BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU 630 SOUTH BERETANIA STREET HONOLULU, HI 96843



KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chair ADAM C. WONG, Vice Chair DAVID C. HULIHEE KAPUA SPROAT BRYAN P. ANDAYA

ROSS S. SASAMURA, Ex-Officio FORD N. FUCHIGAMI, Ex-Officio

ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

ELLEN E. KITAMURA, P.E. Deputy Manager and Chief Engineer



NOTICE

The Regular Meeting of the Board of Water Supply, will convene on Monday, January 25, 2016, at 2:00 p.m. in the Board Room, Public Service Building, 630 South Beretania Street, Honolulu, Hawaii.

SPEAKER REGISTRATION

The Board of Water Supply is committed to allowing public testimony at open meetings of the Board.

Please provide your name, phone number and subject matter of testimony when registering **prior to the day of the meeting** by one of the following options:

- Emailing to <u>board@hbws.org</u>;
- 2. Faxing to 748-5079;
- 3. Calling 748-5061;
- In person 630 S. Beretania Street, Room 311

Persons wishing to testify may also register by filling out the registration form **on-site on the day of the meeting**.

Persons who have not registered to testify will be given an opportunity to speak on an item following the oral testimonies of the registered speakers.

Testimony is limited to three minutes and shall be presented by the registered speaker only.

WRITTEN TESTIMONY

Written testimony may be emailed to <u>board@hbws.org</u> or faxed to 748-5079, **prior to the day of the meeting**, for distribution at the meeting.

13 copies are requested if written testimony is submitted on-site on the day of the meeting.

If submitted, written testimonies, including the testifier's address, email address, and phone number may be posted on the Board of Water Supply website.

PHYSICALLY CHALLENGED REQUESTS

If you require special assistance, auxiliary aid and/or service to participate in this meeting (i.e. sign language interpreter; interpreter for language other than English, or wheelchair accessibility), please contact 748-5061 or email your request to board@hbws.org at least three business days prior to the meeting date.

The agenda for the January 25, 2016 Regular Meeting of the Board of Water Supply is as follows:

ITEMS REQUIRING BOARD ACTION

1. Approval of the Minutes of the Regular Meeting Held on December 21, 2015

ITEMS FOR INFORMATION

- 1. Financial Statements and Supplemental Information With Independent Auditors' Report, Fiscal Years Ended June 30, 2015 and 2014
- 2. Update on the Red Hill Fuel Facility Administrative Order on Consent and Statement of Work and the Requirements for Non-Disclosure Agreements
- 3. Financial Update for the Quarter Ended December 31, 2015
- 4. Enterprise Organizational Study Update
- 5. Board of Water Supply Water Master Plan Quarterly Update
- 6. Status Update of Groundwater Levels at All Index Stations
- 7. Water Main Repair Report for December 2015

EXECUTIVE SESSION

- 1. Approval of the Minutes of the Executive Session Meeting Held on December 21, 2015
- 2. To Consider the Evaluation of the Chief Engineer, Where Consideration of Matters Affecting Privacy Will Be Involved [HRS § 92-5(a)(2)]

MINUTES

REGULAR MEETING OF THE BOARD OF WATER SUPPLY

December 21, 2015

At 2:02 PM on December 21, 2015 in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, Board Chair Miyashiro called to order the Regular Meeting.

Present:

Duane R. Miyashiro, Chair

Adam C. Wong, Vice Chair

David C. Hulihee Ross S. Sasamura

Also Present:

Ernest Lau, Manager and Chief Engineer

Ellen Kitamura, Deputy Manager and Chief Engineer

Alex Ubiadas
Erwin Kawata
Barry Usagawa
Karen Tom
Daryl Hiromoto
Jason Takaki
Robert Morita
Mike Matsuo
Kevin Ihu
Jennifer Elflein
Tracy Burgo
Thelma Kimura
Travis Sonomura

Others Present:

Barrett Francis, Deputy Corporation Counsel

Moana Yost, Deputy Corporation Counsel

Dana Viola, Corporation Counsel Tom Myers, Brown and Caldwell

Absent:

Kapua Sproat Ford N. Fuchigami Bryan P. Andaya

Leanne Matsumoto

APPROVAL OF MINUTES

Approval of the Minutes of the Public Hearing and the Regular Meeting held on November 23, 2015

MOTION TO APPROVE Adam Wong and Ross Sasamura motioned and seconded, respectively, to approve the Minutes of the Public Hearing and the Regular Session Meeting of November 23, 2015. The motion was unanimously carried.

"December 21, 2015

PERFORMANCE METRICS UPDATE Chair and Members Board of Water Supply City and County of Honolulu Honolulu, Hawaii 96843

Chair and Members:

Subject: Board of Water Supply Performance Metrics Update

Ellen Kitamura, Deputy Manager, will present a brief update on the Board of Water Supply performance metrics to measure progress in meeting the three sustainability goals set in the strategic plan.

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

Attachment"

The foregoing was for information only.

DISCUSSION

Ellen Kitamura, Deputy Manager, gave the report.

Mr. Hulihee inquired about the hiring process being so fast since Board of Water Supply was having a hard time filling vacancies. Ms. Kitamura stated that this has been an ongoing Human Resources process of converting the personal services contract positions to permanent positions.

Ellen Kitamura recognized and thanked Jennifer Elflein, Program Administrator, Thelma Kimura and Travis Sonomura of Customer Care Division who helped her with the explanation and gathering of all the information

POSTER AND POETRY CONTEST

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843

Chair and Members:

Subject: 2016 Water Conservation Week Poster and Poetry Contest

We are pleased to announce the upcoming 38th Annual Water Conservation Week Poster Contest and 8th Annual Water Conservation Week Poetry Contest. Students in grades K-6 are eligible to enter the poster contest, and students in grades 7-12 are eligible to enter the poetry contest.

The 2016 Water Conservation Week theme, "Pure Water – There is No Substitute," is intended to educate students of the incomparable value of Oahu's drinking water supply and the importance of protecting and preserving it.

There are four poster contest categories – kindergarten, grades 1 and 2, grades 3 and 4, and grades 5 and 6. There are three poetry contest categories – grades 7 and 8, grades 9 and 10, and grades 11 and 12.

This year's contest deadline is February 24, 2016. Posters and poems may be submitted to our Communications Office or any Satellite City Hall on Oahu. The winners of both contests will be announced in April 2016, at an Awards Ceremony at Mission Memorial Auditorium. Winning and honorable mention entries will be featured in our 2017 Water Conservation Calendar, which will be available to the public at the end of 2016.

Contest information and entry forms are posted on the Board of Water Supply (BWS) website and included in the 2016 Water Conservation Calendars, which are being delivered to teachers at Oahu's public, private, and charter schools. The 2016 Water Conservation Calendar you will receive features the winning poster and poetry entries from last year's contest.

As in years past, we are seeking sponsors to help offset costs to produce the annual Water Conservation Calendar and Poetry Contests. Sponsorships allow for a win-win marketing opportunity with tax-deductible benefits for our sponsors, while providing the BWS with financial support for this key effort to protect Oahu's precious and finite water supply.

We look forward to seeing how Oahu students creatively express their thoughts on the true value of water in the 2016 contests entries. The thousands of entries submitted each year continue to demonstrate that the

Department's work to educate our island youth is effectively promoting our message of resource sustainability ~ Ka Wai Ola – Water for Life.

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E. Manager and Chief Engineer"

The foregoing was for information only.

DISCUSSION:

Tracy Burgo, Acting Information Officer, gave the report. Manager Lau commented that this was an appropriate theme for next year.

ITEM FOR INFORMATION NO. 3

"December 21, 2015

2016 MONTHLY BOARD MEETING SCHEDULE Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843

Chair and Members:

Subject:

Schedule of Monthly Board Meetings for Calendar

Year 2016

Attached for your information is the schedule of Board Meetings for the calendar year 2016.

Respectfully submitted,

/s/

ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

Attachment"

The foregoing was for information only.

DISCUSSION

Mr. Lau commented that it is appreciated when Board Members come to the Board meetings.

BOARD OF WATER SUPPLY CITY AND COUNTY OF HONOLULU

2016 BOARD MEETING SCHEDULE

Board Meetings are scheduled for the fourth Monday of each month at 2:00 p.m., in the Public Service Building (PSB) Board Room, unless otherwise noted.

January 25

February 22

March 28

April 25

May 23

June 27

July 25

August 22

September 26

October 24

November 28

December 19 (3rd Monday in December)

GROUNDWATER LEVELS

Chair and Members Board of Water Supply City and County of Honolulu Honolulu, Hawaii 96843

Chair and Members:

Subject: Status Update of Groundwater Levels at All Index

Stations

There is one aquifer index well within low groundwater status for the production week that ended on December 5, 2015. Kaimuki is under caution status. The weekly production average for the period was 127.05 million gallons per day.

The Board of Water Supply rainfall index for the month of November 2015 was 163 percent of normal, with a 5-month moving average of 172 percent. As of December 8, 2015, the Hawaii Drought Monitor shows no abnormally dry conditions for Oahu.

The National Weather Service is forecasting below normal rainfall for December 2015, driven mainly by strong El Niňo conditions. Climate models indicate El Niňo conditions may continue through the winter season, yielding possible below-normal rainfall from December 2015 through April 2016.

Most index monitor wells exhibit slightly increasing or static trends due to the increased rainfall from the months of August through November 2015.

Respectfully submitted.

/s/ ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

Attachments"

The foregoing was for information only.

DISCUSSION: Barry Usagawa, Water Resources Program Administrator, gave the report.

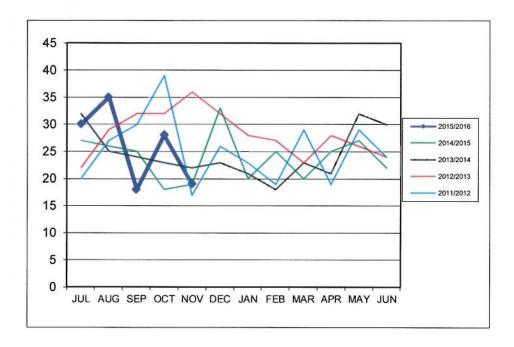
There were no comments or discussion.

WATER MAIN REPAIR REPORT

for November 2015

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2015/2016	30	35	18	28	19								130
2014/2015	27	26	25	18	19	33	20	25	20	25	27	22	287
2013/2014	32	25	24	23	22	23	21	18	23	21	32	30	294
2012/2013	22	29	32	32	36	32	28	27	23	28	26	24	339
2011/2012	20	27	30	39	17	26	23	19	29	19	29	24	302

<u>Date</u>	<u>Address</u>	Size
11/3	2507 Gardenia St.	8" C.I.
11/5	91-503 Pupu St.	8" C.I.
11/5	4 S. Kalaheo Ave.	8" P.V.C.
11/6	3025 Seaview Rise	8" C.I.
11/6	1416 Keolu Dr.	12" C.I.
11/7	85-171 McArthur St.	8" P.V.C.
11/10	1754 Kuahaka St.	8" C.I.
11/12	958 Holoholo St.	8" A.C.
11/13	1749 Royal Palm Dr.	6" C.I.
11/13	85-1652 Haleahi Rd.	12" C.I.
11/17	87-117 Manununu St.	8" C.I.
11/17	87-505 Kulaaupuni St.	8" C.I.
11/17	47-189 Waihee Rd.	12" C.I.
11/18	322 Auwaiolimu St.	4" C.I.
11/20	2312 Kanealii Ave.	8" D.I.
11/23	7153 Niumalu Lp.	8" D.I.
11/25	Keolu Dr & Hamakua Dr.	12" A.C.
11/25	2056 Mohala Wy.	4" C.I.
11/26	84-072 Makau St.	8" P.V.C.



Bold * - Pro-active Leak Repair

19.91 miles of pipelines were surveyed by the Leak Detection Team in the month of November.

DISCUSSION Daryl Hiromoto, Field Operations Division Program Administrator, gave the report. There were no comments or discussion.

