

Kern Fan Groundwater Storage Project

FEASIBILITY REPORT

Attachment 5: Irvine Ranch Water District Comprehensive Annual
Financial Report 2019

October 21, 2019
Updated April 13, 2020





Irvine Ranch Water District
Irvine, California

COMPREHENSIVE ANNUAL FINANCIAL REPORT

for fiscal year ended June 30, 2019



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Comprehensive Annual Financial Report

For fiscal year ended June 30, 2019

Irvine Ranch Water District
Irvine, California

Board of Directors

Steven E. LaMar, President

Mary Aileen Matheis, Vice President

Douglas J. Reinhart

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General Manager

Paul A. Cook

Prepared by:

Irvine Ranch Water District

Finance Department

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Introductory Section

Irvine Ranch Water District
Fiscal Year Ended June 30, 2019

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December 16, 2019

To The Board of Directors,
Irvine Ranch Water District:

Management of the Irvine Ranch Water District (IRWD or the District) has prepared a Comprehensive Annual Financial Report of IRWD for the fiscal year ended June 30, 2019. This document, which contains a complete set of basic financial statements, is presented in conformity with generally accepted accounting principles (GAAP) and audited in accordance with generally accepted government auditing standards by a firm of licensed certified public accountants. State law requires that all special-purpose local governments publish these basic financial statements within six months of the close of the agency's fiscal year.

This report contains management's representations concerning the finances of the District. Management assumes full responsibility for the completeness and reliability of the information contained in this report. To provide a reasonable, rather than absolute, basis for making these representations, IRWD management has established a comprehensive framework of internal controls. These controls are designed to protect the District's assets from loss, theft, or misuse, and to ensure sufficiently reliable information for the preparation of the District's basic financial statements in conformity with GAAP. 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. As management, we assert that this financial report is complete and reliable in all material respects.

The District's basic financial statements have been audited by Davis Farr LLP, a firm of licensed certified public accountants. The goal of the independent audit was to provide reasonable assurance that the basic financial statements of the District for the fiscal year ended June 30, 2019 were free of material misstatements. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the basic financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. The independent auditor rendered an unmodified opinion that the District's basic financial statements for the fiscal year ended June 30, 2019 are fairly presented in conformity with GAAP. The independent auditor's report is presented as the first component of the financial section of this report.

A profile of the District is presented in this Introductory Section. In the Financial Section, Management's Discussion and Analysis (MD&A) immediately follows the independent auditor's report and provides an overview and analysis of the basic financial statements. This letter of transmittal and introduction is designed to complement the MD&A and should be read in conjunction with it.

Profile of Irvine Ranch Water District

Overview

Irvine Ranch Water District was established in 1961 as a California Water District under the provisions of the California Water Code. As a special district, IRWD focuses on four primary services - providing potable water, collecting sewage, producing and distributing recycled and other non-potable water, and implementing urban runoff source control and treatment programs.

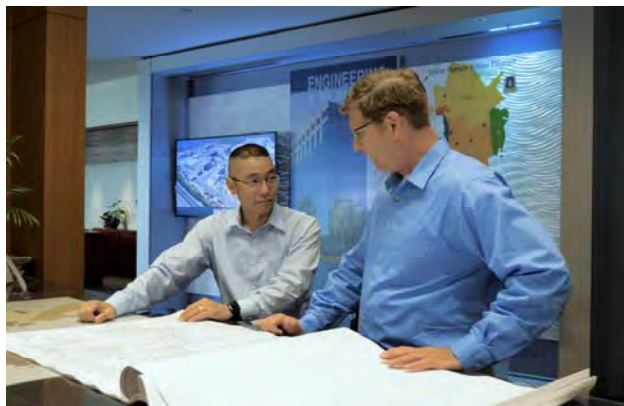
IRWD is an independent public agency governed by a five-member, publicly elected Board of Directors. The members of the Board each have varied professional backgrounds, coupled with an average tenure for the Board members of approximately 25 years. The District is a leader in developing and implementing resource management initiatives such as water recycling, urban runoff control and treatment, water efficiency, and water banking. The District is a pioneer in financial management practices such as variable rate debt financing and long-term infrastructure replacement program development and funding.

The District serves a 181 square mile area, which includes all of the City of Irvine and portions of the cities of Tustin, Newport Beach, Costa Mesa, Orange and Lake Forest, as well as certain unincorporated areas of Orange County. Extending from the Pacific Coast to the top of the foothills of eastern Orange County, the District's region is semi-arid with a mild climate and an average annual rainfall of approximately 12 inches. The total estimated daytime population served is approximately 600,000 and includes approximately 117,000 water and 111,000 sewer service and recycled water connections. The number of service connections has increased by approximately 21% over the last ten years.

The District provides its core services to its customers by focusing on the following areas:

- *Operational Reliability* – having multiple sources of water supply, various sewage treatment alternatives, and emergency power capabilities to ensure reliable services.
- *Organizational Strength* – having professional staff work in close collaboration with the Board of Directors striving to exceed the expectations of our customers.
- *Long-Term Financial Planning* – ensuring sufficient funds are available to construct, operate, maintain, and replace facilities, while retaining competitive rates now and in the future.

People



The District employs approximately 400 staff who are responsible for administering daily operations and implementing strategic objectives and policies set forth by the Board. The District actively promotes the training and education of employees to increase effectiveness and retention. The average tenure of District employees is approximately 10 years.

Services

The District is functionally organized into four core service areas:

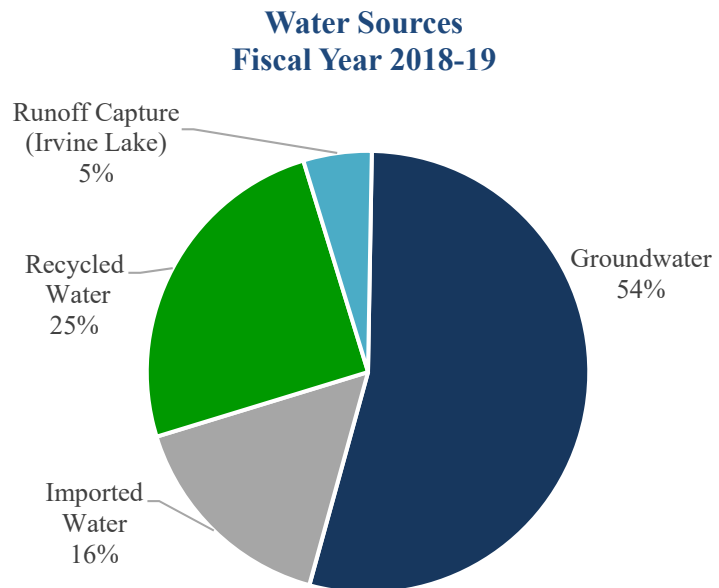
Drinking or “Potable” Water System

For many years, the District received virtually all of its drinking water from imported sources. To minimize this dependence on imported water, in the early 1980’s, the District developed a series of local wells known as the Dyer Road Wellfield to access high quality groundwater from the Orange County Groundwater Basin, managed by the Orange County Water District (OCWD).

IRWD also operates many other groundwater wells with water from some of these wells requiring treatment. In Fiscal Year (FY) 2018-19, local groundwater accounted for 54% of the District’s total water supply.

Groundwater currently is significantly less expensive, more reliable, and less energy intensive than imported water that is transported over hundreds of miles into Southern California and subsequently treated.

The District purchased 16% of its water supply in FY 2018-19 from the Municipal Water District of Orange County (MWDOC), the region’s local wholesale water supplier. This water is imported from both the Colorado River, which is transported approximately 240 miles through deserts and over mountain ranges to Southern California, and from the Delta, from which water is transported approximately 400 miles from Northern California.



Recycled and Non-Potable Water Systems

The District treats sewage to provide water for irrigation, commercial, industrial and agricultural purposes which further reduces its reliance on the more expensive imported water and increases its system reliability. Sewage from the community is collected and recycled to California State Water Resources Control Board Title 22 standards at the Michelson Water Recycling Plant and the Los Alisos Water Recycling Plant, which have the combined capacity to produce nearly 33.5 million gallons of tertiary recycled water per day. The District produced and utilized over 7 billion gallons in the current fiscal year.

Once treated, the recycled water is distributed throughout the service area and in FY 2018-19 accounted for approximately 25% of the District’s total water supply. Approximately 80% of all business and community landscaped areas (parks, school grounds, golf courses, street medians, etc.) in the District’s service area are irrigated with recycled water. The District also provides recycled water for various industrial and commercial uses. IRWD’s goal is to recycle its sewage flows whereby recycled water will represent 25% to 30% of its total water supply after the District’s service area is fully developed.

The District operates a non-potable system which includes 5 wells, 5 open reservoirs and 12 tanks that store water for non-potable uses. In total, the District has approximately 4,500 acre feet of active recycled water storage capacity. IRWD has a majority ownership in Irvine Lake, a 25,000 acre-feet reservoir that can capture and store stormwater and can also store imported water supplies.

Sewage Collection and Treatment System

The District has an extensive network of gravity sewers, force mains, sewage lift stations, and siphons that convey sewage to two District-owned water recycling plants or the Orange County Sanitation District (OCSD). In FY 2018-19, the District treated approximately 77% of its sewage while the remainder of the sewage collected by the District was diverted to the OCSD treatment facilities. The District plans to expand its treatment capacity when necessary to serve its growing population. This expansion is discussed in more detail in the *Major Initiatives* section of this document.

Urban Runoff Source Control and Treatment System

IRWD is statutorily authorized to control and treat urban runoff, and conducts various projects and programs as part of an effort to protect water quality in the San Diego Creek watershed. In the 1990s, the District constructed wetlands at the San Joaquin Marsh where natural biological processes remove a substantial pollutant load from San Diego Creek dry weather flow before it reaches the environmentally sensitive Upper Newport Bay State Ecological Reserve. The District operates a regional urban runoff treatment network known as the Natural Treatment System (NTS). As of June 30, 2019, the NTS consists of 39 constructed wetland treatment sites located throughout the San Diego Creek Watershed and one outside of the IRWD service area with several more currently under construction. In addition, IRWD has recently added an urban runoff diversion facility along Peters Canyon Wash, which pumps runoff resulting from selenium-rich high groundwater into OCSD's sewers, eventually flowing to OCWD's groundwater replenishment system.



San Joaquin Marsh

Infrastructure Assets

The District builds and maintains significant capital infrastructure in order to provide superior service to its customers. The table below provides key information relating to its water and sewer system assets from 2010 to 2019.

Infrastructure Assets		
	<u>2010</u>	<u>2019</u>
Potable System		
Miles of Water Line	1,169	1,919
Number of Storage Tanks	37	36
Maximum Storage Capacity (acre feet)	456	456
Number of Pumping Stations	43	39
Number of Wells	24	27
Well Production Capacity (cfs)	117	118
Water Banking Storage Capacity (acre feet)	107,600	126,000
Potable Treatment Plants	3	5
Non-Potable and Recycled Systems		
Miles of Recycled Line	407	565
Number of Storage Tanks	11	12
Number of Open Reservoirs	4	5
Maximum Storage Capacity (acre feet)	23,703	24,155
Number of Pumping Plants	19	19
Number of Wells	5	5
Well Production Capacity (cfs)	10	10
Sewer System		
Miles of Sewer Line	940	1,134
Number of Lift Stations	18	23
Treatment Plants	2	2
Treatment Capacity (mgd) (Tertiary)	23.5	33.5
Sewage Flows to Michelson Plant	66%	65%
Sewage Flows to Los Alisos Plant	14%	12%
Sewage Flows to Orange County Sanitation District	20%	23%
1 acre foot = 325,900 gallons		
cfs = cubic feet per second		
mgd = millions gallons per day		

2019 Accomplishments

The District has a Strategic Planning Process where the Board annually adopts goals and annual target activities. The approved Target Activities are associated with eighteen goals for the District to accomplish within the next five years. Major accomplishments achieved in FY 2018-19 are:

1. Implemented a 2-year budget and Proposition 218 noticing.
2. Executed key agreements to optimize Irvine Lake as a water resource facility for IRWD, and its partners. Resolved issues regarding use of Irvine Lake for water rights and quality and participated in developing an interim agreement to initiate fishing at the lake.
3. Completed construction and initiated start-up of the \$200 million Michelson Water Recycling Plant Biosolids & Energy Recovery Facilities capital project for the handling of solids, which will cost effectively provide resource recovery of solids and gas for IRWD.
4. Continued to promote water use efficiency and long term conservation measures leading District's customers to have one of the lowest residential gallons per capita per day (gpcd) rates in California. In 2018-19, IRWD's residential water use (indoors and outdoors) averaged 64 gpcd, which was 35% lower than the statewide average of 99 gpcd.
5. Completed triennial Benchmark Salary Survey to ensure District salaries remain competitive to market rates.
6. Completed new three-year labor agreements with represented personnel.
7. Initiated construction of the remaining Sand Canyon Office property. The investment contributes to keeping customer rates low.
8. Implemented re-designed customer bill to enhance customer understanding and communication.
9. Fully funded IRWD employee pension plan, including the Pension Plan Trust which contains funds adequate to cover the District's CalPERS projected pension liability as of the current fiscal year end.
10. Received the United States Environmental Protection Agency's WaterSense Excellence Award and the Silver Anvil Award for Community Outreach from the Public Relations Society of America.



Biosolids and Energy Recovery Facilities

Future Goals

The District has the following Board adopted goals for IRWD to accomplish within the next five years, along with Target Activities that are typically accomplished within 12 to 18 months:

1. Optimize and protect local water supply utilization: develop and implement projects to increase IRWD's access to local groundwater and stormwater capture.
2. Evaluate and invest in projects and programs that will enhance future long-term water supply reliability: pursue projects and supply arrangements to enhance water supply reliability, including increased water banking and water recycling. Provide additional water storage opportunities for regional water supply reliability.
3. Optimize use of Irvine Lake as a water resource facility for IRWD and its partners: resolve property related issues and implement projects which will enhance the safety of the reservoir.

4. Develop water banking recharge, storage, and extraction capacity for IRWD and water banking partners, and store water as it becomes available: continue development of IRWD water banking facilities in Kern County.
5. Develop and implement the Kern Fan Groundwater Storage Project: execute agreements and secure additional water storage investment funding.
6. Develop water recycling facilities and applications for optimal benefit: identify new opportunities for IRWD to utilize recycled water locally.
7. Maximize resource recovery from fully functional biosolids and other resource recovery facilities: continue start-up of IRWD’s Biosolids and Energy Recovery Facilities.
8. Improve energy service reliability, manage demands, and control costs: implement cost-effective battery storage and solar power installations. Develop capability to continue operation of key facilities during short and long-term power outages.
9. Maximize watershed protection: control and treat urban runoff while preventing sewer spills.
10. Ensure financial and rate stability: ensure adequate funding for future infrastructure replacement needs, continue to provide low rates for IRWD customers, maintain strong financials through solid debt coverage, liquidity balances, mixed debt profile, and pension plan obligation funding of at least 90 percent.
11. Identify, assess and implement new technologies and systems to improve operating efficiency: implement new systems such as Enterprise Asset Management while protecting existing and future systems through advanced cybersecurity measures.
12. Enhance customer communications: Implement improved customer web access portal and strategically extend community outreach.
13. Maximize water use efficiency in the community: explore future opportunities for increased water use efficiency and expand database for improved analytics.
14. Recruit, develop and retain a highly skilled, motivated, and educated work force: develop employee skills, develop and implement employee expectations for corporate values and ensure appropriate employee compensation.
15. Guide and lead local, state and federal policies and legislation: actively engage in issues of key interest to IRWD including water use efficiency, water rate structures, and others.
16. Engage and shape policies and regulations put forth by local, state and federal agencies: influence regulations to align with best practices for recycled water use and other applications.
17. Increase collaboration with other agencies and entities through leadership and innovation: engage at a high-level in industry associations, regional water agencies, and development of opportunities of mutual benefit for IRWD and partners.
18. Implement opportunities that enhance safety, security, and emergency preparedness throughout the District: protect the health and safety of IRWD employees and facilities.

Water Use Efficiency

The District continues to be a leader in the innovation and implementation of water use measures that promote the most efficient use of water, both on a per capita and per acre basis.

The District’s budget-based tiered rate structure, implemented in 1991, was carefully designed to promote the efficient use of water by providing customers pricing signals related to over-use of water in a financially sustainable way. This structure is recognized as a model for other agencies to emulate.

In 2016, Governor Brown issued an Executive Order calling for Californians to build on the actions taken during the recent statewide drought, and to “Make Conservation a Way of Life in California”. In response, legislation requiring statewide long-term water use efficiency passed in 2018. As a result, the

state will establish new long-term water efficiency objectives by June 30, 2022. IRWD has a long history of implementing cost-effective water efficiency programs, and it is well prepared to meet the future efficiency standards. The District's customers have one of the lowest residential gallons per capita per day (gpcd) rates in California.

The District's Water Use Efficiency Plan provides a comprehensive strategy that includes environmental considerations and addresses the considerable financial benefits of water use efficiency for the District and its customers. Specifically, the Plan addresses:

- Increasing water demands and the impact to the District's unit cost of water, which would increase if the District needed to purchase more expensive imported water.
- Reducing urban runoff (typically the result of "over-watering") which minimizes water quality degradation from fertilizers, pesticides and animal waste in creeks, rivers and the ocean.
- Reducing water demands, which reduces energy usage and related costs needed to convey water.
- Reducing water use indoors, which results in reduced sewage generation and attendant treatment costs and capital costs for additional infrastructure.

The basic tenets of the Water Use Efficiency Plan include local, state and national policy development and leadership, rate structure improvements, focused customer interface, extensive education and outreach, technology advances, and the development of financial incentives.

During the past fiscal year, the District provided financial incentives to residential and business customers to install water efficient devices such as high efficiency clothes washers, toilets, irrigation equipment, and conversions from high water use turf landscape to water-efficient landscapes. Due to the investments made by the District to diversify its resources, expand the use of recycled water and improve water use efficiency, IRWD provides reliable, high quality water to its customers in a cost effective manner.

The District has also led the use of recycled water beginning in the late 1960s and presently serves over 6,100 sites, with approximately 28,000 acre feet of recycled water sold in FY 2018-19 representing 25% of the District's total water supply. The use of recycled water reduced the District's need to import more expensive potable supplies.

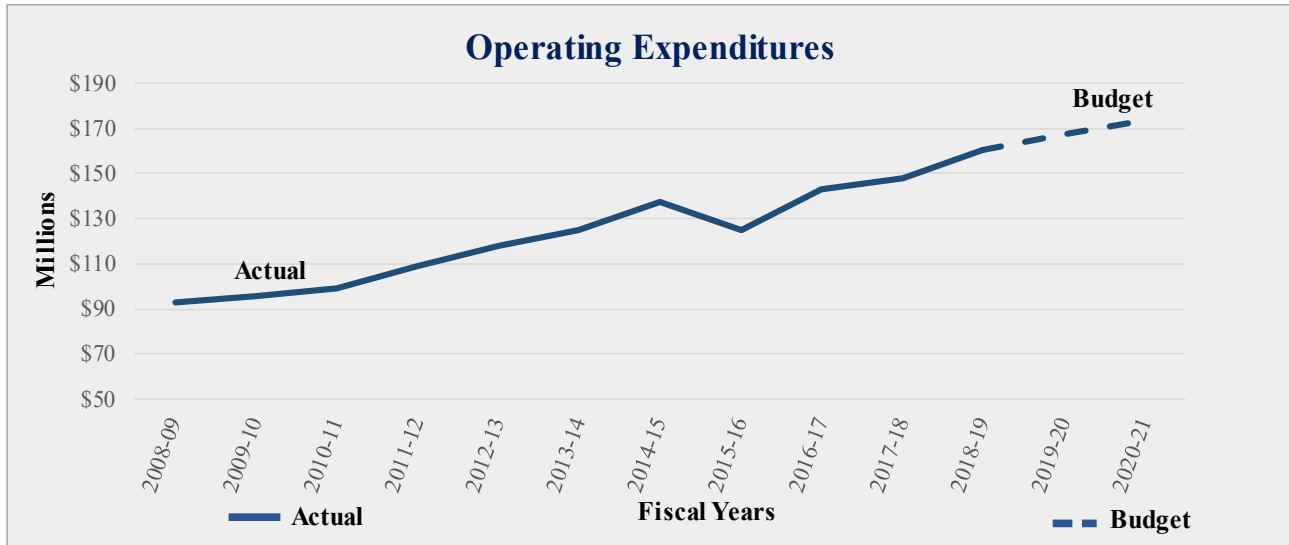
Legislative and Regulatory Affairs

The District actively monitors and works to influence local, state and federal legislation, policies and regulatory actions that could affect IRWD's operations, existing and future facilities and strategic planning efforts. The Board of Directors is frequently engaged in, and takes active positions on, relevant pending legislation and regulatory actions. The District continues to engage proactively in policy discussions surrounding water use efficiency, recycled water, and water rates in California. The District and its Board of Directors also participate in state and regional trade associations including the Association of California Water Agencies, the California Association of Sewer Agencies, the Water Reuse Association, the California Special District Association, and the California Municipal Utilities Association.

Financial Plan

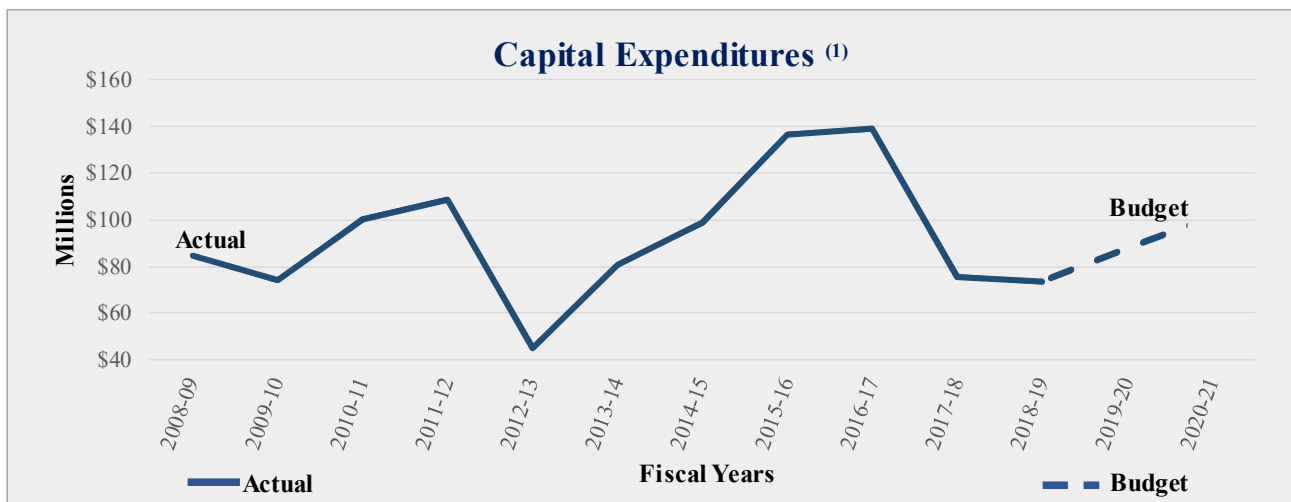
New this year, the Board approved a two-year (biennial) operating budget to improve IRWD's long term planning, enhance funding stability, and create greater efficiency in the budgeting process. The goal of the District's operating budget process is to appropriately fund the resources required to provide

excellent service to IRWD customers as cost-efficiently as possible. The graph below shows the actual operating expenditures through FY 2018-19, as well as the Board approved operating budgets for FY 2019-20 and 2020-21. Increases reflect costs associated with customer growth within the District, as well as an increase in overall operating expenses. Increases have been kept to a minimum by aggressively pursuing reductions in expenses to offset uncontrollable expenses, such as pass-through rate increases from outside agencies.



The approved FY 2019-20 budget increased to \$167.0 million from \$157.1 million or 6.3% from FY 2018-19 and to \$173.6 million or 4.0% in FY 2020-21. The primary reasons were increases in labor and associated benefits for additional positions necessary to support new operating facilities, increases in the cost of water due to rate increases from outside agencies, and higher operating and maintenance costs associated with new facilities coming on line. The decrease in FY2015-16 expenses is primarily due to lower water demands.

The Board also approved a two-year capital budget based on new, enhancement and replacement infrastructure needs. The following chart shows the actual capital expenditures through FY 2018-19 and the budget for FY 2019-20 and FY 2020-21.



(1) Actual capital expenditures excluding overhead, intangibles and capitalized interest.

The reduced spending in 2012-13 and 2017-18 from prior years represents the District's completion of several projects including the MWRP Upgrade Project, the Baker Water Plant, and the subsequent design phase for the Michelson Biosolids and Energy Recovery Facilities, which began construction in FY 2013-14. The Board approved capital budget was \$90.9 million for FY 2019-20 and \$93.8 million for 2020-21. Many capital budget projects extend beyond one fiscal year.

User Rates & Charges

User rates and charges are primarily used to fund the District's operation and maintenance expenses. The District separates the cost of constructing water and sewer infrastructure from the cost of daily operations and maintenance. User rates, as discussed below, are billed to customers on a monthly basis, and include a component for the inevitable replacement of existing infrastructure. The District sets replacement monies aside in advance to help stabilize rates and avoid significant potential future rate impacts. In 2015, the District completed a detailed cost of service study which confirmed that user rates billed to customers are based on actual costs to provide the services.

The District allocates capital costs within its service area through the use of water and sewer improvement districts, for which general obligation bond authorization is obtained and used as needed to fund new capital projects. Ad valorem property tax rates are set annually by the District, as are connection fees paid by property developers and landowners. Generally, the District's policy is to allocate the cost of new infrastructure evenly between the developers/landowners and the ultimate property owners who utilize the water and sewer infrastructure.

Water Rates

The District's rate structure for water use is separated into a commodity charge component and a fixed service charge component. The commodity charge reflects the cost of providing the District's water supplies while the fixed service charge funds the fixed operational and maintenance expenses of the District. For FY 2018-19, the District's water fixed service charge was \$10.35 per month. The District has a long history of planning for the inevitable replacement of capital infrastructure, and sets monies aside into enhancement and replacement funds for this purpose. In FY 2018-19, the monthly fixed service charge includes a user enhancement and replacement component of \$0.70 and \$2.10, respectively, per month, intended to fund current and future replacement and refurbishment costs that provide reliability and redundancy to the District's infrastructure.

The District has a four-tiered rate structure that promotes water use efficiency. A basic use allocation is established for each customer account that provides a reasonable amount of water for the customer's needs based on factors such as the number of occupants, type or classification of use, size of the irrigated area, evapotranspiration rate for the billing period and other consistently applied criteria. The chart below illustrates the four-tier structure that reflects the increased cost associated with usage in the higher tiers.

FY 2018-19 Residential Rate Structure – Potable Water (Commodity Charge)

Tier	Percent of Estimated Customer Need	Cost per ccf
Low Volume	0 – 40%	\$1.40
Base Rate	41 – 100%	\$1.89
Inefficient	101 – 140%	\$4.73
Wasteful	141% +	\$13.35

One ccf (100 cubic feet) = 748 gallons

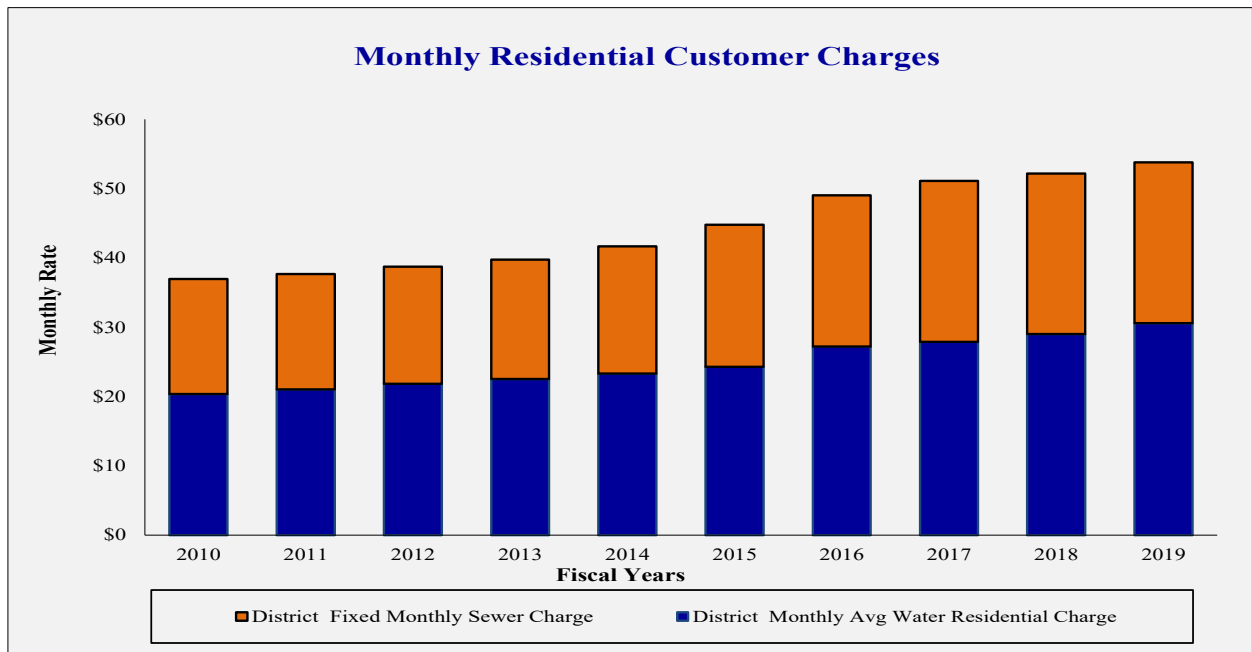
As of June 2019, approximately 81% of the District’s customers were within the first two tiers and approximately 94% of customers fell within the District’s first three tiers. IRWD residential bills are consistently among the lowest in Orange County.

Sewer Rates

The District’s sewer rates are also among the lowest in Orange County, with a fixed monthly service charge of \$23.20 in FY 2018-19 for a typical residential customer covering the collection and treatment of sewage. This monthly service charge includes a user enhancement and replacement component of \$0.82 and \$9.31, respectively, per month, which is intended to fund current and future capital costs to replace, refurbish and upgrade the existing system. The monthly service fee of \$9.31 includes \$3.00 to fund the replacement portion of the Michelson Biosolids and Energy Recovery Facilities discussed in more detail under *Major Initiatives – Expanded Water Recycling Options and System Reliability*.

