Board of Water Supply City and County of Honolulu

FINANCIAL STATEMENTS AND SUPPLEMENTARY INFORMATION WITH INDEPENDENT AUDITOR'S REPORT

Fiscal Years Ended June 30, 2017 and 2016

BOARD OF WATER SUPPLY CITY AND COUNTY OF HONOLULU

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The Board of Water Supply of the City and County of Honolulu (BWS) is pleased to present its Annual Financial Report for Fiscal Year 2017. This introduction provides a brief overview of the mission, organization, and operations of the BWS. The following management's discussion and analysis is intended to provide the reader with an easily understandable analysis of the BWS's financial performance and all aspects of its financial position. Financial statements presenting the financial position and results of operations and cash flows of the BWS in conformity with accounting principles generally accepted in the United States of America, accompanied by the independent auditor's report, follows the management's discussion and analysis.

HISTORY OF THE BOARD OF WATER SUPPLY

The BWS was created in 1929 by the Territorial Legislature in response to public outcry for a truly effective water management system that was above politics. The 1929 Legislature passed Act 96 to create and define the powers and duties of the Honolulu Board of Water Supply. Although it remained as a department of the City and County of Honolulu (City), the BWS was designed to be a semi-autonomous and self-supporting agency with the authority to charge for water usage to support its capital improvement and operating expenses and set long-term plans for Oahu's water future.

POWERS, DUTIES, AND FUNCTIONS

The BWS manages Oahu's municipal water resources and distribution system, providing residents with a safe, dependable, and affordable drinking water supply.

The BWS is the largest municipal water utility in the state of Hawaii. In Fiscal Year 2017, the BWS delivered potable and non-potable water to approximately one million customers on Oahu. The BWS carefully and proactively manages and invests in its intricate system, consisting of 94 active potable water sources, 171 reservoirs, and over 2,100 miles of pipeline.

The BWS is a financially self-sufficient, semi-autonomous agency of the City and County of Honolulu. Its operations and projects are financed with revenues generated by water transmission and distribution fees. It receives no tax money from the City. The BWS also pursues federal and state grants to help subsidize BWS projects.

The BWS is governed by a Board of Directors (Board), consisting of seven members. Five members are appointed by the Mayor and are confirmed by the Honolulu City Council. The remaining two serve in their capacities as the Director of the State Department of Transportation, and the Director and Chief Engineer of the City's Department of Facility Maintenance. The Board appoints the BWS Manager and Chief Engineer to administer the BWS.

The BWS consists of the following 10 divisions: Capital Projects Division, Customer Care Division, Field Operations Division, Finance Division, Information Technology Division, Land Division, Office of the Manager and Chief Engineer, Water Quality Division, Water Resources Division, and Water System Operations Division.

MISSION

The BWS mission is to provide a safe, dependable, and affordable water supply now and into the future, focusing in three strategic areas: resource, operational, and financial sustainability.

- **Resource sustainability**. Protect and manage our groundwater supplies and watersheds through adaptive and integrated strategies.
- **Operational sustainability**. Foster a resilient and collaborative organization utilizing effective and proactive operational practices consistent with current industry standards.
- **Financial sustainability**. Implement sound fiscal strategies to finance our operating and capital needs to provide dependable and affordable water service.

ACCOMPLISHMENTS

BWS employees work diligently to provide safe, dependable, and affordable water service to customers by concentrating their efforts to achieve the BWS's strategic goals:

Resource Sustainability (Safe)

- The BWS conducted 59,862 chemical tests, 10,843 microbiological tests, and 15,114 chlorine residual and other quality tests on samples collected from its sources, distribution systems, and treatment facilities to ensure all water served is safe to drink. Chemical tests performed this fiscal year include monitoring BWS wells near the Navy Red Hill Bulk Fuel Facility in response to a fuel leak reported by the Navy in January 2014. BWS is conducting its own studies to assess the impact the leak may have on the groundwater aquifer.
- In June 2017, BWS completed its annual production and delivery of the Consumer Confidence Report (CCR), also known as the Water Quality Report, to all BWS customers. The report provides information on the quality of the water delivered from the BWS system and was mailed to all customers on record and is also available at www.boardofwatersupply.com. The BWS also placed ads in Honolulu newspapers, including various ethnic language publications, to inform community members of the distribution.
- Potable water demand continues its downward trend of approximately 10% from 1990 to 2017 due to advanced water conservation efforts, economic incentives from sewer and water rate increases, recycled water, public education, and leak detection and repair programs in the BWS water system.
- The North Shore Watershed Management Plan (WMP) was adopted in FY 2017. The WMPs for the Ewa and Central Oahu districts are on-going. Work on the Primary Urban Core WMPs has started with the first community meeting in May 2017. These are long-range water resource protection and water use and development plans for the City that are concurrent with and support the City's Development and Sustainable Communities Plans for Oahu. The WMPs guide the BWS's long-range capital improvement program, ensuring that adequate natural and alternative water supplies are available to meet Oahu's future water growth.

- Recycled water is an important conservation strategy to reduce potable water consumption to extend our high-quality water supplies. Recycled water use from the Honouliuli Water Recycling Facility provides an alternative water supply in Ewa for irrigation and industrial purposes. Recycled water production from the BWS Honouliuli Water Recycling Facility averaged approximately eight million gallons per day. BWS is seeking State of Hawaii land to construct an elevated recycled water reservoir, which will increase recycled water use in Ewa.
- BWS staff held 41 outdoor water conservation classes at the Halawa Xeriscape Garden.
 525 community members attended these classes focused on reducing water use through efficient landscaping.
- The BWS sponsored its 39th annual Water Conservation Week Poster Contest and the 9th annual Water Conservation Week Poetry Contest, receiving more than 870 posters and 300 poems from more than 50 Oahu schools, focused on the theme "Water Matters --Conserve It." All winning entries will be featured in the 2018 Water Conservation Calendar scheduled for distribution in December 2017.
- The BWS started efforts to implement a pilot Water Conservation program, to begin in FY17, leveraging mobile app and web technologies to encourage water savings through targeted, direct customer engagements and the use of data analytics.

Operational Sustainability (Dependable)

- The Water Master Plan (WMP), which is a comprehensive evaluation of our water supplies, needs, and infrastructure over a 30-year period was adopted in October 2016. The 30-year CIP will follow as well as the financial plan and water rate study thereafter. In May of 2017, we celebrated the two-year anniversary of the formation of the BWS Stakeholder Advisory Group (SAG). The group comprises nearly 30 highly respected local residents, civic organization leaders, and environmental and business professionals with a sustained interest in water issues, with representation covering all City Council districts. The SAG effort demonstrates BWS's commitment to increase our responsiveness and transparency of our communications and public engagement.
- In January of FY 2017, BWS launched a complete redesign of their intranet. It now
 matches the updated website and allows for easier access of documents and other
 important information for BWS employees. Also part of this is a section that provides
 regular updates on information and news of importance to BWS employees. All
 departments work with Communications to issue these News to Use bulletins.
- The development of a new Customer Self-Service web portal, and an Interactive Voice Response (IVR) capability integrated with our Customer Care and Billing system was initiated in FY 2017 and is on-going. This will provide our customers the ability to initiate actions and interactions with the BWS, at their convenience, without having to call in and speak with a Customer Service Representative.
- BWS staff responded to 346 main breaks, or about 16 breaks per 100 miles of pipeline.
- BWS staff helped protect Oahu's water resources and prevent damage to BWS infrastructure by handling 9,327 One Call locate requests and providing in-field support for 838 water line leaks and breaks. The BWS staff proactively investigated 26,903 meters to ensure accurate and timely billing and assisted 4,139 customers with concerns about bills reflecting high water consumption.

 BWS staff assisted 167,072 customers: 150,993 (90.3%) by phone; 4,559 (2.7%) inperson; 11,316 (6.8%) via online forms; 264 (0.2%) through email, by mail and fax.

Financial Sustainability (Affordable)

- A total of over \$52.3 million in construction contracts and over \$14.2 million in professional services contracts were awarded as of June 30, 2017. The major programs include the following:
 - Water Main Replacement Program: Aging and corroded water mains are systematically identified and replaced throughout the municipal water system to improve system reliability, reduce main breaks, and to ensure sufficient system pressure during periods of peak demand. In conjunction with main replacement projects, existing fire hydrants are replaced and new hydrants are installed to improve fire protection and ensure that current standards are met. Over \$14.7 million in design contracts were awarded by the BWS for water main replacements in Aiea, Manoa, Wilhemina Rise, Hawaii Kai, Wahiawa, and Kaneohe.
 - Water Facility Improvement Program: Identification and improvements of deficiencies to the appearance and integrity of aging BWS water facilities continues. These facilities include water reservoirs, wells and booster stations, and administrative offices belonging to the BWS. New construction contracts were awarded to repair, renovate, repaint and/or reroof the Wahiawa 1361 Reservoirs No. 1 and No. 2, Makakilo 920 and Waipahu 228 Reservoirs, Kalihi Corporation Yard Lighting, Beretania Engineering Building, Beretania Public Service Building, and security fencing at various locations.
 - Mechanical and Electrical Renovation Projects: Renovation projects ensure the dependable service and operational efficiency of the BWS's pump and booster stations. Construction contracts were awarded for the renovation of the mechanical and/or electrical systems at Mililani Wells I, Honouliuli Wells Unit 2, Kamaile Wells, Waialae Iki Well, and the Diamond Head Line Booster.
- BWS executed and began its 20-year, \$33 million Energy Savings Performance Contract (ESPC) with NORESCO LLC. The partnership allows BWS to implement comprehensive energy efficiency, renewable energy, and operational improvements which guarantees enough energy savings over the next 20 years to pay for the contract. The project is financed by a loan from the Drinking Water State Revolving Fund, managed by the State of Hawaii Department of Health.
- BWS staff received mail-in payments via lockbox, which continued to be the most popular method of payment for BWS customers, with 36% using the service, down 3% from last fiscal year. Automatic bill payments account for 31% of the BWS' total bill collections. Credit card payments account for 16% of payments, a 16% increase over last fiscal year. Online payments account for 9%, walk-in customers for 4%, payments made at satellite city hall locations for 3%, and other accounts for 1% of payments received.



INDEPENDENT AUDITOR'S REPORT

To the Board of Directors Board of Water Supply City and County of Honolulu

Report on the Financial Statements

We have audited the accompanying financial statements of the Board of Water Supply (the "BWS"), a component unit of the City and County of Honolulu (the "City"), as of and for the fiscal years ended June 30, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the BWS's basic 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.

Auditor's Responsibility

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the BWS as of June 30, 2017 and 2016, and the changes in its financial position and its cash flows for the fiscal years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note B, the financial statements of the BWS are intended to present the financial position, the changes in financial position, and cash flows of only that portion of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City that is attributable to the transactions of the BWS. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2017 and 2016, the changes in its financial position, or its cash flows for the fiscal years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Adoption of New Accounting Principle

As discussed in Note P to the basic financial statements, the BWS adopted new accounting guidance that clarifies standards for accounting and financial reporting for pensions that are provided to the employees of state and local governmental employers. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis on pages 10 through 15 and the schedules of proportionate share of the net pension liability, contributions, and funding progress on pages 52 to 55 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

N&K CPAs, Inc.

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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 an opinion on the financial statements that collectively comprise the BWS's basic financial statements. The introductory section and schedules of bonds payable and net revenue requirement are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules of bonds payable and net revenue requirement are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules of bonds payable and net revenue requirement are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory section has 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.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 11, 2017 on our consideration of the BWS's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the BWS's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the BWS's internal control over financial reporting and compliance.

N+K CPAS, INC.

Honolulu, Hawaii December 11, 2017

This section presents management's discussion and analysis of the BWS's financial condition and activities for the fiscal year ended June 30, 2017. This information should be read in conjunction with the financial statements.