MOTION TO RECESS INTO EXECUTIVE SESSION	Upon unanimously approved motion, the Board recessed into Executive Session Pursuant to [HRS §92-5(a)(4)] at 2:21 PM to Consult with the Board's Attorney on Questions and Issues Pertaining to Matters Posted for Discussion at an Executive Session					
OPEN SESSION	The Board reconvened in Open Session at 3:17 PM					
MOTION TO ADJOURN	There being no further business Chair Miyashiro at 3:18 PM called for a motion to adjourn the Open Session. Adam Wong so moved; seconder by David Hulihee and unanimously carried.					
	Respectfully submitted,					
	Lorraine H LEE					
	APPROVED:					
	DUANE R. MIYASHIRO Chair of the Board					

Date

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU 630 SOUTH BERETANIA STREET HONOLULU, HI 96843



January 25, 2016

KIRK CALDWELL, MAYOR

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ELLEN E. KITAMURA, P.E. Deputy Manager and Chief Engineer

Chairman and Members Board of Water Supply City and County of Honolulu Honolulu, Hawaii 96843

Chairman and Members:

Subject:

Financial Statements and Supplementary Information with

Independent Auditors' Report, Fiscal Years Ended June 30, 2015

and 2014

Our auditors, Accuity LLP, have completed the audit of the financial statements and federal awards of the Board of Water Supply and issued an unqualified opinion. They did not identify any deficiencies in internal controls that would be considered a material weakness.

Attached is a copy of the financial statements of the Board of Water Supply and the report thereon by Accuity LLP, covering the results of their examination of the accounts and financial status of the Board of Water Supply for the years ended June 30, 2015 and 2014, as required under Article VII, Section 7-108 of the Revised Charter.

Donn Nakamura and Matthew Oda from Accuity LLP will present highlights from the auditors' report.

Respectfully submitted,

ERNEST Y. W. LAU, P.E.

Manager and Chief Engineer

Attachments



Board of Water SupplyCity and County of Honolulu

Financial Statements and Supplementary Information June 30, 2015 and 2014

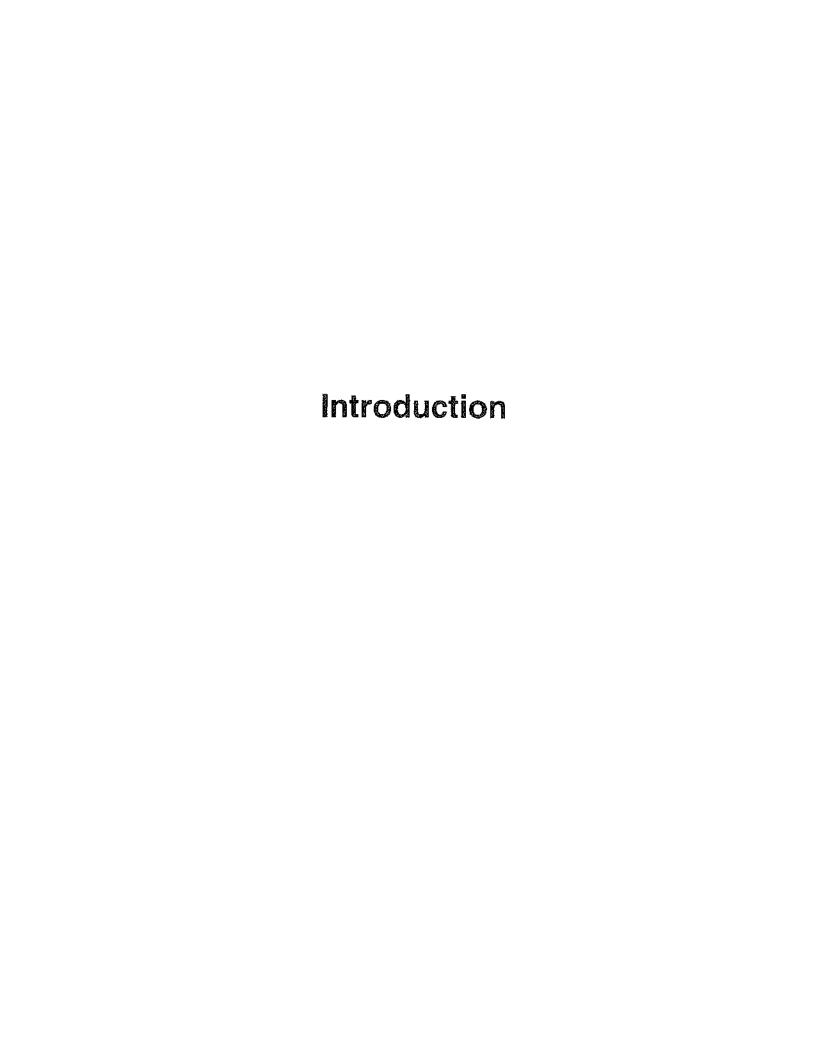
Quality

Integrity

Insight

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The Board of Water Supply of the City and County of Honolulu (the "BWS") is pleased to present its Annual Financial Report for the fiscal year ended June 30, 2015. This introduction provides an 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 of the BWS is in conformity with accounting principles generally accepted in the United States of America, accompanied by the independent auditors' report.

HISTORY OF THE BOARD OF WATER SUPPLY

The Honolulu Board of Water Supply 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 (the "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 2015, 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 nearly 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 the BWS's 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 agency.

The BWS consists of the following 11 divisions: Capital Projects Division, Communications 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's 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.

ACCOMPLISHMENTS

The BWS's 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 27,030 chemical tests and 9,475 microbiological tests on samples collected from its water sources, distribution systems, and treatment facilities to ensure all water served is safe to drink. Chemical tests performed this fiscal year include monitoring the BWS's wells near the Navy Red Hill Bulk Fuel Facility in response to a fuel leak reported by the Navy in January 2014. Since that date, the BWS has been working with the U.S. Environmental Protection Agency and the State Department of Health, and conducting its own studies to assess the impact the leak may have on the groundwater aquifer.
- In June 2015, the BWS completed its annual production and delivery of the Consumer Confidence Report ("CCR"), also known as the Water Quality Report, to all the BWS's customers. The report provides information on the quality of the water delivered from the BWS's 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.
- The BWS celebrated the 25th anniversary of the Halawa Xeriscape Garden Open House and Unthirsty Plant Sale on August 2, 2014. The event was attended by more than 2,000 people who learned about water conservation. The event received a 2015 Koa Award from the Public Relations Society of America, Hawaii Chapter.
- The BWS staff held 24 outdoor water conservation classes at the Halawa Xeriscape Garden.
 These classes focused on reducing water use through efficient landscaping.
- The BWS sponsored its 37th annual Water Conservation Week Poster Contest and the 7th annual Water Conservation Week Poetry Contest, receiving more than 1,400 posters and 275 poems from more than 50 Oahu schools, focused on the theme "Water Matters Conserve It." All winning entries will be featured in the 2016 Water Conservation Calendar scheduled for distribution in December 2015.
- Potable water demand continues its downward trend approximately 9% from 1990 to 2015 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's water system.
- The North Shore, Ewa and Central Oahu Watershed Management Plans ("WMP") have been completed with the North Shore and Ewa WMP expected for adoption in fiscal year 2016. 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 WMP guides 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
the BWS's 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's Honouliuli Water Recycling Facility averaged approximately eight
million gallons per day. The BWS is seeking State of Hawaii land to construct an elevated recycled
water reservoir, which will increase recycled water use in Ewa.

Operational Sustainability (Dependable)

- In February 2015, the BWS conducted a customer satisfaction survey with the assistance of Ward Research. The purpose of the survey was to establish baseline measures of customer satisfaction and other factors related to how the public perceives the BWS. Overall findings indicate that the majority of Oahu residents are strongly satisfied with the BWS and have a high level of trust in the BWS.
- The BWS developed and piloted a New Hire Onboarding Checklist for supervisors to supplement the
 orientation process and nurture the success of new employees. Onboarding gives new employees a
 clear understanding of the BWS's mission and their role on the BWS's team.
- The BWS is in its third year of a three-year comprehensive Water Master Plan to provide a 30-year capital improvement program for the capacity expansion, and repair and replacement of aging water infrastructure. The Water Master Plan applies new technology and best practices in planning and engineering tools in a system-wide condition assessment of all water system assets (pumps, pipelines, reservoirs and treatment plants) and will guide the update of the BWS's financial plan to ensure sufficient funding for infrastructure needs, while keeping water rates affordable.
- In response to Federal Executive Order 13636, the BWS has increased its focus on improving critical
 infrastructure security and resilience. The BWS has recruited an Information Systems Security
 Officer ("ISSO") to lead this focus, and has initiated activity on establishing a cybersecurity program.
 Preliminary assessments by the ISSO have been completed, and an in-depth assessment and
 strategic risk review analysis by an expert cyber security firm is underway.
- The BWS's nationally recognized Geographic Information System ("GIS") database and applications
 continue to be upgraded for best in class industry functionality and performance. This system gives
 users access to GIS layers and updated imagery, and integrates map service sharing with other
 City departments. Use of aerial imagery to leverage geospatial capabilities was piloted, resulting in
 activities planned for fiscal year 2016 to gather and incorporate more imageries, increasing the value
 of the GIS.
- The BWS continues to upgrade its computerized maintenance management system. Testing of the new mobile solution to be used in the field and the overall upgrade is anticipated to be completed in mid-fiscal year 2016.
- The BWS's staff responded to 294 main breaks, or about 14 breaks per 100 miles of pipeline.
- The BWS's staff helped protect Oahu's water resources and prevent damage to the BWS's infrastructure by handling 7,708 One Call locate requests and providing in-field support for 889 water line leaks and breaks. The BWS's leak detection team proactively looked for and identified leaks in the BWS's system and the used the data collected to schedule planned repairs to the water system. The BWS's staff proactively investigated 20,857 meters to ensure accurate and timely billing and assisted 3,718 customers with concerns about bills reflecting high water consumption.

- The BWS's staff assisted 152,116 customers: 142,693 (93.8%) by phone; 4,693 (3.1%) in-person; 2,764 (1.8%) via online forms; 1,692 (1.1%) through email; and 274 (0.2%) by mail and fax. The average speed of answer for phone calls was 90 seconds and electronic inquiries were responded to within one business day.
- In preparation for the upcoming construction of the Nuuanu Reservoir No. 4 Dam Improvements, the BWS elected to conduct a public fishing day, in December 2014, to help remove any fish from the reservoir before it was dredged and the water level lowered. An overwhelming 1,375 people submitted applications to participate and 160 lucky applicants were given fishing slots.

Financial Sustainability (Affordable)

- More than \$15 million in construction contracts and more than \$3.2 million in professional services contracts were awarded by the Capital Projects Division as of June 15, 2015. 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 \$9 million in water main construction projects were awarded by the Capital Projects Division. Once completed, these projects will improve the water systems in the Nuuanu, Waianae and Wilhelmina Rise areas. Design contracts were awarded for water main replacements in Kailua, Kamehameha Heights and Molliili.
 - Water Facility Improvement Program Identification and improvements of deficiencies to the appearance and integrity of the BWS's aging water facilities continues. These facilities include water reservoirs, wells and booster stations, and administrative offices belonging to the agency. During this fiscal year, new construction contracts were awarded to repair, renovate, repaint and/or reroof the Beretania Public Service Building, Microbiological Laboratory and Parking Lot, Kalihi Pump Station, Makaha 242 Reservoirs Nos. 1 & 2, Mauna Olu 530 Nonpotable Reservoir, Pearl City 865 Reservoir, Waialae Iki Booster No.1, Waiau 285 Reservoir, Waiau 550 Reservoir, Wailupe Line Booster, and Waimalu 217 Reservoir. New design contracts were awarded for facility improvements at Kalihi Corporation Yard and installation of 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 the Aina Koa Booster I, Hoaeae Wells, Kaamilo Wells, Kunia Wells III, Manoa Well II, Maunawili Booster, Pacific Heights Booster, and Waipio Heights Wells II. Design contracts were awarded for renovation work at Halawa Wells and Booster No. 2, Makiki 180 Reservoir, Mililani Wells II, Moanalua Wells, Pearl City Wells I, Pearl City Wells II, Punanani Wells, Waialae Iki 180 Reservoir, and Waialae Iki Well.