Historic Rate Trends

The following chart reflects the annual “base rate” charge for an average customer’s water and sewer service through FY 2018-19. The District has raised rates in each of the last several years due largely to increased costs from outside agencies or wholesale supplies and increased fixed service costs for both water and sewer, including funding for future infrastructure replacement.



Factors Affecting Financial Condition

The information presented in the Financial Section is best understood in the context of the economic environment in which the District operates, as discussed below.

State and Local Economy

Orange County is the third most populous county in California with nearly 3.2 million residents and a varied economy in which no single industry is considered dominant. With a location central to Orange County, the District's service area is the home to numerous corporate headquarters such as Oakley, Edwards Life Sciences, Blizzard Entertainment and Glidewell Laboratories. The District is also home to various educational institutions, including University of California Irvine, Concordia University, two community colleges, and other colleges and universities with satellite campuses. The total estimated daytime population served is in approximately 600,000.

During FY 2018-19, the District continued to expand its operating facilities to accommodate approximately 4,700 new water and sewer service connections constructed within District boundaries. Development and entitlement needs of the builders continue to change and there remains less than 20% left for future development, including the Northern Sphere area of Irvine, Lake Forest and property from two de-commissioned military bases. Requirements for these areas have been included in the planning and these facilities are included in the capital budget. The assessed value of land within the District's service area has grown significantly in the last decade from \$34.8 billion in 2010 to more than \$66.3 billion in 2019, demonstrating the strength of the local economy.

The State of California's financial condition has historically impacted local governments such as cities, counties and special districts. In 1992, special districts were subjected to legislation that could shift substantial amounts of property tax revenue to the State.

Long-Term Conservation

In 2016, Governor Brown issued an Executive Order calling for Californians to build on the actions taken during the recent statewide drought, and to "Make Conservation a Way of Life in California". In response, legislation requiring statewide long-term water use efficiency passed in 2018. As a result, the state will establish new long-term water efficiency objectives by June 30, 2022. IRWD has a long history of implementing cost-effective water efficiency programs, and is well prepared to meet the future efficiency standards. The District is well positioned to sustain any potential reduction in revenues and meet future efficiency targets with minimal impact on net revenues due to its rate structure which effectively splits costs into variable and fixed rate components. Any decrease in consumption would be offset by a decrease in related variable costs while the fixed rate component would cover the fixed operating and maintenance costs.

Financial Planning & Budgeting

Short-Term

The Board of Directors approves operating and capital budgets every two years and allocates required funding accordingly. The General Manager has limited discretion to transfer capital between activities and Board approval is required for any overall increase or substantial changes. Throughout the fiscal year, actual expenditures are compared to budget. Variances between budget and actual results are analyzed and evaluated to ensure the District's financial goals and objectives are being met. The budget process is further supported by the District's long-term financial models, enabling the Board to make

informed decisions on setting rates and charges that ensure the long-term stability of the District. Funding needs are assessed using these financial planning models.

Long-Term

Meeting the goals of reliable, cost effective long-term water and sewer service requires substantial planning for both capital improvements and changing operating conditions. The District's capital program anticipates the need to update, expand or provide redundancy as well as refurbish and replace existing facilities as they reach the end of their useful life. District staff identifies future infrastructure requirements well in advance of needs to ensure the necessary funding for those projects is available. Capital projects are funded through a combination of connection fees, property taxes and user rates.

The District has a long history of planning for the enhancement and replacement of aging water and sewer infrastructure. Recognizing that infrastructure replacement is both inevitable and costly, the District established infrastructure Enhancement and Replacement Funds to provide funding for updating, expanding, creating redundancy, as well as replacing and refurbishing various components of the water and sewer systems. The objective of the funds is to help moderate the financial impact on future user rates attributable to expenditures associated with enhancing and replacing capital facilities. For FY 2018-19, the combined water and sewer user enhancement/replacement fees were \$12.93 per month.

Over time, the District has evolved from a newly developing area to becoming a fully developed area. While many of the projects slated for construction will provide additional capacity for ultimate demands, the focus of the District is transitioning from building new infrastructure projects to ongoing operations and maintenance activities, as well as upgrading and replacing existing infrastructure. Connection fees paid by developers, which generated \$32.7 million for new capital in FY 2017-18 declined to \$18.2 million in 2018-19 as the District nears build-out. The District utilizes a sophisticated financial model to factor in such variables as future development, construction costs, growth rates, inflation, redevelopment and other criteria in order to project rate setting for funding future capital needs.

In 2013, the District completed a strategic review of its existing current capital funding plan which resulted in a master consolidation plan that combined certain improvement districts in order to maintain the future financial viability of each area. The master plan allocates funding responsibility for capital improvements to the areas which will benefit from those respective facilities and separates areas on the basis of projected timing of development. Diversification of the District's water supply and sewage treatment options are also major objectives of the District's master plan. Those objectives are discussed in further detail in the *Major Initiatives* section of this introduction.

The District's approach to infrastructure replacement and funding reflects industry best practice and illustrates the District's commitment to financial stability and protection of its customers from significant future rate increases.

Pension Funding

The District recognizes that defined benefit plans and the related future pension obligations pose significant issues for many government agencies. The District has taken a proactive approach to address the issue and, in 2013, established a Pension Benefits Trust to substantially fund its PERS unfunded liability. The Pension Benefits Trust provides the District with an additional funding option to PERS that allows for investment by a professional fund management team selected and monitored by the District. The Pension Benefits Trust holds the funding contributions for the District pending future remittance to the PERS pension trust fund which will pay all retiree benefit payments to employees

associated with the plan. Future contributions will be transferred from the Pension Benefits Trust to PERS at the District’s discretion.

Investment policy and asset allocation decisions relating to the Pension Benefits Trust are made by a Retirement Board consisting of two members from the IRWD Board of Directors and the District’s General Manager. In FY 2013, the District made an initial \$35.0 million contribution to the Pension Benefits Trust, and since then has made additional annual contributions ranging from \$1.9 million to \$12.8 million. As of June 30, 2019, the fair market value of the assets in the Pension Benefits Trust was approximately \$78.4 million. These assets are in an irrevocable trust and may only be used to pay for the pension liability.

The following schedule shows the recent history of pension plan assets and liabilities including the trust assets (in thousands):

Fiscal Year	Total Pension Liability	Total Pension Assets	Total Pension Assets as a Percentage of the Total Pension Liability
06/30/17	\$238,009	\$226,901	95.3%
06/30/18	264,399	263,819	99.8%
06/30/19	275,457	284,426	103.2%

Cash Management Policies and Practices

The District is regulated by State law (primarily California Government Code Section 53600, et seq.) as to the types of fixed-income securities in which it can invest cash assets. In addition, the Board of Directors annually adopts an investment policy that is generally more restrictive than the State codes. The District’s standard practice is to maintain an appropriate balance between safety, liquidity and yield of investments to fund required expenditures in conformance with all applicable State laws, the District’s investment policy, and prudent cash management principles.

For FY 2018-19, the District's fixed-income investment portfolio consisted primarily of short-term securities with a portfolio average maturity of approximately 9 months. These securities included U.S. Treasury notes, U.S. government agency notes and the State-managed Local Agency Investment Fund. The average annual return on all of the District’s cash investments in FY 2018-19 was 1.82%. Including real estate investments, the weighted average rate of return was 3.96% for the same period.

At June 30, 2019, the District's cash and investments totaled approximately \$374.0 million. Cash balances are allocated to various funds including the Replacement Fund, New Capital Fund, Debt Service Fund and others.

Real Property Investments

As a means to match its long-term responsibility to replace water and sewer facilities when they reach the end of their useful lives with long-term funding investments, the District obtained legislative authority from the State to invest a portion of its capital facilities Replacement Fund in real property located in Orange County.

As of June 30, 2019, the District owns or has an interest in six properties with an approximate market value of \$229.6 million. The District’s income-producing real estate investments have a weighted

average return (on original cost) for FY 2018-19 of 14.9%. Net revenues of \$8.4 million generated in FY 2018-19 from the District's real estate investments are retained within the Replacement Fund.

Debt Management Policies and Practices

The District strives to minimize the cost of its long-term debt. In 1984, the District obtained State legislation that allowed for the use of variable rate debt to help achieve this goal. The Board minimizes its exposure to interest rate risk by utilizing both fixed and variable rate debt and has leveraged opportunities provided by the low interest rate environment in recent years. The District maintains a healthy balance between fixed and variable rate debt. As of June 30, 2019, the District's debt portfolio included fixed rate debt at 59.0%, synthetically fixed (hedged) variable rate debt at 14.0% and unhedged variable rate debt at 27.0%, resulting in an average all-in cost of debt of 3.57% for the fiscal year.

In FY 2016-17, the Board of Directors adopted a Debt Management Policy Statement (Debt Policy). Debt Policy objectives formalize previous District guidelines related to timing and amount of future debt issuance, allowable debt types and structures and spending requirements of bond proceeds. The Debt Policy also addresses underwriter selection and allowable methods of sale, continuing disclosure requirements, financial advisor and credit rating agency relationships and other key debt-related topics.

As of June 30, 2019, there were eight outstanding GO bond issues consisting of \$271.7 million in variable rate mode and \$278.4 million in fixed rate mode (excluding any unamortized premium or discount). As of June 30, 2019, the District also had two outstanding COPs issues with a balance of \$118.7 million in fixed rate mode. The District has secured direct pay letters of credit to enhance certain issues of its variable rate debt.

The GO bond issues are secured by the District's ability to levy ad valorem property taxes to pay debt service. Although the District has elected to use a combination of ad valorem property taxes and other legally available funds to pay debt service, the legal authority exists to fully fund GO bond debt service through such ad valorem taxes. In addition to the ad valorem tax pledge, certain GO bond issues are also secured by the net revenues of the District. The COPs issues are also secured by the net revenues of the District.

The District is required under some of its debt covenants to collect revenues sufficient to provide net revenues equal to 125% (1.25 times) of senior debt service coverage during the fiscal year. As of June 30, 2019, the District had net revenues equal to 4.8 times senior debt service coverage.

Prior to FY 2003-04, all of the District's outstanding debt was in a variable rate mode and the Board of Directors took certain actions to manage and mitigate the interest rate risk. The District's practice is to maintain a target amount of investment assets equal to at least 75% of the District's outstanding unhedged variable rate debt. In addition, in 2004 the District began an interest rate swap program under which LIBOR-based fixed payer interest rate swaps were executed to hedge a portion of the District's variable rate exposure. In June 2019, \$70 million of the District's \$130 million of outstanding fixed payer swaps matured, with the remaining \$60 million notional amount due to mature in March 2029. The outstanding interest rate swaps allow the District to limit the interest rate risk exposure on approximately \$89.5 million of its remaining tax-exempt variable rate debt to 3.81% (assuming a historical ratio for the tax-exempt SIFMA Index versus taxable 1-month LIBOR of 67%).

In FY 2010-11, the District issued \$175 million of general obligation fixed rate debt utilizing the taxable Build America Bond (BABs) program. BABs, created under the American Recovery and Reinvestment

Act, are taxable bonds with subsidy payments made by the Treasury Department to issuers equaling 35% of the interest costs. In FY 2018-19, Federal subsidy payments were cut by 6.2% under congressionally mandated sequestration. As a result of the reduced subsidy payments, the net interest rate for the District's BABs issue increased from 4.30% to 4.45%.

Risk Management

The District utilizes a combination of self-insurance and third-party liability insurance to minimize loss exposures from property claims, third-party liability claims and workers compensation claims. The District self-insures the first \$25,000 per occurrence for property losses, \$100,000 per occurrence for third-party liability claims and \$125,000 per occurrence for workers compensation claims. Various control techniques used to minimize loss include, but are not limited to, regular employee safety meetings and training sessions, the use of uniform language in contracts designed to limit or prevent liability exposure, general risk assessments, and the development of emergency plans, including a business continuation plan.

The District engages an outside firm annually to evaluate the District's network security. The objective of the security assessment is to identify risks and vulnerabilities from the Internet or local wireless networks and make recommendations for remediation wherever appropriate. The assessment includes tests, scans, and surveys to identify vulnerabilities and configuration issues. In addition, the District hired an outside firm to conduct a detailed Information Security Assessment. This comprehensive review identified the District's critical data assets, potential system vulnerability risks, and overall ability of the District to respond to a cybersecurity threat or event. The annual external network security and cybersecurity assessments and ongoing staff education and awareness are just a few of the ongoing efforts by the District to safeguard information.

Major Initiatives

The District's major initiatives during FY 2018-19 include continuing programs to secure water supplies, as well as expanding sewage treatment capacity and diverting sewage flows, water education programs, and the continuing implementation of the Water Use Efficiency Plan.

Water Supply Reliability

Groundwater Program

One of the goals of the District's Water Resources Master Plan is to identify a reliable water supply mix which includes developing sufficient groundwater production capacity to pump IRWD's portion of the Orange County Ground Water Basin, additional local groundwater production, and to have enough capacity to meet demands during outage conditions. Currently, the District meets these goals and has the ability to produce approximately 45,000 – 50,000 acre feet per year (AFY) of potable groundwater and 4,000 – 5,000 AFY of non-potable groundwater.

Water Banking

In addition to developing its local groundwater and recycled water systems, the District is further improving its water supply reliability by developing and operating water banking facilities in Kern County, California. These projects are known as the Strand Ranch Integrated Banking Project and the Stockdale Integrated Banking Project (collectively, the IRWD Water Bank). The IRWD's Water Bank is situated on groundwater recharge lands that overlie the regional Kern County groundwater basin. The

purpose of the IRWD Water Bank is to improve the District's water supply reliability by capturing and storing low cost water available during wet hydrologic periods for use during dry periods. The IRWD Water Bank enhances the District's ability to respond to drought conditions and potential water supply interruptions and enables it to reduce the cost of water delivered under such conditions.

The District has entered into agreements for a 30-year water banking partnership with the Rosedale-Rio Bravo Water Storage District (Rosedale) in Kern County. These agreements provide for Rosedale to operate the IRWD Water Bank on behalf of the District and permits the District: (i) to store up to 76,000 acre feet of water in the aquifer; (ii) to recharge a minimum of 44,600 acre feet of water per year in the aquifer; and (iii) to recover a minimum of 28,750 acre feet of water per year from the aquifer. An additional 50,000 acre feet of leased storage will be available in the future as part of the Stockdale Integrated Banking Project.

The District has constructed groundwater recharge ponds and related facilities at its IRWD Water Bank that are necessary to divert water from an adjacent canal into the ponds. Groundwater wells have been constructed on the Strand Ranch and Stockdale West properties. The District, in partnership with Rosedale and others, has also constructed additional wells that will increase the ability to recover water from the District Water Bank during peak summer demand periods. The District has secured water from a number of sources for recharge at the IRWD Water Bank.

The District has entered into agreements with Metropolitan Water District of Southern California (MWD) which allows it to transfer water from the IRWD Water Bank into the District's service area. The District recovered and delivered approximately 1,000 acre feet from the Water Bank in FY 2015-16.

Since 2010, the District has delivered a total of approximately 70,575 acre feet of water to the IRWD Water Bank through its water supply partnerships. The District has returned its partner's share of the water and holds approximately 32,000 acre feet of water in storage for future use in IRWD's service area. The District is currently pursuing additional potential water supply opportunities for diversion into the IRWD Water Bank.

Kern Fan Groundwater Storage Project

The Kern Fan Groundwater Storage Project (Kern Fan Project) will develop a regional water bank in the Kern Fan area to capture, recharge and store unallocated Article 21 water from the State Water Project (SWP) during wet hydrologic periods. The project is a joint venture between IRWD and Rosedale-Rio Bravo Water Storage District. The stored water would be extracted when needed to provide ecosystem, emergency supply and water supply benefits. IRWD's share of the Kern Fan Project would be used in conjunction with the Strand Ranch and Stockdale Integrated Banking Projects to meet IRWD's contingency storage needs at build-out. IRWD's goal for contingency storage is to secure supplies adequate to backfill the loss of imported supplies for three consecutive years. The Kern Fan Project, along with the IRWD Water Bank will allow IRWD to meet this goal.

In August 2017, IRWD and Rosedale jointly submitted a grant application to the California Water Commission (CWC) for the proposed Kern Fan Project. The application sought Proposition 1 funds available from the CWC through the Water Storage Investment Program (WSIP). In July 2018, the CWC conditionally awarded \$67.5 million to the Kern Fan Project. The District is currently pursuing additional funding opportunities.

Water Rights

The District also owns property with rights to State Water Project water which can be stored in the IRWD Water Bank. The water is available as a result of the District's acquisition of property located within the Dudley Ridge Water District, including the rights to use approximately 1,750 acre feet of Table A State Water Project water allocated to Dudley Ridge. The District can store its Table A water in the IRWD Water Bank with half of the water being available for future use in the District's service area. The acquisition also includes certain participation rights in the Kern Water Bank allowing the District to store up to approximately 9,500 acre feet of water.

The District owns approximately 3,100 acres of agricultural land (PVID Properties) in Riverside County, California. IRWD's PVID Properties are located within Palo Verde Irrigation District (PVID), which has first priority rights on the Colorado River. Approximately 969 acres of the land are included in a Metropolitan Water District of Southern California (MWD) and PVID fallowing program under which MWD makes payments to landowners in exchange for letting land lie fallow. Water that is conserved through fallowing is available for use within MWD's service area (which includes the District's service area). The District has leased the PVID Properties to tenant farmers for agricultural uses.

Syphon Recycled Water Seasonal Storage Facility

Syphon Reservoir, located in the northern portion of Irvine, is a sixty-year-old untreated water storage reservoir historically used for agricultural purposes. The District purchased Syphon Reservoir in January 2010, and in 2015 completed the process of converting the reservoir into a recycled water seasonal storage facility. Seasonal storage reservoirs allow the District to store excess recycled water produced in the winter months for use in higher demand summer months. This will increase water reliability by reducing the District's dependency on imported water from MWD used to supplement the recycled water system.

In 2013, the District completed a feasibility study to increase storage capacity in Syphon Reservoir from its current capacity of 450 acre feet to 5,000 acre feet. Additional storage capacity could allow the District to utilize more of the recycled water it produces. An expansion of Syphon Reservoir to 5,000 acre feet would allow for recycling 100% of the sewage flows tributary to MWRP and could reduce the District's need to supplement the recycled water system with imported water in dry years. The District is currently performing geotechnical investigations of the site and evaluating funding alternatives for the reservoir expansion.

Expanded Water Recycling Options, Resource Recovery and System Reliability

The District is continuing its program to increase the reliability of the sewage system by diversifying treatment options and increasing the reliability of critical sewage collections facilities. The goals of the program are to collect sewage in the most cost effective method available, create a high quality and reliable recycled water supply for irrigation and commercial uses and minimize environmental impacts and risks. Sewage collected throughout the District is treated at three locations: The Michelson Water Recycling Plant (MWRP), the Los Alisos Water Recycling Plant (LAWRP) and at the Orange County Sanitation District (OCSD). The District owns and operates the MWRP and LAWRP, and owns capacity in the OCSD facilities.

The most recent example of expanded water recycling reliability is a major capacity expansion of the MWRP from 18 million gallons per day (mgd) to 28 mgd, completed in 2014. The two plants operated by the District currently have capacities of 28 (MWRP) and 7.5 (LAWRP) mgd, with a collective capacity of 35.5 mgd. Expanding existing infrastructure for sewage treatment has four primary benefits including:

- Increased recycled water production and utilization.
- Decreased exposure to third party treatment costs and operational constraints.
- Decreased dependencies on imported water supplies.
- Lower total cost.



Biosolids and Energy Recovery Facilities Project

In addition to the projects identified above, the District evaluated alternative approaches to recover the solids generated by its water recycling facilities. The evaluation of alternative approaches for handling MWRP solids, currently conveyed to Fountain Valley for treatment by OCSD, included consideration of many factors such as costs and potential community impacts.

As a result, in FY 2013-14, the District began construction of new capital facilities at the MWRP which integrates a new state-of-the-art organic handling system. The system makes efficient and sustainable use of locally generated renewable resources by creating a beneficial use of biosolids and biogases that are produced during the sewage treatment/recycling process. This project aligns with green and sustainable business practices, while at the same time creating an effective cost management of sewage/recycling services for IRWD customers.

The biosolids treatment process allows for the conversion of biogas into electricity thereby further reducing the District's dependency on its third party electricity provider. The construction of the MWRP Biosolids and Energy Recovery Facilities is completed and the facilities are anticipated to be fully operational by mid-2020 at an estimated project cost in excess of \$200 million.

Community Education and Outreach

The District's commitment to community education and outreach recognizes the significant impact lifelong water education can have on a community. Irvine Ranch Water District sponsors community events, workshops, water efficiency programs, demonstration gardens and multi-media outreach to further enhance our mission to foster an appreciation for water and the environment.

Community water education and awareness of water use efficiency can begin at a young age. The District provides innovative water education programs to students in its service area through a unique partnership with the Discovery Science Foundation. These exceptional programs are available to all kindergarten through middle school students in any public, private or home school in the District's service area and meet all California curriculum content standards while bringing water education to life for the next generation of community leaders.



Discovery Cube Booklets

The District's San Joaquin Marsh Campus, which houses the IRWD Learning Center and Visitors Center, embodies the District's dedication to lifelong water education. The campus provides a wide variety of educational venues and teaching opportunities using the District's Natural Treatment System, the Butterfly Garden, and San Diego Creek. The Learning Center is a dedicated facility for water education, featuring two state-of-the-art classrooms and a patio that can be used for outdoor learning.

Throughout the year, the Learning Center houses not only the District's education programs but also its resident tours, community events, and programs run by the District's Marsh partner, Sea & Sage Audubon. The Visitors Center at the historic Irvine Ranch Marsh House provides informative self-guided tours of the District's environmental and water use efficiency efforts and is open to the public seven days a week.

Irvine Ranch Water District is active in the community as well, promoting water education through water use efficiency, water quality and recycled water workshops; resident tours, community functions, science fair participation, poster contests and educational events such as the Children's Water Festival. Customized in-class lectures for high school and college classes and educational tours for community organizations are offered throughout the year.

The District has responded to the abatement of statewide drought conditions by moving from urgency-based water efficiency outreach efforts to the development of a new water efficiency outreach program that communicates the value of water, sustains current levels of water savings, and seeks additional permanent water savings among customer groups that have been traditionally difficult to reach. The new program builds on the success of drought outreach efforts, which effectively increased awareness and participation in District conservation programs and resulted in IRWD's success in meeting its previous state-mandated drinking water conservation targets.

To support these efforts, the District continues to offer targeted workshops that teach customers about water efficient landscaping and efficient irrigation techniques. The District offers rebates on items such as high-efficiency rotating spray nozzles, rain barrels, clothes washers and toilets.

In 2019, Irvine Ranch Water District received the United States Environmental Protection Agency's WaterSense Excellence Award and the Public Relations Society of America's Silver Anvil Award for outstanding water efficiency outreach.



Tap Water 101 Workshop

The District maintains two water efficiency websites that offer self-guided landscape design and interactive demonstration resources as well as inspirational garden galleries and customized plant lists: *rightscapenow.com* and *rightscaperesources.com*. IRWD WaterStar and WaterStar Restaurant business recognition programs provide incentives for local companies to increase their efficiency; and the Sewer Savvy program recognizes businesses for exceptional sewer maintenance habits.

The District's demonstration gardens display a palette of more than 80 different drought-tolerant, California-native, and fire-resistant plants, along with practical information for customers to use when redesigning their home landscapes for water efficiency.

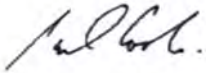
Awards and Acknowledgments

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Irvine Ranch Water District for its comprehensive annual financial report (CAFR) for the fiscal years ended June 30, 2004 through June 30, 2018. In order to be awarded a Certificate of Achievement, IRWD was required to publish an easily readable and efficiently organized CAFR that satisfied both GAAP and applicable legal requirements.

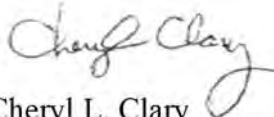
A Certificate of Achievement is valid for a period of one year. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements and we will be submitting it to the GFOA to determine its eligibility for another certificate.

Staff would like to acknowledge the IRWD Board of Directors for their support and for maintaining the highest standards of professionalism in the management of the District's operations and finances. We would also like to thank the dedicated employees of the District for their commitment to providing high quality service to the District's customers. The preparation of this report would not have been possible without the efficient and dedicated service of the entire Finance Department staff. We also wish to express our appreciation to all staff that assisted and contributed to the preparation of this report.

Respectfully submitted,



Paul A. Cook
General Manager



Cheryl L. Clary
Executive Director of Finance & Administration

Irvine Ranch Water District
List of Principal Officials

Board of Directors

President and Director	Steven E. LaMar
Vice President and Director	Mary Aileen Matheis
Director	Douglas J. Reinhart
Director	Peer A. Swan
Director	John B. Withers

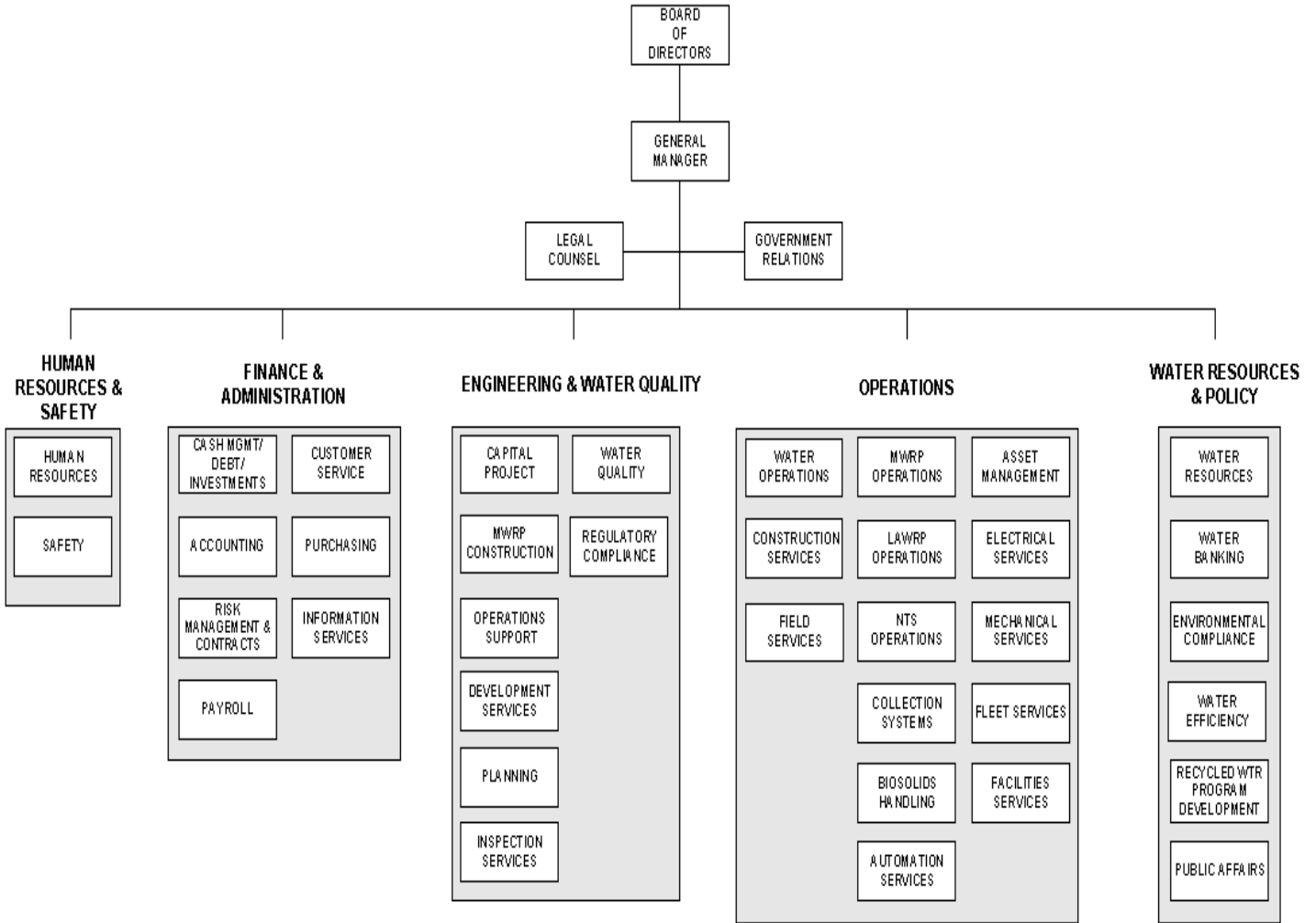
Executive Management

General Manager	Paul A. Cook
Executive Director of Finance & Administration	Cheryl L. Clary
Executive Director of Operations	Wendy L. Chambers
Executive Director of Engineering & Water Quality	Kevin L. Burton
Executive Director of Water Resources & Policy	Paul A. Weghorst
Director of Human Resources	Jenny L. Roney
Director of Water Resources	Fiona M. Sanchez
Director of Public Affairs	Beth M. Beeman
Director of Administrative Services	Tony J. Mossbarger
Director of Treasury and Risk Management	Robert C. Jacobson
Director of Water Operations	Thomas S. Roberts
Director of Recycling Operations	Jose Zepeda
Director of Maintenance	Richard S. Mykitta
Director of Water Quality & Regulatory Compliance	James E. Colston

Irvine Ranch Water District

Organizational Chart (By Function)

Fiscal Year 2018-19





Government Finance Officers Association

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**Irvine Ranch Water District
California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrill

Executive Director/CEO

Financial Section

Irvine Ranch Water District
Fiscal Year Ended June 30, 2019

Independent Auditors' Report

Board of Directors
Irvine Ranch Water District
Irvine, California

Report on the Financial Statements

We have audited the accompanying financial statements of Irvine Ranch Water District (the District), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the District's financial statements 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 financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Irvine Ranch Water District, as of June 30, 2019, and the respective change in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited the District's 2018 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 12, 2018. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2018 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

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

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the District's basic financial statements.

The *introductory section* and the *statistical section* are presented for purposes of additional analysis and are not a required part of the basic financial statements. The *introductory section* and the *statistical section* 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 it.

