217	217
Full Service Treated:										
Tier 1	1,050	1,015	979	942	923	890	847	794	744	701
Tier 2	1,136	1,101	1,073	1,076	1,055	1,032	997	920	869	811
Delta Supply Surcharge [4]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	58	51	69
Capacity Charge ($ per cubic foot second)	8,600	8,700	8,000	10,900	11,100	8,600	6,400	7,400	7,200	7,200

(1) Rates are set on a calendar year basis.
(2) The Replenishment program was discontinued after 2012.
(3) The Interim Agricultural Water Program was discontinued after 2012.
(4) The Delta Supply Surcharge was suspended after 2012.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California
Table 5
Principal Water Revenue Customers (Unaudited) - Accrual Basis
(Dollars in thousands)

	Fiscal Year Ended June 30, 2019			Fiscal Year Ended June 30, 2010		
	Amount	%	Rank	Amount	%	Rank
Treated Water Sales						
Member Agency						
West Basin MWD	$ 120,659.5	16.6 %	1	$ 82,156.9	12.3 %	2
MWD of Orange County	97,001.3	13.3	2	125,196.5	18.7	1
Calleguas MWD	89,304.8	12.3	3	68,770.8	10.3	4
City of Los Angeles	70,811.5	9.7	4	53,924.5	8.1	5
San Diego County Water Authority	56,591.0	7.8	5	75,063.5	11.2	3
Subtotal	$ 434,368.1	59.7 %		$ 322,955.3	60.6 %	
Total Treated Water Sales	$ 727,511.1	100.0 %		$ 669,016.3	100.0 %	
Untreated Water Sales						
Member Agency						
MWD of Orange County	$ 61,983.2	19.4 %	1	$ 13,222.2	4.7 %	4
San Diego County Water Authority	55,201.2	17.3	2	91,838.6	33.0	1
City of Los Angeles	51,355.8	16.1	3	83,169.2	29.9	2
Subtotal	$ 168,540.2	52.8 %		$ 188,230.0	67.6 %	
Total Untreated Water Sales	$ 318,940.9	100.0 %		$ 278,443.4	100.0 %	
Tier 2 Sales						
Member Agency						
City of Los Angeles	$ —	— %		$ 3,577.9	52.0 %	1
Eastern MWD	—	—		1,294.4	18.8	2
Subtotal	$ —	— %		$ 4,872.3	70.80 %	
Total Tier 2 Sales	$ —	— %		$ 6,881.6	100.0 %	
Exchange						
Member Agency						
San Diego County Water Authority	$ 94,923.3	92.9 %	1	$ 56,515.8	100.0 %	1
Subtotal	$ 94,923.3	92.9 %		$ 56,515.8	100.0 %	
Total Exchange	$ 102,221.8	100.0 %		$ 56,515.8	100.0 %	
Total Water Revenue	**$ 1,148,673.8**			**$ 1,010,857.1**		

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California

Table 6

Ten-Year Summary of Property Tax Levies and Collections (Unaudited)-Cash Basis

(Dollars in thousands)

Fiscal Year Ended June 30,	Total Tax Levy	Tax Collections: Current	Tax Collections: Delinquent	Tax Collections: Total [1]	Outstanding Delinquent Taxes [2]	Percent of Current Taxes Collected to Total Tax Levy	Percent of Total Tax Collections to Total Tax Levy	Percent of Delinquent Taxes to Total Tax Levy
2019	$ 130,566	$ 138,427	$ 6,727	$ 145,154	$ —	106.0 %	111.2 %	0.0 %
2018	121,647	124,628 [3]	5,038 [3]	129,666	—	102.5 [3]	106.6	0.0
2017	112,727	112,866 [3]	2,251 [3]	115,137	—	100.1 [3]	102.1	0.0
2016	104,829	104,829	5,825	110,654	—	100.0	105.6	0.0
2015	100,066	97,687	5,320	103,007	2,379	97.6	102.9	2.4
2014	94,963	94,963	3,744	98,707	—	100.0	103.9	0.0
2013	92,247	89,576	7,078	96,654	2,671	97.1	104.8	2.9
2012	94,810	80,775	9,478	90,253	4,076	85.2	95.2	4.3
2011	95,385	71,069	16,987	88,056	9,478	74.5	92.3	9.9
2010	107,867	82,164	15	97,247	16,987	76.2	90.2	15.7

[1] Total tax collections exclude cash payments on new annexations.

[2] Delinquent taxes shown are net of the "Allowance for Uncollectibles" determined by historical trends of collections and payments.