- In November 2014, the BWS received a low-interest loan through the Drinking Water State Revolving Funds administered by the State Department of Health. The loan was used to refinance outstanding bonds and resulted in more than \$6 million of interest savings. The BWS issued \$144,985,000 in water system revenue bonds on December 9, 2014. The Series 2014A and Series 2014B bonds were sold at a value of 3.36%. Combined with the savings from the bond sale, the BWS realized savings of more than \$19 million in interest or nearly \$1 million per year for the next 23 years. These savings will be reinvested into the BWS's water system infrastructure, which will result in better reliability and will help offset some of its future water service improvement projects. The bond ratings from Moody's Investors Service and Fitch Ratings are Aa2 and AA+, respectively.
- The BWS's staff received mail-in payments via lockbox, which continued to be the most popular method of payment for the BWS's customers, with 41% using the service, down 7% from last fiscal year. Automatic bill payments account for 30% of the BWS's total bill collections, a 5% increase from last fiscal year. Credit card payments account for 11% of payments, a 2% increase over last fiscal year. Of these credit card payments, 8% were completed online, while 3% were processed by phone or over the counter. Walk-in customers and payments made at satellite city hall locations remain steady at 3% and 4%, respectively.



Report of Independent Auditors

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 years ended June 30, 2015 and 2014, and related notes to the financial statements, which collectively comprise the BWS's basic financial statements as listed in the index.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our 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 auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider 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.



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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, 2015 and 2014, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 9 through 16 and schedules of proportionate share of the net pension liability, contributions, and funding progress on pages 48 through 50 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 ("GASB") who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information 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 supplementary information 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 them.

Emphasis of Matter

As discussed in Note 2, 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, 2015, the changes in its financial position, or its cash flows for the year 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.

Change in Accounting Principle

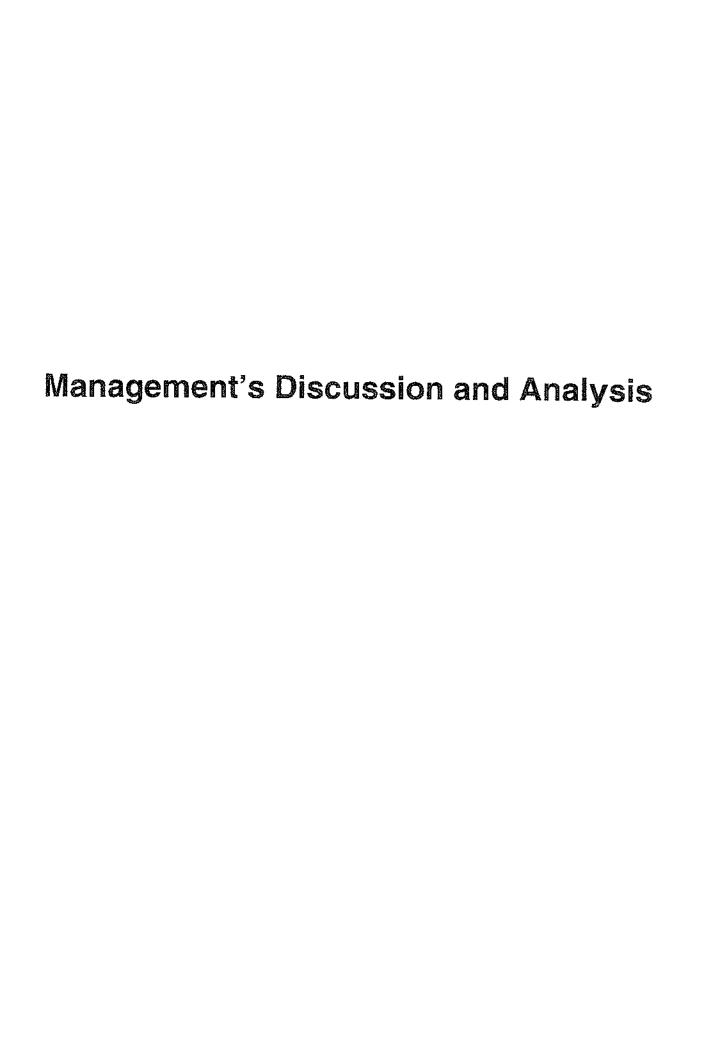
As described in Note 15 to the financial statements, in 2015 the BWS adopted GASB Statement Nos. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27, and 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68. Our opinion is not modified with respect to this matter.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 28, 2015 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 to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the BWS's internal control over financial reporting and compliance.

Honolulu, Hawaii December 28, 2015

Accenty LLP



This section presents the management's discussion and analysis of the BWS's financial condition and activities for the fiscal year ended June 30, 2015. This information should be read in conjunction with the financial statements.

Financial Highlights

Implementation of GASB Statements Nos. 68 and 71

During fiscal year 2015, the BWS implemented GASB Statement Nos. 68, Accounting and Financial Reporting for Pensions — an amendment of GASB Statement No. 27, and 71, Pension Transition for Contributions Made Subsequent to the Measurement Date — an amendment of GASB Statement No. 68. The adoption of Statement Nos. 68 and 71 has resulted in a prior period adjustment of the BWS's beginning net position as of July 1, 2014 to reflect the reporting of net pension liability in accordance with the provisions of Statement No. 68 and deferred outflows of resources related to pensions in accordance with Statement No. 71. Retroactive implementation of GASB Statement No. 68 was not deemed practical by management due to the cost and timing required to obtain and analyze the activity covering fiscal year 2014.

Net position as of July 1, 2014 decreased by \$62.4 million to \$1.0 billion, reflecting the retrospective effect of adoption.

Net pension liability of \$73.1 million, deferred outflows of resources related to pensions of \$16.8 million, and deferred inflows of resources related to pensions of \$8.6 million were reported as of June 30, 2015. For the fiscal year ended June 30, 2015, the BWS recognized pension expense of \$9.7 million. Refer to Note 12 for more information regarding the BWS's pension.

The BWS implemented the fourth of five scheduled rate increases in July 2014 to meet the rising costs of delivering water to customers and to continue its infrastructure repair and replacement programs. Water rates increased by approximately 9.65%, which equates to more than \$5 of monthly water charges for an average single-family residential customer effective July 1, 2014.

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 \$42.3 million in fiscal year 2015 compared to the \$20.5 million increase in fiscal year 2014.
- Total assets were \$1.5 billion, which exceeded liabilities by \$1.0 billion at June 30, 2015 and 2014.
- The BWS's unrestricted current assets at June 30, 2015 were 4.5 times its related current liabilities compared to 3.1 times at June 30, 2014.
- The BWS's debt to equity ratio was 31.0% and 28.7% at June 30, 2015 and 2014, 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 change 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, 2015 and 2014. The statements of revenues, expenses and change 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.

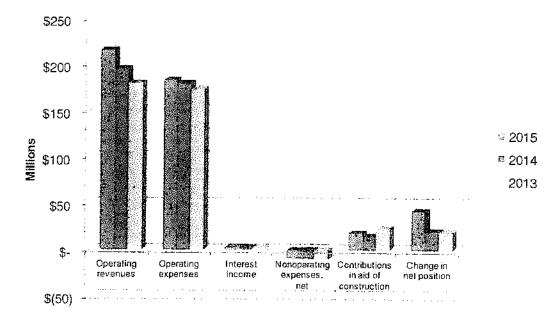
The notes to the financial statements provide required disclosures and other information necessary for the fair presentation of the financial statements. The notes detail information about the BWS's significant accounting policies, significant account balances, related party transactions, employee benefit plans, commitments, contingencies, and other significant events. Required supplementary information on postemployment benefits other than pensions and supplementary information for outstanding bonds and net revenue requirements are also included.

Results of Operations

Condensed Statements of Revenues, Expenses and Change in Net Position

	2015	2014 (in thousands)	2013	% Change
Operating revenues	\$ 216,578	\$ 194,943	\$ 180,505	11.1%
Operating expenses				
Administrative and general	58,385	48,589	43,409	20.2%
Depreciation	45,286	45,941	41,775	-1.4%
Power and pumping	35,478	35,578	39,248	-0.3%
Other operating expenses	44,384	49,472	49,060	-10.3%
Total operating expenses	183,533	179,580	173,492	2.2%
Operating income	33,045	15,363	7,013	
Nonoperating revenues (expenses)			-	
Interest income	3,088	2,149	2,529	43.7%
Others	(12,199)	(11,853)	(13,196)	2.9%
Total nonoperating expenses	(9,111)	(9,704)	(10,667)	-6.1%
Contributions in aid of construction	18,350	14,817	23,527	23.8%
Change in net position	\$ 42,284	\$ 20,476	S 19,873	

Statements of Revenues, Expenses and Change in Net Position



The increase in net position for the year ended June 30, 2015 was \$42.3 million, compared to an increase of \$20.5 million for the year ended June 30, 2014.

Operating revenues for the year ended June 30, 2015 were \$216.6 million, an increase of \$21.6 million or 11.1% from the year ended June 30, 2014 revenues, due to water rate increases that were implemented on July 1, 2014. Operating revenues for the year ended June 30, 2014 were \$194.9 million, an increase of \$14.4 million or 8.0% from the year ended June 30, 2013 revenues, due to water rate increases that were implemented on July 1, 2013.

Total operating expenses increased by \$4.0 million and \$6.1 million in fiscal years 2015 and 2014, respectively. Factors contributing to this change are explained below:

- Administrative and general expenses increased by \$9.8 million in fiscal year 2015, mainly due to an increase in salaries, retirement health fund benefits, pension and supplies. In fiscal year 2014, administrative and general expenses increased by \$5.2 million in fiscal year 2014, mainly due to an increase in salaries, retirement health fund benefits, and other contractual services.
- Power and pumping expenses decreased slightly by \$0.1 million in fiscal year 2015. Power and pumping expenses decreased \$3.7 million during fiscal year 2014. This was primarily due to a decrease in electricity costs.
- Other operating expenses decreased \$5.1 million during fiscal year 2015, mainly due to a decrease
 in water treatment maintenance and customer accounting and collection. Other operating expenses
 increased slightly by \$0.4 million during fiscal year 2014.

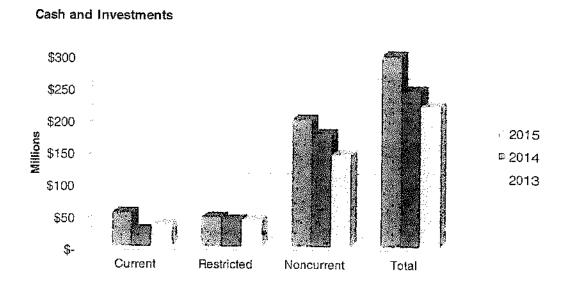
For the year ended June 30, 2015, non-operating expenses decreased slightly by \$0.6 million. Nonoperating expenses decreased by \$1.0 million for the year ended June 30, 2014, due primarily to an increase in fair value on investments.

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 \$18.4 million in fiscal year 2015 compared to \$14.8 million in fiscal year 2014. The increase in contributions in aid of \$3.5 million was due to an increase in projects completed by governmental funds of \$2.6 million, a decrease in the Water Service Facilities Charge revenue ("WSFC") of \$0.3 million offset by an increase in private development contributions of \$1.2 million. During the year ended June 30, 2015, the major developments completed were Ocean Pointe Area IVE and the Kapolei Parkway Urban Core 5, Kamaaha Avenue to Kamokila Boulevard.