Financial Highlights

The BWS still maintains a relatively strong financial performance with a manageable capital program. Meanwhile, management continues to carefully evaluate the BWS's finances to ensure optimum performance. In addition to meeting all debt covenants, outstanding debt and cash reserves were kept at levels appropriate for maintaining favorable bond ratings. Key financial highlights are listed below:

- Net position increased \$60.4 million in fiscal year 2017 compared to the \$72.8 million increase in fiscal year 2016.
- Total assets were \$1.6 billion and \$1.5 billion at June 30, 2017 and 2016, respectively, which exceeded liabilities by \$1.1 billion at June 30, 2017 and 2016.
- The BWS's current assets at June 30, 2017 were 3.7 times its related current liabilities compared to 2.6 times at June 30, 2016.
- The BWS's debt to equity ratio was 26.7% and 28.3% at June 30, 2017 and 2016, respectively, indicating the continuance of capacity to issue additional debt.

Overview of Financial Report

The BWS is a semi-autonomous agency of the City. The financial statements are presented using the economic resources measurement focus and the accrual basis of accounting, whereby revenues and expenses are recognized in the period earned or incurred.

Management's discussion and analysis ("MD&A") represents management's analysis and comments on the BWS's financial condition and performance. Summary financial data, key financial and operational indicators used in the BWS's annual report, budget, bond resolutions, and other management tools were used for this analysis.

The basic financial statements include statements of net position, statements of revenues, expenses and changes in net position, statements of cash flows, and notes to the financial statements. The statements of net position present the resources and obligations of the BWS at June 30, 2017 and 2016. The statements of revenues, expenses and changes in net position presents the changes in net position for the fiscal years then ended, and the resultant ending net position balances.

The statements of cash flows present changes in cash and cash equivalents (short-term investments with original maturities of three months or less from the date of acquisition), resulting from operating, investing, capital and related financing activities, and non-capital financing activities.

Results of Operations

CONDENSED STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION (Amounts in thousands)

	2017	2016 (as restated)	% Change
Operating revenues	\$ <u>231,445</u>	\$ 238,696	-3.0%
Operating expenses			
Administrative and general	63,861	61,723	3.5%
Depreciation	47,938	45,581	5.2%
Power and pumping	29,899	30,190	-1.0%
Other operating expenses	45,826	46,315	-1.1%
Total operating expenses	187,524	183,809	2.0%
Operating income	43,921	54,887	-20.0%
Nonoperating revenues (expenses)			
Interest income	4,617	4,151	11.2%
Interest expense	(7,641)	(7,821)	-2.3%
Others	(6,283)	2,672	-335.1%
Total nonoperating expenses	(9,307)	(998)	832.6%
Contributions in aid of construction	25,757	18,916	36.2%
Change in net position	\$ 60,371	\$ 72,805	

The increase in net position for the year ended June 30, 2017 was \$60.4 million, compared to an increase of \$72.8 million for the year ended June 30, 2016.

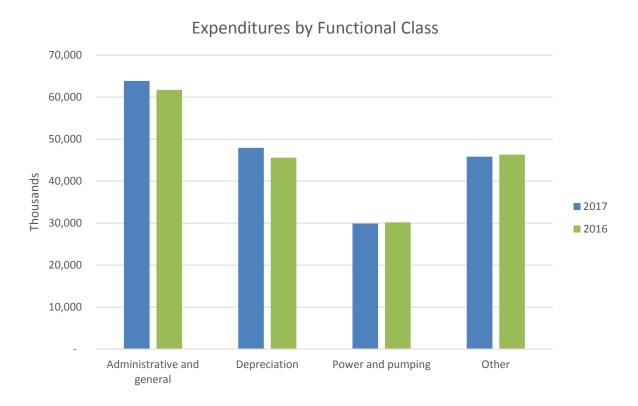
Operating revenues for the year ended June 30, 2017 totaled \$231.4 million, a decrease of \$7.3 million or 3.0% from the year ended June 30, 2016 revenues. Operating revenues for the year ended June 30, 2016 totaled \$238.7 million, an increase of \$22.1 million or 10.2% from the year ended June 30, 2015 revenues, due to water rate increases that were implemented on July 1, 2015.

Total operating expenses increased by \$3.7 million and \$0.2 million in fiscal years 2017 and 2016, respectively. Factors contributing to this change are explained below:

Administrative and general expenses increased by \$2.1 million in fiscal year 2017, mainly
due to increases in salaries and professional services. Administrative and general
expense increased by \$3.2 million in fiscal year 2016, mainly due to increases in salaries,
pension, and supplies.

- Power and pumping expenses decreased slightly by \$0.3 million in fiscal year 2017.
- Other operating expenses decreased slightly by \$0.5 million during fiscal year 2017. Other
 operating expenses increased by \$1.9 million during fiscal year 2016, mainly due to an
 increase in transmission and distribution costs.

For the year ended June 30, 2017, net nonoperating revenues (expenses) decreased by \$8.3 million, due primarily to an increase in realized and unrealized loss on investments. Net nonoperating revenues (expenses) increased by \$3.1 million for the year ended June 30, 2016.



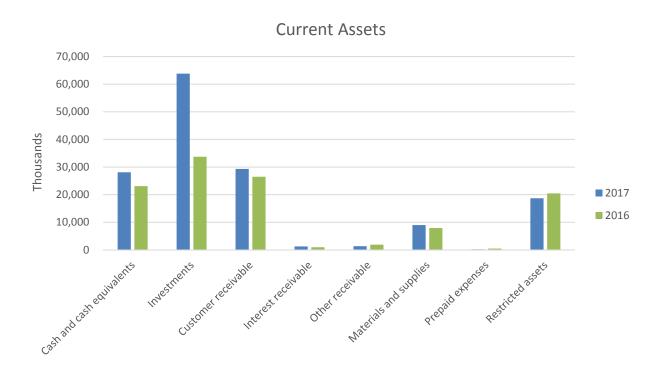
Contributions in aid of construction result from water system facilities charges that are levied against all new developments and residential properties requiring water from the BWS's systems, except those developments that have paid for and installed a complete water system, including sources, transmission, and daily storage facilities. In addition, contributions of capital assets from governmental agencies, developers and customers are recorded as contributions in aid of construction at their cost. The BWS realized contributions in aid of construction of \$25.8 million in fiscal year 2017 compared to \$18.9 million in fiscal year 2016. The increase in contributions in aid of construction of \$6.9 million was due to an increase in Water System Facilities Charge revenue ("WSFC") of \$3.2 million and increases in projects completed by governmental funds and private development contributions of \$4.3 million. During the year ended June 30, 2017 the major developments were East Kapolei II Development, Increment 2B and Keone'ula Boulevard Extension.

Financial Condition

CONDENSED STATEMENTS OF NET POSITION (Amounts in thousands)

	2016				
	_	2017	<u>(</u> a	s restated)	% Change
Current assets	\$	151,694	\$	114,984	31.9%
Noncurrent assets					
Capital assets, net		1,139,003		1,121,711	1.5%
Investments		268,759		260,656	3.1%
Restricted and other assets		41,132		39,494	4.1%
Total assets		1,600,588		1,536,845	4.1%
Deferred outflows of resources		62,984		38,039	65.6%
Total assets and deferred outflows of resources	\$	1,663,572	\$	1,574,884	5.6%
Current liabilities Noncurrent liabilities	\$	41,385	\$	44,388	-6.8%
Bonds payable, noncurrent		234,758		244,799	-4.1%
Notes payable, noncurrent portion		69,746		61,000	14.3%
Net pension liability		116,343		81,526	42.7%
Other liabilities		10,576		12,975	-18.5%
Total liabilities		472,808		444,688	6.3%
Deferred inflows of resources		5,260		5,063	3.9%
Net position					
Net investment in capital assets		859,696		839,033	2.5%
Restricted for capital activity and debt service		18,770		24,292	-22.7%
Unrestricted		307,038		261,808	17.3%
Total net position		1,185,504		1,125,133	5.4%
Total liabilities, deferred inflows of resources					
and net position	\$	1,663,572	\$	1,574,884	5.6%

The BWS's current assets were 3.7 and 2.6 times its related current liabilities as of June 30, 2017 and 2016, respectively. The ratio increase at June 30, 2017 was due to a decrease in accounts payable and contracts payable. The ratio decrease at June 30, 2016 was due to an increase in accounts payable and contracts payable.



As of June 30, 2017 and 2016, capital assets, net increased by \$17.3 million and \$9.3 million, respectively. The increase in fiscal year 2017 and 2016 was primarily due to the completion of various distributions mains projects and additions to construction work in progress, offset by dispositions and depreciation charges.

The BWS's noncurrent bonds payable decreased by \$10.0 million and \$9.8 million as of June 30, 2017 and 2016, respectively. The decrease at June 30, 2017 represents the current bonds payable due within one year. The decrease at June 30, 2016 was due to the Series 2006A and 2006B bonds maturing on July 1, 2016.

Noncurrent notes payable increased by \$8.7 million. The increase is primarily due to projects utilizing financing from the state revolving fund loan program.

The net pension liability increased by \$34.8 million which was primarily due to the changes in actuarial assumptions. The nominal investment return assumption decreased from 7.65% to 7.00%.

Net position increased by \$60.4 million and \$72.8 million as of June 30, 2017 and 2016, respectively. The increase in fiscal year 2017 was primarily due to an increase in contributions in aid of construction. The increase in fiscal year 2016 was primarily due to an increase in operating revenue.

Capital Assets and Long-Term Debt

During fiscal years 2017 and 2016, the BWS capitalized \$56.3 million and \$32.6 million, respectively, to its utility plant in service. Major assets added in fiscal year 2017 were Kapiolani Boulevard 12" Main, \$5.2 million; Kunia Wells II Renovation, \$4.3 million; Water Main Replacements at Various Streets, \$4.1 million, Pensacola Street Water System Improvements, \$3.2 million; Liliha Water System Improvements; Phase A, \$2.8 million; and Slope Stabilization at Waialae Iki 1080, Kamehame 500, Hahaione 500, and Kalama 170 Reservoirs, \$2.7 million.

The BWS issues long-term bonds to finance part of its capital improvement program. The BWS's debt to equity ratio has remained fairly constant at 26.7%, 28.3% and 30.6% for fiscal years 2017, 2016 and 2015, respectively.

All outstanding bonds have been assigned underlying ratings of Aa2 from Moody's Investors Service and AA+ from Fitch Ratings.

Rate Covenant

The BWS is required under its bond indenture, among other things, to fix, charge and collect such rates and other charges in each fiscal year to meet the net revenue requirement for such fiscal year. The net revenue requirement is the greater of 1) the sum of the aggregate debt service and all deposits required by bond resolution to be made, or 2) 1.20 times the aggregate debt service. The BWS met the net revenue requirements for the fiscal years ended June 30, 2017 and 2016.

Request for Information

This financial report is designed to provide a general overview of the BWS's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Board of Water Supply, City and County of Honolulu, 630 S. Beretania Street, Honolulu, Hawaii 96813.