[3] In Fiscal year 2019, current and delinquent tax collections were revised for fiscal years 2017 and 2018 but total tax collections was not affected by the changes.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California
Table 7
Ten-Year Summary of Assessed Valuations and Property Tax Rates (Unaudited)
(Dollars in billions)

Fiscal Year Ended June 30,	Gross Assessed Valuation [1]	Homeowner's Exemption	Net Assessed Valuation	Secured Property Percentage Tax Rate
2019	$ 2,916.6	$ 15.4	$ 2,901.2	0.0035 %
2018	2,740.6	15.6	2,725.0	0.0035
2017	2,583.4	15.8	2,567.6	0.0035
2016	2,451.0	15.9	2,435.1	0.0035
2015	2,315.0	16.2	2,298.8	0.0035
2014	2,183.4	16.4	2,167.0	0.0035
2013	2,097.4	16.7	2,080.7	0.0035
2012	2,067.5	16.9	2,050.6	0.0037
2011	2,049.1	17.1	2,032.0	0.0037
2010	2,081.9	17.2	2,064.7	0.0043

[1] Gross assessed valuations (before deduction of Homeowner's and Business Inventory Exemptions), as of August each year, of all secured and unsecured property within Metropolitan's service area, as certified by the County Auditor-Controllers for the respective counties.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California

Table 8

Ten-Year Summary of Assessed Valuation Within Metropolitan's Service Area - By Counties (Unaudited)

(Dollars in billions)

	Fiscal Year Ended June 30,																			
	2019		2018		2017		2016		2015		2014		2013		2012		2011		2010	
County	AV [1]	% [2]	AV	%	AV	%	AV	%	AV	%	AV	%	AV	%	AV	%	AV	%	AV	%
Los Angeles	$ 1,415.3	48.5	$ 1,327.5	48.5	$ 1,251.3	48.4	$ 1,185.4	48.4	$ 1,117.4	48.3	$ 1,060.8	48.6	$ 1,012.5	48.3	$ 989.1	47.9	$ 975.3	47.6	$ 991.4	47.6
Orange	591.4	20.3	557.1	20.3	524.5	20.3	498.3	20.3	470.7	20.3	441.9	20.2	426.6	20.3	419.2	20.3	415.6	20.3	417.8	20.1
San Diego	508.6	17.4	479.7	17.5	452.0	17.5	427.9	17.5	405.0	17.5	381.7	17.5	369.0	17.6	370.4	17.9	369.1	18.0	375.4	18.0
Riverside	184.6	6.3	172.9	6.3	163.1	6.3	154.7	6.3	146.3	6.3	133.7	6.1	129.0	6.2	129.2	6.2	129.1	6.3	134.8	6.5
San Bernardino	113.0	3.9	104.2	3.8	97.8	3.8	93.9	3.8	89.1	3.8	83.5	3.8	80.9	3.8	80.4	3.9	80.6	3.9	82.2	3.9
Ventura	103.7	3.6	99.2	3.6	94.7	3.7	90.8	3.7	86.5	3.8	81.8	3.8	79.4	3.8	79.2	3.8	79.4	3.9	80.3	3.9
Total	$ 2,916.6	100.0	$ 2,740.6	99.9	$ 2,583.4	100.0	$ 2,451.0	100.0	$ 2,315.0	100.0	$ 2,183.4	100.0	$ 2,097.4	100.1	$ 2,067.5	100.0	$ 2,049.1	100.0	$ 2,081.9	100.0

[1] Assessed Valuation.

[2] Percent of Total Assessed Valuation within Metropolitan.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California

Table 9

Ten-Year Summary of Ratios of General Obligation Debt to Net Assessed Valuations, Total Outstanding Debt to Total Household Income, and Amounts of Total and Net Outstanding Debt per Capita (Unaudited)

(Amounts in thousands)