Financial Condition

Condensed Statements of Net Position

		2015	(in t	2014 thousands)	2013	% Change
Current assets						
Cash and cash equivalents	\$	22,518	\$	14,892	\$ 20,404	51.2%
Investments		30,455		10,756	14,908	183.1%
Other current assets Restricted assets		37,684		28,690	27,166	31,3%
Cash and cash equivalents		16 500		10.000	45.407	
investments		16,502		12,623	15,197	30.7%
Due from broker		29,559		28,775	26,686	2.7%
Investments		199,370		176.985	1,330 143,688	0.0%
Capital assets, net		1,112,393		1,120,478	1,138,464	12.6% -0.7%
Other postemployment benefits asset		9,217		7.041	1,130,404	-0.7% 30.9%
Other assets		54		480	509	-88.7%
Total assets		1,457,752		1,400,720	 1,388,352	4.1%
Deferred outflows of resources	_	33,428		8,760	 9,299	281.6%
Total assets and deferred						
outflows of resources	\$	1,491,180	\$	1,409,480	\$ 1,397,651	5.8%
Current liabilities, payable from current assets Other liabilities and payables	\$	20,368	\$	17,629	\$ 19,065	15.5%
from restricted assets		87,087		48,586	47,107	79.2%
Bonds payable, noncurrent		254,646		275,659	284,349	-7.6%
Net pension liability	_	73,142		<u> </u>	 	100.0%
Total liabilities		435,243		341,874	 350,521	27.3%
Deferred inflows of resources		8,489		-	-	100.0%
Net position						
Net investment in capital assets		819,139		832,296	843,770	-1.6%
Restricted for capital activity and debt service		23,610		22,492	26,635	5.0%
Unrestricted		204,699		212,818	176,725	-3.8%
Total net position		1,047,448		1,067,606	 1,047,130	-1.9%
Total liabilities, deferred inflows						
of resources and net position	\$	1,491,180	\$,409,480	\$ 1,397,651	5.8%



The BWS's unrestricted current assets were 4.5, 3.1 and 3.3 times its related current liabilities, payable from current assets, as of June 30, 2015, 2014 and 2013, respectively. The ratio increase at June 30, 2015 was due to an increase in cash, short-term investments, and customer receivables. The ratio decrease at June 30, 2014 was due to the purchase of long-term investments.

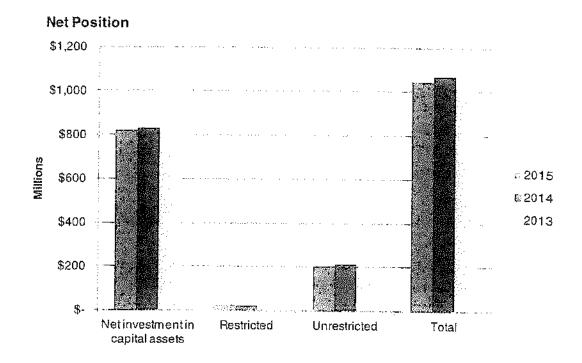
As of June 30, 2015 and 2014, capital assets, net decreased by \$8.1 million and \$18.0 million, respectively. The decreases in fiscal years 2015 and 2014 were due to construction work in progress charge-offs and depreciation charges exceeding acquisitions.

As of June 30, 2015, current liabilities payable from current assets increased by \$2.7 million or 15.5%. This increase is primarily due to the timing of payments on the BWS's trade accounts payable.

Other liabilities and payables from restricted assets increased by \$38.5 million during fiscal year 2015. The increase is primarily due to an increase in projects utilizing financing from the state revolving fund loan program.

The BWS's noncurrent bonds payable decreased by \$21.0 million and \$8.7 million as of June 30, 2015 and 2014, respectively. The decrease at June 30, 2015 was due to a partial refunding of revenue bond Series 2006A and 2006B. The decrease at June 30, 2014 represents the current bonds payable due within one year.

Net position increased by \$42.3 million and \$20.5 million as of June 30, 2015 and 2014, respectively. The increases were primarily due to an increase in operating revenue and contributions in aid of construction.



Capital Assets and Long-Term Debt

During fiscal years 2015 and 2014, the BWS capitalized \$53.5 million and \$82.3 million, respectively, to its utility plant in service. Major assets added in fiscal year 2015 were Ewa Shaft GAC Treatment Facility, \$19.8 million; Woodlawn Drive: 8" Main, \$4.1 million; Honouliuli 228' Reservoir No. 3, \$3.0 million; King Street Reconstruction between River and Bethel Streets, \$2.2 million; Honouliuli 228' Reservoir No. 3 Box Culvert and Site Improvements, \$2.1 million; Wireless Communication System, \$1.8 million; and Repair of Barber's Point 215' Reservoirs No. 1, 2 and 3, \$1.6 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 31.0%, 28.7% and 29.9% for fiscal years 2015, 2014 and 2013, respectively.

The BWS issued \$144,985,000 of Board of Water Supply Water System Revenue Bonds, Series 2014A and 2014B bonds on December 9, 2014.

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

Rate Covenant

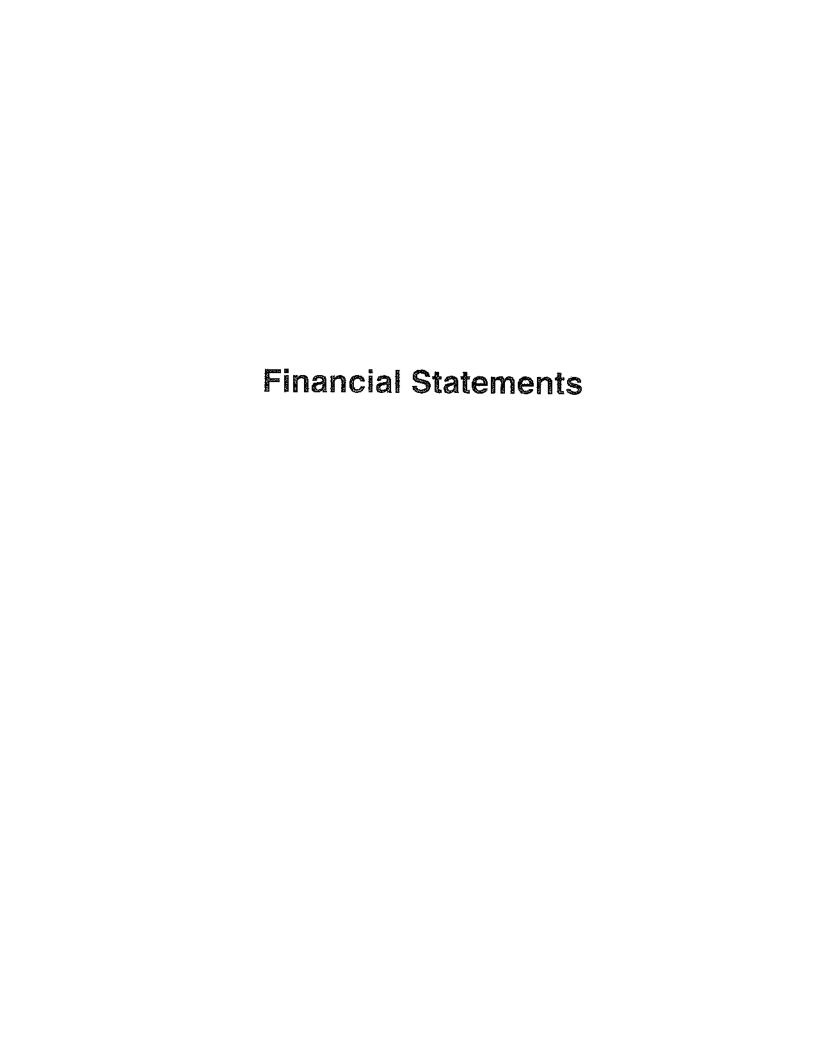
The BWS is required under its bond indenture, among other things, to fix, charge and collect such rates and other charges in each fiscal year to meet the net revenue requirement for such fiscal year. The net revenue requirement is the greater of 1) the sum of the aggregate debt service and all deposits 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, 2015 and 2014.

Currently Known Facts, Decisions or Conditions

Effective July 1, 2015, the BWS increased its water rates by approximately 9.65%.

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, 2015 and 2014

	2015	2014
Assets		
Currents assets		
Cash and cash equivalents	\$ 22,518,020	\$ 14,892,121
Investments	30,454,513	10,756,252
Interest receivable	755,973	550,505
Customer receivables		
Billed, less allowance for uncollectible accounts of		
\$2,459,554 and \$2,304,718 in 2015 and 2014, respectively Unbilled	15,294,688	11,419,964
Other receivables, less allowance for uncollectible	11,519,361	9,143,735
accounts of \$510,868 in 2015 and 2014	2,135,259	1 000 100
Materials and supplies	7,510,010	1,902,199 5,288,572
Prepaid expenses	468,848	384,572
Total current assets	90,656,672	54,337,920
Restricted assets		0.,007,020
Cash and cash equivalents	16,502,337	12,623,052
Investments	29,558,634	28,774,663
Total restricted assets	46,060,971	41,397,715
Investments	199,369,752	176,985,326
Capital assets		110,000,020
Infrastructure	1,450,128,280	1,425,668,553
Building and improvements	162,673,567	157,657,127
Equipment and machinery	304,512,242	282,710,681
	1,917,314,089	1,866,036,361
Less: Accumulated depreciation	900,416,227	855,482,565
	1,016,897,862	1,010,553,796
Land	32,373,064	32,373,064
Construction work in progress	63,122,418	77,550,957
Net capital assets	1,112,393,344	1,120,477,817
Other postemployment benefits asset	9,216,616	7,041,217
Other assets	54,120	479,500
Total other assets	9,270,736	7,520,717
Total assets	1,457,751,475	1,400,719,495
Deferred outflows of resources		
Deferred loss on refunding	16,655,036	8,759,961
Difference between expected and actual experience	930,101	•
Changes in proportionate share	8,597,062	~
Contributions subsequent to measurement date	7,245,510	
Total deferred outflows of resources	33,427,709	8,759,961
Total assets and deferred outflows of resources	\$ 1,491,179,184	\$ 1,409,479,456

The accompanying notes are an integral part of these financial statements.

Board of Water Supply City and County of Honolulu Statements of Net Position June 30, 2015 and 2014

		2015		2014
Liabilities Current liabilities Payable from current assets				
Accounts payable Contracts payable, including retainages Accrued vacation, current Other	\$	9,376,063 4,948,876 2,761,628	\$	8,901,932 5,187,199 2,666,607
Total payable from current assets		3,281,623		873,142
Payable from restricted assets	 ,	20,368,190		17,628,880
Contracts payable, including retainages Accrued interest payable Bonds payable, current Notes payable, current	***************************************	2,621,828 5,269,156 7,810,000 3,748,230		2,914,254 6,596,473 7,660,000 1,735,067
Total payable from restricted assets		19,449,214	<u></u>	18,905,794
Total current liabilities		39,817,404		36,534,674
Other liabilities Customer advances Accrued vacation, noncurrent Accrued workers' compensation Notes payable, noncurrent Accrued arbitrage rebate Other		1,693,846 3,946,481 2,571,877 58,264,967 65,888 1,094,266		929,732 4,004,681 2,051,526 21,283,365 65,888 1,344,987
Total other liabilities		67,637,325		29,680,179
Bonds payable, noncurrent Net pension liability	2	254,646,203 73,141,824	<u></u>	275,659,041
Total liabilities		135,242,756		341,873,894
Deferred inflows of resources Difference between projected and actual earnings on pension plan Total deferred inflows of resources		8,488,509 8,488,509	<u> </u>	
Commitments and contingencies				······································
Net Position Net investment in capital assets Restricted for capital activity and debt service Unrestricted		19,139,210 23,609,757 204,698,952		832,295,372 22,491,921 212,818,269
Total net position		47,447,919	1	,067,605,562
Total liabilities, deferred inflows of resources and net position		91,179,184		409,479,456

The accompanying notes are an integral part of these financial statements.