Board of Water Supply City and County of Honolulu STATEMENTS OF NET POSITION June 30, 2017 and 2016

		2017	2016 (as restated)
ASSETS			
Current assets			
Cash and cash equivalents	\$	28,092,101	\$ 23,084,857
Investments		63,806,798	33,721,976
Interest receivable		1,263,738	969,013
Customer receivables			
Billed, less allowances for uncollectible accounts of		47 000 000	4 4 4 0 0 7 7 4
\$2,529,056 in 2017 and \$2,615,737 in 2016		17,238,263	14,188,771
Unbilled Other receivebles, less allewances for uncellectible		12,070,707	12,299,162
Other receivables, less allowances for uncollectible		1 225 000	1 001 222
accounts of \$510,868 in 2017 and 2016 Materials and supplies		1,335,080 8,989,621	1,891,233 7,900,769
Prepaid expenses		204,367	461,200
Restricted assets		204,307	401,200
Cash and cash equivalents		18,693,705	14,571,741
Investments			5,895,469
Total current assets	-	151,694,380	114,984,191
	=	101,001,000	111,001,101
Noncurrent assets Capital assets			
Infrastructure		1,504,279,618	1,469,794,915
Building and improvements		169,870,257	164,492,090
Equipment and machinery		317,240,982	305,454,875
Equipment and machinery	=	1,991,390,857	1,939,741,880
Less accumulated depreciation		(983,717,510)	(937,722,307)
Less accumulated depreciation	=	1,007,673,347	1,002,019,573
Land		32,373,064	32,373,064
Construction work in progress		98,956,663	87,318,572
Net capital assets	=	1,139,003,074	1,121,711,209
Investments		268,759,415	260,655,703
		200,739,413	200,000,700
Restricted assets		2 244 000	
Cash and cash equivalents Investments		2,344,009	27 200 442
		23,022,759	27,300,443
Other postemployment benefits asset		15,734,883	12,162,155
Other assets	=	29,525	31,370
Total noncurrent assets	=	1,448,893,665	1,421,860,880
Total assets	-	1,600,588,045	1,536,845,071
DEFERRED OUTFLOWS OF RESOURCES			
Deferred loss on refunding of debt		18,599,198	20,112,402
Deferred outflows of resources related to pensions	_	44,384,811	17,926,992
Total deferred outflows of resources	<u>-</u>	62,984,009	38,039,394
Total assets and deferred outflows of resources	\$ _	1,663,572,054	\$ 1,574,884,465

Board of Water Supply City and County of Honolulu STATEMENTS OF NET POSITION (Continued) June 30, 2017 and 2016

	_	2017	2016 (as restated)		
LIABILITIES					
Current liabilities					
Payable from current assets					
Accounts payable	\$	9,798,139	\$	11,465,798	
Contracts payable, including retainages		5,989,963		6,389,575	
Accrued vacation, current portion		3,029,874		2,492,417	
Accrued workers' compensation, current portion		741,279		916,000	
Other		3,131,876		2,657,135	
Total payable from current assets		22,691,131		23,920,925	
Payable from restricted assets					
Contracts payable, including retainages		2,222,787		3,007,142	
Accrued interest payable		4,844,139		5,113,740	
Bonds payable, current portion		8,365,000		8,135,000	
Notes payable, current portion		3,261,779		4,211,328	
Total payable from restricted assets		18,693,705		20,467,210	
Total current liabilities		41,384,836		44,388,135	
Noncurrent liabilities					
Bonds payable, noncurrent		234,757,539		244,798,748	
Notes payable, noncurrent portion		69,746,122		61,000,319	
Net pension liability		116,342,916		81,526,553	
Accrued vacation, noncurrent portion		3,946,625		4,302,997	
Accrued workers' compensation		1,525,876		1,880,735	
Customer advances		1,529,622		3,335,490	
Other		3,574,344		3,455,480	
Total noncurrent liabilities		431,423,044		400,300,322	
Total liabilities		472,807,880		444,688,457	
DEFERRED INFLOWS OF RESOURCES					
Deferred inflows of resources related to pensions		5,260,154		5,063,424	
Total deferred inflows of resources		5,260,154		5,063,424	
NET POSITION					
Net investment in capital assets		859,695,807		839,032,962	
Restricted for capital activity and debt service		18,769,572		24,292,025	
Unrestricted		307,038,641		261,807,597	
Total net position		1,185,504,020		1,125,132,584	
Total liabilities, deferred inflows of resources					
and net position	\$	1,663,572,054	\$	1,574,884,465	

Board of Water Supply City and County of Honolulu STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION Fiscal Years Ended June 30, 2017 and 2016

		2017		2016 (as restated)
ODED ATIMO DEVENUES				(1000)
OPERATING REVENUES	\$	220 002 040	ф	224 725 000
Water sales	Ф	229,083,940 2,361,340	\$	234,725,808
Other, principally contract and service fees				3,970,520
Total operating revenues		231,445,280		238,696,328
OPERATING EXPENSES				
Administrative and general		63,860,738		61,722,651
Depreciation		47,937,866		45,581,460
Power and pumping		29,899,130		30,189,514
Transmission and distribution		21,780,311		20,745,074
Maintenance		12,033,589		12,440,083
Customers' accounting and collection		4,686,863		5,249,768
Water reclamation		3,975,033		4,553,447
Central administrative services expense fees		3,300,000		3,300,000
Source of supply		50,032		27,037
Total operating expenses		187,523,562		183,809,034
Operating income		43,921,718		54,887,294
NONOPERATING REVENUES (EXPENSES)				
Interest income		4,616,741		4,150,911
Interest expense, net of interest capitalized and		, ,		, ,
amortization of bond premiums of \$3,500,348 in 2017				
and \$3,750,860 in 2016		(7,641,223)		(7,821,072)
Loss from disposal of capital assets		(1,229,062)		(297,165)
Realized and unrealized gain (loss) on investments		(5,322,328)		2,662,097
Other		268,021		307,227
Total nonoperating expenses		(9,307,851)		(998,002)
CONTRIBUTIONS IN AID OF CONSTRUCTION		25,757,569		18,915,888
Change in net position		60,371,436		72,805,180
NET POSITION				
Beginning of year, as previously reported		1,125,132,584		1,054,059,809
Restatement adjustment: cumulative effect of implementation of new accounting standard				(1,732,405)
Beginning of year, as restated		1,125,132,584		1,052,327,404
			_	_
End of year	\$	1,185,504,020	\$	1,125,132,584

Board of Water Supply City and County of Honolulu STATEMENTS OF CASH FLOWS Fiscal Years Ended June 30, 2017 and 2016

	 2017	 2016
CASH FLOWS FROM OPERATING ACTIVITIES Cash received from customers Payments to suppliers for goods and services Payments to employees for services Net cash provided by operating activities	\$ 229,847,364 (77,977,910) (57,935,145) 93,934,309	\$ 239,462,367 (76,679,532) (56,102,891) 106,679,944
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES Acquisition and construction of capital assets Customer payments for capital projects Principal paid on bonds Interest paid on bonds Proceeds from notes payable Interest paid on notes payable Principal paid on notes payable	(55,736,894) 12,526,364 (8,135,000) (9,588,890) 26,589,160 (307,233) (18,792,906)	(46,046,346) 12,678,171 (7,810,000) (9,913,722) 9,494,429 (203,353) (3,978,979)
Net cash used in capital and related financing activities CASH FLOWS FROM INVESTING ACTIVITIES Purchase of investments Proceeds from maturity of investments	(53,445,399) (131,437,507) 98,099,798	(45,779,800) (149,139,191) 83,610,596
Interest on investments Net cash used in investing activities Net increase (decrease) in cash and cash equivalents	4,322,016 (29,015,693) 11,473,217	3,264,692 (62,263,903) (1,363,759)
CASH AND CASH EQUIVALENTS Beginning of year End of year	\$ 37,656,598 49,129,815	\$ 39,020,357 37,656,598
Reconciliation of cash and cash equivalents to the statement of net position Unrestricted Restricted	\$ 28,092,101 21,037,714 49,129,815	\$ 23,084,857 14,571,741 37,656,598

Board of Water Supply City and County of Honolulu STATEMENTS OF CASH FLOWS (Continued) Fiscal Years Ended June 30, 2017 and 2016

			2016
	 2017	(;	as restated)
RECONCILIATION OF OPERATING INCOME			
TO NET CASH PROVIDED BY OPERATING ACTIVITIES			
Operating income	\$ 43,921,718	\$	54,887,294
Adjustments to reconcile operating income to net cash			
provided by operating activities:			
Depreciation	49,377,055		47,165,935
Provision for doubtful accounts	361,069		585,825
Change in assets, deferred outflows of resources,			
liabilities and deferred inflows of resources:			
Customer receivables	(3,182,106)		(259,709)
Materials and supplies	(1,088,852)		(390,759)
Other receivables	824,174		1,158,544
Prepaid expenses and other	256,833		7,648
Other postemployment benefits	(3,572,728)		(2,945,539)
Deferred outflows of resources related to pensions	(26,457,819)		(2,886,723)
Accounts and contracts payable	(1,763,238)		2,348,895
Accrued vacation	181,085		87,305
Accrued workers' compensation	(529,580)		224,858
Net pension liability	34,816,363		8,384,729
Other liabilities	593,605		1,736,726
Deferred inflows of resources	 196,730		(3,425,085)
Net cash provided by operating activities	\$ 93,934,309	\$	106,679,944
SUPPLEMENTAL DISCLOSURE OF NONCASH CAPITAL			
AND RELATED FINANCING ACTIVITIES			
Contributions of capital assets from government agencies,			
developers and customers that are recorded as			
contributions in aid of construction	\$ 11,420,958	\$	7,969,129
Amortization of other costs	\$ 1,845	\$	22,750
Amortization of bond premium, net	\$ 1,676,209	\$	1,712,455
Amortization of deferred loss on refunding	\$ 1,513,204	\$	1,587,523
Forgiveness of principal due on notes payable	\$ 	\$	750,000

NOTE A - OPERATIONS

The Revised Charter of the City and County of Honolulu provides for the operation of the Board of Water Supply (the "BWS") as a semi-autonomous body of the City and County of Honolulu government (the "City"). The BWS has full and complete authority to manage, control and operate the City's water system and related properties.

Article VII of the Revised Charter of the City and County of Honolulu states that the BWS's seven-member Board of Directors has the authority to establish and adjust water rates and charges so that the revenues derived shall be sufficient to make the BWS self-supporting. The Board of Directors is required to follow certain procedures that include holding public hearings before implementing changes in the water rate schedules.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

- (1) **Financial Statement Presentation** The BWS is a component unit of the City (the "primary government"). The accompanying financial statements present only the financial position and activities of the BWS and do not purport to, and do not present the financial position of the City, the changes in its financial position, or its cash flows.
- (2) **Measurement Focus and Basis of Accounting** The accompanying financial statements are presented using the economic resources measurement focus and the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.
- (3) Use of Estimates The preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows of resources, liabilities, deferred inflows of resources and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions include the carrying amount of capital assets, valuation allowances for receivables, accrued workers' compensation, and pensions and postretirement benefits. Actual results could differ from those estimates.
- (4) **Cash and Cash Equivalents** The BWS considers all cash on hand, demand deposits, and short-term investments (including restricted assets) with original maturities of three months or less from the date of acquisition to be cash and cash equivalents.
- (5) **Investments** Investments are measured at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The cost of securities sold is generally determined by the weighted average method.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- (6) Receivables Receivables are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the BWS's best estimate of the amount of probable credit losses in the BWS's existing receivables. The BWS determines the allowance based on past collection experience and the length of time individual receivables are past due. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.
- (7) **Materials and Supplies** Materials and supplies are stated at weighted average cost (which approximates the first-in, first-out method). The cost of materials and supplies are recorded as expenses when consumed rather than when purchased.
- (8) Restricted Assets Restricted assets are comprised of cash and cash equivalents and investments maintained in accordance with bond resolutions and other agreements for the purpose of funding certain debt service payments, construction, improvements, and renewal and replacements of the water system. When both restricted and unrestricted assets are available for use, it is the BWS's policy to use restricted assets first, then unrestricted assets as they are needed. Restricted assets comprise the following:
 - The debt service account accumulates transfers from the operating account throughout the fiscal year to make principal and interest payments on the outstanding water system revenue bonds and other notes payable.
 - The renewal and replacement account and the reserve release fund provides funding for improvements, reconstruction, emergency or extraordinary repairs, and renewals or replacements of the water system.
 - The improvement account holds the proceeds of the series bond issuance pursuant to the series resolution or series certificates. These proceeds are only applied to costs specified in the applicable series resolution or series certificates.
 - The extramural account holds reimbursements received from any governmental agency or private entity, pursuant to negotiated agreements, contracts and/or grants.
- (9) Capital Assets Capital assets include those assets in excess of \$5,000 for buildings, infrastructure, and equipment and machinery with a useful life of more than one year. Capital assets are stated at cost and include contributions by governmental agencies, private subdividers and customers at their cost or estimated cost of new construction.

Major replacements, renewals and betterments are capitalized. Interest costs are capitalized during the construction period of major capital projects. Interest costs incurred in the fiscal years ended June 30, 2017 and 2016 totaled approximately \$11,142,000 and \$11,572,000, respectively.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Capitalized interest costs approximated \$1,824,139 and \$2,038,000 for the fiscal years ended June 30, 2017 and 2016, respectively. The BWS also capitalizes certain indirect costs to construction work based upon actual construction direct labor. Maintenance, repairs and replacements that do not improve or extend the lives of the assets are charged to expense.

Assets are depreciated over the individual assets' estimated useful lives using the straight-line method. Depreciation on both purchased and contributed assets is charged against operations.

The estimated useful lives of capital assets are as follows:

Source of supply plant 20 to 100 years
Pumping plant 20 to 50 years
Water treatment plant 20 to 30 years
Transmission and distribution plant 13-1/3 to 50 years
General plant 5 to 50 years

Gains or losses resulting from the sale, retirement or disposal of capital assets in service are charged or credited to operations.