Fiscal Year Ended June 30,	Population [1]	Net Assessed Valuations (NAV)	General Obligation (G.O.) Debt	Revenue Bond Debt	Notes and Loans	Unamortized Bond Discounts and Premiums, net [2]	Total Outstanding Debt	Accumulated Resources Restricted for Repayment of Principal	Net Total Outstanding Debt	Ratio of G.O. Debt to NAV	Net Outstanding Debt per Capita
2019	19,189	$ 2,901,199,673	$ 48,050	$ 3,933,245	$ 46,800	$ 307,310	$ 4,335,405	$ (116,825)	$ 4,218,580	0.00 %	$ 219.8
2018	19,003	2,725,018,457	60,600	4,233,860	—	212,499	4,506,959	(21,955)	4,485,004	0.00	236.0
2017	18,910	2,567,616,063	74,905	4,301,985	—	202,848	4,579,738	(114,730)	4,465,008	0.00	236.1
2016	18,802	2,435,059,261	92,865	4,188,950	9,153	232,467	4,523,435	(153,270)	4,370,165	0.00	232.4
2015	18,725	2,298,791,445	110,420	4,157,105	10,684	200,028	4,478,237	(98,595)	4,379,642	0.00	233.9
2014	18,615	2,167,044,473	132,275	4,271,540	11,675	200,896	4,616,386	(82,285)	4,534,101	0.01	243.6
2013	18,474	2,080,710,578	165,085	4,450,650	12,161	210,283	4,838,179	(110,535)	4,727,644	0.01	255.9
2012	18,346	2,050,548,909	196,545	4,607,125	13,117	194,282	5,011,069	(104,230)	4,906,839	0.01	267.5
2011	18,185	2,031,941,577	225,335	4,731,145	14,051	(77,914)	4,892,617	(90,900)	4,801,717	0.01	264.0
2010	18,042	2,064,661,095	255,075	4,591,910	27,676	(104,989)	4,769,672	(87,075)	4,682,597	0.01	259.5

Fiscal Year Ended June 30,	Population [1]	Total Household Income (THI)	General Obligation (G.O.) Debt	Revenue Bond Debt	Notes and Loans	Unamortized Bond Discounts and Premiums net [2]	Total Outstanding Debt	Ratio of Total Outstanding Debt to THI	Total Outstanding Debt per Capita
2019	19,189	n/a	$ 48,050	$ 3,933,245	$ 46,800	$ 307,310	$ 4,335,405	n/a %	$ 225.9
2018	19,003	n/a	60,600	4,233,860	—	212,499	4,506,959	n/a	237.2
2017	18,910	1,229,985.925	74,905	4,301,985	—	202,848	4,579,738	372.34	242.2
2016	18,802	1,155,679.001	92,865	4,188,950	9,153	232,467	4,523,435	391.41	240.6
2015	18,725	1,107,415.207	110,420	4,157,105	10,684	200,028	4,478,237	404.39	239.2
2014	18,615	1,025,884.337	132,275	4,271,540	11,675	200,896	4,616,386	449.99	248.0
2013	18,474	984,899.139	165,085	4,450,650	12,161	210,283	4,838,179	491.24	261.9
2012	18,346	936,274.391	196,545	4,607,125	13,117	194,282	5,011,069	535.21	273.1
2011	18,185	886,485.607	225,335	4,731,145	14,051	(77,914)	4,892,617	551.91	269.0
2010	18,042	862,607.147	255,075	4,591,910	27,676	(104,989)	4,769,672	552.94	264.4

See accompanying Independent Auditors' Report.

[1] Population data is reported for Metropolitan's service area. Amounts reflect revisions based on current data from the State of California Department of Finance and/or revisions to the service area boundaries.

[2] Deferred amount on bond refundings were reclassified as deferred outflow of resources beginning fiscal year 2012 as a result of GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities,* implementation.

n/a: not available

Source: Office of the Chief Financial Officer and State of California Department of Finance

The Metropolitan Water District of Southern California
Table 10
Direct and Overlapping Bonded Debt (Unaudited)
As of June 30, 2019

2018-19 Assessed Valuation $2,916,620,002,752

OVERLAPPING TAX AND ASSESSMENT DEBT:	Percentage Applicable		Debt June 30, 2019
Community College Districts	Various	$	11,819,074,160
Los Angeles Unified School District	99.557		10,061,678,427
San Diego Unified School District	99.961		3,624,995,575
Other Unified School Districts	Various		13,490,746,238
High School and School Districts	Various		6,646,050,664
City of Los Angeles	99.995		877,216,137
Other Cities	Various		235,197,286
Irvine Ranch Water District Improvement Districts	100		555,200,000
Santa Margarita Water District Improvement Districts	100		58,440,000
Other Water Districts	Various		35,510,843
Healthcare Districts	Various		670,864,356
Other Special Districts	Various		14,255,323
Community Facilities Districts	Various		7,345,736,168
1915 Act Bonds and Other Special Assessment District Bonds	Various		1,104,826,522
TOTAL OVERLAPPING TAX AND ASSESSMENT DEBT		$	56,539,791,699
METROPOLITAN WATER DISTRICT TOTAL DIRECT DEBT		**$**	**48,050,000**
TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT		$	56,587,841,699