Board of Water Supply City and County of Honolulu Statements of Payonus Expanse

Statements of Revenues, Expenses and Change in Net Position Years Ended June 30, 2015 and 2014

	2015	2014
Operating revenues Water sales Other, principally contract and service fees	\$ 212,486,218 4,091,962	\$ 191,593,726 3,348,996
Total operating revenues	216,578,180	194,942,722
Operating expenses Administrative and general Depreciation Power and pumping Transmission and distribution Maintenance Customers' accounting and collection Water reclamation Central administrative services expense fees	58,384,569 45,286,091 35,478,158 16,942,891 12,338,299 6,566,458 5,203,162 3,300,000	48,589,194 45,941,002 35,577,725 16,164,213 14,307,033 9,790,050 5,846,107 3,300,000
Source of supply	33,468	64,064
Total operating expenses Operating income	183,533,096	179,579,388
Nonoperating revenues (expenses) Interest income Interest expense, net of interest capitalized and amortization of bond premiums of \$2,023,874	33,045,084	15,363,334 2,148,814
and \$1,844,213 in 2015 and 2014, respectively Loss from disposal of capital assets Realized and unrealized losses on investments Other	(11,957,255) (305,516) (566,277) 629,544	(11,698,335) (394,052) (188,266) 427,978
Total nonoperating expenses	(9,111,339)	(9,703,861)
Contributions in aid of construction Change in net position	18,350,178 42,283,923	14,816,558 20,476,031
Net position Beginning of year Prior period adjustment for change in accounting principle	1,067,605,562 (62,441,566)	1,047,129,531
Beginning of year, as restated	1,005,163,996	1,047,129,531
End of year	\$ 1,047,447,919	\$ 1,067,605,562

Board of Water Supply City and County of Honolulu Statements of Cash Flows Years Ended June 30, 2015 and 2014

		2015		2014
Cash flows from operating activities Cash received from customers Cash payments to suppliers for goods and services Cash payments to employees for services Other income, net	\$	212,362,274 (86,387,085) (50,218,007)	\$	187,886,180 (95,925,067) (44,333,099)
Net cash provided by operating activities		629,544 76,386,726		427,978
Cash flows from capital and related financing activities Acquisition and construction of capital assets,				48,055,992
net of contributions in aid of construction Customer payments for capital projects Principal paid on bonds Interest paid on bonds		(30,600,185) 10,422,675 (34,060,911)		(17,731,993) 7,320,479 (7,335,000)
Proceeds from notes payable Interest paid on notes payable Principal paid on notes payable		(8,980,725) 41,648,722 (106,923) (2,653,957)		(13,011,177) 3,428,392 (100,506) (1,608,357)
Net cash used in capital and related financing activities		(24,331,304)	- , , , , , , , , , , , , , , , , , , ,	(29,038,162)
Cash flows from investing activities Purchase of investments Proceeds from maturities of investments Interest on investments Net cash used in investing activities		(194,511,840) 151,078,905 2,882,697 (40,550,238)		(162,896,293) 133,643,657 2,148,859 (27,103,777)
Net increase (decrease) in cash and cash equivalents		11,505,184		(8,085,947)
Cash and cash equivalents Beginning of year End of year (including \$16,502,337 and \$12,623,052		27,515,173		35,601,120
in restricted assets in 2015 and 2014, respectively)	\$	39,020,357	\$	27,515,173

Board of Water Supply City and County of Honolulu Statements of Cash Flows Years Ended June 30, 2015 and 2014

		2015		2014
Reconciliation of operating income to				
net cash provided by operating activities				
Operating income	\$	33,045,084	\$	15,363,334
Depreciation		46,826,484	Ψ	47,515,750
Net pension expense		2,416,094		-17,010,700
Provision for doubtful accounts		480,866		827,185
Other revenues		629,544		427,978
Changes in assets and liabilities		020,0 : 1		421,310
Customer receivables		(6,250,350)		(3,083,381)
Materials and supplies		(2,221,438)		1,171,687
Other receivables		(233,060)		591,897
Prepaid expenses		(2,259,675)		(7,705,146)
Accounts and contracts payable		474,131		(1,888,997)
Customer advances		764,114		35,607
Accrued vacation		36,821		164,931
Accrued workers' compensation		520,351		(254,296)
Other liabilities		2,157,760		(5,110,557)
Net cash provided by operating activities	\$	76,386,726	\$	48,055,992
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	\$	7,927,503	S	7,496,079
Amortization of other costs	Ψ	25,417	Ψ	29,150
Amortization of bond premium, net		(2,829,599)		(1,029,960)
Amortization of deferred loss on refunding		7,516,530		538,647
Bond proceeds deposited directly with escrow agent		1,510,500		336,047
for refunding of previously issued debt		183,212,091		
Bond proceeds used for bond issuance costs		835,581		-
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1. 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.

2. Summary of Significant Accounting Policies

Financial Statement Presentation, Measurement Focus and Basis of Accounting

The BWS is a component unit of the City (the "primary government"). The accompanying financial statements present only the activities of the BWS and do not include other organizations, activities and functions of the City.

The accounting policies of the BWS conform to U.S. generally accepted accounting principles as applicable to enterprise activities of governmental units as promulgated by the Governmental Accounting Standards Board ("GASB"). The accompanying financial statements are presented using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

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 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.

Use of Estimates

The preparation of the financial statements in conformity 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 and liabilities 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 postretirement benefits. Actual results could differ from those estimates.

Regulation and Water Rates

Article VII of the Revised Charter of the City and County of Honolulu ("City Charter") 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.

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.

Investments

Investments are stated at fair value, which are based on quoted market prices. The cost of securities sold is generally determined by the weighted average method.

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 historical write-off experience. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.

Materials and Supplies

Materials and supplies are stated at the lower of weighted average cost or market. The weighted average cost method approximates the first-in, first-out method. The cost of materials and supplies are recorded as expenses when consumed rather than when purchased.

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 revenue bonds and other notes payable.
- The renewal and replacement account 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.

Capital Assets

Capital assets include those assets in excess of \$5,000 for buildings, structures, 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 years ended June 30, 2015 and 2014 totaled \$13,981,000 and \$13,543,000, respectively. Capitalized interest costs approximated \$716,000 and \$814,000 for the years ended June 30, 2015 and 2014, 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

Pumping plant

Water treatment plant

Transmission and distribution plant

General plant

20 to 50 years

20 to 50 years

13½ to 50 years

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.

Bond Issue Prepaid Insurance Costs, Original Issue Discount or Premium, and Deferred Loss on Refundings

Bond issue costs are expensed when incurred, except for prepaid insurance costs related to bond issuance, which are amortized over the life of the respective issue on a straight-line basis. Original issue discount or premium and deferred loss on refunding are also amortized using the straight-line method over the terms of the respective issues. Original issue discount or premium are added to or offset against bonds payable in the statements of net position.

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.

As of June 30, 2015 and 2014, accumulated sick leave aggregated approximately \$18,310,000 and \$18,240,000, 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.

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.

Net Position

Net position comprises the various net earnings from operating and nonoperating revenues, expenses, and contributions in aid of construction. 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 and enabling legislation. Unrestricted consists of the remaining balance not included in the above categories.

Revenue Recognition

The BWS's policy is to bill customers on a cyclical monthly basis for water usage. 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 period.

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.

Pension Expense

During fiscal year 2015, BWS implemented GASB Statement Nos. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27, and 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68, as described in Note 15. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, as of and for the year ended June 30, 2015, information about the fiduciary net position of the Employees' Retirement System of the State of Hawaii ("ERS") and additions to/deductions from the ERS's fiduciary net position have been determined on the same basis as they are reported by the ERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with benefit terms. Investments are reported at their fair value.

Retroactive implementation of GASB Statement No. 68 was not deemed practical due to the cost and timing required to obtain and analyze the activity covering fiscal year 2014. As such, the BWS's fiscal year 2014 financial statements are presented in accordance with GASB Statement No. 27. The BWS's contributions to the ERS are based upon actuarial computations and include current service costs and amortization of prior service costs. The BWS's policy is to fund pension costs accrued.

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.

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	Limits (Millions)	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

New Accounting Pronouncements

The GASB issued Statement No. 68, which became effective for reporting periods beginning after June 15, 2014. The Statement revises and establishes new financial reporting requirements for most governments that provide their employees with pension benefits. Management has adopted the new standard as presented in the BWS's financial statements as of and for the year ended June 30, 2015.

The GASB issued Statement No. 71, which became effective for reporting periods beginning after June 15, 2014. The Statement amends and addresses an issue regarding application of the transition provisions of Statement No. 68. Management has adopted the new standard as presented in the BWS's financial statements.

The GASB issued Statement No. 72, Fair Value Measurement and Application. The Statement will enhance comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques. The Statement will also enhance fair value application guidance and disclosure. The requirements of this Statement are effective for reporting periods beginning after June 15, 2015. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

The GASB issued Statement No. 73, Accounting and Financial Reporting for Pensions and Related Assets that are not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68. The Statement establishes accounting and financial reporting requirements by employers and governmental nonemployer contributing entities for pensions that are not within the scope of Statement No. 68. The requirements of this Statement are effective for reporting periods beginning after June 15, 2015, except those provisions that

address employers and governmental nonemployer contributing entities for pensions that are not within the scope of Statement No. 68, which are effective for fiscal years beginning after June 15, 2016. Earlier adoption is encouraged. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

The GASB issued Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other than Pension Plans. The Statement replaces GASB Statement Nos. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans. The Statement addresses the financial reports of defined benefit other post-employment benefit plans that are administered through trusts that meet specified criteria. The requirements of this Statement are effective for reporting periods beginning after June 15, 2016. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

The GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The Statement replaces GASB Statement Nos. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, and 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans. The Statement will require governments to report a liability on the face of the financial statements for the other post-employment benefits that they provide. 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.

The GASB issued Statement No. 76, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments. The Statement reduces the generally accepted accounting principles ("GAAP") to two categories of authoritative GAAP. The first category of authoritative GAAP consists of GASB Statements of Governmental Accounting Standards. The second category includes GASB Implementation Guides, GASB Technical Bulletins, and guidance from the American Institute of Certified Public Accountants that is cleared by the GASB. The requirements of this Statement are effective for reporting periods beginning after June 15, 2015. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

The GASB issued Statement No. 77, *Tax Abatement Disclosures*. The Statement establishes financial reporting standards for tax abatement agreements entered into by state and local governments. The requirements of this Statement are effective for reporting periods beginning after December 15, 2015. Management has determined that this Statement will not have an effect on BWS's financial statements.

The GASB issued Statement No. 78, Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans. The Statement amends the scope and applicability of Statement No. 68 to exclude certain pensions provided to employees of state or local governmental employers through a cost-sharing multiple-employer defined benefit pension. The requirements of this Statement are effective for reporting periods beginning after December 15, 2015. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

The GASB issued Statement No. 79, Certain External Investment Pools and Pool Participants. The Statement addresses how certain state and local government external investment pools – and participants in those pools – may measure and report their investments. The requirements of this Statement are effective for reporting periods beginning after June 15, 2015, except for certain

provisions, which are effective for reporting periods beginning after December 15, 2015. This Statement is not expected to have a material effect on the BWS's financial statements.

3. Cash and Investments

Cash deposited with the City is maintained in separate accounts by the Department of Budget and Fiscal Services of the City. 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, 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 government-sponsored enterprises securities. Investments and securities issued by U.S. government-sponsored enterprises are recorded at fair value based on quoted market prices.

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.

Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. U.S. government securities or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk exposure. Because the BWS invests primarily in obligations of the U.S. government or U.S. government-sponsored enterprises, it is not exposed to significant credit risk.

Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty to a transaction, the BWS will not be able to recover the value of investments or collateral securities that are in the possession of an outside party. All investments are registered in the name of the BWS and are held in the possession of a broker-dealer firm. At June 30, 2015, approximately \$4,839,000 in cash and cash equivalents and all investments were held by a broker-dealer firm. Cash, cash equivalents and investments held by the broker-dealer firm are insured up to \$500,000, of which up to \$250,000 may be uninvested cash, by the Securities Investor Protection Corporation. Excess coverage purchased from a private insurer by the broker-dealer firm is designed to provide additional protection up to an aggregate loss limit of \$1 billion for all customer claims.