(10) **Bond Issue Prepaid Insurance Costs, Original Issue Discount or Premium and Deferred Loss on Refunding of Debt** - Bond issue costs are expensed when incurred, except for prepaid insurance, which are amortized over the life of the respective issue on a straight-line basis. Bond issue prepaid insurance costs are presented as other assets in the statements of net position.

Original issue discounts or premiums are amortized using the straight-line method over the terms of the respective issues. Original issue discounts or premiums are offset against or added to bonds payable in the statements of net position.

Deferred loss on refunding of debt is amortized using the straight-line method over the remaining life of the refunded debt or the life of the new debt, whichever is shorter. The deferred loss on refunding of debt is presented as deferred outflows of resources in the statements of net position.

(11) Accrued Vacation and Compensatory Pay - Vacation is earned at the rate of one and three-quarters working days for each month of service. Vacation days may be accumulated to a maximum of ninety days as of the end of the calendar year and are convertible to pay upon termination. The BWS accrues a liability for compensated absences and additional amounts for certain salary-related payments including payroll taxes and fringe benefits.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

As of June 30, 2017 and 2016, accumulated sick leave aggregated approximately \$19,203,000 and \$19,163,000, respectively. Sick leave accumulates at the rate of one and three-quarters working days for each month of service without limit, but can be taken only in the event of illness and is not convertible to pay upon termination of employment. However, an employee who retires or leaves government service in good standing with 60 or more unused sick days is entitled to additional service credit in the State of Hawaii's Employees' Retirement System.

- (12) Net Position Net position represents the difference between assets and deferred outflows of resources less liabilities and deferred inflows of resources. Net position is classified in the following three components: net investment in capital assets, restricted for capital activity and debt service, and unrestricted net position. Net investment in capital assets consists of capital assets, net of accumulated depreciation and reduced by outstanding debt that is attributable to the acquisition, construction or improvement of those assets. Debt related to unspent proceeds or other restricted cash and investments at year-end is not included in the calculation of net investment in capital assets. Restricted for capital activity and debt service consists of net position for which constraints are placed thereon by external parties, such as lenders, grantors, contributors, laws, regulations or enabling legislation. Unrestricted consists of the remaining balance not included in the above categories.
- (13) Operating Revenues and Expenses The BWS distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services in connection with the BWS's principal ongoing water operations. The principal operating revenues are derived from charges for water usage, while operating expenses include cost of services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.
- (14) Revenue Recognition Charges for water sales are based on usage. The BWS's policy is to bill customers on a cyclical monthly basis. The accrual for unbilled water revenues and related receivables reflected in the accompanying financial statements is based on estimated usage from the latest meter reading date to the end of the fiscal year.
- (15) Contributions in Aid of Construction Contributions in aid of construction represent cash or capital assets received by the BWS to aid in the construction of infrastructure assets. Contributions in aid of construction are recognized when they are accepted by the BWS and when all applicable eligibility requirements have been met.
- (16) Water System Facilities Charge A water system facilities charge is levied against all new developments and residential properties requiring water from the BWS's systems, except those developments that have paid for and installed a complete water system, including source, transmission and daily storage facilities. The amounts collected are initially recorded as customer advances and are recognized as contributions in aid of construction when water service is made available to the customer. The use of these funds is designated for the construction of water facilities.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- (17) Pensions For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the Employees' Retirement System of the State of Hawaii (the "ERS") and additions to/deductions from the ERS's fiduciary net position have been determined using the accrual basis of accounting, which is the same basis as they are reported by the ERS. For this purpose, employer and member contributions are recognized in the period in which the contributions are legally due and benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with benefit terms. Investments are reported at fair value.
- (18) **Deferred Compensation Plan** All full-time employees are eligible to participate in the City and County of Honolulu's Public Employees' Deferred Compensation Plan (the "Plan"), adopted pursuant to Internal Revenue Code Section 457. The Plan permits eligible employees to defer a portion of their salary until future years. The deferred compensation amounts are not available to employees until termination, retirement, death or unforeseeable emergency.

A trust fund was established to protect plan assets from claims of general creditors and from diversion to any uses other than paying benefits to participants and beneficiaries. Accordingly, the BWS has excluded the Plan's assets and liabilities from the financial statements because the BWS and the City do not have significant administrative involvement in the Plan or perform the investment function for the Plan.

(19) **Risk Management** - The BWS is exposed to various risks of loss from: (1) torts, (2) theft of, damage to, and destruction of assets, (3) employee injuries and illnesses, (4) natural disasters, and (5) employee health, dental, and accident benefits. Commercial insurance coverage is purchased for claims arising from such matters.

The ranges of insurance limits and deductibles are as follows:

Policy	<u>Limits (Millions)</u>	 Deductibles		
Property	\$ 60	\$ 50,000		
Public entity liability	\$ 15	\$ 750,000		
Excess workers' compensation	\$ 25	\$ 600,000		
Employment practices	\$ 5	\$ 75,000		
Storage tank liability	\$ 2	\$ 10,000		
Pollution legal liability	\$ 5	\$ 250,000		
Crime	\$ 5	\$ 25,000		
Cyber liability	\$ 3	\$ 50,000		

There have been no significant reductions in insurance coverage's from the prior fiscal year.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- (20) **Reclassification** Certain balances in the prior year financial statements have been reclassified for comparative purposes to conform with the current year presentation. Such reclassifications had no effect on the previously reported change in net position.
- (21) New Accounting Pronouncements The Government Accounting Standards Board (the "GASB") issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The Statement replaces GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, and No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans. The Statement will require the liability of employers for defined benefit OPEB to be measured as the portion of the present value of projected benefit payments to be provided to current active and inactive employees that is attributed to those employees' past periods of service, less the amount of the OPEB plan's fiduciary net position. The requirements of this Statement are effective for fiscal years beginning after June 15, 2017. Management has not yet determined the effect this Statement will have on the BWS's financial statements, but anticipate that it will materially impact the BWS's financial statements.

The GASB issued Statement No. 82, Pension Issues an amendment of GASB Statements No. 67, No. 68, and No. 73. This Statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The requirements of this Statement are effective for reporting periods beginning after June 15, 2016, except for the requirements of this Statement for the selection of assumptions in a circumstance in which an employer's pension liability is measured as of a date other than the employer's most recent fiscal year-end. In that circumstance, the requirements for the selection of assumptions are effective for that employer in the first reporting period in which the measurement date of the pension liability is on or after June 15, 2017. Management has adopted the applicable requirements of the new standards as presented in the BWS's financial statements.

The GASB issued Statement No. 83, Certain Asset Retirement Obligations. This Statement addresses accounting and financial reporting for certain asset retirement obligations ("AROs"). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

The GASB issued Statement No. 85, *Omnibus 2017.* This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). The requirements of this Statement are effective for reporting periods beginning after June 15, 2017. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The GASB issued Statement No. 87, *Leases*. This Statement requires the recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

NOTE C - CASH AND INVESTMENTS

Cash deposited with the City is maintained by the Department of Budget and Fiscal Services of the City. The City maintains a cash and investment pool that is used by all of the City's Funds and the BWS. The Hawaii Revised Statutes ("HRS") provide for the City's Director of Finance to deposit the cash with any national or state bank or federally insured financial institution authorized to do business in the State of Hawaii, provided that all deposits are fully insured or collateralized. The City's demand deposits are fully insured or collateralized with securities held by the City or its agents in the City's name.

The HRS authorizes the BWS to invest, with certain restrictions, in obligations of the State of Hawaii or the United States of America, in federally insured savings accounts, time certificates of deposit, and bank repurchase agreements with federally insured financial institutions authorized to do business in the State of Hawaii. The BWS's portfolio is managed by various investment managers. These investments consist of U.S. government and U.S. government agencies securities.

Interest Rate Risk - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Generally, the longer the term of an investment, the greater the sensitivity of its fair value to changes in market interest rates. As a means of limiting its exposure to fair value losses, the BWS invests operating funds primarily in shorter-term securities, money market mutual funds, or similar investment pools.

Custodial Credit Risk - The 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 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 to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. Excluding cash deposited with the City, all cash, money market mutual funds and investment securities as of June 30, 2017 and 2016 were held in trust by two financial institutions in the State of Hawaii.

NOTE C - CASH AND INVESTMENTS (Continued)

All investment securities are registered in the name of the BWS and are not exposed to custodial credit risk. Money market mutual funds are not considered investment securities for purposes of custodial credit risk classification and are not exposed to custodial credit risk. Cash held in trust with these financial institutions are uncollateralized, however, amounts in excess of depository insurance are covered by commercial insurance obtained by each financial institution designed to insure against losses resulting from errors and omissions or fraud.

Credit Risk and Concentration of Credit Risk - Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation to the holder of the investment. Concentration of credit risk is the risk of a loss attributed to the magnitude of a government's investment in a single issuer. As of June 30, 2017, all investment securities and money market mutual funds were rated Aaa and Aaa-mf, respectively, by Moody's Investors Services. The BWS's concentration of credit risk related to investments in debt securities has been mitigated by limiting such investments to only debt obligations of the U.S. government and U.S. government agencies.

The historical cost and estimated fair value of investments at June 30, 2017 and 2016 consisted of the following:

	 2017				2016			
	Cost		Fair Value		Cost		Fair Value	
U. S. Treasury obligations	\$ 291,330,737	\$	290,061,845	\$	254,228,048	\$	257,167,987	
U. S. government agencies	65,928,234		65,527,127		70,131,159		70,405,604	
	\$ 357,258,971	\$	355,588,972	\$	324,359,207	\$	327,573,591	

As of June 30, 2017 and 2016, the credit exposure as a percentage of total investments were as follows:

_	2017			2016			
_	Percent of Total Fair Value		Percent of Total	Fair Value			
U. S. Treasury obligations	82%	\$	290,061,845	79%	\$	257,167,987	
U. S. government agencies Federal National	00/		20.000.000	420/		42.052.400	
Mortgage Association Federal Home Loan	9%		30,686,283	13%		43,052,108	
Mortgage Corporation	5%		18,872,139	5%		17,314,197	
Federal Home Loan Bank	4%		15,968,705	3%		10,039,299	
	100%	\$	355,588,972	100%	\$	327,573,591	

NOTE C - CASH AND INVESTMENTS (Continued)

The fair value of investments at June 30, 2017 by contractual maturity is shown below:

			Investment Maturities (In Years)			
	 Fair Value Less Than 1			1 - 5		
U. S. Treasury obligations	\$ 290,061,845	\$	57,178,004	\$	232,883,841	
U. S. government agencies	65,527,127		14,838,618		50,688,509	
	\$ 355,588,972	\$	72,016,622	\$	283,572,350	

NOTE D - RESTRICTED ASSETS

At June 30, 2017 and 2016, the BWS's restricted assets were comprised of cash, cash equivalents and investments and were held for the following purposes:

		2017	 2016
Construction, renewals and replacements	\$	6,954,933	\$ 5,927,984
Debt service	_	37,105,540	 41,839,669
	\$	44,060,473	\$ 47,767,653

NOTE E - FAIR VALUE MEASUREMENTS

The framework for measuring fair value provides a fair value 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) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy are described as follows:

Level 1 - Inputs to the valuation methodology are quoted prices (unadjusted) in active markets for identical assets or liabilities that a government has the ability to access at the measurement date.

Level 2 - Inputs other than quoted prices included within level 1 that are observable for an asset or liability, either directly or indirectly. If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability. Level 2 inputs include:

- Quoted prices for similar assets or liabilities in active markets,
- Quoted prices for identical or similar assets or liabilities in markets that are not active,
- 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 that are unobservable for an asset or liability.

NOTE E - FAIR VALUE MEASUREMENTS (Continued)

Following is a description of the valuation techniques used by the BWS to measure fair value:

- U.S. Treasury obligations: Valued using quoted prices in active markets for identical assets.
- U.S. government agencies obligations: Valued using quoted prices for identical or similar assets in markets that are not active.