Board of Directors
Irvine Ranch Water District
Page Three

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 12, 2019, on our consideration of the District'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 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 internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

A handwritten signature in blue ink that reads "Davis Fan LLP". The signature is written in a cursive, flowing style.

Irvine, California
November 12, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

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

Financial Highlights:

- Total assets and deferred outflows of resources exceed total liabilities and deferred inflows of resources by \$1,928.0 million (net position), consisting of \$1,238.8 million in net investment in capital assets, \$313.0 million restricted for water services and \$376.2 million restricted for sewer services. This is an increase of \$87.1 million or 4.7 percent over the prior fiscal year net position of \$1,840.9 million.
- Total assets are \$2,762.5 million, an increase of \$74.3 million or 2.8 percent over the prior fiscal year. This is due primarily to a \$67.9 million increase in the District's capital assets. The District added \$127.8 million in water and sewer assets during the year partially offset by an increase of \$57.4 million in accumulated depreciation.
- Total liabilities are \$871.2 million, a decrease of \$13.0 million or 1.5 percent from the prior year. Liabilities consist primarily of \$722.1 million of debt, net pension and OPEB liabilities of \$80.8 million, swap liability of \$20.7 million and accounts payable and other liabilities of \$47.6 million. The total decrease over the prior year is due primarily to \$13.0 million in principal debt payments during the fiscal year.
- The Irvine Ranch Water District Post-Employment Benefits Trust (Pension Benefits Trust) was established in June 2013 to assist in funding the District's CalPERS unfunded liability. As of June 30, 2019, the District's total pension assets (including the CalPERS and Pension Benefits Trust assets) as a percentage of the total pension liability is 103.2 percent. For more detail, see Note 13 of the Notes to the Basic Financial Statements.
- Total revenues are \$283.5 million, an increase of \$29.0 million or 11.4 percent over the prior fiscal year. Operating revenues increased by \$9.5 million or 5.9 percent over the prior year due primarily to customer growth, Board approved rate increases and an increase of \$5.2 million in water-banking revenue associated with providing storage to other water banking partners. Non-operating revenues increased \$19.5 million or 20.9 percent over the prior year due primarily to a \$9.8 million increase in the fair value of investments including trust and real estate assets, \$5.9 million of higher property tax receipts, and \$2.1 million higher interest income on the District's investments.
- Total expenses are \$245.8 million, an increase of \$7.8 million or 3.3 percent over the prior fiscal year. This is due primarily to an increase of \$7.4 million in sewer expenses, associated with heavy rainfall filling reservoirs resulting in sending higher sewage flows to the District's third party provider, a \$2.5 million increase in expensed projects partially offset by a decrease of \$3.9 million in real estate expense.
- Capital contributions are \$49.4 million, a decrease of \$11.2 million or 18.5 percent over the prior fiscal. Connection fees paid by developers were \$14.5 million lower due to a slowdown in the building industry partially offset by a \$7.3 million increase in facilities completed and donated from developers to the District.

MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)

More detailed analysis about the overall District's financial position and operations is provided in the following sections.

Overview of the Financial Statements:

The basic financial statements of the District consist of the financial statements (the Statement of Net Position, the Statement of Revenues, Expenses, and Changes in Net Position, and the Statement of Cash Flows) and notes to the basic financial statements. The basic financial statements are prepared using the accrual basis of accounting. This report also contains other supplementary information in addition to the basic financial statements.

Statement of Net Position depicts the District's financial position at June 30, the end of the District's fiscal year. The statement of net position shows all financial assets and liabilities of the District. Net position represents the District's residual interest after liabilities and deferred inflows of resources are deducted from assets and deferred outflows of resources. Net position is displayed in two components: net investment in capital assets and restricted for water and sewer services.

Statement of Revenues, Expenses and Changes in Net Position provides information on the District's operations and can be used to determine whether the District has recovered all of its costs through operating and non-operating revenues.

Statement of Cash Flows provides information on the District's cash receipts, cash payments and changes in cash resulting from operations, investments and financing activities.

Notes to the Basic Financial Statements provide additional information essential to a full understanding of the data provided in the basic financial statements.

The **Other Information** includes *required supplementary information* concerning the District's progress in funding its obligations to provide pension and other post-employment benefits to its employees.

Financial Analysis of the District:

The following condensed schedules contain summary financial information extracted from the basic financial statements to assist general readers in evaluating the District's overall financial position and results of operations as described in this Management's Discussion and Analysis (MD&A). Increases or decreases in these schedules can be used as performance indicators to assess whether the District's overall financial position has improved or deteriorated. Other external factors such as changes in economic conditions, customer growth, and legislative mandates should also be considered as part of this analysis.

MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)

Financial Position Summary:

The Statement of Net Position reflects the District's financial position as of June 30. The statement includes assets, deferred outflow of resources, liabilities, and deferred inflows of resources. The net position represents the District's net worth including, but not limited to, capital contributions and net investment in capital assets. A condensed summary of the District's total net position at June 30 is set forth below:

Table 1 - Summary of Net Position (in millions)				
	2019	2018	Increase/(Decrease)	
			Amount	Percentage
Assets				
Current assets	\$ 407.5	\$ 418.3	(\$10.8)	-2.6%
Capital assets, net	1,958.7	1,890.8	67.9	3.6%
Other noncurrent assets	396.3	379.1	17.2	4.5%
Total assets	2,762.5	2,688.2	74.3	2.8%
Deferred Outflows of Resources	41.2	41.7	(0.5)	-1.2%
Liabilities				
Current liabilities	53.8	52.5	1.3	2.5%
Long-term liabilities	817.4	831.7	(14.3)	-1.7%
Total liabilities	871.2	884.2	(13.0)	-1.5%
Deferred Inflows of Resources	4.5	4.8	(0.3)	-6.3%
Net Position				
Net investment in capital assets	1,238.8	1,155.5	83.3	7.2%
Restricted for water services	313.0	289.5	23.5	8.1%
Restricted for sewer services	376.2	395.9	(19.7)	-5.0%
Total net position	\$1,928.0	\$1,840.9	\$87.1	4.7%

As shown in Table 1, the District's total assets increased \$74.3 million or 2.8 percent during the current fiscal year. Current assets decreased \$10.8 million. Amounts due from other agencies relating to cash deposits held by the Orange County Sanitation District (OCSD), the District's third party provider for excess sewage flows, decreased by \$18.0 million based on the agreements between the two agencies for future obligations. This is partially offset by a \$7.0 million increase in water banking inventories.

Capital assets increased \$67.9 million or 3.6 percent during the current fiscal year. The District added \$127.8 million in water and sewer assets during the year partially offset by an increase of \$57.4 million in accumulated depreciation. The largest capital spending during the year was \$26.0 million for the District's proportionate share of the OCSD's jointly funded capital sewer assets and \$14.8 million for the Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities project, a multiple year project with a total cost in excess of \$200 million.

Other noncurrent assets increased \$17.2 million or 4.5 percent during the current fiscal year. Noncurrent assets include the District's real estate investments and the pension benefits trust investment which was established in 2013 to help fund the District's pension liability. The fair value of real estate investments increased by \$11.3 million due primarily to \$5.9 million of spending for building construction costs for the Sand Canyon General Office building, a \$6.1 million increase in the fair value of all District real estate investments and a \$3.1 million increase in interest receivable from a loan to Lennar Homes of California, Inc. for the 2017 sale of the IRWD's Serrano Summit property located in Lake Forest. These are partially offset by a \$3.8 million distribution in one of its limited partnership investments. In addition, the market value of the District's pension benefits trust investments increased \$5.3 million during the current fiscal year.

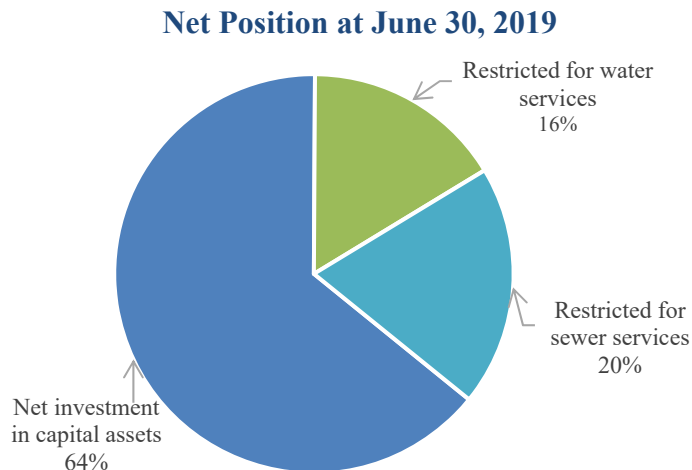
MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)

The District's deferred outflows of resources decreased by \$0.5 million or 1.2 percent over the prior fiscal year. This is due primarily to a \$4.0 million decrease in pension and post-employment (OPEB) actuarial related changes partially offset by a \$2.5 million increase in accumulated losses associated with the fair value of interest rate swaps, and \$1.0 million increase in pension and OPEB contributions.

The District's total liabilities decreased \$13.0 million or 1.5 percent in the current fiscal year. This was due primarily to \$13.0 million in principal payments of the District's general obligation bonds, certificates of participation, and notes payable during the year.

The District's deferred inflows of resources decreased \$0.3 million or 6.3 percent in the current fiscal year. This was due primarily to \$2.1 million amortization of OPEB actuarial assumptions and experience changes. The decrease was partially offset by \$1.8 million in new OPEB actuarial assumptions and experience changes including a decrease in discount rate from 3.87 percent to 3.58 percent, demographic assumption updates, and mortality scale changes. For more details, see Note 14 of the Notes to the Basic Financial Statements.

Net position at end of the current fiscal year increased \$87.1 million or 4.7 percent in the current fiscal year. Net position consists of net investment in capital assets and restricted net positions.



Net investment in capital assets are capital assets, net of accumulated depreciation/amortization and liabilities (such as debt) attributable to the acquisition, construction, or improvement of those assets. Net investment in capital assets was \$1,238.8 million or 64.3 percent of total net position, an increase of \$83.3 million from the prior fiscal year. The change is due primarily to \$67.9 million in net capital asset additions, \$13.0 million of debt principal payments and \$2.6 million amortization of premiums in the current fiscal year.

Several major District capital projects contributed to the increase, including \$26.0 million of the District's proportionate share of the OCSD's jointly funded capital assets and \$14.8 million for the Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities project which will reduce the District's overall sewage treatment costs as well as provide other resource recovery benefits. These projects account for 49.0 percent of the increase in net investment in capital assets.

Restricted net position for water services was \$313.0 million or 16.2 percent of total net position. Restricted net position for sewer services was \$376.2 million or 19.5 percent of total net position. Restricted net positions are externally restricted by legislation which imposes legally enforceable requirements that District assets be used only for the specific purposes for which it was formed.

MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)

Activities and Changes in Net Position:

The Statement of Revenues, Expenses, and Changes in Net Position summarizes the District's operations during the current fiscal year. A Summary of the District's changes in net position for the fiscal years ended June 30, is included in Table 2 below:

Table 2 - Revenues, Expenses and Changes in Net Position (in millions)				
	2019	2018	Increase/(Decrease)	
			Amount	Percentage
Operating revenues				
Water sales and service charges	\$ 94.1	\$ 84.6	\$ 9.5	11.2%
Sewer sales and service charges	76.8	76.8	0.0	0.0%
Total operating revenues	170.9	161.4	9.5	5.9%
Non-operating revenues				
Property taxes	63.1	57.2	5.9	10.3%
Interest income	6.2	4.1	2.1	51.2%
Increase (decrease) in fair value of investments	5.2	(1.6)	6.8	-425.0%
Real estate income	17.8	16.7	1.1	6.6%
Increase (decrease) in fair value of real estate investments	6.1	4.1	2.0	48.8%
Pension benefits trust interest and dividends income	2.1	3.0	(0.9)	-30.0%
Increase (decrease) in fair value of pension benefits trust investments	3.2	2.2	1.0	45.5%
Other income	8.9	7.4	1.5	20.3%
Total non-operating revenues	112.6	93.1	19.5	20.9%
Total revenues	283.5	254.5	29.0	11.4%
Operating expenses				
Water services expenses	83.9	82.5	1.4	1.7%
Sewer services expenses	59.5	52.1	7.4	14.2%
Depreciation	64.8	63.9	0.9	1.4%
Total operating expenses	208.2	198.5	9.7	4.9%
Non-operating expenses				
Interest expense	25.5	26.0	(0.5)	-1.9%
Real estate expense	9.4	13.3	(3.9)	-29.3%
Other expense	2.7	0.2	2.5	1,250.0%
Total non-operating expenses	37.6	39.5	(1.9)	-4.8%
Total expenses	245.8	238.0	7.8	3.3%
Income/(loss) before capital contributions	37.7	16.5	21.2	128.5%
Capital contributions	49.4	60.6	(11.2)	-18.5%
Change in Net Position	87.1	77.1	10.0	13.0%
Beginning Net Position	1,840.9	1,772.0	68.9	3.9%
Prior period adjustments ⁽¹⁾	0.0	(8.2)	8.2	-100.0%
Ending Net Position	\$1,928.0	\$1,840.9	\$87.1	4.7%

⁽¹⁾ In 2018, the prior period adjustment relates to the implementation of the new pension implementation guide and new OPEB accounting standards.

MANAGEMENT’S DISCUSSION AND ANALYSIS (Continued)

Revenues:

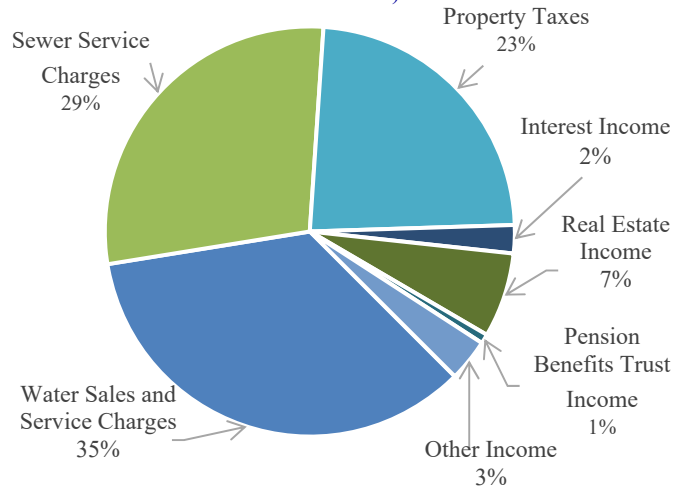
As shown in Table 2, the District’s operating revenues total \$170.9 million or 60.3 percent of total revenues. Water sales contributed \$94.1 million or 55.1 percent to total operating revenues and sewer sales contribute \$76.8 million or 44.9 percent to total operating revenues. Operating revenues increased by \$9.5 million or 5.9 percent from the prior fiscal year. The operating revenue increase is attributed to customer growth, a Board approved commodity rate increase for FY2018-19, and an increase in water banking storage revenue of \$5.4 million. The Board approved rate increase contributed \$4.7 million and customer growth within the District contributed approximately \$1.5 million to the increase. This was partially offset by a reduction in revenues of \$2.1 million due to lower sales from significant rainfall compared to the prior year. Commodity sales decreased by 7,297 acre feet from the prior year.

The chart below illustrates the sources of revenue for the fiscal year ended June 30, 2019.

Non-operating revenues total \$112.6 million and account for 39.7 percent of total revenue for the fiscal year ended June 30, 2019. This is an increase of \$19.5 million or 20.9 percent from the prior fiscal year. The increase in the current fiscal year is due to:

- An increase of \$7.8 million in the fair value of the District’s fixed income investments and Pension Benefit Trust.
- An increase of \$5.9 million in one percent and ad valorem property tax revenue associated with higher assessed values in the District’s service area.
- A net increase of \$1.2 million in the District’s investment interest income (including the Pension Benefit Trust).
- An increase of \$2.0 million in changes in the fair value of real estate investments.
- An increase of \$1.5 million in other non-operating income, primarily grant revenue.
- An increase of \$1.1 million in real estate income.

Revenues for Fiscal Year Ended June 30, 2019
(excluding changes in fair value of investments, real estate investments, and pension benefits trust investments)



Expenses:

As shown in Table 2, operating expenses total \$208.2 million, of which \$143.4 million relates to the cost of providing water and sewer services to the District’s customers. Water service operating costs are 89.2 percent of revenues and sewer service operating costs are 77.5 percent of revenues. Water and sewer operating expenses, excluding depreciation, increased by \$8.8 million or 6.5 percent over the prior fiscal year.

Water expenses totaled \$83.9 million, an increase of \$1.4 million or 1.7 percent primarily due to:

- An increase of \$2.2 million in direct and indirect labor for treated and untreated water treatment and systems maintenance.

MANAGEMENT’S DISCUSSION AND ANALYSIS (Continued)

- An increase of \$1.0 million in electricity costs for the pumping of the District’s wells.
- A decrease of \$1.1 million relating to the District’s conservation programs. The District incurred more costs on various programs in the prior fiscal year.
- A decrease of \$0.7 million relating to the District’s repairs and maintenance. Maintenance expense for the domestic water system and the urban runoff system were lower than the prior fiscal year.

Sewer service expenses totaled \$59.5 million, an increase of \$7.4 million or 14.2 percent over the prior fiscal year. The increase is due primarily to:

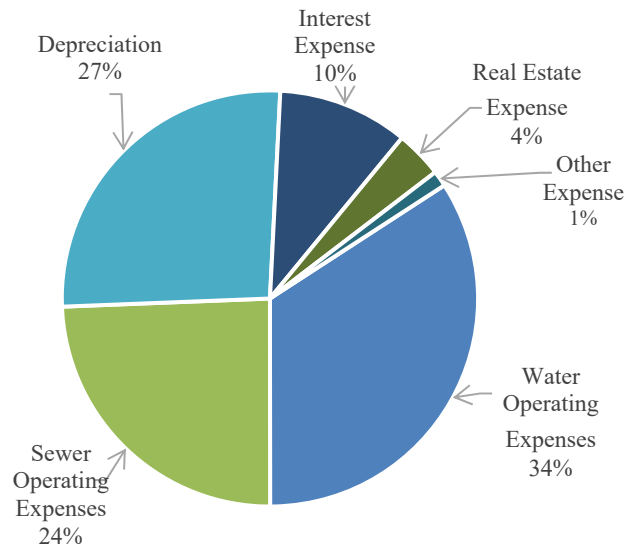
- An increase of \$4.3 million in the cost of handling, treatment, and disposal of sewage solids sent to the District’s third party provider (OCSO) due to higher flows attributable to more rainfall than the prior year.
- An increase of \$1.8 million in expensed sewer and recycled projects related to the District’s capital program.
- An increase of \$1.4 million in direct and indirect labor for sewage treatment and recycled system maintenance.
- Other net decreases of \$0.1 million.

Depreciation expense totaled \$64.8 million, an increase of \$0.9 million or 1.4 percent over the prior fiscal year. The increase is the result of the completion of several capital projects.

Non-operating expenses totaled \$37.6 million, a decrease of \$1.9 million or 4.8 percent from the prior year primarily due to:

- A decrease of \$3.9 million in real estate expense for remaining contractual development obligations related to the Serrano Summit real estate property.
- An increase of \$2.5 million other non-operating expenses associated with expensing of projects in the current fiscal year.
- A decrease of \$0.5 million in interest expense associated with a \$1.0 million reduction in net interest rate swap payments partially offset by \$0.5 million in higher interest expense on the District’s variable rate debt.

**Functional Expenses for Fiscal Year Ended
June 30, 2019**



MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)

Capital Contributions:

Capital contributions totaled \$49.4 million, a decrease of \$11.2 million or 18.5 percent from the prior fiscal year. Donated facilities from developers increased \$7.3 million due to a high number of projects that were completed and donated to the District. The District also received \$18.2 million of connection fees from developers, a decrease of \$14.5 million from the prior year and \$4.0 million reduction in grants / contributions from federal, state, and local agencies compared to the prior year.

Capital Assets:

The District's investment in capital assets consists of the following as of June 30:

	2019	2018	Increase/(Decrease)	
			Amount	Percentage
Water assets	\$1,135.1	\$1,090.3	\$44.8	4.1%
Sewer assets	1,292.9	1,209.9	83.0	6.9%
Less: accumulated depreciation	(925.6)	(868.2)	(57.4)	6.6%
Land and water rights	125.3	125.3	0.0	0.0%
Construction in progress	331.0	333.5	(2.5)	-0.7%
Total	\$1,958.7	\$1,890.8	\$67.9	3.6%

Capital assets, net of depreciation increased \$67.9 million or 3.6% in the current fiscal year. Construction in Progress added \$108.9 million during the current fiscal year. Total projects transferred from Construction in Progress to Capital Assets and depreciated during the fiscal year ended June 30, 2019 were \$111.5 million. The District's accumulated depreciation increased by \$57.4 million for depreciation expense in the current fiscal year. The following is a list of the top 10 capital projects expenditures which accounted for 52.7 percent of total asset additions incurred in the current fiscal year (in millions):

<u>Project Description</u>	<u>Amount</u>
OCSD CORF and Intergration Equity	\$26.0
MWRP Biosolids and Energy Recovery Facilities	14.8
Improvement District 1530 Domestic Water Program	6.7
3.7 MG Zone 1 Reservoir	4.2
ILP North Conversion Reservoir	3.8
Meter Services and Main Pipeline Replacement Program	3.4
Rosedale Drought Relief Project	2.3
Surge Tanks DWRF Wells 11 & 15	2.3
Meter Replacement Domestic Water Program	2.0
Lake Forest Zone B Reservoir Floating Cover	1.9
Total	<u>\$67.4</u>

Additional information on the District's capital assets can be found in Note 5 of the Notes to the Basic Financial Statements.

MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)

Debt Administration:

As shown below in Table 4, as of June 30, 2019, the District had total debt outstanding of \$722.1 million, a decrease of \$15.6 million or 2.1 percent from the prior fiscal year.

	2019	2018	Increase/(Decrease)	
			Amount	Percentage
General obligation bonds	\$574.7	\$586.5	(\$11.8)	- 2.0%
Certificates of participation	146.7	150.3	(3.6)	- 2.4%
Notes payable	0.7	0.9	(0.2)	-22.2%
Total	\$722.1	\$737.7	(\$15.6)	- 2.1%

During the current fiscal year, the decreases in the District's total debt were primarily due to \$13.0 million in debt payments and \$2.6 million of premium amortization. The District's rated debt obligations have received the following ratings from the three major rating agencies:

Fitch Ratings:	AAA
Moody's:	Aa1
Standard and Poor's:	AAA

Additional information on the District's long-term debt can be found in Note 9 of the Notes to the Basic Financial Statements.

Contacting the District's Financial Management:

This financial report is designed to provide our citizens, taxpayers, customers, investors and creditors with a general review of the District's finances and to show the District's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the Executive Director of Finance and Administration at the Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, California 92618-7500.

Irvine Ranch Water District
Statement of Net Position
June 30, 2019
(with comparative data as of June 30, 2018)
(in thousands)

	2019	2018
ASSETS		
Current Assets:		
Cash and Investments (note 2)	\$ 374,003	\$ 373,191
Receivables:		
Customer accounts receivable	9,838	8,635
Interest receivable	1,717	1,058
Notes receivable, current portion	69	15
Due from other agencies (note 8)	0	18,048
Other receivables	5,226	7,532
Total receivables	16,850	35,288
Other Current Assets:		
Inventories (note 4)	16,166	7,836
Prepaid items and deposits	526	2,024
Total other current assets	16,692	9,860
Total current assets	407,545	418,339
Noncurrent Assets:		
Capital Assets (note 5):		
Water assets	1,135,101	1,090,254
Sewer assets	1,292,861	1,209,876
Subtotal	2,427,962	2,300,130
Less accumulated depreciation	(925,571)	(868,178)
Total capital assets being depreciated, net	1,502,391	1,431,952
Land and water rights	125,316	125,316
Construction in progress	330,957	333,490
Total capital assets, net	1,958,664	1,890,758
Other Noncurrent Assets:		
Notes receivable, net of current portion	622	58
Real estate investments (note 7)	317,296	305,980
Pension benefits trust investments (notes 2 & 13)	78,389	73,106
Total other noncurrent assets	396,307	379,144
Total noncurrent assets	2,354,971	2,269,902
TOTAL ASSETS	2,762,516	2,688,241
DEFERRED OUTFLOWS OF RESOURCES		
Deferred refunding charges	2,266	2,422
Accumulated decrease in fair value of swap agreements (note 3)	20,655	18,107
Pension contributions (note 13)	7,184	6,173
Pension actuarial changes (note 13)	8,792	14,331
OPEB contributions (note 14)	721	670
OPEB actuarial changes (note 14)	1,575	0
TOTAL DEFERRED OUTFLOWS OF RESOURCES	41,193	41,703

See accompanying notes to the basic financial statements.

Irvine Ranch Water District
Statement of Net Position
June 30, 2019
(with comparative data as of June 30, 2018)
(in thousands)
(Continued)

	2019	2018
LIABILITIES		
Current Liabilities:		
Account payable and accrued expenses	24,537	23,460
Customer deposits and advance payments	3,607	3,433
Accrued interest:		
General obligation bonds	3,943	3,909
Other accrued interest payable	2,556	2,856
Current portion of long-term liabilities:		
General obligation bonds (note 9)	12,024	11,824
Certificates of participation (note 9)	3,716	3,531
Notes payable (note 9)	265	263
Other long term liabilities (note 9)	2,070	2,180
Unearned revenue (note 10)	565	565
Claims liability (note 17)	570	448
Total current liabilities	53,853	52,469
Long-Term Liabilities:		
General obligation bonds, net of current portion (note 9)	562,645	574,669
Certificates of participation, net of current portion (note 9)	143,028	146,744
Notes payable, net of current portion (note 9)	419	684
Other long-term liabilities (note 9)	3,491	3,366
Unearned revenue, net of current portion (note 10)	5,392	5,957
Claims liability, net of current portion (note 17)	947	946
Net pension liability (note 13)	64,137	66,681
OPEB liability (note 14)	16,672	14,578
Swap liability (note 3)	20,654	18,106
Total long-term liabilities	817,385	831,731
TOTAL LIABILITIES	871,238	884,200
DEFERRED INFLOWS OF RESOURCES		
Pension actuarial changes (note 13)	3,273	3,584
OPEB actuarial changes (note 14)	1,196	1,207
TOTAL DEFERRED INFLOWS OF RESOURCES	4,469	4,791
NET POSITION (note 12)		
Net investment in capital assets	1,238,834	1,155,465
Restricted for water services	312,955	289,540
Restricted for sewer services	376,213	395,948
TOTAL NET POSITION	\$ 1,928,002	\$ 1,840,953

See accompanying notes to the basic financial statements.

Irvine Ranch Water District
Statement of Revenues, Expenses and Changes in Net Position
For the Fiscal Year Ended June 30, 2019
(with comparative data for the Fiscal Year Ended June 30, 2018)
(in thousands)

	<u>2019</u>	<u>2018</u>
OPERATING REVENUES		
Water sales and service charges	\$ 94,107	\$ 84,575
Sewer sales and service charges	76,841	76,789
Total operating revenues	<u>170,948</u>	<u>161,364</u>
OPERATING EXPENSES		
Water:		
Water services	64,004	63,671
General and administrative	19,860	18,825
Sewer:		
Sewer services	43,734	38,115
General and administrative	15,786	14,061
Depreciation	64,835	63,877
Total operating expenses	<u>208,219</u>	<u>198,549</u>
Operating income (loss)	<u>(37,271)</u>	<u>(37,185)</u>
NONOPERATING REVENUES (EXPENSES)		
Property taxes	63,057	57,247
Interest income	6,199	4,133
Increase (decrease) in fair value of investments	5,188	(1,571)
Real estate income (note 7)	17,813	16,689
Increase (decrease) in fair value of real estate investments (note 7)	6,095	4,091
Pension benefits trust interest and dividends income	2,140	3,003
Increase (decrease) in fair value of pension benefits trust investments	3,196	2,173
Other income	8,876	7,504
Interest expense	(25,481)	(26,034)
Real estate expense (note 7)	(9,441)	(13,284)
Pension benefits trust expense	(53)	(51)
Other expenses	(2,615)	(174)
Total nonoperating revenues (expenses)	<u>74,974</u>	<u>53,726</u>
Income (loss) before capital contributions	<u>37,703</u>	<u>16,541</u>
CAPITAL CONTRIBUTIONS		
Donated facilities	28,867	21,593
Connection fees	18,205	32,674
Other	2,274	6,321
Total capital contributions	<u>49,346</u>	<u>60,588</u>
Increase (decrease) in net position	87,049	77,129
NET POSITION AT BEGINNING OF YEAR	1,840,953	1,772,014
Prior period adjustments	0	(8,190)
NET POSITION AT END OF YEAR	<u>\$ 1,928,002</u>	<u>\$ 1,840,953</u>

See accompanying notes to the basic financial statements.

Irvine Ranch Water District
Statement of Cash Flows
For the Fiscal Year ended June 30, 2019
(with comparative data for the Fiscal Year Ended June 30, 2018)
(in thousands)

	2019	2018
Cash flows from operating activities:		
Cash received from customers and users	\$171,660	\$142,432
Cash paid to suppliers of goods and services	(61,214)	(86,669)
Cash paid for employees services	(58,725)	(53,966)
Net cash provided by (used for) operating activities	51,721	1,797
Cash flows from noncapital financing activities:		
Property tax receipts	63,057	57,247
Net cash provided by noncapital financing	63,057	57,247
Cash flows from capital and related financing activities:		
Acquisition and construction of capital assets	(111,986)	(84,760)
Principal payments on long-term liabilities	(13,370)	(22,480)
Interest and fiscal agent costs on long term liabilities	(28,251)	(28,722)
Developer connection fees and related receipts	20,479	38,995
Net cash provided by (used for) capital and related financing activities	(133,128)	(96,967)
Cash flows from investing activities:		
Investment earnings	7,627	6,867
Investment earnings in real estate	9,052	53,842
Proceeds from sale or maturity of investments	182,756	78,901
Purchases of investments	(168,638)	(130,102)
Issuance of notes receivable	(633)	0
Collections on notes receivable	15	11
Net cash provided by (used for) investing activities	30,179	9,519
Net increase (decrease) in cash and cash equivalents	11,829	(28,404)
Cash and cash equivalents at beginning of year	41,977	70,381
Cash and cash equivalents at end of year	\$ 53,806	\$ 41,977

See accompanying notes to the basic financial statements.