Concentration of Credit Risk

Concentration of credit risk is the risk of a loss attributed to the magnitude of a government's investment in a single issuer. 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-sponsored enterprises.

The historical cost and estimated fair value of investments at June 30, 2015 and 2014 consisted of the following:

	20	15	2014			
	Cost	Fair Value	Cost	Fair Value		
U.S. Treasury obligations U.S. Government agencies	\$ 190,329,657 69,807,266	\$ 190,187,641 69,195,258	\$ 162,171,248 54,905,414	\$ 161,975,315 54,540,926		
	\$ 260,136,923	\$ 259,382,899	\$ 217,076,662	\$ 216,516,241		

At June 30, 2015, each investment had a credit quality rating of Aaa. The credit exposure as a percentage of total investments was as follows:

	Percent of Total	Fair Value
U.S. Treasury obligations	73%	\$ 190,187,641
U.S. Government agencies		
Federal National Mortgage Association	15%	38,242,180
Federal Home Loan Mortgage Corporation	7%	17,085,774
Federal Home Loan Bank	3%	8,500,384
Federal Farm Credit Bank	1%	2,870,045
Federal National Mortgage Association Discount Note	1%	2,496,875
	100%	\$ 259,382,899

The fair value of investments at June 30, 2015 by contractual maturity is shown below:

	Investment Maturities (In Years)					
	Fair Value	Less Than 1	1 – 5			
U.S. Treasury obligations U.S. Government agencies	\$ 190,187,641 69,195,258	\$ 15,449,320 18,161,976	\$ 174,738,321 51,033,282			
	\$ 259,382,899	\$ 33,611,296	\$ 225,771,603			

4. Restricted Assets

At June 30, 2015 and 2014, the BWS's restricted assets were comprised of cash and cash equivalents, debt securities, and due from broker receivables and were held for the following purposes:

	2015	2014
Construction, renewals and replacements Debt service	\$ 2,876,622 43,184,349	\$ 2,853,195 38,544,520
	\$ 46,060,971	\$ 41,397,715

5. Capital Assets

Capital assets activity during the years ended June 30, 2015 and 2014 were as follows:

	Balance July 1, 2014		Additions	Transfers	F	Retirements	Balance June 30, 2015
Depreciable assets Infrastructure Buildings and improvements Equipment and machinery	\$ 1,425.668.553 157,657,127.00 282,710,681	\$	8.014,579 - 3.495,970	\$ 17,236,120 5,074,540 19,687,362	\$	(790,972) (58,100) (1,381,771)	\$ 1.450,128,280 162,673,567 304,512,242
Total depreciable assets Less: Accumulated depreciation Total depreciable assets, net Land	1,866,036,361 (855,482,565) 1,010,553,796 32,373,064	_	11,510,549 (46,826,484) (35,315,935)	 41,998,022		(2,230,843) 1,892,822 (338,021)	1,917,314,089 (900,416,227) 1,016,897,862 32,373,064
Construction work in progress Net capital assets	77,550,957 \$ 1,120,477,817	\$	47,663,230 12,347,295	\$ (62,091,769) (20,093,747)	\$	(338,021)	52,373,064 63,122,418 5 1,112,393,344
	Balance July 1, 2013		Additions	Transfers	R	etirements	Balance June 30, 2014
Depreciable assets Infrastructure Buildings and improvements Equipment and machinery		ss	7,121,252 1,659,990	\$ Transfers 53,288,910 5,801,630 14,438,174	\$ \$	(591,813) (342,367) (241,870)	\$ 1,425,668,553 157,657,127
Infrastructure Buildings and improvements Equipment and machinery Total depreciable assets Less: Accumulated depreciation	July 1, 2013 \$ 1,365,850,204 152,197,864 266,854,387 1,764,902,455 (808,738,703)	\$ 	7,121,252 1,659,990 8,781,242 (47,515,750)	\$ 53,288,910 5,801,630 14,438,174 73,528,714		(591,813) (342,357) (241,870) (1,176,050) 771,888	\$ 1,425,668,553 157,657,127 282,710,681 1,866,036,361 (855,482,565)
Infrastructure Buildings and improvements Equipment and machinery Total depreciable assets	July 1, 2013 \$ 1,365,850,204 152,197,864 266,854,387 1,784,902,455	\$ 	7,121,252 1,659,990 B,781,242	\$ 53,288,910 5,801,630 14,438,174		(591,813) (342,367) (241,870) (1,176,050)	\$ 1,425,668,553 157,657,127 282,710,681 1,866,036,361

Depreciation charges allocated to various functions for the years ended June 30, 2015 and 2014 totaled \$1,540,393 and \$1,574,748, respectively.

6. Bonds Payable

At June 30, 2015 and 2014, bonds payable consisted of the following:

	2015	2014
Water System Revenue Bonds, Series 2006A, annual principal due commencing July 1, 2012, ranging from \$595,000 to \$11,965,000 through July 1, 2016, with interest ranging from 4.00% to 5.00%. These bonds were partially refunded by Series 2014A bonds.	\$ 5,475,000	\$ 155,730,000
Water System Revenue Bonds, Series 2006B, annual principal due ranging from \$2,335,000 to \$4,455,000 through July 1, 2016, with interest ranging from 5.00% to 5.25%. These bonds were partially refunded by Series 2014B bonds.	7,035,000	29,105,000
Water System Revenue Bonds, Series 2012A, annual principal due ranging from \$890,000 to \$8,535,000 through July 1, 2033, with interest ranging from 3.00% to 5.00%.	81,655,000	82,545,000
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 ranging from 3,00% to 5,00%.	101,655,000	-
Water System Revenue Bonds, Series 2014B, annual principal due ranging from \$785,000 to \$7,395,000 through July 1, 2031, with interest ranging from .41% to 3.86%.	43,330,000	•
Water System Revenue Bonds, Series 2004, annual principal due of \$2,465,000 with interest of 4.00%. Paid off July 1, 2014.		2,465,000
	239,150,000	269,845,000
Add: Unamortized premium	23,306,203	13,474,041
	262,456,203	283,319,041
Less: Current portion	(7,810,000)	(7,660,000)
Noncurrent portion	\$ 254,646,203	\$ 275,659,041

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.

Bonds payable activity during 2015 and 2014, were as follows:

	Balance July 1, 2014	Additions	Reductions	Balance June 30, 2015	Due Within One Year
Water System Revenue Bonds					
Series 2004	\$ 2,465,000	\$ -	\$ (2,465,000)	s -	s .
Series 2006A	155,730,000		(150,255,000)	5,475,000	2,680,000.00
Series 2006B	29,105,000	-	(22,070,000)	7,035,000	3,430,000
Series 2012A	82,545,000	-	(890,000)	81,655,000	915,000
Series 2014A	-	101,655,000	(101,655,000	313,000
Series 2014B		43,330,000		43,330,000	785,000
	\$ 269,845,000	\$ 144,985,000	\$ (175,680,000)		
		\$ 771,000,B00	0 (170,000,000)	\$ 239,150,000	\$ 7,810,000
	Balance July 1, 2013	Additions	Reductions	Balance June 30, 2014	Due Within One Year
Water System Revenue Bonds					
Series 2004	\$ 4,830,000	\$ -	\$ (2,365,000)	\$ 2,465,000	\$ 2,465,000
Series 2006A	156,745,000		(1,015,000)	155,730,000	\$ 2,465,000 1,050,000
Series 2006B	32,200,000	-	(3,095,000)	29,105,000	3,255,000
Series 2012A	83,405,000		(860,000)	82,545,000	890.000
	\$ 277,180,000	\$ -	\$ (7,335,000)	\$ 269,845,000	\$ 7,660,000

At June 30, 2015, future bond principal and interest payments are as follows:

	Principal Interest		Total		
Year Ending June 30,					
2016	\$ 7,810,000	\$	9,914,000	\$	17,724,000
2017	8,135,000		9,589,000		17,724,000
2018	8,365,000		9,358,000		17,723,000
2019	8,550,000		9,175,000		17,725,000
2020	8,820,000		8,902,000		17,722,000
2021–2025	50,690,000		38,893,000		89,583,000
2026–2030	65,000,000		25,484,000		90,484,000
2031–2035	63,820,000		9,816,000		73,636,000
2036–2037	 17,960,000		727,000		18,687,000
Total	\$ 239,150,000	\$	121,858,000	\$	361,008,000

In February 2001, the BWS created an irrevocable trust with an escrow agent to retire \$32,460,000 of the BWS's outstanding 1992 general obligation water bonds. The escrow agent will pay all future debt service payments on the 1992 Series bonds out of the irrevocable trust. Consequently, the 1992 Series bonds were considered to be defeased and the liability for the bonds was removed from the BWS's financial statements in 2001. At June 30, 2015 and 2014, the outstanding 1992 Series defeased bonds amounted to \$3,135,000 and \$6,095,000, respectively.

In July 2006, the BWS issued \$213,805,000 in water system revenue bonds which consisted of \$165,195,000 of Series 2006A and \$48,610,000 of Series 2006B bonds. A portion of the proceeds of the issuance were used to refund, on a current basis, all of the BWS's outstanding Series 2002 bonds and to advance refund a portion of the outstanding 2001 Series and 2004 Series bonds. Consequently, a portion of the 2001 Series and 2004 Series bonds were considered to be defeased and were removed from the BWS's financial statements in 2007.

In March 2012, the BWS issued \$85,195,000 in Series 2012A water system revenue bonds. The proceeds of the issuance were used to refund, on a current basis, all of the BWS's outstanding Series 2001 bonds and to advance refund a portion of the outstanding 2004 Series and 2006A Series bonds. Consequently, a portion of the 2004 Series and 2006A Series bonds were considered defeased and were removed from the BWS's financial statements in 2012. This refunding was undertaken to reduce total debt service payments by approximately \$9,512,000 and resulted in an economic gain of approximately \$7,152,000.

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 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, 2015 and 2014, the outstanding 2004 Series defeased bonds totaled \$0 and \$78,665,000, respectively. The outstanding 2006A Series defeased bonds totaled \$156,680,000 and \$7,475,000 as of June 30, 2015 and 2014, respectively. At June 30, 2015, the outstanding 2006B Series defeased bonds totaled \$18,815,000.

The debt refunding that occurred during 2007, 2012 and 2015 resulted in a difference between the reacquisition price and the net carrying amount of the old debt of approximately \$2,464,000, \$8,238,000 and \$15,412,000, respectively. These differences reported in the accompanying financial statements as a deferred outflow of resources are being charged to operations through the year 2031 using the straight-line method.