The following table sets forth by level, within the fair value hierarchy, assets measured at fair value on a recurring basis as of June 30, 2017 and 2016:

		Ass	sets at Fair Val	ue a	t June 30, 201	7	
	Total		Level 1		Level 2		Level 3
U. S. Treasury obligations	\$ 290,061,845	\$	290,061,845	\$		\$	
U. S. government agencies	65,527,127				65,527,127		<u></u>
	\$ 355,588,972	\$	290,061,845	\$	65,527,127	\$	
		Ass	sets at Fair Valu	ue at	June 30, 2016	6	
	Total		Level 1		Level 2		Level 3
U. S. Treasury obligations	\$ 257,167,987	\$	257,167,987	\$		\$	
U. S. government agencies	70,405,604				70,405,604		
	\$ 327,573,591	\$	257,167,987	\$	70,405,604	\$	

NOTE F - CAPITAL ASSETS

Capital assets activity during the fiscal years ended June 30, 2017 and 2016, were as follows:

		Balance July 1, 2016	 Additions	 Transfers	 Retirements	 Balance June 30, 2017
Depreciable assets						
Infrastructure	\$	1,469,794,915	\$ 11,506,650	\$ 26,066,196	\$ (3,088,143)	\$ 1,504,279,618
Building and improvements		164,492,090		5,378,167		169,870,257
Equipment and machinery		305,454,875	4,899,736	8,416,180	(1,529,809)	317,240,982
Total depreciable assets		1,939,741,880	16,406,386	39,860,543	(4,617,952)	1,991,390,857
Less: Accumulated depreciati	on	(937,722,307)	(49,377,055)		3,381,852	(983,717,510)
Total depreciable assets - net		1,002,019,573	(32,970,669)	39,860,543	(1,236,100)	1,007,673,347
Land		32,373,064				32,373,064
Construction work in progress		87,318,572	62,862,666	(51,224,575)		98,956,663
Net capital assets	\$	1,121,711,209	\$ 29,891,997	\$ (11,364,032)	\$ (1,236,100)	\$ 1,139,003,074

NOTE F - CAPITAL ASSETS (Continued)

_	Balance July 1, 2015	Additions	 Transfers	Retirements	Balance June 30, 2016
Depreciable assets					
Infrastructure \$	1,450,128,280	\$ 7,344,904	\$ 13,125,939	\$ (804,208)	\$ 1,469,794,915
Building and improvements	162,673,567		1,847,678	(29,155)	164,492,090
Equipment and machinery	304,512,242	1,842,123	8,458,811	(9,358,301)	305,454,875
Total depreciable assets	1,917,314,089	9,187,027	23,432,428	(10,191,664)	1,939,741,880
Less: Accumulated depreciation	(900,416,227)	(47,165,935)		9,859,855	(937,722,307)
Total depreciable assets - net	1,016,897,862	(37,978,908)	23,432,428	(331,809)	1,002,019,573
Land	32,373,064				32,373,064
Construction work in progress	63,122,418	65,063,334	(40,867,180)		87,318,572
Net capital assets \$	1,112,393,344	\$ 27,084,426	\$ (17,434,752)	\$ (331,809)	\$ 1,121,711,209

Depreciation charges allocated to various functions for the fiscal years ended June 30, 2017 and 2016 totaled \$1,439,189 and \$1,584,475 respectively.

NOTE G - BONDS PAYABLE

At June 30, 2017 and 2016, bonds payable consisted of the following:

	2017	2016
Water System Revenue Bonds, Series 2006A, with principal of \$2,795,000 due July 1, 2016, with interest at 4.25%. These bonds were partially refunded by Series 2014A bonds.	\$	\$ 2,795,000
Water System Revenue Bonds, Series 2006B, with principal of \$3,605,000 due July 1, 2016, with interest at 5.00%. These bonds were partially refunded by Series 2014B bonds.		3,605,000
Water System Revenue Bonds, Series 2012A, annual principal due ranging from \$970,000 to \$8,535,000 through July 1, 2033, with interest ranging from 2.00% to 5.00%.	79,800,000	80,740,000
Water System Revenue Bonds, Series 2014A, annual principal due commencing from July 1, 2023, ranging from \$410,000 to \$9,205,000 through July 1, 2036, with interest	404.055.000	404.055.000
ranging from 3.00% to 5.00%.	101,655,000	<u>101,655,000</u>
Balance forward	\$ <u>181,455,000</u>	\$ <u>188,795,000</u>

NOTE G - BONDS PAYABLE (Continued)

	2017	2016
Balance carried forward	\$ 181,455,000	\$ 188,795,000
Water System Revenue Bonds, Series 2014B, annual principal due ranging from \$1,540,000 to \$7,395,000 through July 1, 2031, with		
interest ranging from 1.34% to 3.86%.	<u>41,750,000</u> 223,205,000	<u>42,545,000</u> 231,340,000
Add: unamortized premium	<u>19,917,539</u>	21,593,748
Less: current portion	243,122,539 <u>8,365,000</u>	252,933,748 8,135,000
Noncurrent portion	\$ <u>234,757,539</u>	\$ <u>244,798,748</u>

Principal and interest payments on water system revenue bonds are to be paid from the BWS's revenue. Water system revenue bonds are subject to redemption on and after specific dates prior to maturity at the option of the BWS. The redemption amount equals the outstanding principal amount plus accrued interest without premium on the date of redemption.

At June 30, 2017, future bond principal and interest payments are as follows:

Fiscal Year Ending June 30,	_	Principal		Interest	 Total
2018 2019	\$	8,365,000 8,550,000	\$	9,358,000 9,175,000	\$ 17,723,000 17,725,000
2020		8,820,000		8,902,000	17,722,000
2021 2022		9,110,000 9,450,000		8,613,000 8,273,000	17,723,000 17,723,000
2023 - 2027 2028 - 2032		56,340,000 71,330,000		34,001,000 19,183,000	90,341,000 90,513,000
2033 - 2037	-	51,240,000	-	4,850,000	56,090,000
Total	\$_	223,205,000	\$	102,355,000	\$ 325,560,000

In December 2014, the BWS issued \$144,985,000 in water system revenue bonds which consisted of \$101,655,000 of Series 2014A and \$43,330,000 of Series 2014B bonds. The proceeds of the issuance and the proceeds from certain state revolving fund loans were used to advance refund a portion of the outstanding 2006A Series and 2006B Series bonds. Consequently, a portion of the 2006A Series and 2006B Series bonds were considered defeased and were removed from the BWS's financial statements in 2015. This refunding was undertaken to reduce total debt service payments by approximately \$24,667,000 and resulted in an economic gain of approximately \$19,182,000. At June 30, 2017 and 2016, defeased bonds totaled \$-0- and \$174,515,000, respectively.

NOTE H - NOTES PAYABLE

At June 30, 2017 and 2016, notes payable consisted of the following:

	 2017	 2016
Notes payable to Department of Health		
Note payable in semi-annual installments of approximately \$60,100, including interest at .10%, repaid in fiscal year 2017.	\$ 	\$ 1,127,975
Non-interest bearing note payable in semi-annual installments of approximately \$75,000, repaid in fiscal year 2017.		1,424,109
Note payable in semi-annual installments of approximately \$104,400, including interest at .31%, repaid in fiscal year 2017.		1,953,944
Note payable in semi-annual installments of approximately \$328,700 including interest at .10%, repaid in fiscal year 2017.		6,540,050
Note payable in semi-annual installments of approximately \$10,200, including interest at .10%, repaid in fiscal year 2017.		213,598
Note payable in semi-annual installments of approximately \$70,200, including interest at .01%, repaid in fiscal year 2017.		1,614,199
Note payable in semi-annual installments of approximately \$32,500, including interest at .01%, repaid in fiscal year 2017.		779,698
Note payable in semi-annual installments of approximately \$49,700, including interest at .01%, repaid in fiscal year 2017.		1,192,225
Note payable in semi-annual installments of approximately \$36,100, including interest at .36%, repaid in fiscal year 2017.		845,796
Note payable in semi-annual installments of approximately \$30,400, including interest at 1.0%, due April 2033.	896,523	947,969
Note payable in semi-annual installments of approximately \$66,100, including interest at 1.0%, due April 2033.	1,951,528	2,063,496
Balance forward	\$ 2,848,051	\$ 18,703,059

NOTE H - NOTES PAYABLE (Continued)

	2017	2016
Balance carried forward	\$ 2,848,051	\$ 18,703,059
Note payable in semi-annual installments of approximately \$73,200, including interest at .50%, due April 2033.	2,249,163	2,383,869
Note payable in semi-annual installments of approximately \$29,200, including interest at 1.0%, January 2034.	908,788	933,280
Non-interest bearing note payable in semi-annual installments of approximately \$676,900, due April 2034.	23,016,178	24,370,071
Note payable in semi-annual installments of approximately \$21,600, including interest at .50%, due May 2034.	704,406	744,001
Note payable in semi-annual installments of approximately \$97,100, including interest at 1.0%, due May 2034.	3,029,464	3,192,231
Note payable in semi-annual installments of approximately \$130,500, including interest at .50%, due May 2034.	4,248,697	3,755,205
Note payable in semi-annual installments of approximately \$130,000, including interest at .50%, due May 2034.	4,220,859	3,049,253
Non-interest bearing note payable in semi-annual installments of approximately \$178,000, due November 2034.	6,229,364	6,150,200
Note payable in semi-annual installments of approximately \$91,000, including interest at .50%, due November 2034.	3,045,268	91,091
Non-interest bearing note payable in semi-annual installments of approximately \$190,800, due December 2037.	<u>5,539,875</u>	<u>474,946</u>
Balance forward	\$ <u>56,040,113</u>	\$ <u>63,847,206</u>

NOTE H - NOTES PAYABLE (Continued)

	 2017	_	2016
Balance carried forward	\$ 56,040,113	\$	63,847,206
Non-interest bearing note payable in semi-annual installments of approximately \$301,800, due February 2039.	10,723,695		
Note payable in semi-annual installments of approximately \$146,900, including interest at .50%, due October 2036.	5,000,000		
Notes payable to other lenders			
Note payable in monthly installments of approximately \$15,700, including interest at			
5.0%, due September 2025	<u>1,244,093</u> 73,007,901		<u>1,364,441</u> 65,211,647
Less current maturities	3,261,779		4,211,328
	\$ <u>69,746,122</u>	\$	61,000,319

The notes payable to the Department of Health are state revolving fund loans and are collateralized by net revenue of the BWS.

At June 30, 2017, future principal and interest payments for notes payable are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	\$ 3,262,000	\$ 221,000	\$ 3,483,000
2019	3,534,000	210,000	3,744,000
2020	3,805,000	194,000	3,999,000
2021	4,079,000	178,000	4,257,000
2022	4,106,000	161,000	4,267,000
2023-2027	20,603,000	550,000	21,153,000
2028-2032	20,568,000	247,000	20,815,000
2033-2037	11,697,000	35,000	11,732,000
2038-2039	1,354,000		1,354,000
	\$ 73,008,000	\$ 1,796,000	\$ 74,804,000

Subsequent to June 30, 2017, the BWS made principal and interest prepayments of approximately \$9,781,000 to the Department of Health for certain state revolving fund loans.