OVERLAPPING GENERAL FUND DEBT:	Percentage Applicable		Debt June 30, 2019
Los Angeles County Obligations	93.143	$	2,011,450,560
Orange County Obligations	99.908		809,094,187
Riverside County Obligations	66.008		662,709,502
San Bernardino County Obligations	50.834		349,128,557
San Diego County Obligations	96.682		748,526,546
Ventura County Obligations	76.847		256,668,980
City of Anaheim General Fund Obligations	99.861		537,811,520
City of Long Beach General Fund Obligations and Pension Obligation Bonds	100		136,980,000
City of Los Angeles General Fund and Judgment Obligations	99.995		1,578,304,222
City of Pasadena General Fund and Pension Obligation Bonds	100		537,118,414
City of San Diego General Fund Obligations	99.949		523,401,911
Other City General Fund Obligations	Various		3,064,346,663
Water District General Fund Obligations	Various		68,059,754
Los Angeles Unified School District Certificates of Participation	99.557		179,745,186
Other School District General Fund Obligations	Various		1,977,140,649
Other Special District General Fund Obligations	Various		102,933,102
TOTAL GROSS OVERLAPPING GENERAL FUND DEBT		$	13,543,419,753
Less: Obligations supported from other revenue sources			915,572,133
TOTAL NET OVERLAPPING GENERAL FUND DEBT		$	12,627,847,620
OVERLAPPING TAX INCREMENT DEBT (Successor Agencies):		$	6,793,124,231
GROSS COMBINED TOTAL DEBT		$	76,924,385,683 [1]
NET COMBINED TOTAL DEBT		$	76,008,813,550

[1] Debt instruments included are general obligation bonds, lease revenue bonds and certificates of participation (when supported by the general fund), pension obligation bonds, 1915 Act special assessment bonds and Mello-Roos Act special assessment bonds. Excluded are enterprise revenue bonds, mortgage revenue bonds, tax and revenue anticipation notes and non-bonded capital lease obligations. Qualified Zone Academy Bonds are included based on principal due at maturity.

Ratios to 2018-19 Assessed Valuation:	
Direct Debt ($48,050,000)	**0.002%**
Total Direct and Overlapping Tax and Assessment Debt	1.94 %
Gross Combined Total Debt	2.64 %
Net Combined Total Debt	2.61 %

Ratios to Redevelopment Incremental Valuation:	$ 405,720,851,445	
Total Overlapping Tax Increment Debt		1.67 %

Source: California Municipal Statistics, Inc. San Francisco, California

The Metropolitan Water District of Southern California
Table 11
Ten-Year Summary of Legal Debt Margin Information (Unaudited)
(Dollars in millions)

	Fiscal Year Ended June 30,									
15 Percent of Assessed Value [1a]	2019	2018	2017	2016	2015	2014	2013 [4] As Adjusted	2012 [4]	2011 [4]	2010
Debt limit	$ 437,493	$ 411,095	$ 387,508	$ 367,651	$ 347,242	$ 327,508	$ 314,606	$ 310,122	$ 307,359	$ 312,280
Debt applicable to the limit [2]	4,335	4,507	4,842	4,773	4,478	4,616	4,838	5,011	4,971	4,875
Legal debt margin	$ 433,158	$ 406,588	$ 382,666	$ 362,878	$ 342,764	$ 322,892	$ 309,768	$ 305,111	$ 302,388	$ 307,405
Total debt applicable to the limit as a percentage of debt limit	0.99 %	1.10 %	1.25 %	1.30 %	1.29 %	1.41 %	1.54 %	1.62 %	1.62 %	1.56 %
100 Percent of Equity [1b]										
Debt limit [3]	$ 6,836	$ 6,686	$ 6,758	$ 6,684	$ 6,882	$ 7,201	$ 6,800	$ 6,427	$ 6,252	$ 6,146
Debt applicable to the limit [2]	3,933	4,234	4,302	4,189	4,157	4,272	4,451	4,607	4,731	4,592
Legal debt margin	$ 2,903	$ 2,452	$ 2,456	$ 2,495	$ 2,725	$ 2,929	$ 2,349	$ 1,820	$ 1,521	$ 1,554
Total debt applicable to the limit as a percentage of debt limit	57.53 %	63.33 %	63.66 %	62.67 %	60.40 %	59.32 %	65.46 %	71.68 %	75.67 %	74.71 %

Legal Debt Margin Calculations for Fiscal Year Ended June 30, 2019

15 Percent of Assessed Value	
2018-19 taxable assessed valuation	$ 2,916,620
Debt limit (15% of total assessed value)	$ 437,493
Applicable long-term debt outstanding as of June 30, 2019	$ 4,335
Legal debt margin	$ 433,158
100 Percent of Equity (Net Position)	
Net position of Metropolitan as of June 30, 2019	$ 6,836
Debt limit (100% of equity/net position)	$ 6,836
Revenue bonds outstanding as of June 30, 2019	$ 3,933
Legal debt margin	$ 2,903

[1] The Metropolitan Water District Act (Act) provides for two limitations on indebtedness, which may be incurred by Metropolitan:

[a] Indebtedness is limited to 15 percent of the assessed value of all taxable property within Metropolitan.