7. Notes Payable

At June 30, 2015 and 2014, notes payable consisted of the following:

		2015		2014
Notes payable to State Department of Health				
Note payable in semi-annual installments of approximately				
\$60,100, including interest at .10%, due June 2025	\$	1,196,442	S	1,315,432
Non-interest bearing note payable in semi-annual	·		-	.,0,0,,02
installments of approximately \$75,000, due September 2025		1,574,015		1,723,921
Note payable in semi-annual installments of approximately): ==11 = :
\$104,400, including interest at .31%, due November 2025		2,156,283		2,358,006
Note payable in semi-annual installments of approximately				, , ,
\$317,000, including interest at .10%, due February 2026		6,933,516		7,539,271
Note payable in semi-annual installments of approximately				
\$10,200, including interest at .10%, due January 2027		233,832		254,045
Note payable in semi-annual installments of approximately				
\$70,200, including interest at .01%, due August 2027		1,754,481		1,894,750
Note payable in semi-annual installments of approximately				
\$32,500, including interest at .01%, due March 2028		844,631		909,557
Note payable in semi-annual installments of approximately				
\$49,700, including interest at .01%, due March 2028		1,291,512		1,390,790
Subtotal		15,984,712		17,385,772

	0	045	
		:015	2014
Subtotal carried forward	15	,984,712	 17,385,772
Note payable in semi-annual installments of approximately			
\$36,100, including interest at .36%, due June 2028		914,742	983,446
Note payable in semi-annual installments of approximately			•
\$30,400, including interest at 1.0%, due April 2033		998,868	1,049,360
Note payable in semi-annual installments of approximately			
\$60,000, including interest at 1.0%, due April 2033	1,	,969,220	2,011,468
Note payable in semi-annual installments of approximately			
\$30,000, including interest at .50%, due April 2033	1,	,285,846	-
Note payable in semi-annual installments of approximately \$29,200, including interest at 1.0%, due January 2034		004 000	
Non-interest bearing note payable in semi-annual		981,939	_
installments of approximately \$676,900, due April 2034	25	723,964	
Note payable in semi-annual installments of approximately	20,	120,504	-
\$21,600, including interest at .50%, due May 2034		783,384	_
Note payable in semi-annual installments of approximately		, 50,55	•
\$56,000, including interest at 1.0%, due May 2034	3,	270,250	-
Note payable in semi-annual installments of approximately	·		
\$68,000, including interest at .50%, due May 2034	4,	675,470	-
Note payable in semi-annual installments of approximately			
\$26,400, including interest at .50%, due May 2034	1,	220,307	-
Non-interest bearing note payable in semi-annual			
installments of approximately \$70,000, due November 2034	2,	725,436	-
Notes payable to other lenders			
Note payable in monthly installments of approximately			
\$15,700, including interest at 5%, due September 2025	1,	479,059	 1,588,386
	62,	013,197	23,018,432
Less: Current portion	3,	748,230	 1,735,067
Noncurrent portion	\$ 58,	264,967	\$ 21,283,365

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

At June 30, 2015, future principal and interest payments for notes payable are as follows:

	Principal	Interest		Total
Year Ending June 30,				
2016	\$ 3,748,000	\$ 196,000	\$	3,944,000
2017	3,796,000	183,000	,	3,979,000
2018	3,808,000	170,000		3,978,000
2019	3,822,000	157,000		3,979,000
2020	3,835,000	143,000		3,978,000
2021-2025	19,396,000	496,000		19,892,000
2026-2030	13,157,000	192,000		13,349,000
2031-2035	 10,451,000	 46,000		10,497,000
Total	\$ 62,013,000	\$ 1,583,000	\$	63,596,000

8. Other Long-Term Liabilities

The following is a summary of changes in other long-term liabilities for the years ended June 30, 2015 and 2014:

	ئاد	Balance ily 1, 2014 Restated)	Additions	Re	eductions	Ju	Balance ine 30, 2015	ı	Due Within One Year
Customer advances Accrued vacation Accrued workers' compensation Accrued arbitrage rebate liability Notes payable Net pension liability Other		929,732 6,671,288 2,051,526 65,888 23,018,432 69,992,291 1,344,987	\$ 764,114 2,798,449 1,471,201 41,648,721 9,080,769 141,911	((2,761,628) (950,850) (2,653,956) (5,931,236) (392,632)	\$	1,693,846 6,708,109 2,571,877 65,888 62,013,197 73,141,824 1,094,266	\$	2,761,628 - - 3,748,230
	\$ 1	04,074,144	\$ 55,905,165	\$ (1	2,690,302)	\$	147,289,007	\$	6.509,858
		Balance ly 1, 2013	Additions	Re	ductions		Balance ne 30, 2014		Due Within One Year
Customer advances Accrued vacation Accrued workers' compensation Other postemployment benefits Accrued arbitrage rebate liability Notes payable Other	\$	894,125 6,506,357 2,305,822 460,450 48,873 21,198,397 2,134,881	\$ 35,607 2,831,538 887,485 8,981,000 17,015 3,428,392 350,432	(2,686,607) 1,141,781) 9,441,450) - 1,608,357) 1,140,326)	\$	929,732 6,671,288 2,051,526 - 65,888 23,018,432 1,344,987	\$	2,666,607 - 1,735,067
	\$ 3	33,548.905	\$ 16,531,469	\$ (1	5,998,521)	\$	34,081,853	S	4,401,674

9. Net Position

The BWS's net position consisted of the following as of June 30, 2015 and 2014:

	2015	2014
Net investment in capital assets		
Capital assets, net	\$ 1,112,393,344	\$ 1,120,477,817
Deferred loss on refunding	16,655,036	8,759,961
Less: Noncurrent portion of water system		
revenue bonds payable	(254,646,203)	(275,659,041)
Less: Noncurrent portion of notes payable	(58,264,967)	(21,283,365)
Unspent debt proceeds	3,002,000	
Total net investment in capital assets	819,139,210	832,295,372
Restricted for capital activity and debt service		
Restricted cash and cash equivalents	16,502,337	12,623,052
Restricted investments	29,558,634	28,774,663
Less: Unspent debt proceeds	(3,002,000)	-
Less: Contracts payable, including retainages	(2,621,828)	(2,914,254)
Less: Accrued interest payable	(5,269,156)	(6,596,473)
Less: Current portion of bonds payable	(7,810,000)	(7,660,000)
Less: Current portion of notes payable	(3,748,230)	(1,735,067)
Total restricted for capital activity and debt service	23,609,757	22,491,921
Unrestricted	204,698,952	212,818,269
Total net position	\$ 1,047,447,919	\$ 1,067,605,562

10. Leases

The BWS 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.

The BWS also 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.

The future minimum rental payments and sublease income from these operating leases at June 30, 2015 were as follows:

	Future Minimal Rental Payments	Less Sublease Income	et Minimum iture Rental (Income) Expense
Year Ending June 30,			
2016	\$ 159,000	\$ 218,000	\$ (59,000)
2017	159,000	194,000	(35,000)
2018	159,000	123,000	36,000
2019	159,000	100,000	59,000
2020	159,000	100,000	59,000
2021-2025	793,000	500,000	293,000
2026-2030	-	500,000	(500,000)
2031-2035	 	 100,000	 (100,000)
	\$ 1,588,000	\$ 1,835,000	\$ (247,000)

11. 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 \$3,257,000 and \$2,433,000 for the years ended June 30, 2015 and 2014, 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 incurred during the years ended June 30, 2015 and 2014 totaled \$3,300,000.

Amounts due from the City totaled approximately \$153,000 and \$36,000, as of June 30, 2015 and 2014, respectively, and are included in other receivables.

The BWS has entered into agreements with the City for joint capital projects. Unexpended advanced funds totaled approximately \$826,000 and \$862,000 as of June 30, 2015 and 2014, respectively, and are included in other liabilities.

12. Employee Benefit Plans

Defined Benefit Pension Plan

Plan Description

All eligible employees of the BWS are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan administered by the ERS. Benefit terms, eligibility and contribution requirements are established by HRS Chapter 88 and can be amended through legislation. The ERS issues a publicly available financial report that can be obtained at ERS's website: http://ers.ehawaii.gov/.

Benefits Provided

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. The benefit multiplier decreased by 0.25% for new hybrid and contributory class members hired after June 30, 2012. 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.
- <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. 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.

Ten years of credited service is required for ordinary death benefits. For ordinary death benefits, the surviving spouse/reciprocal beneficiary (until remarriage/reentry 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.
- Disability Benefits 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 designated 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 to the surviving spouse/reciprocal beneficiary 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.

Hybrid 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 62. General employees with 30 years of credited service are eligible to retire at age 55.
- <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.
- <u>Death Benefits</u> For service-connected deaths, the designated 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 to the surviving spouse/reciprocal beneficiary 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.

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 plus a percentage multiplied by 120% 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

Contributions are established by HRS Chapter 88 and may be amended through legislation. The employer rate is set by statute based on the recommendations of the ERS actuary resulting from an experience study conducted every five years. Prior to July 1, 2005, the funding method used to calculate the total employer contribution requirement was the Entry Age Normal Actuarial Cost Method. Under this method, employer contributions to the ERS were comprised of normal cost plus level annual payments required to liquidate the unfunded actuarial liability over the remaining period of 29 years from July 1, 2000. Effective July 1, 2008, employer contribution rates are a fixed percentage of compensation, generally 15.0% for most covered employees. The BWS's contributions to the ERS for the years ended June 30, 2015, 2014 and 2013, were approximately \$5,484,000, \$5,162,000 and \$4,604,000, respectively, which represented approximately 16.4%, 16.0% and 15.5% of the BWS's covered payroll for the fiscal years ended June 30, 2015, 2014 and 2013, 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. Hybrid class members hired prior 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, 2015, BWS reported a liability of approximately \$73,142,000 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2014, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The BWS's proportion of the net pension liability was based on a projection of the BWS's long-term share of contributions to the pension plan relative to the

projected contributions of all participating entities, actuarially determined. At June 30, 2014, BWS's proportion was 0.91%, which was an increase of 0.13% from its proportion measured as of June 30, 2013.

There were no changes in benefit terms that affected the measurement of the total pension liability since the prior measurement date. There were no changes between the measurement date, June 30, 2014, and the reporting date, June 30, 2015, that are expected to have a significant effect on the proportionate share of the net pension liability.

For the year ended June 30, 2015, BWS recognized pension expense of approximately \$9,662,000. At June 30, 2015, the BWS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience Changes in proportion and differences between employer	\$ 930,101	\$ •
contributions and proportionate share of contributions Net difference between projected and actual investment	8,597,062	-
earnings on pension plan investments	-	8,488,509
Contributions subsequent to the measurement date	 7,245,510	 -
Total deferred inflows and outflows of resources	\$ 16,772,673	\$ 8,488,509

The \$7,246,000 of deferred outflows of resources related to pensions resulting from the BWS's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2016. Other amounts reported as deferred outflows of resources and deferred (inflows) of resources will be recognized in pension expense as follows:

Year Ending June 30,	
2016	\$ (123,184)
2017	(123,184)
2018	(123,184)
2019	(123,184)
2020	1,531,390
Total	\$ 1,038,654

Actuarial Assumptions

The total pension liability as of the June 30, 2014 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement.

Inflation	3.00%
Payroll growth rate	3.50%
Investment rate of return	7.75% per year, compounded annual including inflation

The same rates were applied to all periods. There were no changes to ad hoc postemployment benefits including COLA. Pre-retirement mortality rates are based on the RP-2000 tables.

The actuarial assumptions used in the June 30, 2014 valuation 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 "top down approach" of the Bespoke Client-Constrained Simulation-based Optimization Model (a statistical technique known as "re-sampling with replacement" that directly keys in on specific plan-level risk factors as stipulated by the ERS Board) 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 arithmetic real rates of return for each major asset class are summarized in the following table:

	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	30.0%	8.50%
International equity	26.0	9.00%
Total fixed-income	20.0	3.10%
Real estate	7.0 *	8.46%
Private equity	7.0 *	11.45%
Real return	5.0 *	6.10%
Covered calls	5.0_	7.65%
Total	100%	

^{*} The real estate, private equity and real return targets will be the percentage actually invested up to 7.0%, 7.0% and 5.0%, respectively, of the total fund. Changes in the real estate, private equity and real return targets will be offset by an equal percentage in the large cap domestic equity target.

Discount Rate

The discount rate used to measure the total pension liability was 7.75%. 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 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 Plan investments was applied to all periods of projected benefit payments to determine the total pension liability. There has been no change to the discount rate since the prior measurement date.

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 using the discount rate of 7.75%, 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 (6.75%) or 1-percentage point higher (8.75%) than the current rate:

	1% Decrease (6.75%)	Discount Rate (7.75%)	1% Increase
BWS's proportionate share of the net pension liability	\$ 92,705,833	\$ 73,141,824	\$ (8.75%) 53,577,814

Plan Fiduciary Net Position

The pension plan's fiduciary net position is determined on the same basis used by the pension plan. The ERS financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred, and revenues are recorded in the accounting period in which they are earned and become measurable. Employer and member contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Investment purchases and sales are recorded as of their trade date. Administrative expenses are financed exclusively with investment income.

There were no significant changes after the report measurement date. 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.

Payable to the Pension Plan

At June 30, 2015, the amount payable to the ERS was approximately \$2,407,000.

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 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 ten years of credited service.

For employees hired after June 30, 1996 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 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 ten 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 ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities or funding excess over a period not to exceed thirty years.