NOTE I - LONG-TERM LIABILITIES

The following is a summary of changes in long-term liabilities for the fiscal years ended June 30, 2017 and 2016:

	Balance July 1, 2016	Additions	Reductions	Balance June 30, 2017	Current Portion
Bonds payable Add: unamortized premium	\$ 231,340,000 21,593,748	\$	\$ (8,135,000) (1,676,209)	\$ 223,205,000 19,917,539	\$ 8,365,000
Total bonds payable	252,933,748		(9,811,209)	243,122,539	8,365,000
Notes payable Accrued vacation	65,211,647 6,795,414	26,589,160 3,210,959	(18,792,906) (3,029,874)	73,007,901 6,976,499	3,261,779 3,029,874
Accrued workers' compensation Customer advances	2,796,735 3,335,490	594,366 14,332,232	(1,123,946) (16,138,100)	2,267,155 1,529,622	741,279
Other	3,455,480	651,098	(532,234)	3,574,344	
	\$ 334,528,514	\$ 45,377,815	\$ (49,428,269)	\$ 330,478,060	\$ 15,397,932
	Balance July 1, 2015	Additions	Reductions	Balance June 30, 2016	Current Portion
					\
Bonds payable Add: unamortized premium	\$ 239,150,000 23,306,203	\$ 	\$ (7,810,000) (1,712,455)	\$ 231,340,000 21,593,748	\$ 8,135,000
		\$ 			\$ 8,135,000 8,135,000
Add: unamortized premium	23,306,203	9,494,429	(1,712,455)	21,593,748	
Add: unamortized premium Total bonds payable	23,306,203 262,456,203		(1,712,455) (9,522,455)	<u>21,593,748</u> 252,933,748	8,135,000
Add: unamortized premium Total bonds payable Notes payable	23,306,203 262,456,203 60,446,197	9,494,429	(1,712,455) (9,522,455) (4,728,979)	21,593,748 252,933,748 65,211,647	8,135,000 4,211,328
Add: unamortized premium Total bonds payable Notes payable Accrued vacation	23,306,203 262,456,203 60,446,197 6,708,109	9,494,429 2,579,722	(1,712,455) (9,522,455) (4,728,979) (2,492,417)	21,593,748 252,933,748 65,211,647 6,795,414	8,135,000 4,211,328 2,492,417
Add: unamortized premium Total bonds payable Notes payable Accrued vacation Accrued workers' compensation	23,306,203 262,456,203 60,446,197 6,708,109 2,571,877	9,494,429 2,579,722 1,054,492	(1,712,455) (9,522,455) (4,728,979) (2,492,417) (829,634)	21,593,748 252,933,748 65,211,647 6,795,414 2,796,735	8,135,000 4,211,328 2,492,417

NOTE J - NET POSITION

The BWS's net position consisted of the following as of June 30, 2017 and 2016:

		2016
	2017	(as restated)
Net investment in capital assets		
Capital assets, net	\$ 1,139,003,074	\$ 1,121,711,209
Deferred loss on refunding	18,599,198	20,112,402
Less: noncurrent portion of water system		
revenue bonds payable	(234,757,539)	(244,798,748)
Less: noncurrent portion of notes payable	(69,746,122)	(61,000,319)
Unspent debt proceeds	6,597,196	3,008,418
	859,695,807	839,032,962
Restricted for capital activity and debt service		
Restricted cash and cash equivalents	21,037,714	14,571,741
Restricted investments	23,022,759	33,195,912
Less: unspent debt proceeds	(6,597,196)	(3,008,418)
Less: contracts payable, including retainages	(2,222,787)	(3,007,142)
Less: accrued interest payable	(4,844,139)	(5,113,740)
Less: bonds payable, current portion	(8,365,000)	(8,135,000)
Less: notes payable, current portion	(3,261,779)	(4,211,328)
	18,769,572	24,292,025
Unrestricted	307,038,641	261,807,597
	\$ 1,185,504,020	\$ 1,125,132,584

NOTE K - LEASES

The BWS leases space for its deep seawater cooling project on Oahu under an operating lease that extends through September 2025. The lease is subject to early cancellation contingent on mutual agreement between the BWS and the lessor. Rent expense under this lease for the fiscal years ended June 30, 2017 and 2016 totaled \$159,000.

The BWS also leases certain properties to other users, primarily utility and telecommunications companies, under multi-year license agreements. The terms of these agreements range from 5 to 30 years through December 2031. The agreements are generally based on fixed annual amounts, with provisions for increases.

NOTE K - LEASES (Continued)

The future minimum rental payments and revenue from these operating leases at June 30, 2017 were as follows:

Fiscal Year Ending June 30,	Future Minimum Rental Payments	Future Minimum Rental Revenue		
	_			
2018	\$ (159,000)	\$	138,000	
2019	(159,000)		115,000	
2020	(159,000)		115,000	
2021	(159,000)		115,000	
2022	(159,000)		107,000	
2023-2027	(509,000)		500,000	
2028-2032			400,000	
	\$ (1,304,000)	\$	1,490,000	

NOTE L - RELATED PARTY TRANSACTIONS

The BWS has an agreement with the Department of Environmental Services, City and County of Honolulu to provide certain services relating to the billing and collection of sewer service charges. Fees related to these services were negotiated at approximately \$2,896,609 and \$3,738,000 for the fiscal years ended June 30, 2017 and 2016, respectively.

The BWS has an agreement with the City to pay a central administrative services expense ("CASE") fee for treasury, personnel, purchasing and other services that the City provides to the BWS on an on-going basis. The BWS's Charter allows for CASE fees to the extent that it represents a reasonable charge for services necessary for the BWS to perform its duties. CASE fees totaled \$3,300,000 for each of the fiscal years ended June 30, 2017 and 2016.

Amounts due from the City totaled approximately \$623,000 and \$535,000 as of June 30, 2017 and 2016, respectively, and are included in other receivables in the statements of net position.

The BWS has entered into agreements with the City for joint capital projects. Unexpended advanced funds totaled \$826,000 as of June 30, 2017 and 2016, and are included in other liabilities in the statements of net position.

NOTE M - EMPLOYEE BENEFIT PLANS

Defined Benefit Pension Plan

The ERS is a cost-sharing, multiple-employer public employee retirement system established as a defined benefit pension plan to administer a pension benefits program for all eligible employees of the State and counties of Hawaii. Benefit terms, eligibility, and contribution requirements are established by Chapter 88 of the Hawaii Revised Statutes and can be amended through legislation.

The ERS provides retirement, disability and death benefits that are covered by the provisions of the noncontributory, contributory and hybrid retirement membership classes. The three classes provide a monthly retirement allowance equal to the benefit multiplier (generally 1.25% or 2%) multiplied by the average final compensation multiplied by years of credited service. Average final compensation is an average of the highest salaries during any three years of credited service, excluding any salary paid in lieu of vacation for employees hired January 1, 1971 or later and the average of the highest salaries during any five years of credited service including any salary paid in lieu of vacation for employees hired prior to January 1, 1971.

For members hired before July 1, 2012, the original retirement allowance is increased by 2.5% each July 1 following the calendar year of retirement. This cumulative benefit is not compounded and increases each year by 2.5% of the original retirement allowance without a ceiling (2.5% of the original retirement allowance the first year, 5.0% the second year, 7.5% the third year, etc.). For members hired after June 30, 2012, the post-retirement annuity increase was decreased to 1.5% per year.

Noncontributory Class

- <u>Retirement Benefits</u> General employees' retirement benefits are determined as 1.25% of average final compensation multiplied by the years of credited service. Employees with 10 years of credited service are eligible to retire at age 62. Employees with 30 years of credited service are eligible to retire at age 55.
- Disability Benefits Members are eligible for service-related disability benefits regardless of length of service and receive a lifetime pension of 35% of their average final compensation. Ten years of credited service is required for ordinary disability. Ordinary disability benefits are determined in the same manner as retirement benefits but are payable immediately, without an actuarial reduction, and at a minimum of 12.5% of average final compensation.
- <u>Death Benefits</u> For service-connected deaths, the surviving spouse/reciprocal beneficiary receives a monthly benefit of 30% of the average final compensation until remarriage or re-entry into a new reciprocal beneficiary relationship. Additional benefits are payable to surviving dependent children up to age 18. If there is no spouse/reciprocal beneficiary or dependent children, no benefit is payable.

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

Ten years of credited service is required for ordinary death benefits. For ordinary death benefits, the surviving spouse/reciprocal beneficiary (until remarriage/re-entry into a new reciprocal beneficiary relationship) and dependent children (up to age 18) receive a benefit equal to a percentage of member's accrued maximum allowance unreduced for age or, if the member was eligible for retirement at the time of death, the surviving spouse/reciprocal beneficiary receives 100% joint and survivor lifetime pension.

Contributory Class for Employees Hired Prior to July 1, 2012

- Retirement Benefits General employees' retirement benefits are determined as 2% of average final compensation multiplied by the years of credited service. General employees with five years of credited service are eligible to retire at age 55.
- O <u>Disability Benefits</u> Members are eligible for service-related disability benefits regardless of length of service and receive a one-time payment of the member's contributions and accrued interest plus a lifetime pension of 50% of their average final compensation. Ten years of credited service is required for ordinary disability. Ordinary disability benefits are determined as 1.75% of average final compensation multiplied by the years of credited service but are payable immediately, without an actuarial reduction, and at a minimum of 30% of average final compensation.
- Death Benefits For service-connected deaths, the surviving spouse/reciprocal beneficiary receives a lump sum payment of the member's contributions and accrued interest plus a monthly benefit of 50% of the average final compensation until remarriage or re-entry into a new reciprocal beneficiary relationship. If there is no surviving spouse/reciprocal beneficiary, surviving children (up to age 18) or dependent parents are eligible for the monthly benefit. If there is no spouse/reciprocal beneficiary or dependent children/parents, the death benefit is payable to the designated beneficiary.

Ordinary death benefits are available to employees who were active at time of death with at least one year of service. Ordinary death benefits consist of a lump sum payment of the member's contributions and accrued interest plus a percentage of the salary earned in the 12 months preceding death, or 50% Joint and Survivor lifetime pension if the member was not eligible for retirement at the time of death but was credited with at least 10 years of service and designated one beneficiary, or 100% Joint and Survivor lifetime pension if the member was eligible for retirement at the time of death and designated one beneficiary.

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

Contributory Class for Employees Hired After June 30, 2012

- Retirement Benefits General employees' retirement benefits are determined as 1.75% of average final compensation multiplied by the years of credited service. General employees with 10 years of credited service are eligible to retire at age 60.
- <u>Disability and Death Benefits</u> Disability and benefits for contributory class members hired after June 30, 2012 are generally the same as those for contributory class members hired June 30, 2012 and prior.

Hybrid Class for Employees Hired Prior to July 1, 2012

- <u>Retirement Benefits</u> General employees' retirement benefits are determined as 2% of average final compensation multiplied by the years of credited service. General employees with five years of credited service are eligible to retire at age 62. General employees with 30 years of credited service are eligible to retire at age 55.
- O <u>Disability Benefits</u> Members are eligible for service-related disability benefits regardless of length of service and receive a lifetime pension of 35% of their average final compensation plus refund of their contributions and accrued interest. Ten years of credited service is required for ordinary disability. Ordinary disability benefits are determined in the same manner as retirement benefits but are payable immediately, without an actuarial reduction, and at a minimum of 25% of average final compensation.
- Death Benefits For service-connected deaths, the designated surviving spouse/reciprocal beneficiary receives a lump sum payment of the member's contributions and accrued interest plus a monthly benefit of 50% of the average final compensation until remarriage or re-entry into a new reciprocal beneficiary relationship. If there is no surviving spouse/reciprocal beneficiary, surviving children (up to age 18) or dependent parents are eligible for the monthly benefit. If there is no spouse/reciprocal beneficiary or dependent children/parents, the death benefit is payable to the designated beneficiary.

Ordinary death benefits are available to employees who were active at time of death with at least five years of service. Ordinary death benefits consist of a lump sum payment of the member's contributions and accrued interest plus a percentage multiplied by 150%, or 50% Joint and Survivor lifetime pension if the member was not eligible for retirement at the time of death but was credited with at least 10 years of service and designated one beneficiary, or 100% Joint and Survivor lifetime pension if the member was eligible for retirement at the time of death and designated one beneficiary.

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

Hybrid Class for Employees Hired After June 30, 2012

- Retirement Benefits General employees' retirement benefits are determined as 1.75% of average final compensation multiplied by the years of credited service. General employees with 10 years of credited service are eligible to retire at age 65. Employees with 30 years of credited service are eligible to retire at age 60.
- Disability and Death Benefits Provisions for disability and death benefits generally remain the same except for ordinary death benefits. Ordinary death benefits are available to employees who were active at time of death with at least 10 years of service. Ordinary death benefits consist of a lump sum payment of the member's contributions and accrued interest, or 50% Joint and Survivor lifetime pension if the member was not eligible for retirement at the time of death and designated one beneficiary, or 100% Joint and Survivor lifetime pension if the member was eligible for retirement at the time of death and designated one beneficiary.

Contributions - The employer contribution rate is a fixed percentage of compensation. The employer contribution rate was 17% for each of the fiscal years ended June 30, 2017 and 2016. For the fiscal years ended June 30, 2017 and 2016, contributions to the pension plan from the BWS totaled \$6,879,511 and \$5,871,134, respectively.