[b] Revenue bonds limited to 100% of equity (net position) as of the end of the last fiscal year prior to the issuance of such bonds.

[2] The Act defines the calculations for debt limits based on gross debt outstanding. Accordingly, debt applicable to the limit is not netted for applicable reserves.

[3] Adjustment relates to reclassification of outstanding debt from net investment in capital assets to restricted for debt service beginning fiscal year 2012.

[4] Adjustment relates to implementation of Governmental Accounting Standards Board (GASB) Statement No. 65, *Items Previously Reported as Assets and Liabilities.*

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California

Table 12

Ten-Year Summary of Revenue Bond Debt Service Coverage (1) (Unaudited)

(Dollars in millions)

	Fiscal Year Ended June 30,									
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
									As Adjusted	
Water Revenues [2]	$ 1,149	$ 1,285	$ 1,151	$ 1,166	$ 1,383	$ 1,485	$ 1,283	$ 1,062	$ 996	$ 1,011
Additional Revenues [2]	170	172	184	200	199	182	173	168	153	135
Total Revenues	1,319	1,457	1,335	1,366	1,582	1,667	1,456	1,230	1,149	1,146
Operating Expenses	(916)	(963)	(927)	(1,201)	(1,005)	(854)	(793)	(792)	(853)	(825)
Net Operating Revenues	403	494	408	165	577	813	663	438	296	321
Hydroelectric Power Revenues & Other [3]	40	52	72	252	171	34	48	87	96	52
Interest on Investments [4]	34	8	4	18	13	19	(2)	11	17	19
Adjusted Net Operating Revenues	477	554	484	435	761	866	709	536	409	392
Senior and Subordinate Bonds Debt Service [5]	(333)	(340)	(306)	(309)	(280)	(343)	(298)	(297)	(277)	(244)
Subordinate Revenue Obligations	—	—	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Funds Available from Operations	$ 144	$ 214	$ 176	$ 125	$ 480	$ 522	$ 410	$ 238	$ 131	$ 147
Ratios										
Debt Service Coverage on all Senior and Subordinate Bonds [6]	1.43	1.63	1.58	1.41	2.72	2.52	2.38	1.81	1.48	1.61
Bonds and Additional Bonds Debt Service Coverage [7]	—	—	1.57	1.41	2.71	2.51	2.37	1.80	1.47	1.60

(1) Prepared on a modified accrual basis for fiscal years 2013-2019 and on a cash basis for fiscal years 2010-2012.

(2) Water Revenues include revenues from water sales, exchanges, and wheeling. Fiscal years 2010-2011 restated to include exchange sales in Water Revenues. They were previously reported under Additional Revenues.

(3) Fiscal years 2018, 2017, 2016, and 2015 include $1 million, $33 million, $222 million, and $142 million, respectively, in transfers from revenue reserves to fund conservation credit expenses.

(4) Excludes interest applicable to Bond Construction accounts, Excess Earning account(s), Other Trust accounts, and the Deferred Compensation Trust account.

(5) Previously reported as Bonds and Additional Bonds Debt Service for fiscal years 2010-2017.

(6) Previously reported as Bonds and Additional Bonds Debt Service Coverage for fiscal years 2010-2017.

(7) Previously reported as Debt Service Coverage on all Obligations for fiscal years 2010-2017. The State Revolving Fund Loan was paid off at the end of fiscal year 2017, therefore the ratio is the same as Debt Service Coverage on all Senior and Subordinate Bonds and is not presented beginning with fiscal year 2018.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California
Table 13
Ten-Year Summary of Demographic Statistics (Unaudited)