Irvine Ranch Water District
Statement of Cash Flows
For the Fiscal Year ended June 30, 2019
(with comparative data for the Fiscal Year Ended June 30, 2018)
(in thousands)
(Continued)

	2019	2018
Reconciliation of cash and cash equivalents to amounts reported on the Statement of Net Assets:		
Cash and investments	\$374,003	\$373,191
Pension benefits trust investments	78,389	73,106
Subtotal	452,392	446,297
Less long-term investments	(398,586)	(404,320)
Cash and cash equivalents at end of year	\$ 53,806	\$ 41,977
Reconciliation of operating income to net cash provided by (used for) operating activities:		
Operating income (loss)	(37,271)	(37,185)
Adjustments to reconcile operating income to net cash provided by (used for) operating activities:		
Other nonoperating income	8,876	7,504
Other nonoperating expenses	(2,615)	(174)
(Gain) loss on disposition of capital assets	2,211	1,281
Depreciation and amortization	64,835	63,877
(Increase) decrease in customer receivables	(1,203)	(175)
(Increase) decrease in installment sale receivable	0	0
(Increase) decrease in other receivables	2,306	(463)
(Increase) decrease in inventories	(8,330)	(750)
(Increase) decrease due from other agencies	18,048	(18,048)
(Increase) decrease in prepaid expenses and other assets	1,498	(824)
(Increase) decrease in deferred outflows	2,902	11,070
Increase (decrease) in accounts payable and accrued expenses	1,077	(16,829)
Increase (decrease) in customer deposits and advance payments	174	319
Increase (decrease) in compensated absences	427	210
Increase (decrease) in claims payable	123	(32)
Increase (decrease) in unearned revenue	(565)	(565)
Increase (decrease) in net OPEB liability	2,094	(808)
Increase (decrease) in net pension liability	(2,544)	(7,760)
Increase (decrease) in deferred inflows	(322)	1,149
Net cash provided by (used for) operating activities	\$ 51,721	\$ 1,797
Noncash investing, capital and financing activities:		
Contributions of capital assets from developers	\$ 28,867	\$ 21,593
Note receivable from sale of real estate	0	81,600
Total noncash investing, capital and financing activities	\$ 28,867	\$103,193

See accompanying notes to the basic financial statements.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019

(1) Summary of Significant Accounting Policies

(a) Reporting Entity

The Irvine Ranch Water District (District) was formed in 1961 as a special district under Division 13 of the California Water Code (the Act). The District provides potable and recycled water service as well as sewage collection, treatment, and disposal to users within its boundaries.

The District is divided geographically into eight water and ten sewer improvement districts (IDs), as well as several planning areas (PAs) that function as informal improvement districts. Each improvement district is a sub-fund of the District and their primary purpose is to allocate costs and funding on an equitable basis for the construction of water, sewer, and recycled water infrastructure. Most improvement districts have authority to issue general obligation bonds to finance the construction of capital facilities that were identified and valued in a Plan of Works specific to the improvement district. Each improvement district with authority to issue general obligation bonds also has the authority to levy and collect connection fees and ad valorem taxes on the land within its legal boundaries sufficient to meet its general obligation bond indebtedness.

Connection fees which are paid by developers and property taxes which are paid by property owners vary by improvement district based upon, among other considerations, total capital costs, ratio of developed to undeveloped land, and development densities; however, water and sewer user fees are uniform throughout the District.

Description of the Reporting Entity

The financial statements of the District include the financial activities of the following sub-fund improvement districts and planning areas:

111/222	Area Excluded from IDs
112/212	Former El Toro Marine Base
113/213	Former Tustin Marine Base
125/225	Developed/Underlay
240	Newport Coast/Newport Ridge
252	Santiago Hills
153/253	Irvine Business District /Spectrum /Shady Canyon/Laguna Laurel/East Orange
154	Santiago Canyon(s)
256	Orange Park Acres
185/285	Los Alisos Area
188/288	Portola Hills Commercial
110/210	Overall District Boundary

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(1) **Summary of Significant Accounting Policies (Continued)**

(a) **Reporting Entity (Continued)**

Blended Component Units - Blended component units although legally separate entities, are, in substance, part of the District's operations since they have the same governing board. The District has both financial accountability and operational responsibility for the blended component units. The District has the following blended component units:

The Irvine Ranch Water District Water Service Corporation – In January 1997, the District formed a 501(c)(4) corporation for the purpose of financing and acquiring water, sewer and other public improvements. The Corporation was created to effect the merger of the Santa Ana Heights Water Company and the issuance of the 2002 Certificates of Participation, 2008 Refunding Certificates of Participation, 2010 Refunding Certificates of Participation, and 2016 Certificates of Participation. The Corporation's bylaws mandate that the members of the District's Board of Directors shall constitute the Corporation's five-member Board of Directors. The Irvine Ranch Water District Water Service Corporation does not issue separate financial statements.

Bardeen Partners, Inc. – In March 1991, the District formed a 501(c)(4) corporation for the purpose of accounting for the financial data and transactions for certain District real estate investments, including the investments in Wood Canyon Villas, Sycamore Canyon Apartments, and Irvine Technology Center. Bardeen Partners is governed by a Board of Directors consisting of the five members of the District's Board of Directors. Bardeen Partners does not issue separate financial statements.

(b) **Basic Financial Statements**

The basic financial statements are comprised of the Statement of Net Position, the Statement of Revenues, Expenses and Changes in Net Position, the Statement of Cash Flows, and the Notes to the Basic Financial Statements.

(c) **Measurement Focus, Basis of Accounting and Financial Statement Presentation**

The District's financial activities are accounted for as an enterprise fund (proprietary fund type). A fund is an accounting entity with a self-balancing set of accounts established to record the financial position and results of operations of a specific governmental activity.

The activities of enterprise funds closely resemble those of ongoing businesses in which the purpose is to conserve and add to basic resources while meeting operating expenses from current revenues. Enterprise funds account for operations that provide services on a continuous basis and are substantially financed by revenues derived from user charges. The enterprise fund utilizes the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized as they are incurred. Internal activity has been eliminated in the accompanying basic financial statements.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(1) **Summary of Significant Accounting Policies (Continued)**

(c) **Measurement Focus, Basis of Accounting and Financial Statement Presentation (Continued)**

The District distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with water and sewer operations. The principal operating revenues of the District are charges to customers for sales and services. Operating expenses include cost of sales and services, general and administrative expenses and depreciation of capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Capital contributions consist of contributed capital assets, connection fees, grants and other charges that are legally restricted for capital expenditures by state law or by the Board action that established those charges.

Net position of the District is classified into two components: (1) net investment in capital assets and (2) restricted net position. These classifications are defined as follows:

Net Investment in capital assets – This component of net position consists of capital assets, net of accumulated depreciation reduced by the outstanding balances of notes or borrowing(s) that are attributable to the acquisition of the asset, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of net investment in capital assets.

Restricted net position – This component of net position consists of constraints placed on net position use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.

When both restricted and unrestricted resources are available for use, the District uses unrestricted resources first, and then restricted resources as they are needed. For capital expenditures, legally available restricted bond proceeds are used first, then other restricted resources, and then unrestricted resources are used if needed.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(1) **Summary of Significant Accounting Policies (Continued)**

(d) **Property Taxes**

The District is authorized under the Act to levy taxes on all taxable property (lands only) within its boundaries for the purposes of paying certain of its debt obligations, subject to certain limitations in the Act, the Revenue and Taxation Code and the California Constitution. The District also receives a portion of the County's 1% ad valorem property taxes from certain lands within its boundaries. Property tax revenue is recognized in the fiscal year in which the taxes are levied.

The property tax calendar is as follows:

Lien date:	January 1
Levy date:	July 1
Due date:	First installment – November 1 Second installment – February 1
Delinquent date:	First installment – December 10 Second installment – April 10

The assessment, levy and collection of property taxes are the responsibility of the County of Orange, and are remitted to the District periodically.

(e) **Cash and Cash Equivalents**

For the purposes of the statement of cash flows, cash equivalents are defined as short-term, highly liquid investments that are both readily convertible to known amounts of cash or so near to their maturity that they present insignificant risk of changes in value because of changes in interest rates, and have an original maturity date of 3 months or less.

(f) **District Investments**

Investments are reported in the accompanying Statement of Net Position at fair value, except for certain investment contracts that are reported at cost because they are not transferable and they have terms not affected by changes in market interest rates.

Changes in fair value that occur during the fiscal year are recognized as increase (decrease) in fair value of investments reported for that fiscal year. Interest income includes interest earnings on the District's investments.

(g) **Pension Benefits Trust Investments**

Investments of the Pension Benefits Trust are reported in the accompanying Statement of Net Position at fair value.

Changes in fair value that occur during the fiscal year are recognized as increase (decrease) in fair value of investments reported for that fiscal year. Interest income is recorded on the accrual basis. Dividends are recorded on the payment date.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(1) **Summary of Significant Accounting Policies (Continued)**

(h) **Real Estate Investments**

Real estate investments consist of a wholly-owned apartment complex, three commercial office properties and one entitled land property. The District is also a party to a real estate limited partnership in which the District has more than a 50% ownership interest but does not exercise control. All real estate investments are reported at fair value. Changes in fair value that occur during the fiscal year are recognized as increase (decrease) in fair value of real estate investments reported for that fiscal year.

(i) **Fair Value Measurements**

Certain assets and liabilities are required to be reported at fair value. The fair value framework provides a hierarchy that prioritizes the inputs to valuation techniques used to measure fair value.

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of fair value hierarchy are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly and fair value is determined through the use of models or other valuation methodologies including:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in markets that are inactive;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement. These unobservable inputs reflect the District's own assumptions about the inputs market participants would use in pricing the asset or liability (including assumptions about risk). These unobservable inputs are developed based on the best information available in the circumstances and may include the District's own data.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(1) **Summary of Significant Accounting Policies (Continued)**

(j) **Inventory and Prepaid Items**

Water inventory related to water stored in its banking facilities in Kern County is stated at its purchase cost or at a rate equivalent to what the District would charge for storage. The District's warehouse materials and supplies are valued using the average cost method. Inventory is recorded when purchased, and expensed at the time the inventory is consumed. Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items.

(k) **Capital Assets and Depreciation**

Capital assets are valued at cost where historical records are available and at an estimated historical cost where no historical records exist. Donated assets are valued at their estimated acquisition value on the date received. The District capitalizes all assets with a historical cost of at least \$2,500 and a useful life of at least three years. The cost of normal maintenance and repairs that do not add to the value of the assets or materially extend asset lives are not capitalized.

Depreciation is computed utilizing the straight-line method over the following estimated useful lives:

Buildings and Structures	3 to 100 years
Transmissions and Distributions	10 to 75 years
Machinery and Equipment	3 to 50 years

(l) **Compensated Absences**

The District's policy permits employees to accumulate earned but unused vacation and sick leave benefits up to certain limits. Earned vacations pay to a maximum of 400 hours (or more with written approval of the General Manager). Sick leave hours accrue at the rate of one day per month and employees may elect to receive cash for accumulated sick leave for up to 96 hours in excess of the first 80 hours accumulated. Fifty percent of accumulated sick leave up to a maximum of 960 hours may be paid upon termination of employment. All accumulated vacation and vested sick leave pay is recorded as expense at the time the benefit is earned.

(m) **Pensions**

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

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(1) **Summary of Significant Accounting Policies (Continued)**

(m) **Pensions (Continued)**

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 (MP)	July 1, 2017 to June 30, 2018

(n) **Other Post-Employment Benefits (OPEB)**

The OPEB liability, deferred outflows and inflows of resources relating to OPEB and OPEB expense have been determined by an independent actuary. Benefit payments are recognized when currently due and payable in accordance with the benefit terms.

GASB requires that the reported results pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

Valuation Date (VD)	June 30, 2018
Measurement Date (MD)	June 30, 2018
Measurement Period (MP)	July 1, 2017 to June 30, 2018

(o) **Deferred Outflows/Inflows of Resources**

In addition to assets, the Statement of Net Position reports a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then. The District has the following items that qualify for reporting in this category:

- Deferred refunding charges
- Accumulated decrease in fair value of swap agreements
- Employer contributions subsequent to measurement date for pension and OPEB
- Deferred actuarial amounts related to pension and OPEB

In addition to liabilities, the Statement of Net Position reports a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The District has the following items that qualify for reporting in this category:

- Deferred actuarial amounts related to pension and OPEB

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(1) **Summary of Significant Accounting Policies (Continued)**

(p) **Use of Estimates**

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

(q) **Comparative Financial Statements and Reclassifications**

The information included in the accompanying financial statements for the prior year has been presented for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Certain amounts presented in the prior year financial statements have been reclassified in order to be consistent with the current year's presentation.

(2) **Cash and Investments**

Cash and investments as of June 30, 2019 are classified in the accompanying financial statements as follows (in thousands):

District Cash and Investments	\$374,003
Pension Benefits Trust Investments	<u>78,389</u>
Total Cash and Investments	<u>\$452,392</u>

Cash and investments as of June 30, 2019 consist of the following (in thousands):

District Cash and Investments:

Cash on hand	\$ 3
Deposits with financial institutions	(1,090)
Investments	<u>375,090</u>
Total District Cash and Investments	<u>\$374,003</u>

Pension Benefits Trust Cash and Investments

Equities - mutual funds	\$ 52,780
Fixed income bonds - mutual funds	25,590
Money market - mutual funds	<u>19</u>
Total Pension Benefits Trust Cash and Investments	<u>78,389</u>
Total Cash and Investments	<u>\$452,392</u>

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(2) **Cash and Investments (Continued)**

The following table identifies the investment types that are authorized for the District by the California Government Code, the California Water Code, and the District's investment policy, whichever is most restrictive. The table also identifies certain provisions that address interest rate risk and concentration of credit risk.

Authorized Investment Type	Maximum Maturity⁽¹⁾	Maximum Percentage of Portfolio	Maximum Investment in One Issuer
Local Agency Bonds	5 years	None	None
U.S. Treasury Obligations	5 years	None	None
U.S. Agency Securities	5 years	None	None
Bankers Acceptances	180 days	40%	30%
Commercial Paper	270 days	25%	10%
Negotiable Certificates of Deposit	5 years	30%	None
Repurchase Agreements	1 year	None	None
Reverse Repurchase Agreements	92 days	20% of base value	None
Medium-Term Notes	5 years	30%	None
Money Market Mutual Funds	N/A	20%	10%
Mortgage Pass-Through Securities	5 years	20%	None
Orange County Treasury Pool	N/A	None	None
Local Agency Investment Fund (LAIF)	N/A	None	None
Real Estate Investments	N/A	30% ⁽²⁾	None

⁽¹⁾ Maximum maturity unless express authority has been granted otherwise by the Board of Directors pursuant to the California Government Code Section 53601.

⁽²⁾ 30% of Replacement Fund, as authorized by the California Water Code.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(2) **Cash and Investments (Continued)**

Pension Benefits Trust (The Trust) Authorized Investment Strategy

The District recognizes that defined benefit plans and the related future pension obligations pose significant issues for many government agencies. The District has taken a proactive approach to address the issue and in 2013, established a Pension Benefits Trust to substantially fund its PERS unfunded liability. The Trust's investment policy authorizes investment of Trust assets in financial instruments in three broad categories: equity, fixed income, and real estate. These financial instruments can include, but are not limited to, corporate bonds, commercial paper, U.S. government securities, common and preferred stock, real estate investment trusts, and mutual funds. Investments may include derivatives, options and futures as portfolio protection strategies. The following is a summary of the Trust's investment policy.

The Trust is governed by a Retirement Board (the Board) which consists of two IRWD Board members and the General Manager. The Board designates one or more investment advisors to manage the assets under their supervision subject to the laws of the State of California and Investment Guidelines established by the Board. The long-term asset allocation policy including the minimum-maximum asset allocation range for each asset class is as follows:

Asset Classes	Minimum	Maximum
Cash	0%	30%
Public Equity: Domestic & International	30%	80%
Private Equity	0%	5%
Fixed Income	10%	40%
Real Estate	0%	10%

The asset allocation policy will be pursued by the Trust on a long-term basis and may be revised if necessary due to market conditions. The Board will monitor the current asset allocation policy against the long-term allocation and rebalance as it deems necessary.

Cash equivalent reserves shall consist of cash instruments having a quality rating of A-1, P-1 or higher, as established by Moody's or Standard & Poor's. Bankers' acceptances, certificates of deposit and savings accounts must be made of United States banks or financial institutions or United States branches of foreign banks, which are federally insured with unrestricted capital of at least \$50 million. Short-term corporate obligations must be rated A or better by Moody's or by Standard & Poor's.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(2) **Cash and Investments (Continued)**

Pension Benefits Trust Authorized Investment Strategy (Continued)

Equity investments are restricted to high quality, readily marketable securities of corporations that are actively traded on a major exchange. Not more than 5% of the total stock portfolio valued at market may be invested in the common stock of any one corporation. Ownership of the shares of one company shall not exceed 2% of those outstanding. Not more than 25% of stock valued at market may be held in any one industry category. The overall non-U.S. equity allocation should include a diverse global mix of at least 10 countries. The emerging markets exposure as defined by Morgan Stanley Capital International Inc. should be limited to 35% of the non-U.S. portion of the portfolio.

Fixed income securities of any one issuer shall not exceed 5% of the total bond portfolio, at time of purchase. The 5% limitation does not apply to issues of the U.S. Treasury or other Federal Agencies. The overall rating of the fixed income assets shall be at least "A", according to one of the three rating agencies (Fitch, Moody's or Standard & Poor's). In cases where the yield spread adequately compensates for additional risk, securities where two of the three rating agencies (Fitch, Moody's or Standard & Poor's) have assigned ratings of Baa3 or BBB- ratings, can be purchased up to a maximum of 20% of total market value of fixed income securities.

Custodial Credit Risk

Custodial credit risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure public agency deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(2) **Cash and Investments (Continued)**

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the District manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming near to maturity as necessary to provide the cash flow and liquidity needed for District operations.

Information about the sensitivity of the fair values of the District's and Pension Benefits Trust's investments to market interest rate fluctuations is provided by the following table that shows the distribution of the investments by maturity (in thousands):

Investment Type	Amount	Remaining Maturity			
		12 Months Or Less	13 to 36 Months	37 Months Or More	Not Applicable
Federal Agency Securities	\$270,462	\$169,674	\$100,788	\$ 0	\$ 0
US Treasury Note	50,035	19,965	30,070	0	0
Local Agency Investment Fund	54,593	54,593	0	0	0
Total District Investments	375,090	244,232	130,858	0	0
Mutual Funds - Equities	52,781	0	0	0	52,781
Mutual Funds - Fixed Income Bonds	25,589	919	2,779	21,891	0
Mutual Funds - Money Market	19	19	0	0	0
Total Pension Benefits Trust Investments	78,389	938	2,779	21,891	52,781
Total	\$453,479	\$245,170	\$133,637	\$21,891	\$52,781

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(2) **Cash and Investments (Continued)**

Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented below is the actual rating as of year-end for each investment type (in thousands):

District Cash and Investments:

<u>Investment Type</u>	<u>Amount</u>	<u>Rating as of 6/30/19</u>		
		<u>AAA</u>	<u>Between AA- and AA+</u>	<u>Not Rated</u>
Federal Agency Securities	\$270,462	\$10,555	\$215,108	\$44,799
US Treasury Note	50,035	19,965	30,070	0
Local Agency Investment Fund	54,593	0	0	54,593
Total	\$375,090	\$30,520	\$245,178	\$99,392

Pension Benefits Trust Investments:

<u>Investment Type</u>	<u>Amount</u>
Mutual Funds - Equities	\$52,780 ⁽¹⁾
Mutual Funds - Fixed Income Bonds	25,590 ⁽²⁾
Mutual Funds - Money Market	19 ⁽³⁾
Total	\$78,389

⁽¹⁾ Equity Mutual Funds as of 6/30/2019 include four "index funds" and are each comprised of diversified portfolios of equity securities. Credit ratings are not provided for Equity Mutual Funds.

⁽²⁾ Fixed Income Mutual Funds are comprised of four diversified portfolios of fixed income securities. As of 6/30/2019, 58.36% of the holdings were rated A-AAA, 38.56% of the holdings were rated B-BBB, and 3.08% of the holdings were rated below B or Not Rated.

⁽³⁾ The Money Market Mutual Fund is not rated.

The District is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by the California Government Code under the oversight of the Treasurer of the State of California. The fair value of the District's investment in this pool is reported in the accompanying financial statements at amounts based upon the District's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(2) **Cash and Investments (Continued)**

Concentration of Credit Risk

The investment policy of the District contains no limitations on the amount that can be invested in any one issuer beyond that stipulated by the California Government Code. Investments in any one issuer (other than U.S. Treasury securities, mutual funds, and external investment pools) that represent 5% or more of total District investments are as follows (in thousands):

<u>Issuer</u>	<u>Investment Type</u>	<u>Amount</u>
FHLB	Federal Agency Securities	\$ 90,092
FNMA	Federal Agency Securities	75,365
FFCB	Federal Agency Securities	75,016
FHLMC	Federal Agency Securities	29,989
Total		<u><u>\$270,462</u></u>

Disclosures Relating to Fair Value Measurements

The District categorizes its fair value investments within the fair value hierarchy established by generally accepted accounting principles. The District has the following fair value measurements as of June 30, 2019 (in thousands):

District Cash and Investments:

<u>Investment Type</u>	<u>Amount</u>	<u>Fair Value Measurements</u>	
		<u>Level 1</u>	<u>Level 2</u>
Federal Agency Securities	\$270,462	\$ 0	\$270,462
US Treasury Note	50,035	50,035	0
Local Agency Investment Fund	54,593 ⁽¹⁾	0	0
Total	<u><u>\$375,090</u></u>	<u><u>\$50,035</u></u>	<u><u>\$270,462</u></u>

⁽¹⁾ Local Agency Investment Fund is not subject to the fair value measurements classification.

Pension Benefits Trust Cash and Investments:

<u>Investment Type</u>	<u>Amount</u>	<u>Fair Value</u>
		<u>Measurements</u>
		<u>Level 1</u>
Mutual Funds - Equities	\$52,780	\$52,780
Mutual Funds - Fixed Income Bonds	25,590	25,590
Mutual Funds - Money Market	19	0
Total	<u><u>\$78,389</u></u>	<u><u>\$78,370</u></u>

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(3) Interest Rate Swap Agreements

In September 2003, the District's Board of Directors approved a policy regarding the use of interest rate swap transactions. The policy provides that interest rate swap transactions will be designed to enhance the relationship between risk and return with respect to an investment or a program of investments entered into by the District; and/or to reduce the amount or duration of payment, rate, spread, or similar risk; and/or result in a lower cost of borrowing when used in combination with bonds or other indebtedness of the District. Pursuant to the policy, the Board of Directors authorizes general parameters for interest rate swap transactions while the Finance and Personnel Committee structures specific transactions within the Board-authorized parameters. The Treasurer, with the concurrence of the Chairman of the Finance and Personnel Committee, is authorized to enter into interest rate swap transactions that are within all authorized parameters.

The International Swaps and Derivatives Association, Inc. (ISDA) Master Agreement, including the schedule and credit support annex, is used as the form of contract with interest rate swap counterparties. The District is compliant with all Dodd-Frank Protocol provisions regarding swap advisor representation and transparency.

During FY 2018-19 three fixed payer interest rate swaps matured, representing a notional amount of \$70 million. All remaining outstanding interest rate swaps are pay-fixed, receive variable swaps ("fixed payer swaps"). As of June 30, 2019, the notional amount and fair value balance of the District's interest rate swaps is \$60.0 million and (\$20.7) million, respectively. For the year ended June 30, 2019, the decrease in fair market value of the fixed payer interest rate swaps was \$2.6 million.

The fair value of the swap agreements at June 30, 2019 is calculated using a zero-coupon method (Level 2 inputs). This method calculates the future net settlement payments required by the swaps, assuming, for the LIBOR fixed payer swaps, that the current LIBOR forward rates implied by the LIBOR yield curves correctly anticipate future LIBOR spot interest rates. These payments are discounted using the spot rates implied by the current yield curves for hypothetical zero-coupon bonds due on the date of each future net settlement of the swaps.

The District's fixed payer swaps were executed in 2004, and became effective in 2007. The purpose of the fixed payer swaps was to hedge a portion of the interest rate risk exposure associated with the District's 100% variable rate debt structure at the time the swaps were executed. The interest rate swap notional amounts and maturities are not specifically related to a particular District debt issue, however are considered a hedge of a pooled portion of the District's variable rate debt exposure. The following table displays the objective and terms of the District's interest rate swaps outstanding at June 30, 2019, along with the credit rating of the associated counterparty.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(3) **Interest Rate Swap Agreements (Continued)**

Current Year Active Interest Rate Swaps (in thousands):

Type	Objective	Notional Amount	Effective Date	Maturity Date	Terms	Counterparty Rating
Fixed Payer	Hedge of changes in cash flows on pool of variable rate debt issues	\$30,000	3/10/07	3/10/29	Pay 5.687%; receive 1-Mo. LIBOR	Aa2/A+/AA-
Fixed Payer	Hedge of changes in cash flows on pool of variable rate debt issues	\$30,000	3/10/07	3/10/29	Pay 5.687%; receive 1-Mo. LIBOR	Aa3/A+/A+

The ISDA agreements for the above referenced interest rate swaps include a provision that the counterparties shall be required to post collateral should the mark-to-market value of the total interest rate swap portfolio with the respective counterparty, including any current outstanding swap accruals, exceed a threshold of (\$15.0) million. The amount of the collateral posted shall be the amount of the mark-to-market value and outstanding swap accrual amounts in excess of (\$15.0) million. As of June 30, 2019, the mark-to-market value of the total interest rate swaps with Citibank N.A. and Bank of America, N.A. as counterparties did not exceed the threshold amount.

Credit risk: The District is exposed to credit risk on interest rate swaps. To minimize its exposure to loss related to credit risk, the District's policy requires that the Finance and Personnel Committee evaluate and approve the counterparty creditworthiness of each counterparty prior to executing an ISDA Agreement, and all current swap agreements include collateral posting provisions. These terms require full collateralization of the fair value of interest rate swaps in asset positions (net of the effect of applicable netting arrangements) should the counterparty's credit rating fall below BBB+ as issued by Fitch Ratings and Standard & Poor's or Baa1 as issued by Moody's Investors Service. Collateral posted is to be in the form of U.S. Treasuries, or other approved securities, held by a third-party custodian.

The District has executed interest rate swap transactions with two counterparties. Their ratings are Aa2/A+/AA- (50% of net exposure to credit risk) and Aa3/A+/A+ (50% of net exposure to credit risk) as of June 30, 2019.

Interest rate risk: The District is exposed to interest rate risk on its interest rate swaps. On its fixed payer swaps, as LIBOR's swap index decreases, the District's net payment on the swap increases. Alternatively, on its fixed payer swaps, as LIBOR's swap index increases, the District's net payment on the swap decreases.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(3) Interest Rate Swap Agreements (Continued)

Basis risk: The District is exposed to basis risk on its fixed payer swaps because the variable-rate payments received by the District on these swaps are based on a rate or index other than interest rates the District pays on its variable-rate debt, which is remarketed daily or weekly.

Termination risk: The District or its counterparties may terminate an interest rate swap if the other party fails to perform under the terms of the contract. If at the time of termination, an interest rate swap is in a liability position, the District would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

Collateral requirements: All of the District's interest rate swaps include provisions that require the District to post collateral in the event its credit rating falls below A as issued by Fitch Ratings and Standard & Poor's or A2 as issued by Moody's Investors Service.

The collateral posted is to be in the form of U.S. Treasuries or other approved securities in the amount of the fair value of interest rate swaps in liability positions net of the effect of applicable netting arrangements. If the District does not post collateral, the swaps may be terminated by the counterparty. The District's credit rating is Aa1/AAA/AAA; therefore, no collateral has been posted at June 30, 2019.

(4) Inventories

Inventories consist of available water in storage and materials and supplies in the District's warehouse facilities. As of June 30, 2019, the District had 36,203 acre-feet of banked water in various water bank facilities at a cost of \$7.8 million. Inventories at June 30, 2019 consisted of the following (in thousands):

Water in storage	\$ 7,814
Materials and supplies	<u>8,352</u>
Total	<u><u>\$16,166</u></u>

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(5) **Capital Assets**

Capital asset activity for the year ended June 30, 2019 is as follows (in thousands):

	Balance			Balance
	June 30, 2018	Additions	Deletions	June 30, 2019
Capital assets:				
Land leasehold	\$ 4,860	\$ 0	\$ 0	\$ 4,860
Buildings and structures	739,443	27,669	(457)	766,655
Transmissions and distributions	1,277,227	104,757	(6,153)	1,375,831
Machinery and equipment	278,600	5,059	(3,043)	280,616
Sub-total	2,300,130	137,485	(9,653)	2,427,962
Less: Accumulated depreciation:				
Land leasehold	(1,262)	(97)	0	(1,359)
Buildings and structures	(289,270)	(17,148)	224	(306,194)
Transmissions and distributions	(427,294)	(36,918)	6,216	(457,996)
Machinery and equipment	(150,352)	(11,852)	2,182	(160,022)
Sub-total	(868,178)	(66,015)	8,622	(925,571)
Total depreciable capital assets, net	1,431,952	71,470	(1,031)	1,502,391
Capital assets, non-depreciable:				
Land and water rights	125,316	0	0	125,316
Construction in progress	333,490	108,940	(111,473)	330,957
Total capital assets, net	\$1,890,758	\$180,410	\$ (112,504)	\$1,958,664

Total projects transferred from Construction in Progress to Capital Assets and depreciated during the fiscal year ended June 30, 2019 were \$111.5 million. The District's proportionate share of the Orange County Sanitation District's jointly funded capital assets increased \$26.0 million during the fiscal year ended June 30, 2019.