The employer is required to make all contributions for noncontributory members. For contributory class employees hired prior to July 1, 2012, general employees are required to contribute 7.8% of their salary. For contributing class employees hired after June 30, 2012, general employees are required to contribute 9.8% of their salary. Hybrid class members hired prior to July 1, 2012 are required to contribute 6.0% of their salary. Hybrid class members hired after June 30, 2012 are required to contribute 8.0% of their salary.

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions - At June 30, 2017 and 2016, the BWS reported a liability of \$116,342,916 and \$81,526,553, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2016 and 2015, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of those dates. The BWS's proportion of the net pension liability was based on the actual employer contributions to the pension plan relative to the contributions of all participating employers. At June 30, 2016 and 2015, the BWS's proportion was 0.87% and 0.93%, respectively, which was a change of -0.06% and 0.02% from its proportion measured as of June 30, 2015 and 2014, respectively.

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

For the fiscal years ended June 30, 2017 and 2016, the BWS recognized pension expense of \$15,437,218 and \$9,118,964, respectively. At June 30, 2017 and 2016, the BWS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	June 30, 2017				
		Deferred	Deferred		
		Outflows of		Inflows of	
		Resources		Resources	
Differences between expected and actual experience	\$	2,316,873	\$	1,683,977	
Changes of assumptions		21,852,328			
Net difference between projected and actual earnings on pension plan investments		7,117,333			
Changes in proportion and differences between employer contributions and proportionate share of contributions		6,993,084		3,576,177	
Employer contributions subsequent to the measurement					
date		6,105,193			
	\$	44,384,811	\$	5,260,154	
		lune 3	30 O	116	
		June 3 (as re			
		June 3 (as re Deferred			
		(as re		ed)	
	_	(as re		Deferred	
Differences between expected and actual experience	\$	(as re Deferred Outflows of		Deferred Inflows of	
Differences between expected and actual experience Changes of assumptions	\$	(as re Deferred Outflows of Resources	estate	Deferred Inflows of Resources	
·	\$	Deferred Outflows of Resources 763,598	estate	Deferred Inflows of Resources	
Changes of assumptions Net difference between projected and actual earnings	\$	Deferred Outflows of Resources 763,598	estate	Deferred Inflows of Resources 2,281,473	
Changes of assumptions Net difference between projected and actual earnings on pension plan investments Changes in proportion and differences between employer contributions and proportionate share of contributions Employer contributions subsequent to the measurement	\$	Deferred Outflows of Resources 763,598 1,924,472 9,367,788	estate	Deferred Inflows of Resources 2,281,473	
Changes of assumptions Net difference between projected and actual earnings on pension plan investments Changes in proportion and differences between employer contributions and proportionate share of contributions	\$	Deferred Outflows of Resources 763,598 1,924,472	estate	Deferred Inflows of Resources 2,281,473	

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

The \$6,105,193 of deferred outflows of resources related to pensions at June 30, 2017 resulting from the BWS's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ended June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources at June 30, 2016 will be recognized in pension expense as follows:

Fiscal Year Ending June 30,		Amount
2018	\$	7,366,831
2019	•	7,366,831
2020		8,991,075
2021		6,309,939
2022	_	2,984,788
	\$_	33,019,464

Actuarial Assumptions

The following actuarial assumptions were used in the actuarial valuations as of June 30, 2016 and 2015:

	2016	2015
Inflation	2.50%	3.00%
Payroll growth rate	3.50%	3.50%
Investment rate of return, including inflation	7.00%	7.65%
Salary increases, including inflation Police and fire employees General employees Teachers	5.00% to 7.00% 3.50% to 6.50% 3.75% to 5.75%	5.00% to 19.00% 4.00% to 8.00% 4.50% to 8.50%

Mortality rates used in the actuarial valuation as of June 30, 2016 were based on the following:

Active members - Multiples of the RP 2014 mortality table for active employees based on the occupation of the member.

Healthy retirees - The 2016 Public Retirees of Hawaii mortality table, generational projection using the BB projection table from the year 2016 and with multipliers based on plan and group experience.

Disabled retirees - Base table for healthy retirees' occupation, set forward five years, generational projection using the BB projection table from the year 2016. Minimum mortality rate of 3.5% for males and 2.5% for females.

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

Mortality assumptions used in the actuarial valuations as of June 30, 2015 included post-retirement mortality rates that were based on either the Client Specific Tables or the 1994 US Group Annuity Mortality Static Tables. Pre-retirement mortality rates were based on the RP-2000 Mortality Tables.

The actuarial assumptions used in the actuarial valuation as of June 30, 2016 were based on the results of an actuarial experience study for the five-year period ended June 30, 2015. The major changes to assumptions resulting from the 2015 actuarial experience study were (1) a decrease in the investment return assumption from 7.65% to 7.00% and (2) the mortality assumptions were modified to assume longer life expectancies as well as to reflect continuous mortality improvement. The actuarial assumptions used in the actuarial valuation as of June 30, 2015 were based on the results of an actuarial experience study for the five-year period ended June 30, 2010. ERS updates their experience studies every five years.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of rates of return on pension plan investments as of June 30, 2016 and 2015 are summarized in the following tables:

		2016
		Long-Term
Strategic Allocation	Target	Expected Geometric
(Risk-Based Classes)	Allocation	Rate of Return
Broad growth	63.00%	8.35%
Principal protection	7.00%	2.20%
Real return	10.00%	6.15%
Crisis risk offset	20.00%	5.50%
	100.00%	

	2015				
		Long-Term			
	Target	Expected Arithmetic			
Asset Class	Allocation	Rate of Return			
Domestic equity	30.00%	8.50%			
International equity	26.00%	9.25%			
Total fixed-income	20.00%	3.10%			
Real estate	7.00%	9.20%			
Private equity	7.00%	11.85%			
Real return	5.00%	6.65%			
Covered calls	5.00%	7.65%			
	100.00%				
		•			

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

Discount Rate

The discount rate used to measure the total pension liability at June 30, 2017 and 2016 was 7.00% and 7.65%, respectively. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the BWS's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the BWS's proportionate share of the net pension liability calculated as of the fiscal years ended June 30, 2017 and 2016 using the applicable discount rate, as well as what the BWS's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the applicable rate:

_	1%		1%
	Decrease	Discount Rate	Increase
	(6.00%)	(7.00%)	(8.00%)
Proportionate share of the net			
pension liability	\$ <u>148,774,341</u>	\$ <u>116,342,916</u>	\$ 89,506,979
_		June 30, 2016	
	1%		1%
	Decrease	Discount Rate	Increase
	(6.65%)	(7.65%)	(8.65%)
Proportionate share of the net			
pension liability	\$ <u>102,639,120</u>	\$ <u>81,526,553</u>	\$ 60,413,986

Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued ERS financial report. ERS's complete financial statements are available at http://www.ers.ehawaii.gov.

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

Payable to the Pension Plan

At June 30, 2017 and 2016, the amount payable to the ERS totaled \$503,150 and \$487,947, respectively. The amount payable at June 30, 2017 and 2016 consists of statutorily required employer contributions for the month of June 2017 and 2016, respectively.

Post-Retirement Health Care and Life Insurance Benefits

In addition to providing pension benefits, the State of Hawaii Employer-Union Health Benefits Trust Fund ("EUTF"), an agent multiple-employer plan provides certain health care (medical, prescription, vision and dental) and life insurance benefits for retired BWS employees. Act 88 established the EUTF during the 2001 State legislative session and is codified in HRS 87A. Contributions are based on negotiated collective bargaining agreements and are limited by State statute to the actual cost of benefit coverage.

For employees hired on or before July 1, 1996, the BWS pays 100% of the monthly health care premium for employees retiring with 10 or more years of credited service, and 50% of the monthly premium for employees retiring with fewer than 10 years of credited service.

For employees hired after June 30, 1996 but before July 1, 2001, and retiring with 25 years or more of service, the BWS pays the entire health care premium. For employees retiring with at least 15 years but fewer than 25 years of service, the BWS pays 75% of the monthly Medicare or non-Medicare premium. For those retiring with at least 10 years but fewer than 15 years of service, the BWS pays 50% of the retired employees' monthly Medicare or non-Medicare premium. For those retiring with fewer than 10 years of service, the BWS makes no contributions.

For employees hired on or after June 30, 2001 and retiring with over 25 years of service, the BWS pays 100% of the monthly premium based on the self plan. For those who retire with at least 15 years but fewer than 25 years of service, the BWS pays 75% of the retired employees' monthly Medicare or non-Medicare premium based on the self plan. For those retiring with at least 10 years but fewer than 15 years of service, the BWS pays 50% of the retired employees' monthly Medicare or non-Medicare premium based on the self plan. For those retiring with fewer than 10 years of service, the BWS makes no contributions.

The BWS also reimburses 100% of Medicare premium costs for retirees and qualified dependents (through the State of Hawaii), who are at least 65 years of age and have at least 10 years of service.

The BWS is required to contribute the annual required contribution ("ARC") of the employer, an amount actuarially determined for the other postemployment benefits ("OPEB"). The ARC represents a level of funding that, if paid on an on-going basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities or funding excess over a period not to exceed 30 years.

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

For the fiscal years ended June 30, 2017, 2016 and 2015, the components of the BWS's annual OPEB costs, the amounts contributed to the plan and the changes to the BWS's net OPEB asset (obligation) are summarized as follows:

	2017	2016	2015
Annual required contribution	\$ 8,181,000	\$ 8,826,000	\$ 8,528,000
Interest on net OPEB obligation	(851,000)	(645,000)	493,000
Adjustments to annual required contribution	822,000	602,000	(446,000)
Annual OPEB cost	8,152,000	8,783,000	8,575,000
Contributions made	(11,724,728)	(11,728,539)	(10,750,399)
Change in net OPEB asset (obligation)	3,572,728	2,945,539	2,175,399
Net OPEB asset (obligation)			
Beginning of year	12,162,155	9,216,616	7,041,217
End of Year	\$ 15,734,883	\$ 12,162,155	\$ 9,216,616
Percentage of annual OPEB cost contributed	144%	134%	125%

The funded status of the plan as of the most recent valuation dates are as follows:

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Unfunded Liability AAL (AAL) (UAAL)		Accrued Unfunded Liability AAL Funded Covered				UAAL as a Percentage of Covered Payroll
July 1, 2015	\$ 50,689,000	\$ 137,018,000	\$	86,329,000	37%	\$	34,218,000	252%
July 1, 2013	\$ 25,638,000	\$ 122,886,000	\$	97,248,000	21%	\$	31,677,000	307%

The schedule of funding progress presented as required supplementary information following the notes to the financial statements presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

In the July 1, 2015 actuarial valuation, the entry age normal actuarial cost method was used. The actuarial assumptions included a discount rate of 7.0%, projected payroll growth of 3.5%, and an annual health cost trend rates of 9.0% and 7.5% for PPO and HMO, respectively, reduced by decrements to an ultimate rate of 5.0% after 8 years. The initial unfunded actuarial accrued liability is amortized as a level percentage of projected payroll over a thirty-year closed period ending June 30, 2037.

The EUTF issues a stand-alone financial report that includes financial statements and required supplementary information, which may be obtained at the following address: State of Hawaii Employer-Union Health Benefits Trust Fund, P.O. Box 2121, Honolulu, Hawaii 96805.

NOTE N - COMMITMENTS

Commitments, primarily for capital improvements, approximated \$196,224,000 and \$217,450,000 as of June 30, 2017 and 2016, respectively. Such amounts are to be funded by operating revenues, contributed capital, cash and investments on hand.

NOTE O - CONTINGENCIES

Workers' Compensation Self-Insurance Liability

The BWS is self-insured for workers' compensation and disability claims up to \$600,000 and in excess of \$25,000,000. The BWS has obtained excess insurance coverage for claims that are not self-insured. The BWS provides reserves for claims not covered by insurance that in the opinion of management will result in probable judgment against the BWS.

The liability for losses and loss adjustment expenses is comprised of case reserves and incurred but not reported loss reserves ("IBNR"). Case or outstanding loss reserves represent estimates of ultimate costs to settle reported claims.

Determination of a reserve account for workers' compensation is a significant estimate. It is reasonably possible that one or more future events could result in a material change in the estimated claims loss in the near term.