	Calendar Year									
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Population (in thousands) [1]										
Los Angeles County	10,279	10,262	10,215	10,192	10,069	10,020	9,912	9,858	9,837	10,409
Orange County	3,217	3,206	3,182	3,165	3,133	3,105	3,072	3,044	3,015	3,155
Riverside County	2,420	2,393	2,362	2,331	2,295	2,268	2,244	2,227	2,196	2,128
San Bernardino County	2,178	2,164	2,145	2,128	2,092	2,076	2,065	2,060	2,044	2,064
San Diego County	3,344	3,320	3,297	3,276	3,212	3,182	3,147	3,131	3,100	3,208
Ventura County	855	855	854	853	844	840	834	830	824	841
Per Capita Income [2]										
Los Angeles County	n/a	$ 58,419	$ 55,624	$ 53,521	$ 49,366	$ 46,530	$ 44,474	$ 42,564	$ 41,791	$ 40,867
Orange County	n/a	65,400	60,360	57,749	55,200	54,519	52,342	50,544	49,863	49,020
Riverside County	n/a	39,261	36,782	35,589	33,945	33,278	31,742	29,927	29,222	29,748
San Bernardino County	n/a	38,816	36,835	35,431	32,932	32,747	32,072	29,998	29,609	29,609
San Diego County	n/a	57,913	55,168	53,298	51,711	51,384	49,719	46,800	45,627	45,706
Ventura County	n/a	59,178	55,779	54,155	50,928	50,507	48,837	45,855	44,653	45,908
Median Household Income [3]										
Los Angeles County	n/a	$ 65,006	$ 61,338	$ 59,134	$ 55,746	$ 54,529	$ 53,001	$ 52,280	$ 52,684	$ 54,467
Orange County	n/a	86,217	81,827	78,428	76,306	74,163	71,983	72,293	70,880	71,865
Riverside County	n/a	63,944	60,134	58,292	57,006	54,095	52,651	52,883	54,296	55,352
San Bernardino County	n/a	60,420	56,337	53,803	52,041	52,323	50,770	51,247	52,607	52,320
San Diego County	n/a	76,207	70,824	67,320	66,192	61,426	60,330	59,477	59,923	60,231
Ventura County	n/a	82,857	80,135	80,032	75,449	77,363	71,517	74,263	71,864	71,723
Unemployment Rate [4]										
Los Angeles County	4.7 %	4.8 %	5.3 %	6.6 %	8.2 %	9.8 %	10.9 %	12.3 %	12.5 %	11.5 %
Orange County	2.9	3.5	4.0	4.4	5.5	6.5	7.6	8.8	9.7	8.9
Riverside County	4.4	5.2	6.1	6.7	8.2	10.3	12.1	13.7	13.8	13.4
San Bernardino County	4.0	4.9	5.8	6.4	8.0	10.3	11.9	13.4	13.5	13.0
San Diego County	3.3	4.0	4.7	5.2	6.4	7.8	8.9	10.0	10.8	9.6
Ventura County	3.8	4.5	5.2	5.6	6.6	7.9	9.1	10.1	10.8	9.9

n/a: not available

Sources:

[1] Data from State of California Department of Finance. The most recent calendar year for which information is available is 2018. Includes population for the entire county. Amounts from prior years reflect revisions based on current data from State of California Department of Finance.

[2] Data from U.S. Department of Commerce and Center for Continuing Study of the California Economy. The most recent calendar year for which information is available is 2017.

[3] Data from U.S. Census Bureau (American Community Survey). The most recent calendar year for which information is available is 2017.

[4] Data from U.S. Bureau of Labor Statistics and State of California Employment Development Department (EDD). The most recent calendar year for which information is available is 2018. Rates from prior years reflect revisions based on current data from U.S. Bureau of Labor Statistics and EDD.

The Metropolitan Water District of Southern California
Table 14
Principal Employers within Service Area (Unaudited)

	Calendar Year					
	2018			2009		
Company or Organization	Employees	Rank	Percentage of total employment	Employees	Rank	Percentage of total employment
Taco Bell Corp	210,000	1	8.71 %	166,000	1	8.37 %
Walt Disney Co	201,000	2	8.33	144,000	2	7.26
Allied Universal	200,000	3	8.29	n/a	n/a	n/a
Alorica Inc	100,000	4	4.15	n/a	n/a	n/a
CBRE Group Inc	90,000	5	3.73	n/a	n/a	n/a
AECOM	87,000	6	3.61	51,000	9	2.57
Gores Group	84,000	7	3.48	84,000	4	4.24
Dole Food Co Inc	74,800	8	3.10	75,600	5	3.81
Chipotle Mexican Grill Inc	73,000	9	3.03	n/a	n/a	n/a
Advantage Solutions	50,000	10	2.07	n/a	n/a	n/a
	1,169,800		48.50 %	520,600		26.25 %
Total Employment	2,412,052			1,983,055		

n/a: not available

Note: The most recent year for which information is available is 2018. Population includes companies with employees of 10,000 or more.