(6) **Capitalized Amounts**

Certain administrative and general expenses relating to assets under construction are charged to construction-in-progress until the assets are ready for their intended use. The amount of administrative and general expenses capitalized to construction-in-progress for the fiscal year ended June 30, 2019 was \$10.5 million.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(7) **Real Estate Investments**

Real estate investments as of June 30, 2019 consist of the following (in thousands):

Real estate investments at fair value	\$229,590
Real estate loan receivable	81,600
Accrued interest on loan receivable	<u>6,106</u>
Total	<u>\$317,296</u>

The District has the following fair value measurements for the real estate investments (Level 3 inputs) (in thousands):

	Balance June 30, 2018	Increase / (decrease) in Fair Value	Purchases / (Sales)	Balance June 30, 2019
Wood Canyon Villas, L.P.	\$ 30,670	\$1,840	\$(3,800)	\$ 28,710
Sycamore Canyon Apartments	145,000	3,625	0	148,625
230 Commerce Office Property	11,500	230	0	11,730
Waterworks Way Business Park	9,000	180	0	9,180
Sand Canyon Professional Center	11,000	220	0	11,220
Sand Canyon General Office	14,224	0	5,901	20,125
Total	<u>\$221,394</u>	<u>\$6,095</u>	<u>\$ 2,101</u>	<u>\$229,590</u>

Net real estate income as of June 30, 2019 is as follows (in thousands):

Real estate income	\$17,813
Increase (decrease) in fair value of real estate investments	6,095
Real estate expense	<u>(9,441)</u>
Net real estate income	<u>\$14,467</u>

Included in real estate investments are two apartment properties, three commercial office buildings and one entitled land property. The District, through Bardeen Partners, Inc., is the sole limited partner in Wood Canyon Villas, L.P. (Wood Canyon), and the sole owner of both Sycamore Canyon Apartments and a commercial office building (230 Commerce). Separate from Bardeen Partners, Inc., the District is the sole owner of two other commercial office buildings (Waterworks Way Business Park and Sand Canyon Professional Center) and one entitled land property Sand Canyon General Office. The District is currently constructing a new office building on the Sand Canyon General Office property, which is expected to be completed in spring 2020. In addition, the District has an \$81.6 million loan receivable from the sale of the Serrano Summit property due on or before April 30, 2020.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(7) **Real Estate Investments (Continued)**

The construction of Wood Canyon Villas, a 230-unit apartment property, was completed in 1993. The property is located in Orange County, California, and was 96% occupied at June 30, 2019. The Wood Canyon partnership agreement provides the District with a 9% cumulative preferred return on its unrecovered contribution accounts, as defined in the agreement (\$6.0 million contribution). In addition to the preferred return, the District received a \$3.8 million cash distribution during the current fiscal year. The property's fair value and the District's partnership interest was determined using an appraisal valuation in 2018 and adjusted with a growth factor in 2019.

In 1992, the District acquired a 450-unit apartment property (original cost, \$34.1 million) in Orange County, California known as Sycamore Canyon Apartments. The property was 96% occupied at June 30, 2019. The Sycamore Canyon Apartments completed a renovation project in 2007 for a total cost of \$9.6 million. The property's fair value was determined using an appraisal valuation in 2018 and adjusted with a growth factor in 2019.

In 2003, the District completed construction of the 41,000 square foot for-lease 230 Commerce professional office building located in Irvine, California. Land and construction costs for the project totaled \$5.6 million and the building was 80% occupied as of June 30, 2019. The property's fair value was determined using an appraisal valuation in 2018 and adjusted with a growth factor in 2019.

In November 2008, the District completed construction of a 37,200 square foot for-lease R&D office building located in Irvine, California known as the Waterworks Way Business Park. Construction of the building was a specific facilities requirement of the purchase agreement for land acquired for an adjacent District water treatment facility. Land and construction costs for the office project totaled \$9.0 million. As of June 30, 2019, the building was 100% occupied. The property's fair value was determined using an appraisal valuation in 2018 and adjusted with a growth factor in 2019.

In April 2012, the District completed construction of a 16,350 square foot for-lease medical office building located in Irvine, California known as the Sand Canyon Professional Center. Land and construction costs for the project totaled \$8.4 million and the building was 100% occupied as of June 30, 2019. The property's fair value was determined using an appraisal valuation in 2018 and adjusted with a growth factor in 2019.

The District has a 5.8-acre general office site located in Irvine, California at the Sand Canyon Professional Center. Land and related entitlement costs totaled \$5.0 million as of June 30, 2018. The fair value of the land was determined using an appraisal valuation in 2018. In January 2019, the District began construction of a new for-lease 70,000 square foot office building on the Sand Canyon Office property. The new building is expected to be completed in spring 2020. Design and construction costs totaled \$5.9 million as of June 30, 2019.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(7) Real Estate Investments (Continued)

On September 1, 2017, the District entered into a loan agreement with Lennar Homes of California, Inc. for a principal amount of \$81.6 million from the sale of IRWD's Serrano Summit property located in Lake Forest. On July 24, 2019, the District executed an amendment to the loan agreement for an eight-month extension of the original September 1, 2019 maturity. The loan amendment also increased the principal amount to include interest earned to September 1, 2019 for a total principal amount of \$88.1 million, bearing a 4.0% per annum interest rate. The entire outstanding principal balance and all accrued unpaid interest will be paid in a single lump sum on or before April 30, 2020. The loan is secured by the Serrano Summit property. The balance of the loan was stated at cost as of June 30, 2019.

(8) Orange County Sanitation District (OCSD)

The District, with OCSD, negotiated an agreement as of July 1, 1985, which has been amended from time to time. The District agreed to annually fund payment of the District's proportionate share of OCSD's joint capital outlay revolving fund (CORF) budget requirements and certain capital improvements, calculated on an annual flow basis using the four highest months of actual flows, during the term of the agreement.

The capital assets associated with this agreement are co-owned by the two agencies and provide an operational benefit to both agencies. The District's ownership of capital assets payments to OCSD for the fiscal year ended June 30, 2019 totaled \$19.7 million. In addition, the District's CORF payments to OCSD for the fiscal year ended June 30, 2019 totaled \$3.8 million. The District's share of the jointly funded capital assets and CORF is included in capital assets in the District's basic financial statements

In May 2018, the District and OCSD agreed to extend the agreement, providing for treatment and disposal by OCSD of District solids and the temporary lease of capacity in OCSD's solids treatment and disposal facilities through December 31, 2021. The capacity lease for the fiscal year ended June 30, 2019, estimated at \$2.4 million, is included in Sewer Services as an operating expense.

The accompanying basic financial statements reflect management's best estimate of balances pertaining to this agreement based upon information provided by OCSD. Periodically this information is subjected to further review by the performance of agreed upon procedures when the records for such review have been made available to the District. Adjustments pertaining to the accounting estimates associated with this agreement are recognized as the information for such adjustments becomes available

As of June 30, 2019, the District had a net payable of \$0.8 million to OCSD which is reflected as an account payable and accrued expenses liability in the District's basic financial statements.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(9) **Long-Term Liabilities**

Long-term liability activity for the year ended June 30, 2019 is as follows (in thousands):

	Balance June 30, 2018	Additions	Deletions	Balance June 30, 2019	Due within One Year	Due in more than one Year
General Obligation Bonds:						
1993 C Consolidated	\$ 29,900	\$ 0	\$ (1,600)	\$ 28,300	\$ 1,700	\$ 26,600
2008A Refunding	49,500	0	(1,500)	48,000	1,500	46,500
2009A Consolidated	60,000	0	(2,500)	57,500	2,500	55,000
2009B Consolidated	60,000	0	(2,500)	57,500	2,500	55,000
2010B BABS	175,000	0	0	175,000	0	175,000
2011A-1 Refunding	49,920	0	(1,680)	48,240	1,740	46,500
2011A-2 Refunding	33,280	0	(1,120)	32,160	1,160	31,000
2016 Consolidated	103,400	0	0	103,400	0	103,400
Unamortized Premium	25,493	0	(924)	24,569	924	23,645
Sub-total	586,493	0	(11,824)	574,669	12,024	562,645
Certificates of Participation:						
2010 Refunding Certificates	3,775	0	(1,795)	1,980	1,980	0
2016 Certificates	116,745	0	0	116,745	0	116,745
Unamortized Premium	29,755	0	(1,736)	28,019	1,736	26,283
Sub-total	150,275	0	(3,531)	146,744	3,716	143,028
Notes Payable	947	0	(263)	684	265	419
Other Long-Term Liabilities:						
Compensated Absences	4,226	4,403	(3,976)	4,653	1,861	2,792
Other Long-Term Liabilities	1,320	2,725	(3,137)	908	209	699
Sub-total	5,546	7,128	(7,113)	5,561	2,070	3,491
Total Long-Term Liabilities	\$743,261	\$7,128	\$(22,731)	\$727,658	\$18,075	\$709,583

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(9) **Long-Term Liabilities (Continued)**

The following schedule summarizes the major terms of outstanding long-term debt (in thousands):

	Date of Issue	Original Issue	Revenue Sources	Final Maturity Date	Interest Rates
General Obligation Bonds:					
1993 Consolidated	May 1, 1993	\$38,300	(1)(3)	April 1, 2033	Variable
2008A Refunding	April 1, 2008	60,215	(1)(3)	July 1, 2035	Variable
2009A Consolidated	June 4, 2009	75,000	(1)(3)	October 1, 2041	Variable
2009B Consolidated	June 4, 2009	75,000	(1)(3)	October 1, 2041	Variable
2010B BABS	December 16, 2010	175,000	(1)(2)(3)	May 1, 2040	6.60%
2011A-1 Refunding	April 15, 2011	60,545	(1)(2)(3)	October 1, 2037	Variable
2011A-2 Refunding	April 15, 2011	40,370	(1)(2)(3)	October 1, 2037	Variable
2016 Consolidated	October 12, 2016	103,400	(1)(2)(3)	February 1, 2046	5.00% - 5.25%
Certificates of Participation:					
2010 Certificates	February 23, 2010	85,145	(2)	March 1, 2020	3.80%
2016 Certificates	September 1, 2016	116,745	(2)	March 1, 2046	5.00%

- (1) Ad valorem assessments or, in lieu of assessments, in the District's discretion, charges for water or sewer service.
- (2) Available water, sewer, and recycled water revenues.
- (3) Proceeds from the sale of property.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(9) **Long-Term Liabilities (Continued)**

General Obligation Bonds

The annual debt service requirements for the General Obligation Bonds, including principal and interest payments (based on variable interest rates at June 30, 2019 ranging from 1.32% to 1.67% and the fixed rate for the 2010B BABs issue and 2016 Consolidated issue) are as follows (in thousands):

Fiscal Year	Principal	Interest	Hedging Instruments, Net	BAB Federal Subsidy	Total
2020	\$ 11,100	\$ 20,802	\$ 2,002	\$ (3,817)	\$ 30,087
2021	11,300	20,642	2,002	(3,817)	30,127
2022	14,155	20,479	2,002	(3,817)	32,819
2023	14,365	20,199	2,002	(3,817)	32,749
2024	14,775	19,911	2,002	(3,817)	32,871
2025-2029	96,560	82,476	10,008	(18,416)	170,628
2030-2034	125,310	71,473	0	(16,363)	180,420
2035-2039	176,380	47,221	0	(10,332)	213,269
2040-2044	72,340	10,437	0	(619)	82,158
2045-2046	13,815	1,097	0	0	14,912
Sub-total	550,100	314,737	20,018	(64,815)	820,040
Plus: Unamortized premium	24,569	0	0	0	24,569
Total	\$574,669	\$314,737	\$20,018	\$(64,815)	\$844,609

The above table incorporates the net receipts/payments of the hedging instruments that are associated with the variable rate debt issue(s). The amounts assume that current interest rates on variable rate bonds and the current reference rates of the hedging instruments will remain the same for their term. As these rates vary, interest payments on variable rate bonds and net receipts/payments on the hedging instruments will vary. Additionally, the above table includes the most recent BABs subsidy reduction of 5.9% under the Congressionally-mandated sequestration which began in FY 2012-13. Refer to Note 3 for additional information regarding the hedging instruments associated with the debt of the District.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(9) **Long-Term Liabilities (Continued)**

Certificates of Participation

In February 2010, the Irvine Ranch Water District Service Corporation issued \$85.1 million of Certificates of Participation Refunding Series 2010 (the Series 2010 Certificates) to refinance the cost of certain capital improvements by refunding the outstanding principal amount of the Certificates of Participation Series 1986 and Series 2008. In September 2016, the Irvine Ranch Water District Service Corporation issued \$116.7 million of Certificates of Participation Series 2016 (the Series 2016 Certificates) to finance the cost of certain capital improvements and to refund a portion of the outstanding Series 2010 Certificates.

The annual debt service requirements for the Certificates of Participation, including principal and interest payments, are as follows (in thousands):

Fiscal Year	Principal	Interest	Total
2020	\$ 1,980	\$ 5,936	\$ 7,916
2021	3,420	5,837	9,257
2022	3,675	5,666	9,341
2023	3,940	5,483	9,423
2024	4,220	5,286	9,506
2025-2029	26,270	22,923	49,193
2030-2034	26,280	15,627	41,907
2035-2039	16,990	10,618	27,608
2040-2044	21,680	5,925	27,605
2045-2046	10,270	777	11,047
Sub-total	118,725	84,078	202,803
Plus: Unamortized premium	28,019	0	28,019
Total	\$146,744	\$84,078	\$230,822

Notes Payable

The District has one outstanding loan from the State of California to fund reclaimed water projects. The balance on the 2000 loan was \$0.2 million at June 30, 2019. The annual interest rate is 0.00%; however, the loan agreement required the District to prepay interest of \$0.6 million, which is amortized over the life of the loan. The loan is payable annually in fixed installments of \$0.2 million through 2020.

The District also has one outstanding loan, which was assumed as a result of its consolidation with the Santiago County Water District. The original loan amount was \$1.3 million. The loan is payable semi-annually with interest at 2.32%. The loan matures in July 2025. The balance of the loan at June 30, 2019 was \$0.5 million.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(9) **Long-Term Liabilities (Continued)**

Notes Payable (Continued)

Amounts required to amortize notes payable at June 30, 2019 are as follows (in thousands):

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$265	\$43	\$308
2021	72	9	81
2022	74	8	82
2023	76	6	82
2024	77	4	81
2025-2026	120	3	123
Total	<u>\$684</u>	<u>\$73</u>	<u>\$757</u>

(10) **Unearned Revenue**

Unearned revenue at June 30, 2019 consisted of the following (in thousands):

Unearned revenue, current portion	\$ 565
Unearned revenue, net of current portion	<u>5,392</u>
Total	<u><u>\$5,957</u></u>

On November 10, 2008, the Board approved the South Orange County – Irvine Ranch Water District Interconnection Projects Participation Agreement (Agreement). The Agreement was effective on November 2008 between the District, City of San Clemente (CSC), Laguna Beach County Water District (LBCWD), Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD), South Coast Water District (SCWD), Municipal Water District of Orange County (MWDOC), and Orange County Water District (OCWD). The purpose of the Agreement is to allow the South County water agencies (CSC, LBCWD, MNWD, SMWD, and SCWD) to reserve capacity in the District system and reimburse the District for various new intertie facilities which provide that up to 25 cfs of water supply per month may be made available during a water supply disruption. The total cost of the agreement was paid in full by each party in the fiscal year ended June 30, 2009. The amount of unearned revenue related to the South County Water Agencies is amortized over 20 years, the term of the Agreement. The amount of amortization for the fiscal year ended June 30, 2019 was \$0.5 million.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(11) Letters of Credit

The District has letters of credit securing the payment of principal and interest on certain General Obligation Bonds. The letters of credit are issued in favor of the trustees and enable the trustees to make drawings against the letters of credit for payment of principal and interest amounts.

The terms of the letters of credit, as of June 30, 2019 are summarized as follows (in thousands):

Letter of Credit	Trustee	Amount	Expiration Date
Bank of America:			
2009 Series B Consolidated	U.S. Bank	\$ 58,143	May 16, 2022
Sumitomo Mitsui:			
2008 Series A Refunding	Bank of New York Mellon	48,710	July 21, 2021
U.S. Bank:			
1993 Consolidated	Bank of New York Mellon	28,681	December 15, 2021
2009 Series A Consolidated	U.S. Bank	58,143	December 15, 2021

(12) Net Position

Net position at June 30, 2019 consisted of the following (in thousands):

Net investment in capital assets:	
Property, plant and equipment, net	\$1,958,664
Less:	
Outstanding debt issued to construct capital assets:	
General obligation bonds	(574,669)
Certificates of participation	(146,744)
Notes payable	(684)
Deferred refunding charges	2,267
Total net investment in capital assets	1,238,834
Restricted net position:	
Restricted for water services	312,955
Restricted for sewer services	376,213
Total restricted net position	689,168
Total net position	\$1,928,002

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(13) Defined Benefit Pension Plan

Plan Descriptions

All qualified employees are eligible to participate in the District’s agent multiple-employer public employee defined benefit pension plan which is administrated by the California Public Employees’ Retirement System (CalPERS). CalPERS acts as a common investment and administrative agent for participating public entities within the State of California. Benefit provisions and all other requirements are established by State statute and the District’s Board of Directors. CalPERS issues publicly available reports that include a full description of the pension plans regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website at www.calpers.ca.gov.

Benefits Provided

CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. The Plan’s provisions and benefits in effect at June 30, 2019, are summarized as follows:

	Hire Date		
	Prior to October 1, 2012	On or after October 1, 2012 to December 31, 2012	On or after January 1, 2013
Benefit Formula	2.5% @ 55	2.0% @ 60	2.0% @ 62
Benefit Vesting Schedule	5 Years of Service	5 Years of Service	5 Years of Service
Benefit Payments	Monthly for Life	Monthly for Life	Monthly for Life
Minimum Retirement Age	50	50	52
Monthly Benefits, as a % of Eligible Compensation	2.0% to 2.5%	1.092% to 2.418%	1.0% to 2.5%
Required Employee Contribution Rate	8.00%	7.00%	5.25%
Required Employer Normal Cost Rate	7.510%	7.510%	7.510%

In addition, the District made a \$4.5 million unfunded liability contribution during the current fiscal year.

Employees Covered

As of June 30, 2017, the following employees were covered by the benefit terms for the Plan:

Active Employees	362
Inactive Employees or Beneficiaries Currently Receiving Benefits	274
Inactive Employees Entitled to But not Yet Receiving Benefits	<u>194</u>
Total	<u><u>830</u></u>

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(13) Defined Benefit Pension Plan (Continued)

Contributions

Section 20814(c) of the California Public Employees’ Retirement Law (PERL) 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 the 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. The employer is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. Employer contribution rates may change if plan contracts are amended. Payments made by the employer to satisfy contribution requirements that are identified by the pension plan terms as plan member contribution requirements are classified as plan member contributions.

Actuarial Methods and Assumptions Used to Determine Total Pension Liability

As of June 30, 2019, the total pension liability was determined using 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%
Inflation	2.50%
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 2.0% until Purchasing Power Protection Allowance Floor on Purchasing Power applies, 2.50% thereafter

⁽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. For more details on this table, please refer to the December 2017 experience study report (based on CalPERS demographic data from 1997 to 2015) that can be found on the CalPERS website.

Long-term Expected Rate of Return

The long-term expected rate of return on pension plan investments 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.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(13) Defined Benefit Pension Plan (Continued)

Long-term Expected Rate of Return (Continued)

Using historical returns of all of 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 adjusted to account for assumed administrative expenses. The expected real rates of return by asset class are as followed:

Asset Class ⁽¹⁾	Assumed Asset Allocation	Real Return Years 1 – 10 ⁽²⁾	Real Return Years 11+ ⁽³⁾
Global Equity	50.0%	4.80%	5.98%
Fixed Income	28.0%	1.00%	2.62%
Inflation Assets	0.0%	0.77%	1.81%
Private Equity	8.0%	6.30%	7.23%
Real Estates	13.0%	3.75%	4.93%
Liquidity	1.0%	0.00%	(0.92%)
Total	100%		

- (1) In the CalPERS' CAFR, 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 2.00% used for this period.
- (3) An expected inflation of 2.92% used for this period.

Change in Assumptions

For the measurement period ended June 30, 2018, demographic assumptions and inflation rate were changed in accordance to the CalPERS Experience Study and Review of Actuarial Assumptions December 2017.

Discount Rate

The discount rate used to measure the total pension liability 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 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.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(13) Defined Benefit Pension Plan (Continued)

Pension Plan Fiduciary Net Position

The plan fiduciary net position disclosed in the GASB 68 accounting valuation report may differ from the plan assets reported in the funding actuarial valuation report due to several reasons. For example, for the accounting reports, CalPERS must keep items such as deficiency reserves and fiduciary self-insurance included as assets. These amounts are excluded for rate setting purposes in the funding actuarial valuation.

Changes in the Net Pension Liability

The changes in the net pension liability for the Plan were as follows (in thousands):

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability/(Asset)
	(a)	(b)	(c) = (a) - (b)
Balance at June 30, 2018	\$264,399	\$197,718	\$66,681
Changes Recognized for the Period:			
Service Cost	5,098	0	5,098
Interest	18,570	0	18,570
Changes of Assumptions	(1,605)	0	(1,605)
Difference between Expected and Actual Experience	(235)	0	(235)
Contributions – Employer	0	6,157	(6,157)
Contributions – Employees	0	2,401	(2,401)
Net Investment Income	0	16,707	(16,707)
Benefit Payments, Including Refunds of Employee Contributions	(10,770)	(10,770)	0
Administrative Expense	0	(308)	308
Other Miscellaneous Expense ⁽¹⁾	0	(585)	585
Net Change	11,058	13,602	(2,544)
Balance at June 30, 2019	\$275,457	\$211,320	\$64,137

⁽¹⁾ During Fiscal Year 2017-18, as a result of Governmental Accounting Standards Board Statement (GASB) No. 75, Accounting and Financial Reporting for Postemployment Benefit Plans Other than Pensions (GASB 75), CalPERS reported its proportionate share of activity related to postemployment 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 Statement No. 68, Accounting and Financial Reporting for Pensions (GASB 68).

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(13) Defined Benefit Pension Plan (Continued)

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

The following presents the net pension liability of the Plan, calculated using the discount rate of 7.15 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage-point lower (6.15 percent) or 1 percentage-point higher (8.15 percent) than the current rate (in thousands):

	Discount Rate -1% (6.15%)	Current Discount Rate (7.15%)	Discount Rate +1% (8.15%)
Plan's Net Pension Liability	\$101,766	\$64,137	\$32,971

Subsequent Events

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

Recognition of Gains and Losses

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 fiscal year ended June 30, 2019 was 4.7 years, which was obtained by dividing the total service years of 3,860 (the sum of remaining service lifetimes of the active employees) by 830 (the total number of participants: active, inactive, and retired). Inactive employees and retirees have remaining service lifetimes equal to 0. Total future service is based on the members' probability of decrementing (leaving employment) due to an event other than receiving a cash refund.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(13) **Defined Benefit Pension Plan (Continued)**

Pension Expense and Deferred Outflows and Deferred Inflows of Resources Related to Pensions

For the fiscal year ended June 30, 2019, the District recognized pension expense of \$8.8 million. At June 30, 2019, the District reported deferred outflows and deferred inflows of resources related to pensions from the following sources (in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension Contributions made Subsequent to the Measurement Date	\$ 7,184	\$ 0
Differences between Expected and Actual Experiences	37	1,721
Changes in Assumptions	8,435	1,552
Net Difference between Projected and Actual Earnings on Pension Plan Investments	320	0
Total	\$15,976	\$3,273

\$7.2 million reported as deferred outflows of resources related to employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ending June 30, 2020. \$5.5 million net of deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows (in thousands):

Fiscal Year	Deferred Outflows/ (Inflows) of Resources
2020	\$4,333
2021	2,943
2022	(937)
2023	(820)
Total	\$5,519

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(13) Defined Benefit Pension Plan (Continued)

Funding of CalPERS Plan and Pension Benefits Trust

The District recognizes that defined benefit plans and the related future pension obligations pose significant issues for many government agencies. The District has taken a proactive approach to address the issue and in 2013, established a Pension Benefits Trust to substantially fund its PERS unfunded liability. The Pension Benefits Trust provides the District with an alternative to PERS that allows for investment by a professional fund management team selected and monitored by the District. The Pension Benefits Trust holds the funding contributions for the District pending future remittance to the CalPERS pension trust fund which will pay all retiree benefit payments to employees associated with the plan. Future contributions will be transferred from the Pension Benefits Trust to CalPERS at the District's discretion.

As of June 30, 2019, the total value of the assets in the Pension Benefits Trust was approximately \$78.4 million.

The following schedule shows the District's total pension liability, CalPERS assets, Pension Benefits Trust assets, and the relationship of the total pension liability (in thousands):

Fiscal Year ⁽¹⁾	Total Pension Liability	CalPERS Assets	Net Pension Liability/ (Asset)	Pension Benefits Trust Assets	CalPERS Assets as a Percentage of the Total Pension Liability	Pension Benefits Trust Assets as a Percentage of the Total Pension Liability	Total Pension Assets as a Percentage of the Total Pension Liability
	06/30/17	\$238,009	\$179,769	\$58,240	\$47,132	75.5%	19.8%
06/30/18	264,399	197,718	66,681	66,101	74.8%	25.0%	99.8%
06/30/19	275,457	211,320	64,137	73,106	76.7%	26.5%	103.2%

⁽¹⁾ As of the measurement date June 30, 2016, 2017, and 2018 respectively.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(14) Other Post-Employment Benefits

Plan Descriptions

The District administers three other post-employment benefits (OPEB) plans which are subject to changes based on the discretion of the Board:

- **PEMHCA:** The District provides an agent multiple-employer defined benefit healthcare plan to retirees through the California Public Employee Retirement System (CalPERS) under the California Public Employees Medical and Hospital Care Act (PEMHCA), commonly referred to as PERS Health. Employees are eligible for this lifetime benefit if they retire from the District and are eligible to begin drawing a PERS pension. Participation in PEMHCA is financed in part by the District through a contribution of \$136 per month per participating retiree.
- **RHCAP:** The District also administers a single-employer defined benefit Retiree Health Costs Assistance Program (RHCAP), which provides medical benefits to covered employees and their eligible dependents. The duration of the benefit is based on employees' years of service as follows: 12 months of benefits for employees with 3-7 years of service; 24 months of benefits for employees with 8-9 years of services; 36 months of benefits for employees with 10-14 years of service; 48 months of benefits for employees with 15-19 years of service; and 60 months of benefits for employees with at least 20 years of service. Employees are eligible for this benefit if they retire from the District on or after age 55 with at least three years of service. The District reimburses retirees for eligible healthcare costs of up to \$160 per month (for retirees with at least three years of service at the District), to a maximum of \$600 per month after 25 years of service.
- **Retiree Death Benefit Only Plan:** The District administers a single-employer defined benefit plan. Employees hired on or before December 31, 2008 and who retire from the District on or after age 55 with at least 10 years of service at the District are eligible for term life insurance with a face amount equal to 100% of their final annual salary at the time of retirement. Employees hired after December 31, 2008 are not currently eligible for this plan.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(14) Other Post-Employment Benefits (Continued)

Employees Covered

As of the June 30, 2018 actuarial valuation, the following employees were covered by the benefit terms under each Plan:

	PEMHCA	RHCAP	Death Benefit Only	Total
Inactive Employees or Beneficiaries Currently Receiving Benefits	97	47	0	144
Inactive Employees Entitled to But not Yet Receiving Benefits	89	0	149	238
Active Employees	370	370	160	900
Total	556	417	309	1,282

Contributions

The contributions for the District's various other post-employment benefits are based on pay-as-you-go financing requirements.

For the fiscal year ended June 30, 2019, the District's cash contributions were \$0.5 million and estimated implied subsidy was \$0.2 million resulting in total payments of \$0.7 million. The following shows contributions by each OPEB plan (in thousands):

	PEMHCA	RHCAP	Retiree Death Benefit Only	Total
Cash Contributions	\$163	\$332	\$10	\$505
Estimated Implied Subsidy	216	0	0	216
Total	\$379	\$332	\$10	\$721

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(14) **Other Post-Employment Benefits (Continued)**

Actuarial Methods and Assumptions Used to Determine Total OPEB Liability

The June 30, 2018 valuation was used to determine the June 30, 2018 total OPEB liability, based on the following actuarial methods and assumptions:

	PEMHCA	RHCAP	Retiree Death Benefit Only
Actuarial Method	Entry Age Normal		
Actuarial Assumptions:			
Contribution Policy	Pay-as-you-go		
Discount Rate	3.87% at June 30, 2018 and 3.581% at June 30, 2017 (Bond Buyer 20-Bond Index)		
Inflation	2.75% Annually		
Mortality, Disability, Termination, Retirement	CalPERS 1997-2015 Experience Study		
Mortality Improvement	Post-retirement Mortality Projected Fully Generational with Scale MP-2018		
Salary Increases	3% Annually and CalPERS 1997-2015 Experience Study		
Medical Trend	Non-Medicare –7.5% for 2020, decreasing to 4.0% in 2076 Medicare – 6.5% for 2020, decreasing to 4.0% in 2076	Not Applicable	
Minimum Increase	4.25% Annually	Not Applicable	
Participation at Retirement	Medical Coverage: 70% if eligible for RHCAP. Otherwise, 50% if currently in District's medical plan, 0% if not.	100% Participate	

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(14) Other Post-Employment Benefits (Continued)

Change in Assumptions

For the fiscal year ended June 30, 2018 measurement period, the changes in assumptions was as follows:

PEMHCA	RHCAP	Retiree Death Benefit Only
Discount rate was increased from 3.581% to 3.87% based on municipal bond rate as of the measurement date.		
Demographic assumptions were updated to CalPERS 1997-2015 Experience Study. Mortality improvement scale was updated to Scale MP-2018.		
Medical claims costs were developed by Axene Health Partners based on demographic data for the CalPERS health plans provided by CalPERS and Axene's proprietary AHP Cost Model.	Not Applicable	
Short term medical trend was developed in consultation with Axene Health Partners' healthcare actuaries. Long-term medical trend developed using the Society of Actuaries Getzen Model of Long-Run Medical Cost Trends.	Not Applicable	
Participation at retirement for medical coverage was updated to 70% if eligible for RHCAP.	Not Applicable	
A 2% load on the cash liability was added to estimate the ACA Excise Tax.	Not Applicable	

Discount Rate

The discount rate used to measure the total OPEB liability was 3.87 percent which was based on the Bond Buyer 20-Bond G.O. Index.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(14) Other Post-Employment Benefits (Continued)

Changes in the OPEB Liability

The changes in the OPEB liability were as follows (in thousands):

	PEMHCA	RHCAP	Retiree Death Benefit Only	Total
Balance at June 30, 2018	\$ 9,855	\$3,126	\$1,597	\$14,578
Changes Recognized for the Period:				
Service Cost	472	148	28	648
Interest	364	112	58	534
Changes in Assumptions	682	1	(10)	673
Difference between Expected and Actual Experience	951	125	(168)	908
Benefit Payments	(343)	(306)	(20)	(669)
Net Change	<u>2,126</u>	<u>80</u>	<u>(112)</u>	<u>2,094</u>
Balance at June 30, 2019	<u>\$11,981</u>	<u>\$3,206</u>	<u>\$1,485</u>	<u>\$16,672</u>

Sensitivity of the OPEB Liability to Changes in the Discount Rate

The following presents the OPEB liability, calculated using a discount rate that is one percentage point lower or one percentage higher than the current rate for the measurement period ended June 30, 2018 (in thousands).