Safe Drinking Water

The BWS is subject to the requirements of the Safe Drinking Water Act (the "Act"), which is administered by the State Department of Health on behalf of the U.S. Environmental Protection Agency. Management believes that the BWS is in full compliance with the requirements of the Act and is not aware of any matters under the Act that may materially affect the BWS's customer service area.

NOTE O - CONTINGENCIES (Continued)

Other Legal Matters

The BWS is party to various legal proceedings arising in the normal course of business. The outcome of individual matters is not predictable. However, management believes that the ultimate resolution of all such matters, after considering insurance coverage, will not have material adverse effect on the BWS's financial position, results of operations, or liquidity.

NOTE P - ADOPTION OF NEW ACCOUNTING PRINCIPLE

BWS has adopted certain requirements of GASB Statement No. 82, *Pension Issues an amendment of GASB Statements No. 67, No. 68, and No. 73* (GASBS 82), which are effective for reporting periods beginning after June 15, 2016. The adoption of GASBS 82 resulted in the reclassification of payments made by BWS to satisfy employee (plan member) contribution requirements that were previously deferred in the period for which the contributions were assessed and recorded as expenses in the subsequent fiscal year. These changes have been applied retroactively by restating the financial statements of the BWS as of June 30, 2016.

For the fiscal year ended June 30, 2016, the effect of the change reduced beginning net position by \$1,732,405 and decreased the change in net position for the fiscal year ended June 30, 2016 by \$96,523. As of June 30, 2016, deferred outflows of resources related to pensions and net position both decreased by \$1,828,928. For the fiscal year ended June 30, 2017, the effect of the change decreased the change in net position by \$126,880.

REQUIRED SUPPLEMENTARY INFORMATION

Board of Water Supply City and County of Honolulu SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY Last Ten Fiscal Years *

Measurement Period Ended	Proportion of the Net Pension Liability	;	Proportionate Share of the Net Pension Liability	_	Covered Payroll	Proportionate Share of the Net Pension Liability as a %age of Covered Payroll	Plan Fiduciary Net Position as a %age of the Total Pension Liability
June 30, 2016	0.87%	\$	116,342,916	\$	34,536,085	337%	51.28%
June 30, 2015	0.93%	\$	81,526,553	\$	33,412,761	244%	62.42%
June 30, 2014	0.91%	\$	73,141,824	\$	32,202,276	227%	63.92%
June 30, 2013	0.78%	\$	69,992,291	\$	29,761,149	235%	57.96%

^{*} This schedule is intended to present information for ten years, as of the measurement date of the collective net pension liability for each respective fiscal year. Additional years will be built prospectively as information becomes available.

Board of Water Supply City and County of Honolulu SCHEDULE OF CONTRIBUTIONS Last Ten Fiscal Years

Fiscal Year Ended	Statutorily Required ontribution	in (ontributions Relation to Statutorily Required ontributions	Contribution Deficiency (Excess)		_	Covered Payroll	Contributions as a %age of Covered Payroll	
June 30, 2017	\$ 6,105,193	\$	6,105,193	\$		\$	35,912,898	17.0%	
June 30, 2016	\$ 6,647,884	\$	6,647,884	\$		\$	34,536,085	19.2%	
June 30, 2015	\$ 6,686,641	\$	6,686,641	\$		\$	33,412,761	20.0%	
June 30, 2014	\$ 5,931,238	\$	5,931,238	\$		\$	32,202,276	18.4%	
June 30, 2013	\$ 4,604,149	\$	4,604,149	\$		\$	29,761,149	15.5%	
June 30, 2012	\$ 4,404,845	\$	4,404,845	\$		\$	29,353,916	15.0%	
June 30, 2011	\$ 4,497,292	\$	4,497,292	\$		\$	29,981,949	15.0%	
June 30, 2010	\$ 4,850,928	\$	4,850,928	\$		\$	32,339,522	15.0%	
June 30, 2009	\$ 4,804,377	\$	4,804,377	\$		\$	32,881,432	14.6%	
June 30, 2008	\$ 4,273,765	\$	4,273,765	\$		\$	31,081,925	13.8%	

Board of Water Supply City and County of Honolulu NOTES TO REQUIRED SUPPLEMENTARY INFORMATION REQUIRED BY GASB STATEMENT NO. 68 Fiscal Year Ended June 30, 2017

NOTE A - CHANGES OF ASSUMPTIONS

Amounts reported in the schedule of the proportionate share of the net pension liability as of the measurement period ended June 30, 2016 (fiscal year ended June 30, 2017) were significantly impacted by the following changes of actuarial assumptions:

- The investment return assumption decreased from 7.65% to 7.00%
- Mortality assumptions were modified to assume longer life expectancies as well as to reflect continuous mortality improvement

Prior to the measurement period ended June 30, 2016 (fiscal year ended June 30, 2017), there were no other factors, including the use of different assumptions that significantly affect trends reported in these schedules.

Board of Water Supply City and County of Honolulu SCHEDULE OF FUNDING PROGRESS June 30, 2017

Actuarial Valuation Date		Actuarial Value of Assets		Actuarial Accrued Liability (AAL)		Unfunded AAL (UAAL)		Funded Ratio	Covered Payroll		UAAL as a %age of Covered Payroll
	July 1, 2015	\$	50,689,000	\$	137,018,000	\$	86,329,000	37%	\$	34,218,000	252%
	July 1, 2013	\$	25,638,000	\$	122,886,000	\$	97,248,000	21%	\$	31,677,000	307%
	July 1, 2011	\$	14,557,000	\$	127,154,000	\$	112,597,000	11%	\$	29,900,000	377%

SUPPLEMENTARY INFORMATION

Board of Water Supply City and County of Honolulu SCHEDULE OF BONDS PAYABLE June 30, 2017

	Interest Rate	Bond Dated	Maturing Serially From	Call Dates (1)		Outstanding June 30, 2017	
Water System Revenue Bonds Series 2012A							
Insured Serial Bonds	3.000%	3/29/2012	7/1/2017	(2)	\$	970,000	
Insured Serial Bonds	4.000%	3/29/2012	7/1/2018	(2)		3,960,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2019	(2)		4,140,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2020	(2)		2,320,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2021	(2)		6,865,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2022	(2)		8,535,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2023	7/1/2022		3,605,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2024	7/1/2022		3,790,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2025	7/1/2022		3,980,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2026	7/1/2022		4,185,000	
Insured Serial Bonds	4.500%	3/29/2012	7/1/2027	7/1/2022		4,390,000	
Insured Serial Bonds	4.500%	3/29/2012	7/1/2028	7/1/2022		4,595,000	
Insured Serial Bonds	4.500%	3/29/2012	7/1/2029	7/1/2022		4,805,000	
Insured Serial Bonds	4.500%	3/29/2012	7/1/2030	7/1/2022		5,025,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2031	7/1/2022		5,270,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2032	7/1/2022		5,540,000	
Insured Serial Bonds	5.000%	3/29/2012	7/1/2033	7/1/2022		5,825,000	
Bifurcated Serial Bonds	2.000%	3/29/2012	7/1/2020	(2)	_	2,000,000	
					\$	79,800,000	

⁽¹⁾ Call dates indicated are optional.(2) Noncallable.

Board of Water Supply City and County of Honolulu SCHEDULE OF BONDS PAYABLE (Continued) June 30, 2017

	Interest	Bond	Maturing	Call	Outstanding		
	Rate	Dated	Serially From	Dates (1)	June 30, 2017		
Water System Revenue Bonds							
Series 2014A (Non-AMT)							
Tax-Exempt Serial Bonds							
Insured Serial Bonds	5.000%	12/9/2014	7/1/2023	(2)	\$ 5,585,000		
Insured Serial Bonds	3.000%	12/9/2014	7/1/2024	(2)	410,000		
Insured Serial Bonds	5.000%	12/9/2014	7/1/2024	(2)	5,455,000		
Insured Serial Bonds	5.000%	12/9/2014	7/1/2025	7/1/2024	6,165,000		
Insured Serial Bonds	5.000%	12/9/2014	7/1/2026	7/1/2024	6,480,000		
Insured Serial Bonds	5.000%	12/9/2014	7/1/2027	7/1/2024	6,810,000		
Insured Serial Bonds	3.000%	12/9/2014	7/1/2028	(2)	930,000		
Insured Serial Bonds	5.000%	12/9/2014	7/1/2028	7/1/2024	6,215,000		
Insured Serial Bonds	5.000%	12/9/2014	7/1/2029	7/1/2024	7,505,000		
Insured Serial Bonds	5.000%	12/9/2014	7/1/2030	7/1/2024	7,930,000		
Insured Serial Bonds	3.250%	12/9/2014	7/1/2031	(2)	4,470,000		
Insured Serial Bonds	5.000%	12/9/2014	7/1/2031	7/1/2024	3,825,000		
Insured Serial Bonds	4.000%	12/9/2014	7/1/2032	7/1/2024	6,575,000		
Insured Serial Bonds	4.000%	12/9/2014	7/1/2033	7/1/2024	6,840,000		
Insured Serial Bonds	4.000%	12/9/2014	7/1/2034	7/1/2024	8,500,000		
Insured Serial Bonds	4.000%	12/9/2014	7/1/2035	7/1/2024	8,755,000		
Insured Serial Bonds	4.000%	12/9/2014	7/1/2036	7/1/2024	9,205,000		
					101,655,000		
Water Cretem Berence Banda							
Water System Revenue Bonds Series 2014B (AMT)							
Taxable Serial Bonds							
Insured Serial Bonds	1.335%	12/9/2014	7/1/2017	(2)	7,395,000		
Insured Serial Bonds	1.744%	12/9/2014	7/1/2017	(2)	4,590,000		
Insured Serial Bonds	2.144%	12/9/2014	7/1/2019	(2)	4,680,000		
Insured Serial Bonds	2.389%	12/9/2014	7/1/2020	(2)	4,790,000		
Insured Serial Bonds	2.619%	12/9/2014	7/1/2021	(2)	2,585,000		
Insured Serial Bonds	2.755%	12/9/2014	7/1/2022	(2)	1,540,000		
Insured Serial Bonds	2.915%	12/9/2014	7/1/2023	(2)	1,585,000		
Insured Serial Bonds	3.135%	12/9/2014	7/1/2024	(2)	1,625,000		
Insured Serial Bonds	3.285%	12/9/2014	7/1/2025	(2)	1,670,000		
Insured Serial Bonds	3.385%	12/9/2014	7/1/2026	(2)	1,730,000		
Insured Serial Bonds	3.485%	12/9/2014	7/1/2027	(2)	1,785,000		
Insured Serial Bonds	3.585%	12/9/2014	7/1/2028	(2)	1,845,000		
Insured Serial Bonds	3.685%	12/9/2014	7/1/2029	(2)	1,910,000		
Insured Serial Bonds	3.760%	12/9/2014	7/1/2030	(2)	1,975,000		
Insured Serial Bonds	3.860%	12/9/2014	7/1/2031	(2)	2,045,000		
				• •	41,750,000		
					\$ 223,205,000		

⁽¹⁾ Call dates indicated are optional.

⁽²⁾ Noncallable.

Board of Water Supply City and County of Honolulu SCHEDULES OF NET REVENUE REQUIREMENT Fiscal Years Ended June 30, 2017 and 2016

		2017		2016		
REVENUES						
Water sales	\$	229,083,940	\$	234,725,808		
Interest	•	4,616,741	•	4,150,911		
Other		2,629,361		4,277,747		
Total revenues		236,330,042		243,154,466		
DEDUCTIONS						
Operating expenses		187,523,562		183,809,034		
Less: depreciation expense		(47,937,866)		(45,581,460)		
Less: allocated depreciation charges		(1,439,189)		(1,584,475)		
Total deductions		138,146,507		136,643,099		
Net revenues	\$	98,183,535	\$	106,511,367		
NET REVENUE REQUIREMENT						
Greater of:						
Aggregate debt service	\$	17,787,071	\$	17,890,708		
Required deposits						
	\$	17,787,071	\$	17,890,708		
2) Aggregate debt service	\$	17,787,071	\$	17,890,708		
Minimum required debt service ratio	X	1.20	X	1.20		
Net revenue requirement	\$	21,344,485	\$	21,468,850		
Net revenue to aggregate debt						
service ratio		5.52		5.95		