Source: Infogroup

The Metropolitan Water District of Southern California
Table 15
Ten-Year Summary of Operating Information (Unaudited)

Mission Statement: The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

	Fiscal Year Ended June 30,									
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Acre-feet [1] water sold:										
Treated	707	788	736	731	892	1,029	984	981	992	1,001
Untreated	449	553	573	683	829	846	685	561	475	598
Exchange	221	219	178	179	180	180	183	157	157	160
Total	1,377	1,560	1,487	1,593	1,901	2,055	1,852	1,699	1,624	1,759
Acre-feet [1] water sold by usage:										
Domestic and municipal uses	1,352	1,481	1,454	1,569	1,858	2,039	1,829	1,488	1,461	1,656
Agricultural uses	—	—	—	—	—	—	23	28	25	33
Replenishment and other	25	79	33	24	43	16	—	183	138	70
Total	1,377	1,560	1,487	1,593	1,901	2,055	1,852	1,699	1,624	1,759
Source of Water Supplies-Acre-feet [1], [2], [3]:										
Local Supplies	1,782.1	1,760.8	1,731.2	1,705.5	1,741.2	1,952.2	1,925.5	1,804.6	1,731.3	1,800.0
L.A. Aqueduct	317.7	307.7	224.7	57.9	57.7	61.0	113.4	266.6	305.1	199.5
Colorado River Aqueduct	600.0	494.6	594.6	1,086.5	1,184.4	1,103.0	640.0	437.8	656.9	901.4
State Water Project (California Aqueduct)	921.8	1,222.5	1,242.7	691.7	592.4	805.8	1,214.9	1,338.0	1,363.4	953.4
Total	3,621.6	3,785.6	3,793.2	3,541.6	3,575.7	3,922.0	3,893.8	3,847.0	4,056.7	3,854.3
Number of employees	1,877	1,832	1,794	1,772	1,770	1,765	1,746	1,767	1,806	1,877
Colorado River Aqueduct (miles)	242	242	242	242	242	242	242	242	242	242
Distribution System Pipeline (miles) [4]	830	830	830	830	830	830	819	819	819	819
Storage Capacity (thousand acre-feet)	1,072	1,072	1,072	1,072	1,072	1,072	1,072	1,072	1,072	1,072
Pumping Plants	6	6	6	6	6	6	6	6	6	6
Water Filtration Plants	5	5	5	5	5	5	5	5	5	5
Hydroelectric Plants	16	16	16	16	16	16	16	16	16	16

(1) Water volumes are reported in thousand acre-feet.
(2) Reflects regional sources of water supply within Metropolitan's service area.
(3) Actual production data from prior years are updated based on the most current available information.
(4) The increase in distribution system pipeline is due to the Inland Feeder becoming operational.

Source: Office of the Chief Financial Officer

The Metropolitan Water District of Southern California
Table 16
Projects Completed as of June 30, 2019 (Unaudited)

Completion Date	Contract/ Spec. No.	Project	Bid Amount	Final Amount
7/19/18	1827/1778	Jensen Electrical Upgrades - Stage A1	$ 15,800,000	$ 16,255,668
7/25/18	1844/1853	Colorado River Aqueduct Pumping Plants Seismic Retrofit of 6.9kV Switch Houses	9,595,000	9,298,114
8/3/18	1876/1898A	Eagle Rock Operation Control Center Building Roof Replacement	194,517	210,187
8/22/18	1859/1894	Garvey Reservoir Drainage and Erosion Improvements - Areas 1 and 5	280,238	348,438
8/28/18	1841/1826	Joseph Jensen Water Treatment Plant Solar Power Facility	4,503,635	4,293,766
8/31/18	1818/1750	F. E. Weymouth Water Treatment Plant Chemical Upgrades	10,267,000	10,692,931
9/24/18	1862/1901	Second Lower Feeder PCCP Rehabilitation - Contract 1	19,362,000	20,122,822
10/2/18	1860/1866	Inland Feeder and Lakeview Pipeline Intertie Valve Installation	767,201	752,201
11/16/18	1918/1918	Eagle Mountain Pumping Plant - Renovations of Houses 41 and 146	378,985	454,960
11/19/18	1850/1792	Colorado River Aqueduct Whitewater Siphons Erosion Protection	5,285,000	5,278,044
11/26/18	1843/1748	Robert B. Diemer Treatment Plant Administration Building Seismic Upgrades	4,426,000	4,613,015
12/14/18	1872/1915	Gene Pumping Plant Renovation of Houses 12 and 47	339,500	580,730
12/20/18	1881/1931	Julian Hinds Pumping Plant Renovation of Houses 42 and 149	349,000	452,555
2/5/19	1869/1881	Robert B. Diemer Water Treatment Plant Filter Outlet Conduit Seismic Upgrade - Northeast Slope	4,394,400	4,352,070
2/8/19	1950/1950	Sepulveda Feeder PCCP Del Amo Boulevard Urgent Relining	1,200,000	1,200,000
3/15/19	1866/1910	Lake Mathews Headworks Forebay Liner and Outlet Tower Repair	3,248,000	3,264,355
3/20/19	1906/1906	Wadsworth Pumping Plant Yard Piping Lining Repairs	5,416,000	5,390,918
3/27/19	1901/M-3006	Wadsworth Pumping Plant Control and Electrical Protection Upgrade	420,000	420,000
4/8/19	1892/1892	Rialto Pipeline CB-12 and CB-16 Valve Installation	866,600	866,600
4/23/19	1871/1797	Eagle Mountain Pumping Plant Reservoir Spillway Radial Gate Replacement	1,433,000	1,104,703
4/24/19	1888/1888	Colorado River Aqueduct Iron Mountain Reservoir and Canal Liner Repair	4,674,444	4,623,869
5/28/19	1870/1622	Colorado River Aqueduct Surge Chamber Discharge Line Bypass Covers	2,560,232	2,468,232
6/25/19	1956/1956	Colorado River Aqueduct Urgent Erosion Repair Mile Marker 131.5 to 140.2	3,200,100	2,886,957