	Discount Rate - 1%	Current Discount Rate	Discount Rate + 1%
OPEB Liability	(2.87%)	(3.87%)	(4.87%)
PEMHCA	\$13,991	\$11,981	\$10,383
RHCAP	3,396	3,206	3,028
Retiree Death Benefit Only	1,605	1,485	1,377
Total	<u>\$18,992</u>	<u>\$16,672</u>	<u>\$14,788</u>

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(14) **Other Post-Employment Benefits (Continued)**

Sensitivity of OPEB Liability to Changes in the Healthcare Trend Rates (Continued)

The following presents the OPEB liability, calculated using health care cost trend rates that are one percentage point lower or one percentage higher than the current rate for the measurement period ended June 30, 2018 (in thousands).

OPEB Liability	Healthcare Trend Rates -1%	Curent Healthcare Trend Rates	Healthcare Trend Rates +1%
PEMHCA	\$10,157	\$11,981	\$14,348
RHCAP	3,206	3,206	3,206
Retiree Death Benefit Only	1,485	1,485	1,485
Total	\$14,848	\$16,672	\$19,039

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

Gains and losses related to changes in total OPEB liability is recognized in OPEB expense systematically over time.

The first amortized amounts are recognized in OPEB expense for the fiscal 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 amortization period differs depending on the source of the gain or loss. Straight line amortization over the expected average remaining service lifetime (EARSLS) of all members that are provided with benefits (active and retired) as of the beginning of the measurement period is used for each Plan.

OPEB Expense and Deferred Outflows and Deferred Inflows of Resources Related to OPEB

For the fiscal year ended June 30, 2019, the District recognized OPEB expense of \$1.2 million which consisted of \$0.9 million for PEMHCA, \$0.3 million for RHCAP and \$0.03 million for Retiree Death Benefit Only.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(14) Other Post-Employment Benefits (Continued)

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

At June 30, 2019, the District reported deferred outflows and deferred inflows of resources related to OPEB from the following sources (in thousands):

	PEMHCA	RHCAP	Death Benefit Only	Total
Deferred Outflows of Resources:				
OPEB Contributions made Subsequent to the Measurement Date	\$379	\$332	\$ 10	\$ 721
Changes in Assumptions	\$610	\$ 1	\$ 0	\$ 611
Difference between Expected and Actual Experience	\$851	\$113	\$ 0	\$ 964
Deferred Inflows of Resources:				
Changes in Assumptions	\$895	\$106	\$ 63	\$1,064
Difference between Expected and Actual Experience	\$ 0	\$ 0	\$132	\$ 132

The District has \$0.7 million reported as deferred outflows of resources related to employer contributions subsequent to the measurement date which will be recognized as a reduction of the OPEB liability in the fiscal year ending June 30, 2020. The District has \$0.4 million deferred outflows and deferred inflows of resources related to OPEB which will be recognized as OPEB expense as follows (in thousands):

Fiscal Year	PEMHCA	RHCAP	Benefit Only	Total
2020	\$ 32	(\$3)	(\$ 56)	(\$27)
2021	32	(3)	(56)	(27)
2022	32	(3)	(56)	(27)
2023	32	(3)	(27)	2
2024	32	(3)	0	29
Thereafter	406	23	0	429
Total	\$566	\$ 8	(\$195)	\$379

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(15) Deferred Compensation Plans

Retirement for Part Time Employees

The District provides pension benefits for all of its part-time employees through a defined contribution plan, in lieu of providing social security benefits. In a defined contribution plan, benefits depend solely on amounts contributed to the plan plus investment earnings. The plan is administered as part of the District's Section 457 plan. All part-time and seasonal employees are eligible to participate from the date of employment. For the year ended June 30, 2019, the District's payroll covered by the plan was \$162,706. The District made no employer contributions. Employees contributed \$11,675 for the year ended June 30, 2019.

Deferred Compensation

All regular, full-time District employees are eligible to participate in the District's deferred compensation program pursuant to Section 457 of the Internal Revenue Code (Plan) whereby they can voluntarily contribute a portion of their earnings into a tax-deferred fund administered by the District and invested through a third party provider. Pursuant to the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), effective January 1, 2002, employees may contribute the lesser of 100% of includible compensation or the maximum dollar amount allowable under Internal Revenue Code Section 457 in effect for the year. The dollar amount currently in effect for calendar year 2019 is \$19,000.

Effective January 1, 2008, for employees with one year or more of services, the District provides 100% matching up to an annual maximum of 3% of the employee's base salary after one year of service. Such employer contribution amounts are deposited into a money purchase plan pursuant to Section 401(a) of the Internal Revenue Code. All full-time employees who have completed two years of regular, full-time service with the District, are eligible for an additional District contribution. Beginning with the first month following an employee's second anniversary date, the District will deposit to the employee's 401 (a) Plan account on a per-pay period basis an amount equal to 1% of the employee's base salary. During the fiscal year ended June 30, 2019, the District contributed \$1,090,432 to employee accounts under the 401(a) plan.

The assets in both plans are held in trust for the exclusive benefit of the participants and their beneficiaries, and are therefore not reported in the basic financial statements of the District.

Irvine Ranch Water District
Notes to the Basic Financial Statements
For the Fiscal Year Ended June 30, 2019
(Continued)

(16) Commitments and Contingencies

Legal Actions

The District is a defendant in various legal actions arising out of the conduct of the District's operations. Management believes that, based on current knowledge, the outcome of these matters will not have a material adverse effect on the District's financial position.

(17) Risk Management

The District is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions, and natural disasters for which the District carries commercial insurance.

Property, Boiler and Machinery insurance is provided by the California State Association of Counties Excess Insurance Authority (CSAC-EIA). Property insurance includes flood insurance for all properties, and earthquake insurance for the District's real estate investment properties. General and excess liability coverage and workers compensation insurance are provided through participation in the CSAC-EIA. Pollution and legal liability coverage for the Irvine Desalter Project is provided by a policy with Chubb Insurance Company.

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 amount for claims that have been incurred but not reported (IBNRs). The result of the process to estimate the claims liability is not an exact amount as it depends on many complex factors, such as inflation, changes in legal doctrines, and damage awards. Accordingly, claims are reevaluated periodically to consider the effects of inflation, recent claim settlement trends (including frequency and amount of payouts), and other economic and social factors. The estimate of the claims liability also includes amounts for incremental claim adjustment expenses related to specific claims and other claim adjustment expenses regardless of whether allocated to specific claims. Estimated recoveries, for example from salvage or subrogation, are another component of the claims liability estimate. Excess coverage insurance policies cover individual general liability claims in excess of \$100,000, property claims in excess of \$25,000 and workers compensation claims in excess of \$125,000.

Changes in the reported liability resulted from the following (in thousands):

Fiscal Year	Liability Beginning of Year	Claims and Changes in Estimates	Claim Payments	Liability End of Year	Due within One Year	Due in more than One Year
2018	\$1,426	\$157	(\$189)	\$1,394	\$448	\$946
2019	\$1,394	\$142	(\$19)	\$1,517	\$570	\$947

Irvine Ranch Water District
Required Supplementary Information
For the Fiscal Year Ended June 30, 2019

(1) Defined Benefit Pension Plan – California Public Employees’ Retirement System

(a) Schedule of Changes in the Net Pension Liability and Related Ratio (in thousands) ⁽¹⁾

	Measurement Date: June 30				
	2018	2017	2016	2015	2014
Total Pension Liability					
Service Cost	\$ 5,098	\$ 4,825	\$ 4,066	\$ 4,005	\$ 3,942
Interest	18,570	17,806	17,092	16,343	15,436
Changes of Assumptions	(1,605)	15,182	0	(4,127)	0
Difference between Expected and Actual Experience	(235)	(1,702)	(1,856)	530	0
Benefit Payments, Including Refunds of Employee Contributions	(10,770)	(9,721)	(9,089)	(8,365)	(7,631)
Net Change in Total Pension Liability	11,058	26,390	10,213	8,386	11,747
Total Pension Liability – Beginning	264,399	238,009	227,796	219,410	207,663
Total Pension Liability – Ending (a)	\$275,457	\$264,399	\$238,009	\$227,796	\$219,410
Plan Fiduciary Net Position					
Contributions – Employer	\$ 6,157	\$ 5,450	\$ 4,926	\$ 4,524	\$ 4,330
Contributions – Employees	2,401	2,280	2,519	2,170	2,712
Net Investment Income	16,707	20,205	946	4,049	26,787
Benefit Payments, Including Refunds of Employee Contributions	(10,770)	(9,721)	(9,089)	(8,365)	(7,632)
Administrative Expense	(308)	(265)	(110)	(208)	0
Other Miscellaneous Expense ⁽²⁾	(585)	0	0	0	0
Net Change in Fiduciary Net Position	13,602	17,949	(808)	2,170	26,197
Plan Fiduciary Net Position – Beginning ⁽³⁾	197,718	179,769	180,577	178,407	152,210
Plan Fiduciary Net Position – Ending (b)	\$211,320	\$197,718	\$179,769	\$180,577	\$178,407
Plan Net Pension Liability – Ending (a) - (b)	\$ 64,137	\$ 66,681	\$ 58,240	\$ 47,219	\$ 41,003
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	76.72%	74.78%	75.53%	79.27%	81.31%
Covered Payroll	\$ 32,213	\$ 30,823	\$ 28,802	\$ 27,596	\$ 26,264
Plan Net Pension Liability as a Percentage of Covered Payroll	199.10%	216.33%	202.21%	171.11%	156.12%

Irvine Ranch Water District
 Required Supplementary Information
 For the Fiscal Year Ended June 30, 2019
 (Continued)

(1) **Defined Benefit Pension Plan – California Public Employees’ Retirement System (Continued)**

(a) Schedule of Changes in the Net Pension Liability and Related Ratio (in thousands)
⁽¹⁾ (Continued)

- (1) Historical information is required only for measurement periods from which GASB 68 is applicable. Fiscal Year 2015 was the first year of GASB 68 implementation.
- (2) During Fiscal Year 2017-18, as a result of Governmental Accounting Standards Board Statement (GASB) No. 75, Accounting and Financial Reporting for Postemployment Benefit Plans Other than Pensions (GASB 75), CalPERS reported its proportionate share of activity related to postemployment 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 Statement No. 68, Accounting and Financial Reporting for Pensions (GASB 68).
- (3) Includes any beginning of year adjustment.

Notes to Schedule of Changes in the Net Pension Liability and Related Ratio

Benefit Changes: The figures above do not include any liability impact that may have resulted from plan changes which occurred after June 30, 2017. 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 to the CalPERS Experience Study and Review of Actuarial Assumptions December 2017. In 2017, the discount rate reduced from 7.65 percent to 7.15 percent. In 2015, the discount rate was changed from 7.5 percent (net of administrative expense) to 7.65 percent (without a reduction for pension plan administration expense.) In 2014, the discount rate was 7.5 percent.

(b) Schedule of Contributions (in thousands) ⁽¹⁾

	Fiscal Year Ended June 30				
	2019	2018	2017	2016	2015
Actuarially Determined Contribution ⁽²⁾	\$ 7,184	\$ 6,157	\$ 5,450	\$ 4,926	\$ 4,524
Contributions in Relation to the Actuarially Determined Contribution ⁽²⁾	(7,184)	(6,157)	(5,450)	(4,926)	(4,524)
Contribution Deficiency (Excess)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Covered Payroll ⁽³⁾	\$32,700	\$32,213	\$30,823	\$28,802	\$27,596
Contributions as a Percentage of Covered Payroll ⁽³⁾	21.97%	19.11%	17.68%	17.10%	16.39%

Irvine Ranch Water District
Required Supplementary Information
For the Fiscal Year Ended June 30, 2019
(Continued)

(1) Defined Benefit Pension Plan – California Public Employees’ Retirement System (Continued)

(b) Schedule of Contributions (in thousands) ⁽¹⁾ (Continued)

- (1) Historical information is required only for measurement periods from which GASB 68 is applicable. Fiscal Year 2015 was the first year of GASB 68 implementation.
- (2) Employers are assumed to make contributions equal to the actuarially determined contributions. However, some employers may choose to make additional contributions towards their unfunded liability. Employer contributions for such plans exceed the actuarially determined contributions.
- (3) Included one year’s payroll growth using 2.75 percent payroll assumptions for fiscal year ended June 30, 2018; 3.00 percent payroll assumptions for fiscal years ended June 30, 2014-17.

Notes to Schedule of Contributions

The actuarial methods and assumptions used to set the actuarially determined contributions for the fiscal year ended June 30, 2019 were from the June 30, 2016 public agency valuations.

Actuarial Cost Method	Entry Age Normal
Amortization Method/Period	Level Percent of Payroll
Asset Valuation Method	Market Value of Assets
Inflation	2.75%
Salary Increases	Varies by Entry Age and Service
Payroll Growth	3.00%
Investment Rate of Return	7.375% Net of Pension Plan Investment and Administrative Expenses; includes Inflation
Retirement Age	The probabilities of Retirement are based on the 2014 CalPERS Experience Study for the period from 1997 to 2011.
Mortality	The probabilities of mortality are based on the 2014 CalPERS Experience Study for the period from 1997 to 2011. Pre-retirement and Post-retirement mortality rates include 20 years of projected mortality improvement using Scale BB published by the Society of Actuaries.

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 were calculated using a discount rate of 7.375 percent.

Irvine Ranch Water District
 Required Supplementary Information
 For the Fiscal Year Ended June 30, 2019
 (Continued)

(2) **Other Post-Employment Benefits**

Schedule of Changes in the OPEB Liability and Related Ratio (in thousands)⁽¹⁾

PEMHCA		
Measurement Date: June 30	2018	2017
Service Cost	\$ 472	\$ 549
Interest	364	310
Changes of Assumptions	682	(1,173)
Difference between Expected and Actual Experience	951	0
Benefit Payments	(343)	(304)
Net Change in Total OPEB Liability	\$ 2,126	\$ (618)
Total OPEB Liability – Beginning	9,855	10,473
Total OPEB Liability – Ending	\$11,981	\$ 9,855
Covered-Employee Payroll	\$35,629	\$30,823
OPEB Liability as a Percentage of Covered-Employee Payroll	33.63%	31.97%

RHCAP		
Measurement Date: June 30	2018	2017
Service Cost	\$ 148	\$ 161
Interest	112	94
Changes of Assumptions	1	(136)
Difference between Expected and Actual Experience	125	0
Benefit Payments	(306)	(286)
Net Change in Total OPEB Liability	\$ 80	\$ (167)
Total OPEB Liability – Beginning	3,126	3,293
Total OPEB Liability – Ending	\$ 3,206	\$ 3,126
Covered-Employee Payroll	\$35,629	\$30,823
OPEB Liability as a Percentage of Covered-Employee Payroll	9.00%	10.14%

Irvine Ranch Water District
 Required Supplementary Information
 For the Fiscal Year Ended June 30, 2019
 (Continued)

(2) **Other Post-Employment Benefits (Continued)**

(a) Schedule of Changes in the OPEB Liability and Related Ratio (in thousands)⁽¹⁾
(Continued)

Retiree Death Benefit Only		
Measurement Date: June 30	2018	2017
Service Cost	\$ 28	\$ 32
Interest	58	47
Changes of Assumptions	(10)	(92)
Difference between Expected and Actual Experience	(168)	0
Benefit Payments	(20)	(10)
Net Change in Total OPEB Liability	(112)	(23)
Total OPEB Liability – Beginning	1,597	1,620
Total OPEB Liability – Ending	\$ 1,485	\$ 1,597
Covered -Employee Payroll	\$19,775	\$16,028
OPEB Liability as a Percentage of Covered-Employee Payroll	7.51%	9.96%

⁽¹⁾Historical information is required only for measurement periods from which GASB 75 is applicable. Fiscal Year 2018 was the first year of GASB 75 implementation.

Irvine Ranch Water District
 Required Supplementary Information
 For the Fiscal Year Ended June 30, 2019
 (Continued)

(2) **Other Post-Employment Benefits (Continued)**

(a) **Schedule of Changes in the OPEB Liability and Related Ratio (in thousands)⁽¹⁾**
 (Continued)

Notes to Schedule of Changes in the OPEB Liability and Related Ratio

Changes of Assumptions: In 2018, the changes of assumptions were as follows:

PEMHCA	RHCAP	Retiree Death Benefit Only
Discount rate was increased from 3.581% to 3.87% based on municipal bond rate as of the measurement date.		
Demographic assumptions were updated to CalPERS 1997-2015 Experience Study. Mortality improvement scale was updated to Scale MP-2018.		
Medical claims costs were developed by Axene Health Partners based on demographic data for the CalPERS health plans provided by CalPERS and Axene's proprietary AHP Cost Model.	Not Applicable	
Short term medical trend was developed in consultation with Axene Health Partners' healthcare actuaries. Long-term medical trend developed using the Society of Actuaries Getzen Model of Long-Run Medical Cost Trends.	Not Applicable	
Participation at retirement for medical coverage was updated to 70% if eligible for RHCAP.	Not Applicable	
A 2% load on the cash liability was added to estimate the ACA Excise Tax.	Not Applicable	

In 2017, the discount rate increased from 2.85 percent to 3.581 percent.

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Statistical Section

Irvine Ranch Water District
Fiscal Year Ended June 30, 2019

This section of the Irvine Ranch Water District'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 the District's overall financial health.

Financial Trends Schedules – These schedules contain trend information to help the reader understand how the District's financial performance and well-being have changed over time.

- Net Position
- Changes in Net Position

Revenue Capacity Schedules – These schedules contain information to help the reader assess the factors affecting the District's ability to generate its property and sales taxes.

- Water Sold by Type of Customer
- Water Rates
- Largest Water Customers
- Sewer Rates
- Largest Sewer Customers
- Ad Valorem Property Tax Rates

Debt Capacity Schedules – These schedules present information to help the reader assess the affordability of the District's current levels of outstanding debt and the District's ability to issue additional debt in the future.

- Assessed Valuation and Estimated Actual Value of Taxable Property and 1% Property Tax Revenue
- Direct and Overlapping Property Tax Rates
- Principal Property Taxpayers
- Property Tax Collections/Delinquency
- Outstanding Debt by Type
- Outstanding General Obligation Bonds by Improvement District
- Ratio of General Obligation Debt to Assessed Values
- Ratio of Annual Debt Service Expenditures to Total General Expenditures
- Debt Service Coverage

Demographic and Economic Information – These schedules offer demographic and economic indicators to help the reader understand the environment within which the District’s financial activities take place and to help make comparisons over time and with other governments.

Principal Employers
Demographic and Economic Statistics

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

Operating Indicators by Function – Water and Sewer Service Connections
Operating Indicators by Function – New Service Connections
Operating Indicators by Function – Average Monthly Usage
Source of Supply and Demand in Acre Feet
Capital Asset Statistics
Full-Time Employees

Irvine Ranch Water District
Net Position
For the Past Ten Fiscal Years
(in millions)

	Fiscal Year				
	2010	2011	2012	2013 ⁽¹⁾	2014 ⁽¹⁾
Assets					
Current and other assets	\$1,172.3	\$1,300.0	\$1,167.0	\$1,128.2	\$ 462.7
Capital assets	1,396.6	1,430.3	1,508.8	1,506.1	1,567.5
Total assets	2,568.9	2,730.3	2,675.8	2,634.3	2,030.2
Deferred Outflows of Resources	37.4	32.7	53.0	47.3	37.7
Liabilities					
Current and other liabilities	67.3	97.7	99.0	672.7	54.9
Long-term liabilities	1,204.3	1,323.7	1,281.8	647.7	623.4
Total liabilities	1,271.6	1,421.4	1,380.8	1,320.4	678.3
Deferred Inflows of Resources	0	0	0	0	0
Net Position					
Net investment in capital assets	929.5	900.6	943.1	918.1	981.3
Restricted for water services	249.8	213.6	179.3	185.4	165.1
Restricted for sewer services	155.4	227.4	225.6	257.7	243.2
Total net position	\$1,334.7	\$1,341.6	\$1,348.0	\$1,361.2	\$1,389.6

Irvine Ranch Water District
Net Position
For the Past Ten Fiscal Years

(in millions)
(Continued)

	Fiscal Year				
	2015 ⁽²⁾	2016 ⁽³⁾	2017 ⁽⁴⁾	2018 ⁽⁵⁾	2019
Assets					
Current and other assets	\$ 332.9	\$ 456.6	\$ 735.1	\$ 797.4	\$ 803.9
Capital assets	1,647.4	1,731.6	1,848.3	1,890.8	1,958.7
Total assets	1,980.3	2,188.2	2,583.4	2,688.2	2,762.6
Deferred Outflows of Resources	43.3	49.7	61.6	41.7	41.2
Liabilities					
Current and other liabilities	51.5	65.4	78.5	52.5	53.8
Long-term liabilities	602.8	589.8	790.9	831.7	817.4
Total liabilities	654.3	655.2	869.4	884.2	871.2
Deferred Inflows of Resources	14.6	4.4	3.6	4.8	4.5
Net Position					
Net investment in capital assets	1,074.6	1,178.5	1,087.9	1,155.5	1,238.8
Restricted for water services	148.6	221.5	264.3	289.5	313.0
Restricted for sewer services	131.5	178.3	419.8	395.9	376.2
Total net position	\$1,354.7	\$1,578.3	\$1,772.0	\$1,840.9	\$1,928.0

Source: Irvine Ranch Water District Basic Financial Statements

Notes:

- ⁽¹⁾ The District implemented GASB Statement No. 65 for the fiscal year ended June 30, 2014 and restated the financial statements for the fiscal year ended June 30, 2013.
- ⁽²⁾ The District implemented GASB Statement Nos. 68 and 71 for the fiscal year ended June 30, 2015. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.
- ⁽³⁾ The District implemented GASB Statement No. 72 for the fiscal year ended June 30, 2016. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.
- ⁽⁴⁾ The prior period adjustment for the fiscal year ended June 30, 2017 was related to the reclassification of certain assets from capital assets to real estate investments. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.
- ⁽⁵⁾ The District implemented GASB Implementation Guide No. 2017-1 and GASB Statement No. 75 for the fiscal year ended June 30, 2018. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

Irvine Ranch Water District
Changes in Net Position
For the Past Ten Fiscal Years
(in thousands)

	Fiscal Year				
	2010	2011	2012	2013	2014
Operating Revenues					
Water sales and service charges	\$ 51,268	\$ 54,796	\$ 57,558	\$ 62,565	\$ 66,321
Sewer sales and service charges	45,344	45,375	49,234	53,085	58,109
Total operating revenues	<u>96,612</u>	<u>100,171</u>	<u>106,792</u>	<u>115,650</u>	<u>124,430</u>
Operating Expenses					
Water					
Water services	43,591	45,961	44,883	51,163	57,624
General and administrative	13,349	12,327	12,305	14,619	13,660
Sewer					
Sewer services	30,992	33,382	33,086	38,189	37,715
General and administrative	6,651	6,569	7,792	8,048	8,612
Depreciation	39,444	43,592	41,378	47,539	46,809
Total operating expenses	<u>134,027</u>	<u>141,831</u>	<u>139,444</u>	<u>159,558</u>	<u>164,420</u>
Operating income (loss)	<u>(37,415)</u>	<u>(41,660)</u>	<u>(32,652)</u>	<u>(43,908)</u>	<u>(39,990)</u>
Nonoperating Revenues (Expenses)					
Property taxes	38,392	38,679	38,062	41,068	42,751
Investment income	2,191	2,599	3,132	224	1,079
Increase (decrease) in fair value of investments	(7,782)	(20,172)	(23,586)	(29,180)	(16,177)
JPA investment income	55,726	53,708	51,530	49,178	29,522
Real estate income	9,701	9,719	11,039	10,789	11,899
Increase (decrease) in fair value of real estate investments	0	0	0	0	0
Pension benefits trust interest and dividends income	0	0	0	0	0
Increase (decrease) in fair value of pension benefits trust investments	0	0	0	0	0
Other income	10,706	7,987	6,141	8,323	10,974
Interest expense	(9,962)	(14,174)	(16,924)	(16,770)	(15,836)
JPA interest expense	(51,530)	(41,264)	(39,603)	(28,884)	(17,166)
Real estate expense	(6,186)	(6,004)	(6,016)	(6,047)	(6,139)
Pension benefits trust expense	0	0	0	0	0
Other expenses	(1,286)	(989)	(10,713)	(6,110)	(7,163)
Total nonoperating revenue (expenses)	<u>39,970</u>	<u>30,089</u>	<u>13,062</u>	<u>22,591</u>	<u>33,744</u>
Income (loss) before capital contributions	2,555	(11,571)	(19,590)	(21,317)	(6,246)
Contributed capital assets	17,963	18,506	25,948	34,535	34,684
Increase (decrease) in net position	<u>20,518</u>	<u>6,935</u>	<u>6,358</u>	<u>13,218</u>	<u>28,438</u>
Net position at beginning of year	1,357,046	1,334,666	1,341,601	1,347,959	1,361,177
Prior period adjustments	(42,898)	0	0	0	0
Net position at end of year	<u>\$1,334,666</u>	<u>\$1,341,601</u>	<u>\$1,347,959</u>	<u>\$1,361,177</u>	<u>\$1,389,615</u>

Irvine Ranch Water District
Changes in Net Position
For the Past Ten Fiscal Years

(in thousands)

(Continued)

	Fiscal Year				
	2015 ⁽¹⁾	2016 ⁽²⁾	2017 ⁽³⁾	2018 ⁽⁴⁾	2019
Operating Revenues					
Water sales and service charges	\$ 70,110	\$ 76,692	\$ 77,252	\$ 84,575	\$ 94,107
Sewer sales and service charges	62,808	67,682	72,054	76,789	76,841
Total operating revenues	132,918	144,374	149,306	161,364	170,948
Operating Expenses					
Water					
Water services	57,978	57,499	55,296	63,671	64,004
General and administrative	9,319	11,827	15,906	20,554	19,860
Sewer					
Sewer services	54,575	40,413	42,752	38,115	43,734
General and administrative	5,826	7,625	9,059	12,332	15,786
Depreciation	51,015	58,330	61,841	63,877	64,835
Total operating expenses	178,713	175,694	184,854	198,549	208,219
Operating income (loss)	(45,795)	(31,320)	(35,548)	(37,185)	(37,271)
Nonoperating Revenues (Expenses)					
Property taxes	42,431	46,303	51,321	57,247	63,057
Investment income	1,214	1,249	2,843	4,133	6,199
Increase (decrease) in fair value of investments	(28)	(32)	(1,624)	(1,571)	5,188
JPA investment income	0	0	0	0	0
Real estate income	12,518	13,056	13,434	16,689	17,813
Increase (decrease) in fair value of real estate investments	0	5,597	10,084	4,091	6,095
Pension benefits trust interest and dividends income	0	0	0	3,003	2,140
Increase (decrease) in fair value of pension benefits trust investments	0	0	0	2,173	3,196
Other income	7,899	7,837	7,117	7,504	8,876
Interest expense	(13,903)	(15,415)	(18,784)	(26,034)	(25,481)
JPA interest expense	0	0	0	0	0
Real estate expense	(6,251)	(4,363)	(4,358)	(13,284)	(9,441)
Pension benefits trust expense	0	0	0	(51)	(53)
Other expenses	(9,752)	(2,800)	(1,997)	(174)	(2,615)
Total nonoperating revenue (expenses)	34,128	51,432	58,036	53,726	74,974
Income (loss) before capital contributions	(11,667)	20,112	22,488	16,541	37,703
Contributed capital assets	42,540	53,278	41,913	60,588	49,346
Increase (decrease) in net position	30,873	73,390	64,401	77,129	87,049
Net position at beginning of year	1,389,615	1,354,663	1,578,311	1,772,014	1,840,953
Prior period adjustments	(65,825)	150,258	129,302	(8,190)	0
Net position at end of year	\$1,354,663	\$1,578,311	\$1,772,014	\$1,840,953	\$1,928,002

Source: IRWD Basic Financial Statements

Notes:

- ⁽¹⁾ The District implemented GASB Statement Nos. 68 and 71 for the fiscal year ended June 30, 2015. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.
- ⁽²⁾ The District implemented GASB Statement No 72 for the fiscal years ended June 30, 2016 and 2017. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.
- ⁽³⁾ The prior period adjustment for the fiscal year ended June 30, 2017 was related to the reclassification of certain assets from capital assets to real estate investments. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.
- ⁽⁴⁾ The District implemented GASB Implementation Guide No. 2017-1 and GASB Statement No. 75 for the fiscal year ended June 30, 2018. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

Irvine Ranch Water District
 Water Sold By Type of Customer (in Acre Feet)
 For the Past Ten Fiscal Years

	Fiscal Year				
	2010	2011	2012	2013	2014
Residential	31,721	31,127	32,262	33,166	34,068
Commercial	7,586	7,632	8,021	8,353	8,803
Industrial	4,711	4,733	4,713	4,783	4,891
Public Authority	2,293	2,305	2,373	2,458	2,458
Construction & Temporary	127	174	275	378	739
Landscape	4,712	4,252	4,741	5,316	5,671
Agricultural	5,234	3,208	2,433	2,749	3,277
Landscape/Agricultural	20,951	20,147	25,011	28,259	30,021
Total	77,335	73,578	79,829	85,462	89,928

	Fiscal Year				
	2015	2016	2017	2018	2019
Residential	32,375	28,573	30,384	32,848	31,642
Commercial	8,391	8,377	8,179	8,769	8,624
Industrial	6,233	5,118	5,084	4,923	4,831
Public Authority	2,583	2,234	2,282	2,193	2,073
Construction & Temporary	863	1,230	874	1,292	541
Landscape	5,327	3,843	4,126	4,740	4,065
Agricultural	2,547	2,216	1,856	1,839	1,114
Landscape/Agricultural	32,139	26,386	26,374	29,736	26,153
Total	90,458	77,977	79,159	86,340	79,043

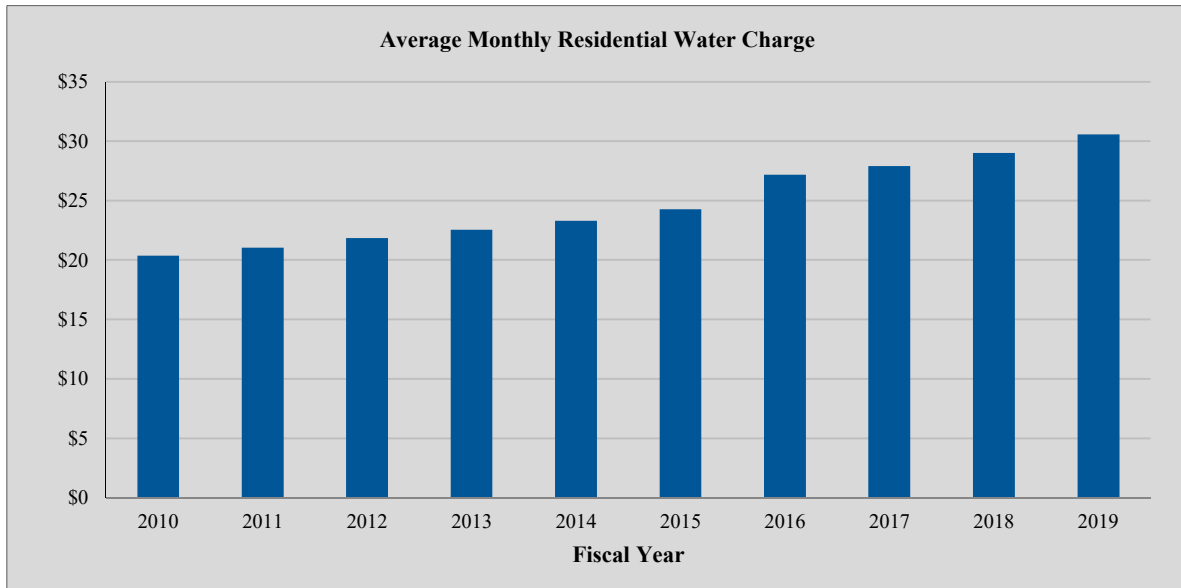
Source: Irvine Ranch Water District

Irvine Ranch Water District

Water Rates ⁽¹⁾

For the Past Ten Fiscal Years

Fiscal Year	Fixed Service Charge	Commodity Rate (per ccf)	Average Monthly Residential Charge
2010	\$7.75	\$1.15	\$20.35
2011	8.00	1.21	21.02
2012	8.75	1.22	21.84
2013	9.30	1.24	22.53
2014	9.85	1.27	23.29
2015	10.50	1.34	24.28
2016	10.30	1.62	27.19
2017	10.30	1.65	27.90
2018	10.30	1.70	29.00
2019	10.35	1.89	30.58



Source: Irvine Ranch Water District

Note:

⁽¹⁾ The water charge to the average residential customer is based upon 12 ccf per month.

The first 5 ccf are at the District's low volume rate, which is less than the commodity base rate. The fixed monthly service charge includes components to add enhancement and replacement funds to assist with the District's aging infrastructure.

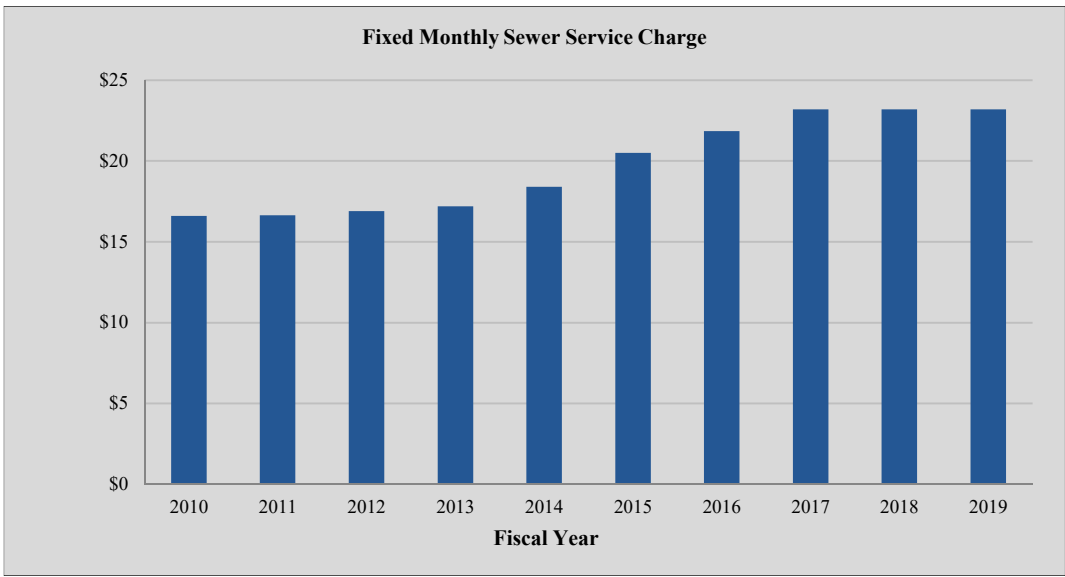
Irvine Ranch Water District
Largest Water Customers
Current Year and Nine Years Ago

Customer Name	2019			2010		
	Total Sales	Rank	Percentage of Water Sales Revenues	Total Sales	Rank	Percentage of Water Sales Revenues
The Irvine Company	\$ 7,451,673	1	8.38%			
University of California - Irvine	1,385,199	2	1.56%	\$ 1,485,554	4	2.90%
Jazz Semiconductor	1,210,411	3	1.36%	667,649	5	1.30%
B Braun Medical, Inc	1,045,000	4	1.18%	520,961	7	1.02%
Woodbridge Village Association	590,810	5	0.66%	438,228	10	0.85%
City of Irvine	391,077	6	0.44%	1,655,368	3	3.23%
City of Lake Forest	342,143	7	0.38%			
Allergan Sales, LLC	281,375	8	0.32%			
Irvine Unified School District	264,337	9	0.30%	499,635	8	0.97%
Maruchan, Inc	259,686	10	0.29%			
TIC-Irvine Apartment Communities				3,613,332	1	7.05%
The Irvine Company - Agricultural Division				1,934,706	2	3.77%
The Irvine Company - Spectrum Office				626,393	6	1.22%
Hines Nurseries				472,390	9	0.92%
Total	\$13,221,712		14.87%	\$11,914,216		23.23%

Source: Irvine Ranch Water District

Irvine Ranch Water District
Sewer Rates⁽¹⁾
For the Past Ten Fiscal Years

Fiscal Year	Fixed Monthly Service Charge
2010	\$16.60
2011	16.65
2012	16.90
2013	17.20
2014	18.40
2015	20.50
2016	21.85
2017	23.20
2018	23.20
2019	23.20



Source: Irvine Ranch Water District

Note:

⁽¹⁾ The fixed monthly service charge assumes the three lowest months of usage fall below 10 ccf's and it includes components to add enhancement and replacement funds to assist with the District's aging infrastructure.

Irvine Ranch Water District
 Largest Sewer Customers
 Current Year and Nine Years Ago

Customer Name	2019			2010		
	Total Sales	Rank	Percentage of Sewer Sales Revenues	Total Sales	Rank	Percentage of Sewer Sales Revenues
The Irvine Company	\$11,932,092	1	15.53%			
University of California - Irvine	2,256,337	2	2.94%	\$1,011,420	2	2.23%
City of Irvine	2,202,981	3	2.87%			
B Braun Medical, Inc	858,955	4	1.12%	431,368	3	0.95%
Irvine Unified School District	657,418	5	0.86%			
ERP Operating, LP	351,201	6	0.46%	187,388	8	0.41%
Crystal Cove Community Assn	349,178	7	0.45%			
Allergan Sales, LLC	344,890	8	0.45%	241,434	4	0.53%
Maruchan, Inc	338,045	9	0.44%	222,382	6	0.49%
Woodbridge Village Assn	318,598	10	0.41%			
TIC-Irvine Apartment Communities				3,399,070	1	7.50%
Royal Carpet Mills				241,048	5	0.53%
The Irvine Company - Spectrum Office				197,071	7	0.43%
Oakley Technical Center				159,619	9	0.35%
Teva Parenteral Medicines				146,413	10	0.32%
Total	\$19,609,695		25.53%	\$6,237,213		13.74%

Source: Irvine Ranch Water District

Irvine Ranch Water District
Ad Valorem Property Tax Rates⁽¹⁾
For the Past Ten Fiscal Years

Improvement District	Fiscal Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
112	\$0.07920	\$0.07920	\$0.03168	\$0.03168	\$0.03168	\$0.03000	\$0.03000	\$0.03000	\$0.03000	\$0.03000
113	0.01980	0.01980	0.05940	0.05940	0.05940	0.03000	0.03000	0.04000	0.04000	0.04000
120	0.01311	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
121	0.00001	0.01311	0.01311	0.01311	0.01311	N/A	N/A	N/A	N/A	N/A
125	N/A	N/A	N/A	N/A	N/A	0.01300	0.01300	0.01300	0.01300	0.01300
130	0.00680	0.00680	0.00680	0.00680	0.00680	N/A	N/A	N/A	N/A	N/A
135	0.00842	0.00842	0.00421	0.00421	0.00421	N/A	N/A	N/A	N/A	N/A
140	0.00001	0.00001	0.01000	0.01000	0.01000	N/A	N/A	N/A	N/A	N/A
150	0.00990	0.00990	0.01980	0.01980	0.01980	N/A	N/A	N/A	N/A	N/A
153	N/A	N/A	N/A	N/A	N/A	0.00001	0.00001	0.00001	0.02000	0.02000
160	0.01758	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
161	0.00001	0.01758	0.01758	0.01758	0.01758	N/A	N/A	N/A	N/A	N/A
182	0.01350	0.01350	0.02700	0.02700	0.02700	N/A	N/A	N/A	N/A	N/A
184	0.00001	0.00001	0.01350	0.01350	0.01350	N/A	N/A	N/A	N/A	N/A
185	N/A	N/A	N/A	N/A	N/A	0.00001	0.00001	0.00001	0.02300	0.02300
186	0.03191	0.03191	0.04787	0.04787	0.04787	N/A	N/A	N/A	N/A	N/A
188	0.03590	0.03590	0.21540	0.21540	0.21540	0.21540	0.21540	0.21540	0.07350	0.07350
190	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
210	0.00001	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
212	0.12420	0.12420	0.07452	0.07452	0.07452	0.04500	0.04500	0.04500	0.04500	0.04500
213	0.14533	0.14533	0.08720	0.08720	0.08720	0.03800	0.03800	0.05900	0.05900	0.05900
220	0.01800	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
221	0.00001	0.01800	0.01700	0.01700	0.01700	N/A	N/A	N/A	N/A	N/A
225	N/A	N/A	N/A	N/A	N/A	0.01500	0.01500	0.01500	0.01500	0.01500
230	0.02200	0.02200	0.02200	0.02200	0.02200	N/A	N/A	N/A	N/A	N/A
235	0.00532	0.00532	0.00266	0.00266	0.00266	N/A	N/A	N/A	N/A	N/A
240	0.03140	0.03140	0.02140	0.02140	0.02140	0.01500	0.01500	0.01500	0.01500	0.01500
250	0.03600	0.03600	0.03600	0.03600	0.03600	N/A	N/A	N/A	N/A	N/A
252	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
253	N/A	N/A	N/A	N/A	N/A	0.00001	0.00001	0.00001	0.02100	0.02100
260	0.02830	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
261	0.00001	0.02830	0.02830	0.02830	0.02830	N/A	N/A	N/A	N/A	N/A
282	0.01890	0.01890	0.01890	0.01890	0.01890	N/A	N/A	N/A	N/A	N/A
284	0.03239	0.03239	0.03239	0.03239	0.03239	N/A	N/A	N/A	N/A	N/A
285	N/A	N/A	N/A	N/A	N/A	0.00001	0.00001	0.00001	0.03050	0.03050
286	N/A	0.00001	0.00201	0.00201	0.00201	N/A	N/A	N/A	N/A	N/A
288	N/A	0.00001	0.01000	0.01000	0.01000	0.01000	0.01000	0.01000	0.01000	0.01000
290	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: Irvine Ranch Water District

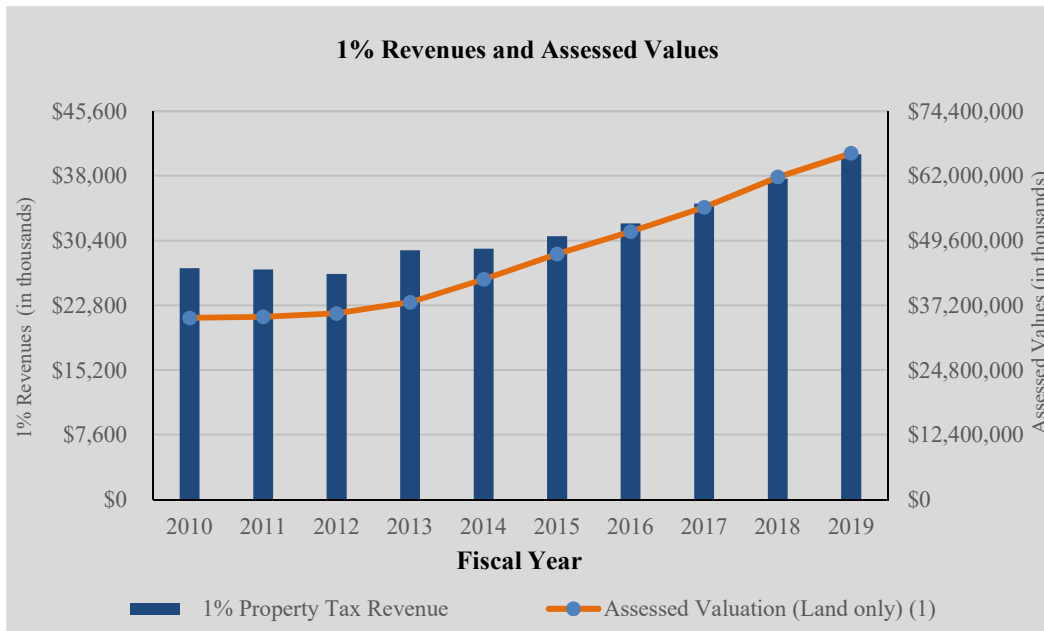
Notes:

(1) The ad valorem property tax rates for the consolidated improvement districts are effective July 1, 2014.

Irvine Ranch Water District

Assessed Valuation and Estimated Actual Value of Taxable Property and 1% Property Tax Revenue For the Past Ten Fiscal Years (in thousands)

Fiscal Year	Assessed Valuation (Land only) ⁽¹⁾	1% Property Tax Revenue
2010	\$ 34,818,153	\$ 27,150 ⁽²⁾
2011	35,008,276	26,989
2012	35,661,242	26,478
2013	37,809,660	29,265
2014	42,205,844	29,445
2015	47,059,437	30,924
2016	51,340,888	32,427
2017	56,028,731	34,761
2018	61,803,980	37,693
2019	66,341,210	40,543



Source: Orange County Auditor-Controller and Orange County Tax Collector.

Notes:

⁽¹⁾ Estimated market values for the land-only Assessed Values are not available.

⁽²⁾ Of this amount, the State of California borrowed \$2.0 million, which was repaid in June 2013.

In 1978, the voters of the State of California passed Proposition 13 which limited property taxes to a total maximum rate of 1% based upon the assessed value of the property being taxed. Each year, the assessed value of property may be increased by an "inflation factor" (limited to a maximum increase of 2%). With few exceptions, property is only reassessed at the time that it is sold to a new owner. At that point, the new value is reassessed at the purchase price of the property sold.

Irvine Ranch Water District
 Direct and Overlapping Property Tax Rates
 Fiscal Year Ended June 30, 2019

Direct Rate:

Irvine Ranch Water District I.D. No. 112	\$0.03000
Irvine Ranch Water District I.D. No. 113	0.04000
Irvine Ranch Water District I.D. No. 125	0.01300
Irvine Ranch Water District I.D. No. 153	0.02000
Irvine Ranch Water District I.D. No. 185	0.02300
Irvine Ranch Water District I.D. No. 188	0.07350
Irvine Ranch Water District I.D. No. 212	0.04500
Irvine Ranch Water District I.D. No. 213	0.05900
Irvine Ranch Water District I.D. No. 225	0.01500
Irvine Ranch Water District I.D. No. 240	0.01500
Irvine Ranch Water District I.D. No. 252	0.00001
Irvine Ranch Water District I.D. No. 253	0.02100
Irvine Ranch Water District I.D. No. 285	0.03050
Irvine Ranch Water District I.D. No. 288	0.01000

Overlapping Rates:

School Districts:

Coast Community College District	0.03052
Rancho Santiago Community College District	0.02875
Rancho Santiago Community College District SFID 1	0.01662
Irvine Unified School District SFID No. 1	0.02804
Laguna Beach Unified School District	0.01285
Newport Mesa Unified School District	0.01682
Saddleback Valley Unified School District	0.02392
Santa Ana Unified School District	0.05561
Tustin Unified School District SFID 2002-1	0.02087
Tustin Unified School District SFID 2008-1	0.02994
Tustin Unified School District SFID 2012-1	0.01606

Source: California Municipal Statistics, Inc.

Irvine Ranch Water District
Principal Property Taxpayers
Fiscal Year Ended June 30, 2019

Property Owner's Name	Type of Business	Assessed Valuation of Property, including Land & Improvements	Percentage of Total City Taxable Assessed Value
The Irvine Company	Developer/Real Estate	\$3,638,914,778	5.10%
Irvine Apartment Communities	Real Estate	490,974,183	0.69%
Allergan	Pharmaceutical (R&D/Marketing)	473,025,829	0.66%
Jamboree Center LLC	Developer/Real Estate	402,676,027	0.56%
Park Place Michelson LLC	Real Estate	380,767,695	0.53%
B Braun Medical Inc.	Bio-Medical Manufacturing	359,759,461	0.50%
Heritage Fields El Toro	Developer/Real Estate	343,675,342	0.48%
Calatlantic Group Inc	Home Builder	318,302,991	0.45%
LBA IV-PPI LLC	Real Estate Investment and Management	313,541,491	0.44%
Hancock S-Reit Irvine Corporation	Real Estate	281,519,999	0.39%
		\$7,003,157,796	9.80%

Source: City of Irvine Comprehensive Annual Financial Report (Fiscal Year Ended June 30, 2018).
Data was not yet available for FY 2018/19 from the City of Irvine.
The City of Irvine is only a part of the IRWD service area.

Irvine Ranch Water District
Property Tax Collections/Delinquency
For the Past Ten Fiscal Years

Fiscal Year	Levied During Fiscal Year		Collected During Fiscal Year	
	1 Percent ⁽¹⁾	General ⁽²⁾	1 Percent	General ⁽³⁾
2010	\$ 24,166,600	\$ 10,503,249	\$ 23,636,793	\$ 10,802,992
2011	26,493,900	10,323,198	25,892,653	11,180,391
2012	26,749,900	10,558,510	25,953,788	11,716,056
2013	26,749,900	10,733,998	29,265,283	11,802,915
2014	26,749,900	11,374,556	27,606,048	12,463,175
2015	29,000,000	9,203,641	28,668,756	9,585,904
2016	31,900,000	11,133,538	31,115,506	10,879,713
2017	33,500,000	11,679,081	33,318,168	12,822,313
2018	35,000,000	13,964,731	35,977,694	15,482,916
2019	39,000,000	16,142,433	38,717,848	17,906,438
Total	\$299,310,200	\$115,616,935	\$300,152,536	\$124,642,813

Fiscal Year	Percentage Collected		Amount of Levy Collected in Subsequent Periods	
	1 Percent	General	1 Percent	General
2010	97.81%	102.85%	\$ 1,493,752	\$ 634,095
2011	97.73%	108.30%	1,153,265	753,309
2012	97.02%	110.96%	733,450	118,691
2013	109.40%	109.96%	989,396	438,947
2014	103.20%	109.57%	1,148,873	988,796
2015	98.86%	104.15%	2,275,461	4,888
2016	97.54%	97.72%	1,192,700	884,301
2017	99.46%	109.79%	1,230,854	1,443,272
2018	102.79%	110.87%	1,542,713	1,635,416
2019	99.28%	110.93%	1,510,697	1,911,630
Total			\$ 13,271,161	\$ 8,813,346

Source: County of Orange Tax Ledger

Notes:

- ⁽¹⁾ The estimated levy for one percent revenue is generated internally and it is based on prior year receipts and developer growth projections.
- ⁽²⁾ The estimated levy for G.O. tax receipts is based on the county's assessed value projection multiplied by the tax rate assessed within each improvement district.
- ⁽³⁾ The General column for Collected tax receipts includes an unbudgeted utility tax revenue from improvement districts 190/290 that adds approximately \$400K per year.

Irvine Ranch Water District

Outstanding Debt by Type ⁽¹⁾

For the Past Ten Fiscal Years

Fiscal Year	Total Service Connections ⁽²⁾	General Obligation Bonds ⁽³⁾	GO Debt per Connection	Certificates of Participation	COPS Debt per Connection
2010	188,275	\$399,152,800	\$2,120	\$92,005,200	\$489
2011	191,474	562,051,000	2,935	88,043,000	460
2012	193,293	548,549,000	2,838	83,616,000	433
2013	196,596	534,343,000	2,718	78,698,000	400
2014	200,559	515,900,000	2,572	73,565,000	367
2015	203,762	503,800,000	2,472	67,293,000	330
2016	209,267	491,200,000	2,347	60,387,000	289
2017	215,573	608,118,000	2,821	153,626,000	713
2018	222,918	586,493,000	2,631	150,275,000	674
2019	227,749	574,669,000	2,523	146,744,000	644

Irvine Ranch Water District
Outstanding Debt by Type ⁽¹⁾
For the Past Ten Fiscal Years
(Continued)

Fiscal Year	JPA Revenue Bonds	JPA Debt per Connection	Notes Payable	Notes Payable per Connection	Total Debt	Total Debt per Connection
2010	\$690,263,700	\$3,666	\$4,553,000	\$24	\$1,185,974,700	\$6,299
2011	676,415,000	3,533	2,747,000	14	1,329,256,000	6,942
2012	638,521,000	3,303	2,494,000	13	1,273,180,000	6,587
2013	610,568,000	3,106	2,240,000	11	1,225,849,000	6,235
2014	0	0	1,984,000	10	591,449,000	2,949
2015	0	0	1,728,000	8	572,821,000	2,811
2016	0	0	1,469,000	7	553,056,000	2,643
2017	0	0	1,209,000	6	762,953,000	3,539
2018	0	0	947,000	4	737,715,000	3,309
2019	0	0	684,000	3	722,097,000	3,171

Source: Irvine Ranch Water District

Notes:

- ⁽¹⁾ More detail about the District's long-term liabilities can be found in Note 9 to the Basic Financial Statements.
- ⁽²⁾ Per Capita income information for the Irvine Ranch Water District is not readily available. Accordingly, the District presents this schedule by total service connections.
- ⁽³⁾ Includes unamortized discount/deferred loss on refunding for the fiscal year 2010 through the fiscal year 2013.

Irvine Ranch Water District
Outstanding General Obligation Bonds by Improvement District
As of June 30, 2019

Improvement District	General Obligation Bonds Authorized	General Obligation Bonds Issued	Remaining Unissued General Obligation Bonds Authorized	Amount Outstanding as of June 30, 2019
112	\$ 28,512,300	\$ 8,111,000	\$ 20,401,300	\$ 7,476,000
113	25,769,500	16,300,000	9,469,500	14,320,000
125	735,246,000	429,729,000	305,517,000	182,981,000
153	237,300,000	7,601,000	229,699,000	7,601,000
154	4,839,000	0	4,839,000	0
185	13,500,000	1,493,000	12,007,000	1,493,000
188	8,174,000	4,590,000	3,584,000	1,591,000
Total	\$1,053,340,800	\$ 467,824,000	\$ 585,516,800	\$ 215,462,000
210	\$ 2,000,000	\$ 2,000,000	\$ 0	\$ 0
212	108,711,800	26,013,000	82,698,800	24,314,000
213	87,647,500	28,565,000	59,082,500	23,621,000
225	856,643,000	493,304,000	363,339,000	255,574,000
240	117,273,000	49,722,000	67,551,000	17,071,000
253	122,283,000	11,877,000	110,406,000	11,877,000
285	21,300,000	1,809,000	19,491,000	1,809,000
288	8,977,000	443,000	8,534,000	373,000
Total	\$1,324,835,300	\$ 613,733,000	\$ 711,102,300	\$ 334,639,000
	\$2,378,176,100	\$1,081,557,000	\$1,296,619,100	\$ 550,101,000

Source: Irvine Ranch Water District

Irvine Ranch Water District
Ratio of General Obligation Debt to Assessed Values ⁽¹⁾
for the Past Ten Fiscal Years

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 112			
2010	\$ 521,318,307	\$ 2,745,000	0.00526550
2011	539,618,060	5,745,000	0.01064642
2012	504,820,526	5,745,000	0.01138028
2013	511,871,892	5,653,500	0.01104476
2014	780,606,904	5,562,000	0.00712523
2015	1,333,029,836	5,470,000	0.00410343
2016	1,850,638,433	5,378,000	0.00290602
2017	2,077,681,111	7,658,000	0.00368584
2018	2,795,881,726	7,567,000	0.00270648
2019	3,230,805,159	7,476,000	0.00231397

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 212			
2010	\$ 521,318,307	\$ 7,305,000	0.01401255
2011	539,618,060	15,705,000	0.02910392
2012	504,820,526	15,705,000	0.03111007
2013	511,871,892	15,461,500	0.03020580
2014	780,606,904	15,218,000	0.01949509
2015	1,333,029,836	14,974,000	0.01123306
2016	1,850,638,433	14,731,000	0.00795996
2017	2,077,681,111	24,801,000	0.01193687
2018	2,795,881,726	24,558,000	0.00878363
2019	3,230,805,159	24,314,000	0.00752568

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 113			
2010	\$ 651,917,180	\$ 4,505,375	0.00691096
2011	553,458,157	9,770,000	0.01765264
2012	536,369,090	15,794,500	0.02944707
2013	562,239,093	15,541,750	0.02764260
2014	674,596,339	14,150,000	0.02097551
2015	827,524,085	13,900,000	0.01679709
2016	885,391,548	13,638,000	0.01540335
2017	1,031,821,023	14,870,000	0.01441141
2018	1,143,798,184	14,597,000	0.01276187
2019	1,186,452,170	14,320,000	0.01206960

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 213			
2010	\$ 651,917,180	\$ 17,544,775	0.02691258
2011	553,458,157	17,283,000	0.03122729
2012	536,369,090	23,418,645	0.04366144
2013	562,239,093	22,828,480	0.04060280
2014	674,596,339	22,074,000	0.03272179
2015	827,524,085	21,488,000	0.02596662
2016	885,391,548	20,839,000	0.02353648
2017	1,031,821,023	24,950,000	0.02418055
2018	1,143,798,184	24,288,000	0.02123452
2019	1,186,452,170	23,621,000	0.01990894

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 125			
2010	n/a	n/a	n/a
2011	n/a	n/a	n/a
2012	n/a	n/a	n/a
2013	n/a	n/a	n/a
2014	\$29,578,638,615	\$192,075,000	0.00649371
2015	32,752,414,757	187,604,000	0.00572794
2016	35,506,392,050	182,932,000	0.00515209
2017	38,802,873,378	194,719,000	0.00501816
2018	42,983,731,609	187,049,000	0.00435162
2019	45,924,240,097	184,083,000	0.00400841

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 225			
2010	n/a	n/a	n/a
2011	n/a	n/a	n/a
2012	n/a	n/a	n/a
2013	n/a	n/a	n/a
2014	\$24,757,488,949	\$240,995,000	0.00973423
2015	27,557,606,802	235,865,000	0.00855898
2016	29,945,134,379	230,535,000	0.00769858
2017	32,838,922,602	268,655,000	0.00818099
2018	36,549,538,031	260,260,000	0.00712075
2019	39,234,190,651	256,320,000	0.00653308

Irvine Ranch Water District
Ratio of General Obligation Debt to Assessed Values ⁽¹⁾
for the Past Ten Fiscal Years
(continued)

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
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Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
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Improvement District 240

2010	\$4,871,225,527	\$30,885,287	0.00634035
2011	4,903,741,743	29,527,697	0.00602146
2012	4,973,007,663	28,081,173	0.00564672
2013	5,343,804,951	26,441,526	0.00494807
2014	5,609,174,229	24,078,000	0.00429261
2015	6,031,968,996	22,767,000	0.00377439
2016	6,449,202,772	21,431,000	0.00332305
2017	7,000,292,817	21,271,000	0.00303859
2018	7,667,626,922	17,921,000	0.00233723
2019	8,000,510,347	17,202,000	0.00215011

Improvement District 153

2010	\$ 36,997,523	n/a	n/a
2011	7,971,152	n/a	n/a
2012	8,114,060	n/a	n/a
2013	8,475,848	n/a	n/a
2014	8,687,744	n/a	n/a
2015	666,622,225	n/a	n/a
2016	1,287,363,937	n/a	n/a
2017	2,893,148,966	\$7,601,000	0.00262724
2018	4,097,566,306	7,601,000	0.00185500
2019	5,118,350,587	7,601,000	0.00148505

Improvement District 253

2010	\$ 36,997,523	n/a	n/a
2011	7,971,152	n/a	n/a
2012	8,114,060	n/a	n/a
2013	8,475,848	n/a	n/a
2014	228,692,347	n/a	n/a
2015	666,622,225	n/a	n/a
2016	1,287,363,937	n/a	n/a
2017	2,893,148,966	\$11,877,000	0.00410522
2018	4,097,566,306	11,877,000	0.00289855
2019	5,118,350,587	11,877,000	0.00232047

Improvement District 154

2010	\$ 8,831,144	n/a	n/a
2011	8,904,175	n/a	n/a
2012	9,127,678	n/a	n/a
2013	9,334,512	n/a	n/a
2014	9,111,103	n/a	n/a
2015	9,289,351	n/a	n/a
2016	9,266,433	n/a	n/a
2017	9,376,883	n/a	n/a
2018	9,529,712	n/a	n/a
2019	9,720,296	n/a	n/a