Source: Engineering Services Group

The Metropolitan Water District of Southern California

Table 17

Major Construction Contracts in Progress as of June 30, 2019 (Unaudited)-Accrual Basis

Contract No.	Project	Percentage Contract Complete through 6/30/2019	Estimated Contract Completion Date	Contract Earnings through 6/30/2019 [1]	Bid Amount
1825	Palos Verdes Reservoir Cover and Liner Replacement	99%	7/1/2019	$ 31,678,434	$ 29,560,000
1856	Advanced Water Treatment Demonstration Facility	99%	9/1/2019	13,964,100	13,856,000
1857	Mills Electrical Upgrades – Stage1A	75%	8/1/2019	2,315,973	3,097,927
1877	F. E. Weymouth Water Treatment Plant - West Washwater Tank Seismic Upgrades	78%	7/27/2019	2,026,675	2,591,576
1879	Joseph Jensen Water Treatment Plant Inlet Water Quality Instrumentation Enclosure	56%	11/1/2019	551,925	985,000
1880	Orange County Region Service Center	48%	11/14/2019	4,408,078	9,257,483
1882	Weymouth Plant Domestic Water Systems Improvement	29%	2/10/2020	1,074,383	3,740,000
1883	F. E. Weymouth Water Treatment Plant Chlorination Systems Upgrades	10%	1/20/2021	873,648	8,487,170
1889	Colorado River Aqueduct Pumping Plants Uninterruptible Power Supply Replacement	25%	10/9/2019	230,999	939,000
1890	Intake Pumping Plant 2.4kV Power Line Relocation	72%	8/5/2019	3,979,755	5,553,669
1893	Electrical Upgrades at 15 Structures in the Orange County Region	6%	1/20/2020	150,300	2,606,700
1899	Orange County Feeder Cathodic Protection	29%	1/8/2020	163,000	556,000
1900	Diemer Water Treatment Plant West Basin and Filter Building Rehabilitation	28%	11/24/2020	10,931,781	38,539,196
1902	Second Lower Feeder PCCP Rehabilitation - Reach 2	2%	12/14/2020	1,000,000	53,273,196
1904	Orange County Feeder and Extension Relining - Reach 2	50%	9/13/2019	3,455,740	6,967,500
1905	Metropolitan Headquarters Building Improvements	17%	6/23/2022	7,527,738	43,998,000
1908	CRA Pumping Plants - Sump Rehabilitation	2%	3/3/2022	403,500	26,900,000
1911	Greg Avenue Pressure Control Structure - Pump Modification and New Control Building	12%	12/2/2020	2,614,779	20,975,000
1915	Colorado River Aqueduct Pumping Plants 6.9 kV Power Cable Replacement	1%	6/22/2020	163,444	16,452,832
1930	Garvey Reservoir Drainage and Erosion Improvements - Areas 2, 3, and 4	—%	10/28/2019	—	648,745
1931	Joseph Jensen Water Treatment Plant Modules 2 and 3 Flocculator Rehabilitation	—%	2/15/2021	—	8,888,000
1932	Iron Mountain Pumping Plant Renovation of Houses 74, 125, and 126	98%	7/1/2019	607,142	619,000
1940	Second Lower Feeder PCCP Rehabilitation - Reach 4	82%	10/8/2019	11,921,602	14,536,130

[1] Earnings reflected represent the value of work performed by the contractor as of the date indicated and include contract retention and other similar deductions from amounts earned by the contractor but otherwise required to be withheld by Metropolitan by law or contract.

Source: Engineering Services Group