Irvine Ranch Water District
Ratio of General Obligation Debt to Assessed Values ⁽¹⁾
for the Past Ten Fiscal Years
(continued)

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 185			
2010	n/a	n/a	n/a
2011	n/a	n/a	n/a
2012	n/a	n/a	n/a
2013	n/a	n/a	n/a
2014	\$ 85,119,097	n/a	n/a
2015	209,634,682	n/a	n/a
2016	586,316,903	n/a	n/a
2017	836,640,799	\$1,493,000	0.00178452
2018	1,209,166,559	1,493,000	0.00123473
2019	1,465,394,626	1,493,000	0.00101884

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 285			
2010	n/a	n/a	n/a
2011	n/a	n/a	n/a
2012	n/a	n/a	n/a
2013	n/a	n/a	n/a
2014	\$ 85,119,097	n/a	n/a
2015	209,634,682	n/a	n/a
2016	586,316,903	n/a	n/a
2017	836,640,799	\$1,809,000	0.00216222
2018	1,209,166,559	1,809,000	0.00149607
2019	1,465,394,626	1,809,000	0.00123448

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 188			
2010	\$ 14,613,156	\$1,050,082	0.07185867
2011	13,887,854	2,155,702	0.15522211
2012	14,165,606	1,942,809	0.13714973
2013	14,448,912	1,714,661	0.11867060
2014	14,446,476	1,468,000	0.10161648
2015	14,735,113	1,462,000	0.09921879
2016	185,851,827	1,456,000	0.00783420
2017	196,953,990	1,603,000	0.00813896
2018	212,742,385	1,597,000	0.00750673
2019	246,753,329	1,591,000	0.00644773

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
Improvement District 288			
2010	\$ 14,613,156	\$ 300,000	0.02052945
2011	13,887,854	300,000	0.02160161
2012	14,165,606	300,000	0.02117806
2013	14,448,912	290,000	0.02007072
2014	14,446,476	280,000	0.01938189
2015	14,735,113	270,000	0.01832358
2016	185,851,827	260,000	0.00139896
2017	196,953,990	393,000	0.00199539
2018	212,742,385	383,000	0.00180030
2019	246,753,329	373,000	0.00151163

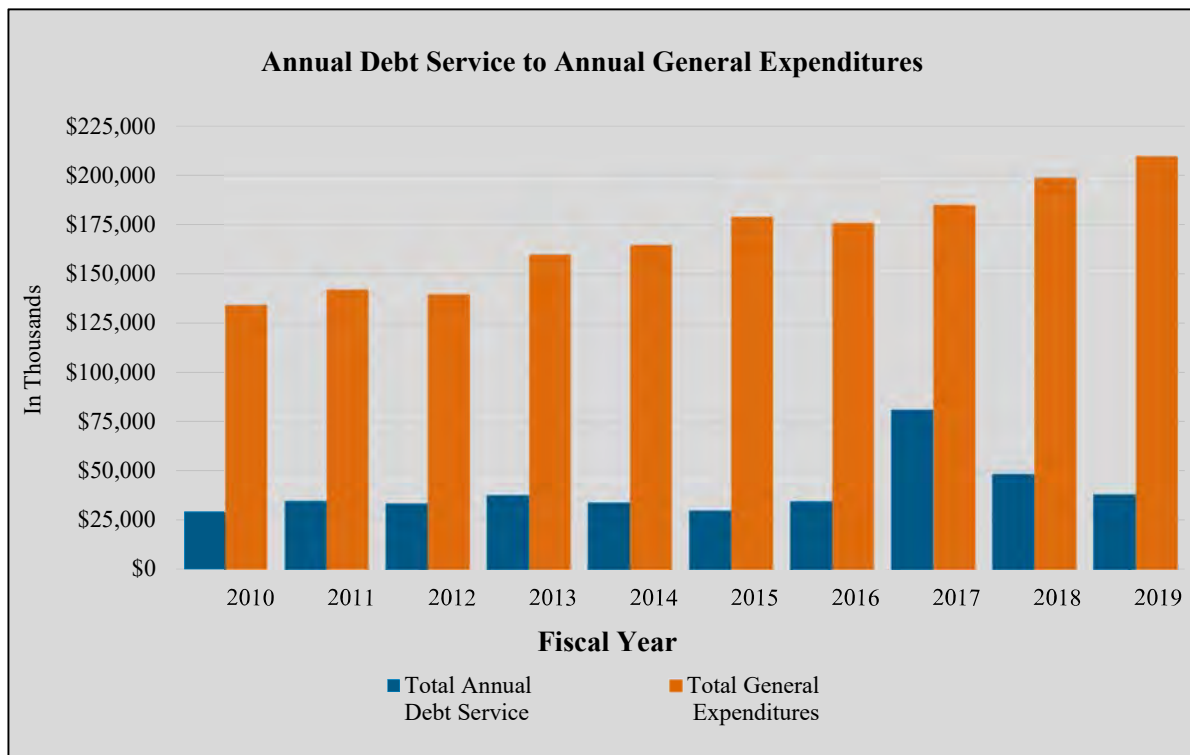
Source: Irvine Ranch Water District

Note:

⁽¹⁾ In December 2013, the District consolidated water ID's 120, 121, 130, 140, 150, 160, 161, 182, 184, and 186 into ID 125 and sewer ID's 220, 221, 230, 250, 260, 261, 282, 284, and 286 into ID 225.

Irvine Ranch Water District
Ratio of Annual Debt Service Expenditures to Total General Expenditures
For the Past Ten Fiscal Years
(in thousands)

Fiscal Year	Total Annual Debt Service	Total General Expenditures	Ratio of Total Annual Debt Service to Total General Expenditures
2010	\$29,044	\$134,027	21.7%
2011	34,842	141,831	24.6%
2012	33,437	139,444	24.0%
2013	37,734	159,558	23.6%
2014	34,009	164,420	20.7%
2015	29,921	178,713	16.7%
2016	34,560	175,694	19.7%
2017	81,029	184,854	43.8%
2018	48,349	198,549	24.4%
2019	38,176	209,413	18.2%



Source: Irvine Ranch Water District

Irvine Ranch Water District
Debt Service Coverage (in thousands)
For the Past Ten Fiscal Years

	Fiscal Year				
	2010	2011	2012	2013	2014
Revenues					
Water sales and service charges	\$ 51,268	\$ 54,796	\$ 57,558	\$ 62,565	\$ 66,321
Sewer sales and service charges	45,344	45,375	49,234	53,085	58,109
Developer Connection fees	5,818	10,572	9,030	17,314	22,429
Net real estate income	5,624	5,649	6,736	6,566	7,760
Interest income	2,191	2,599	1,739	1,549	1,671
Net earnings on JPA	4,196	12,444	11,927	20,294	12,356
Available 1% property tax revenue	19,346	22,396	23,165	25,796	28,532
Other	10,706	7,987	6,141	8,323	10,974
Total Revenues	144,493	161,818	165,530	195,492	208,152
Expenses					
Water supply services	43,591	45,961	44,883	51,163	57,624
Sewer services	30,992	33,382	33,086	38,189	37,715
Administrative and general	20,000	18,896	20,097	22,667	17,487
Pension and OPEB Expense	0	0	0	0	4,785
Other	1,286	989	10,713	6,110	7,163
Total Expenses	95,869	99,228	108,779	118,129	124,774
Net Revenues					
Applicable <i>Ad Valorem</i> Assessments Available for GO	\$ 48,624	\$ 62,590	\$ 56,751	\$ 77,363	\$ 83,378
Double-Barrel Bonds	\$ 0	\$ 0	\$ 5,823	\$ 5,838	\$ 6,409
Parity Obligations					
Certificates of Participation	\$ 3,119	\$ 7,680	\$ 8,016	\$ 8,388	\$ 8,753
1997 State Loan #3	0	226	226	226	227
Series 2010B Bonds	0	4,080	7,533	7,519	7,825
Series 2011-A Index Tender Notes	0	35	2,284	2,306	2,360
2016 General Obligation	0	0	0	0	0
Total Parity Obligations Debt Service	3,119	12,021	18,059	18,439	19,165
Remaining Revenues	\$ 45,505	\$ 50,569	\$ 44,515	\$ 64,762	\$ 70,622
Parity Obligation Coverage					
	15.6 x	5.2 x	3.5 x	4.5 x	4.7 x
Subordinate Obligations					
Fixed Payer Swap Payments	\$ 7,391	\$ 7,734	\$ 7,734	\$ 7,452	\$ 7,475
State Loans and SCWD Debt	381	253	308	308	308
Total Subordinate Obligations	7,772	7,987	8,042	7,760	7,783
Remaining Revenues	\$ 37,733	\$ 42,582	\$ 36,473	\$ 57,002	\$ 62,839
Non-Double-Barrel GO Bonds					
Revenues Pledged to Non-Double-Barrel GO Bonds					
1% Property tax revenues (Pledged to Secured Bonds)	\$ 7,804	\$ 4,593	\$ 3,313	\$ 3,470	\$ 3,013
Pro-rata Share <i>Ad valorem</i> Assessments for Non-Double-Barrel GO Bonds	11,244	11,690	5,761	5,965	4,797
Sub-total Pledged Revenues	56,781	58,865	45,547	66,437	70,649
Additional Funds Available for Non-Double-Barrel GO Bonds					
Remaining 1% Property Tax Revenues	19,346	22,396	23,165	25,796	28,532
Additional Net Revenues	18,387	20,186	13,308	25,248	34,307
Total with Additional Pledged Revenues	\$ 56,781	\$ 58,865	\$ 45,547	\$ 66,437	\$ 70,649
Debt Service					
Non-Double-Barrel GO Bond Debt Service	\$ 21,179	\$ 16,899	\$ 16,899	\$ 17,129	\$ 10,968
GO Bond Coverage	2.7 x	3.5 x	2.7 x	3.9 x	6.4 x
Remaining Revenues	\$ 35,602	\$ 41,966	\$ 28,648	\$ 49,308	\$ 59,681
Total Debt Coverage	2.1 x	2.1 x	1.7 x	2.1 x	2.6 x

Irvine Ranch Water District
Debt Service Coverage (in thousands)
For the Past Ten Fiscal Years
(Continued)

	Fiscal Year				
	2015	2016	2017	2018	2019
Revenues					
Water sales and service charges	\$ 70,110	\$ 76,692	\$ 77,252	\$ 84,575	\$ 94,107
Sewer sales and service charges	62,808	67,682	72,054	76,789	76,841
Developer Connection fees	29,183	32,109	25,563	32,674	18,205
Net real estate income	8,191	8,693	9,076	3,405	8,372
Interest income	1,515	1,585	3,210	4,133	6,199
Net earnings on JPA	0	0	0	0	0
Available 1% property tax revenue	29,770	31,645	34,247	29,649	42,389
Other	7,899	7,836	7,117	7,504	8,876
Total Revenues	209,476	226,242	228,519	238,729	254,989
Expenses					
Water supply services	57,978	57,499	55,296	63,671	64,004
Sewer services	54,575	40,413	42,752	38,115	43,734
Administrative and general	16,012	19,909	22,664	22,390	25,610
Pension and OPEB Expense	2,237	2,831	5,146	10,496	10,036
Other	9,752	2,800	1,997	174	2,615
Total Expenses	140,554	123,452	127,855	134,846	145,999
Net Revenues	\$ 68,922	\$ 102,790	\$ 100,664	\$ 103,883	\$ 108,990
Applicable <i>Ad Valorem</i> Assessments Available for GO Double-Barrel Bonds	\$ 4,839	\$ 6,036	\$ 8,605	\$ 10,499	\$ 12,554
Parity Obligations					
Certificates of Participation	\$ 9,098	\$ 9,487	\$ 11,675	\$ 7,722	\$ 7,821
1997 State Loan #3	227	227	194	194	194
Series 2010B Bonds	7,829	7,823	7,813	7,807	7,792
Series 2011-A Index Tender Notes	2,455	2,927	2,967	3,675	4,045
2016 General Obligation	0	0	1,605	5,301	5,301
Total Parity Obligations Debt Service	19,609	20,464	24,254	24,699	25,153
Remaining Revenues	\$ 54,152	\$ 88,362	\$ 85,015	\$ 89,683	\$ 96,391
Parity Obligation Coverage	3.8 x	5.3 x	4.5 x	4.6 x	4.8 x
Subordinate Obligations					
Fixed Payer Swap Payments	\$ 7,734	\$ 7,712	\$ 6,798	\$ 5,739	\$ 4,513
State Loans and SCWD Debt	308	308	133	122	122
Total Subordinate Obligations	8,042	8,020	6,931	5,861	4,635
Remaining Revenues	\$ 46,110	\$ 80,342	\$ 78,084	\$ 83,822	\$ 91,756
Non-Double-Barrel GO Bonds					
Revenues Pledged to Non-Double-Barrel GO Bonds					
1% Property tax revenues (Pledged to Secured Bonds)	\$ 3,358	\$ 3,226	\$ 3,128	\$ 10,834	\$ 1,192
Pro-rata Share <i>Ad valorem</i> Assessments for Non-Double-Barrel GO Bonds	4,463	5,396	5,341	6,265	6,922
Sub-total Pledged Revenues	53,931	88,964	86,553	100,921	99,870
Additional Funds Available for Non-Double-Barrel GO Bonds					
Remaining 1% Property Tax Revenues	29,770	31,645	34,247	29,649	42,389
Additional Net Revenues	16,340	48,697	43,837	54,173	49,367
Total with Additional Pledged Revenues	\$ 53,931	\$ 88,964	\$ 86,553	\$ 100,921	\$ 99,870
Debt Service					
Non-Double-Barrel GO Bond Debt Service	\$ 12,840	\$ 11,173	\$ 12,385	\$ 20,843	\$ 11,436
GO Bond Coverage	4.2 x	8.0 x	7.0 x	4.8 x	8.7 x
Remaining Revenues	\$ 41,091	\$ 77,791	\$ 74,168	\$ 80,078	\$ 88,434
Total Debt Coverage	2.0 x	3.0 x	2.7 x	2.6 x	3.1 x

Source: Irvine Ranch Water District

Irvine Ranch Water District
Principal Employers
Fiscal Year Ended June 30, 2019

Name of Company	Number of Employees	Products	Percentage of Employment
University of California, Irvine	23,884	Educational	9.05%
Irvine Unified School District	5,029	Educational	1.90%
Mastec	4,000	Construction	1.52%
Edwards Lifesciences, LLC	2,987	Surgical Appliances and Supplies	1.13%
Broadcom	2,604	Technology	0.99%
Blizzard Entertainment, Inc	2,327	Technology	0.88%
Glidewell Laboratories	1,538	Dental Appliances	0.58%
B Braun Medical	1,370	Bio-Medical Manufacturing	0.52%
Western Digital	1,300	Technology	0.49%
Parker Hannifin Corporation	1,200	Aircraft Parts	0.45%
			17.51%

Source: City of Irvine Comprehensive Annual Financial Report (Fiscal Year Ended June 30, 2018)
Data was not yet available for FY 2018/19 from the City of Irvine.
The City of Irvine is only a part of the IRWD service area.

Irvine Ranch Water District
Demographic & Economic Statistics
For the Past Ten Fiscal Years

Fiscal Year Ended	IRWD Population	City of Irvine Population	City of Irvine Median Family Income	Total Personal Income (in thousands)	County of Orange Unemployment Rate
2010	331,500	217,686	\$94,903	\$8,090,372	9.5%
2011	330,000	219,156	93,258	8,481,794	9.2%
2012	334,000	223,729	90,939	8,886,628	7.9%
2013	340,000	231,117	92,599	8,174,011	6.1%
2014	370,000	242,651	92,663	9,595,168	5.0%
2015	370,000	250,384	90,585	10,593,508	4.2%
2016	390,000	258,386	91,999	10,946,242	3.6%
2017	390,000	267,086	92,278	12,840,224	3.2%
2018	390,000	276,176	93,823	12,272,130	2.6%
2019	422,000	N/A ⁽¹⁾	N/A ⁽¹⁾	N/A ⁽¹⁾	2.4%

Source: City of Irvine Comprehensive Annual Financial Report (Fiscal Year Ended June 30, 2018) and County of Orange website.

Data for the entire Irvine Ranch Water District service area is not readily available. The City of Irvine is only a part of the IRWD service area.

Note:

⁽¹⁾ City of Irvine Population, Median Family Income, and Total Personal Income for FY 2019 has not yet been published by the City of Irvine.

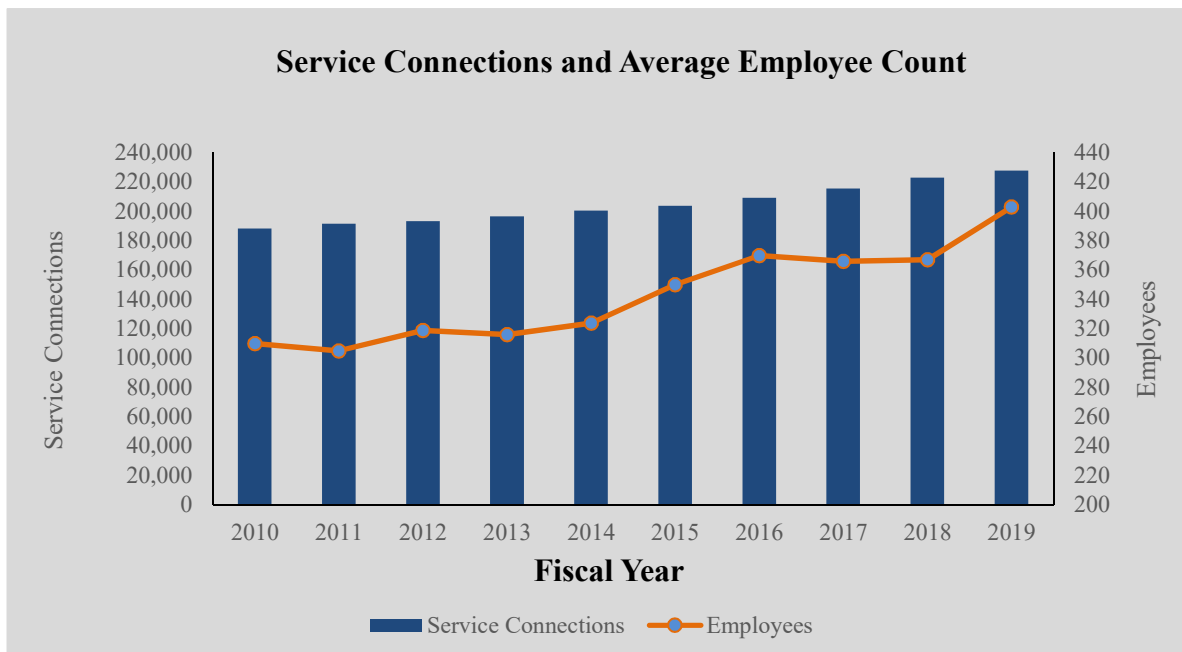
Irvine Ranch Water District

Operating Indicators by Function

Water and Sewer Service Connections

For the Past Ten Fiscal Years

Fiscal Year	Water	Sewer & Recycled Water	Total Service Connections	Average Employee Population	Service Connections per Employee
2010	97,023	91,252	188,275	310	607
2011	98,637	92,837	191,474	305	628
2012	99,465	93,828	193,293	319	606
2013	101,108	95,488	196,596	316	622
2014	103,077	97,482	200,559	324	619
2015	104,678	99,084	203,762	350	582
2016	107,402	101,865	209,267	370	566
2017	110,520	105,053	215,573	366	589
2018	114,164	108,754	222,918	367	607
2019	116,539	111,210	227,749	403	565



Source: Irvine Ranch Water District

Irvine Ranch Water District
Operating Indicators by Function
New Service Connections
For the Past Ten Fiscal Years

	Fiscal Year									
	2010	2011	2012	2013	2014	2015	2016⁽¹⁾	2017	2018	2019
Water										
Residential	631	1,469	862	1,520	1,848	1,727	2,513	2,928	3,355	2,314
Commercial/Industrial/ Public Authority	19	98	18	27	40	(126)	82	88	133	27
Fire Protection	43	40	37	55	50	29	107	83	99	68
Construction & Temporary	(6)	39	3	31	36	4	3	14	43	(23)
Landscape Irrigation	33	(21)	(89)	8	(4)	(30)	19	5	13	(11)
Agricultural	(8)	(11)	(3)	2	(1)	(3)	0	0	1	0
Total Water	712	1,614	828	1,643	1,969	1,601	2,724	3,118	3,644	2,375
Sewer										
Residential	613	1,462	861	1,521	1,829	1,727	2,501	2,894	3,340	2,314
Commercial/Industrial/ Public Authority	21	37	21	29	41	(232)	88	84	137	45
Landscape Irrigation	63	85	102	112	127	113	0	0	0	0
Agricultural	10	1	7	(2)	(3)	(6)	0	0	0	0
Total Sewer	707	1,585	991	1,660	1,994	1,602	2,589	2,978	3,477	2,359
Recycled Water										
Residential	0	0	0	0	0	0	6	33	14	1
Commercial/Industrial/ Public Authority	0	0	0	0	0	0	8	9	14	12
Construction & Temporary	0	0	0	0	0	0	13	8	(5)	(1)
Landscape Irrigation	0	0	0	0	0	0	162	161	199	85
Agricultural	0	0	0	0	0	0	3	(1)	2	0
Total Recycled Water	0	0	0	0	0	0	192	210	224	97
Total	1,419	3,199	1,819	3,303	3,963	3,203	5,505	6,306	7,345	4,831

Source: Irvine Ranch Water District

⁽¹⁾ New connection data for Recycled Water connections was not available prior to the fiscal year 2016.

Irvine Ranch Water District
Operating Indicators by Function
Average Monthly Usage Per Customer (in CCF)
For the Past Ten Fiscal Years

	Fiscal Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water										
Residential	10	9	9	9	9	12	11	11	12	11
Commercial	57	56	61	63	66	57	60	57	61	59
Industrial	200	201	201	204	192	267	222	232	213	212
Public Authority	300	295	296	306	305	378	287	260	260	242
Construction & Temporary	52	79	106	181	241	398	285	148	172	75
Treated - Landscape Irrigation	95	85	94	105	182	110	74	82	95	82
Treated - Agricultural	663	925	835	733	575	646	327	402	403	255
Untreated - Agricultural	6,925	4,714	4,768	5,799	6,314	8,504	8,047	6,315	6,274	4,700
Total	8,302	6,364	6,370	7,400	7,884	10,372	9,313	7,507	7,490	5,636
Recycled water										
Landscape Irrigation	152	134	152	169	182	192	186	170	195	145
Agricultural	1,874	2,247	3,768	4,145	3,882	4,992	3,891	3,197	3,292	2,438
Total	2,026	2,381	3,920	4,314	4,064	5,184	4,077	3,367	3,487	2,583

Source: Irvine Ranch Water District

Irvine Ranch Water District
Source of Supply and Water Deliveries / Sales in Acre Feet
For the Past Ten Fiscal Years

Source of Supply
(in Acre Feet)

Fiscal Year	Local	Imported	Recycled	Total Supply
2010	45,980	24,744	20,912	91,636
2011	41,274 ⁽¹⁾	30,260	21,030	92,564
2012	39,409	26,155	20,602	86,166
2013	49,967 ⁽²⁾	20,151	22,983	93,101
2014	55,015 ⁽²⁾	22,508	21,038	98,561
2015	54,057	18,628	22,866	95,551
2016	46,926	11,853	23,206	81,985
2017	49,252	16,418	22,006	87,676
2018	52,386	17,409	24,913	94,708
2019	51,844	13,937	22,382	88,163

Water Deliveries / Sales
(in Acre Feet)

Fiscal Year	Potable and Untreated	Recycled	Total Demand
2010	56,689	21,153	77,842
2011	53,642	22,250	75,892
2012	54,818	25,011	79,829
2013	57,203	28,259	85,462 ⁽³⁾
2014	59,907	30,021	89,928 ⁽³⁾
2015	58,319	32,139	90,458 ⁽³⁾
2016	51,098	26,879	77,977 ⁽⁴⁾
2017	51,299	27,860	79,159
2018	54,603	31,737	86,340
2019	51,364	27,679	79,043 ⁽⁵⁾

Source: Irvine Ranch Water District

- Notes:**
- ⁽¹⁾ IDP wells were not operational in FY 2011.
 - ⁽²⁾ Wells 21 & 22 came on line during FY 2013 and was at full capacity in FY 2014.
 - ⁽³⁾ Extremely dry conditions led to a considerable increase in demands.
 - ⁽⁴⁾ State mandated reduction in usage resulted in a significant decrease in overall demand.
 - ⁽⁵⁾ Significant rainfall resulted in a decrease in overall demand.

Irvine Ranch Water District
Capital Asset Statistics
For the Past Ten Fiscal Years

	Fiscal Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Potable System										
Miles of Water Line ⁽¹⁾	1,169	1,460	1,490	1,516	1,597	1,622	1,760	1,810	1,905	1,919
Number of Storage Tanks ⁽²⁾	37	37	37	36	36	36	36	36	36	36
Maximum Storage Capacity (Acre Feet)	456	456	456	456	456	456	456	456	456	456
Number of Pumping Stations	43	43	43	37	38	39	39	39	39	39
Number of Wells	24	24	24	26	26	27	27	27	27	27
Well Production Capacity (cfs)	117	117	117	124	124	128	128	118	118	118
Water Banking Storage (Acre Feet)	107,600	109,600	109,600	109,600	109,600	109,600	126,000	126,000	126,000	126,000
Potable Treatment Plants	3	3	3	4	4	4	4	5	5	5
Non-Potable and Recycled Systems										
Miles of Recycled Line ⁽¹⁾	407	468	478	488	503	509	525	540	555	565
Number of Storage Tanks	11	11	11	12	12	12	12	11	12	12
Number of Open Reservoirs	4	4	4	5	5	5	5	5	5	5
Maximum Storage Capacity (Acre Feet) ⁽³⁾	23,703	23,703	23,703	24,155	24,155	24,155	24,155	24,155	24,155	24,155
Number of Pumping Plants	19	19	19	20	19	20	20	20	19	19
Number of Wells ⁽⁴⁾	5	5	5	5	5	5	5	5	5	5
Well Production Capacity (cfs)	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Sewer System										
Miles of Sewer Line	940	950	962	971	1,009	1,019	1,070	1,081	1,123	1,134
Number of Lift Stations ⁽⁵⁾	18	18	16	14	14	14	14	23	23	23
Treatment Plants	2	2	2	2	2	2	2	2	2	2
Treatment Capacity (mgd) (Tertiary)	23.5	23.5	23.5	23.5	33.5	33.5	33.5	33.5	33.5	33.5

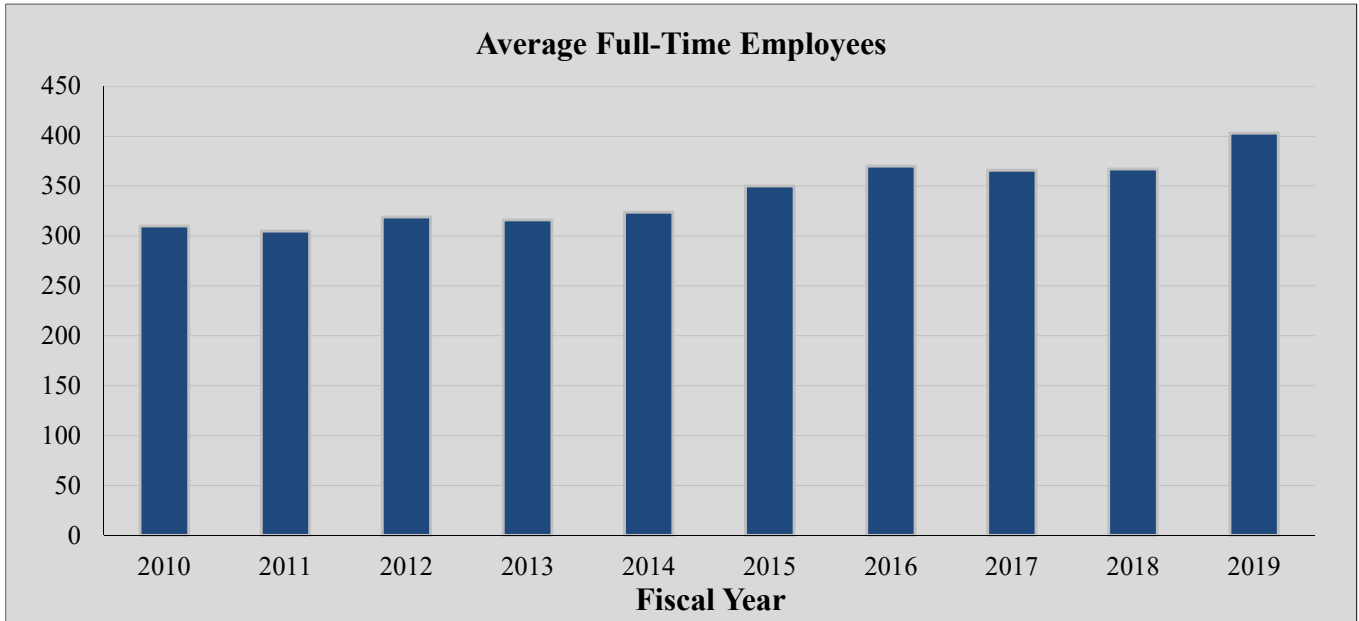
Source: Irvine Ranch Water District

Notes:

- ⁽¹⁾ Miles of Line include laterals.
- ⁽²⁾ Total number of tanks excludes IRWD's storage capacity with East Orange County Water District. However, this capacity is accounted for in the maximum storage capacity estimate (456 AF).
- ⁽³⁾ Excludes Serrano Water District's capacity in Irvine Lake, which equals 25% of total capacity.
- ⁽⁴⁾ Accounts for active production wells only (Excludes SGU Injection Well).
- ⁽⁵⁾ Excludes lift stations serving individual IRWD facilities.

Irvine Ranch Water District
 Full-Time Employees
 For the Past Ten Fiscal Years

	Fiscal Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Average Full-Time Employees	310	305	319	316	324	350	370	366	367	403



Source: Irvine Ranch Water District

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IRVINE RANCH WATER DISTRICT