For the fiscal years ended June 30, 2015, 2014 and 2013, 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:

		2015	2014	2013
Annual required contribution Interest on net OPEB obligation Adjustment to annual required contribution	\$	8,528,000 493,000 (446,000)	\$ 8,977,000 32,000 (28,000)	\$ 8,674,000 54,000 (47,000)
Annual OPEB cost		8,575,000	8,981,000	8,681,000
Contributions made	<u></u>	(10,750,399)	 (16,482,667)	 (8,232,550)
Change in net OPEB asset (obligation)		2,175,399	7,501,667	(448,450)
Net OPEB asset (obligation) Beginning of year		7,041,217	 (460,450)	 (12,000)
End of year	\$	9,216,616	\$ 7,041,217	\$ (460,450)
Percentage of annual OPEB cost contributed		125%	 184%	 95%

The funded status of the plan as of the most recent valuation date is as follows:

Actuarial Valuation Date	Actuarial Value of Assets	Lia	Actuarial Accrued ability ("AAL")	Actuarial AAL ("UAAL")	Funded Ratio	Covered Payroll	Percentage of Covered Payroll
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%

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. The schedule of funding progress, presented as

required supplementary information following the notes to the financial statements, presents multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

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.

In the July 1, 2013 actuarial valuation, the entry age normal actuarial cost method was used. The actuarial assumptions included a discount rate of 7.0%, projected salary increases 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 10 years. The unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll amounts 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.

13. Commitments

Commitments, primarily for capital improvements, approximated \$185,570,000 and \$156,680,000 as of June 30, 2015 and 2014, respectively. Such amounts are to be funded by operating revenues, contributed capital, cash and investments on hand.

14. 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. All claims are reported to and managed by the City's Workers' Compensation Division (the "Division"). The BWS provides reserves for claims not covered by insurance that in the opinion of the Division 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. The estimated liability is presented at its net present value using a discount rate of 3%.

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.

Arbitrage

The BWS is required to annually calculate rebates to the U.S. Treasury on revenue bond issues. In accordance with the requirements of Section 148 of the Internal Revenue Code of 1986, as amended, rebates are calculated by bond series based on the amounts by which the cumulative amount of investment income exceeds the amount that would have been earned had funds been invested at the bond yield. As of June 30, 2015 and 2014, the arbitrage rebate and yield restriction liability totaled approximately \$66,000.

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.

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.

15. Change in Accounting Principle

During fiscal year, 2015, BWS implemented GASB Statement Nos. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27, and 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68. Statement No. 68 establishes standards of accounting and financial reporting for defined benefit pensions and defined contribution pensions provided to the employees of state and local government employers through pension plans that are administered through trusts or equivalent arrangements in which:

- Contributions from employers and non-employer contributing entities to the pension plan and earnings on those contributions are irrevocable.
- Pension plan assets are dedicated to providing pensions to plan members in accordance with the benefit terns.
- Pension plan assets are legally protected from the creditors of employer, nonemployee contributing entities, and the pension plan administrator. If the plan is a defined benefit pension plan, plan assets also are legally protected from creditors of the plan members.

Statement No. 68 replaces the requirements of Statement No. 27, Accounting for Pensions by State and Local Governmental Employers, as well as the requirements of Statement No. 50, Pension Disclosures, as they relate to pensions that are provided through pension plans administered as trusts or equivalent arrangements that meet certain criteria. The requirements of Statements Nos. 27 and 50 remain applicable for pensions that are not covered by the scope of this Statement.

Statement No. 71 is required to be implemented simultaneously with Statement No. 68 and amends the requirement related to certain pension contributions made to defined benefit pension plans prior to implementation of Statement No. 68 by employers and non-employer contributing entities.

As a result of implementing GASB Statement Nos. 68 and 71, beginning net position as of July 1, 2014 was reduced by approximately \$62,442,000, to recognize BWS's portion of the ERS pension plan net pension liability and deferred outflows of resources related to contributions subsequent to the measurement date.

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 (Unaudited)

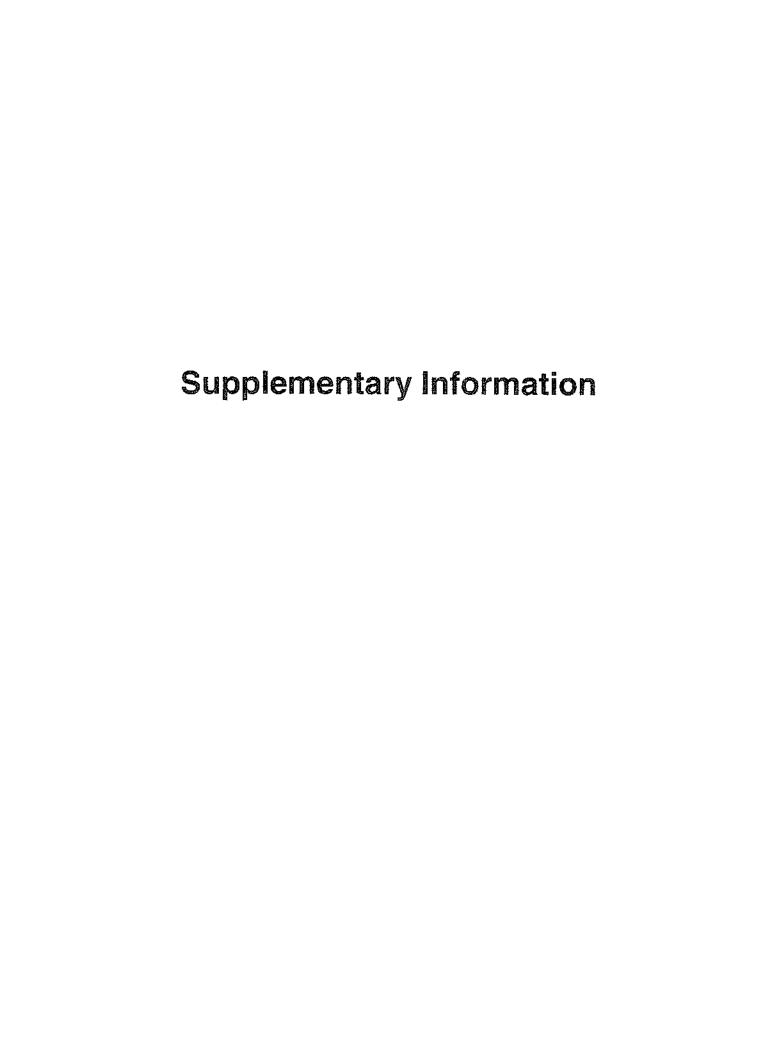
	Proportion of the Net Pension Liability	Proportionate Share of the Net Pension Liability		Covered Payroll		Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
Year Ended June 30,							•
2015	0.91232473%	\$	73,141,824	\$	32,259,458	227%	63.92%
2014 2006–2013 not available.	0.78362008%		69,992,291		29,765,600	235%	57.96%

Board of Water Supply City and County of Honolulu Schedule of Contributions Last Ten Fiscal Years (Unaudited)

	Statutorily Required ontribution	Contributions in Relation to the Statutorily Required Contributions		Contribution Excess (Deficiency)		Covered Payroll	Contributions as a Percentage of Covered Payroll
Year Ended June 30,							
2014	\$ 5,161,513	\$	5,931,238	\$	769,725	\$ 32,259,458	18.4%
2013 2005–2012 not available.	4,604,149		4,604,149		-	29,765,600	15.5%

Board of Water Supply City and County of Honolulu Schedule of Funding Progress June 30, 2015 (Unaudited)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability ("AAL") (b)	Unfunded Actuarial Accrued Liability ("UAAL") (b-a)	Funded Ratio (a/b)	Annual Covered Payroll (c)	UAAL as a Percentage of Annual Covered Payroll ((b-a)/c)	
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%	
July 1, 2009	5,244,000	143,333,000	138,089,000	4%	33,104,000	417%	



Board of Water Supply City and County of Honolulu Schedule of Bonds Payable June 30, 2015

			Maturing	Call	
	Interest	Bond	Serially	Dates	Outstanding
Description of Bonds Payable	Rate	Dated	From	(A)	June 30, 2015
Water System Revenue Bonds Series 2006A (Non-AMT)					
Insured Serial Bonds	4.250%	7/7/2006	7/1/2015	(B)	\$ 2,680,000
Insured Serial Bonds	4.250%	7/7/2006	7/1/2016	(B)	2,795,000
				, ,	5,475,000
Water System Revenue Bonds					-,,
Series 2006B (AMT)					
Insured Serial Bonds	5.000%	7/7/2006	7/1/2015	(B)	3,430,000
Insured Serial Bonds	5.000%	7/7/2006	7/1/2016	(B)	3,605,000
				ι- 7	7,035,000
Water System Revenue Bonds					7,000,000
Series 2012A (Non-AMT)					
Insured Serial Bonds	3.000%	3/29/2012	7/1/2015	/D\	045.000
Insured Serial Bonds	3.000%	3/29/2012	7/1/2015	(B) (B)	915,000
Insured Serial Bonds	3.000%	3/29/2012	7/1/2017	(B) (B)	940,000 970,000
Insured Serial Bonds	4.000%	3/29/2012	7/1/2018	(B)	3,960,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2019	(B)	4,140,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2020	(B)	2,320,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2021	(B)	6,865,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2022	(B)	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	(B)	2,000,000
					81,655,000

⁽A) Call dates indicated are optional.

⁽B) Noncallable.

Board of Water Supply City and County of Honolulu Schedule of Bonds Payable June 30, 2015

	Interest	Bond	Maturing Serially	Call Dates	Outstanding
Description of Bonds Payable	Rate	Dated	From	(A)	June 30, 2015
Water System Revenue Bonds Series 2014A (Non-AMT)					
Insured Serial Bonds	5.000%	12/9/2014	7/1/2023	(B)	5,585,000
Insured Serial Bonds	3.000%	12/9/2014	7/1/2024	(B)	410,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2024	(B)	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	(B)	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	(B)	9 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 System Revenue Bonds					
Series 2014B (AMT)					
Insured Serial Bonds	0.405%	12/9/2014	7/1/2015	(B)	785,000
Insured Serial Bonds	0.805%	12/9/2014	7/1/2016	(B)	795,000
Insured Serial Bonds	1.335%	12/9/2014	7/1/2017	(B)	7,395,000
Insured Serial Bonds	1.744%	12/9/2014	7/1/2018	(B)	4,590,000
Insured Serial Bonds	2.144%	12/9/2014	7/1/2019	(B)	4,680,000
Insured Serial Bonds	2.389%	12/9/2014	7/1/2020	(B)	4,790,000
Insured Serial Bonds	2.619%	12/9/2014	7/1/2021	(B)	2,585,000
Insured Serial Bonds	2.755%	12/9/2014	7/1/2022	(B)	1,540,000
Insured Serial Bonds	2.915%	12/9/2014	7/1/2023	(B)	1,585,000
Insured Serial Bonds	3.135%	12/9/2014	7/1/2024	(B)	1,625,000
Insured Serial Bonds	3.285%	12/9/2014	7/1/2025	(B)	1,670,000
Insured Serial Bonds	3.385%	12/9/2014	7/1/2026	(B)	1,730,000
Insured Serial Bonds	3.485%	12/9/2014	7/1/2027	(B)	1,785,000
Insured Serial Bonds	3.585%	12/9/2014	7/1/2028	(B)	1,845,000
Insured Serial Bonds	3.685%	12/9/2014	7/1/2029	(B)	1,910,000
Insured Serial Bonds	3.760%	12/9/2014	7/1/2030	(B)	1,975,000
Insured Serial Bonds	3.860%	12/9/2014	7/1/2031	(B)	2,045,000
					43,330,000
					\$ 239,150,000

⁽A) Call dates indicated are optional.

⁽B) Noncallable.

Board of Water Supply City and County of Honolulu Schedules of Net Revenue Requirement Years Ended June 30, 2015 and 2014

Mater sales \$ 212,486,218 \$ 191,593,726 Interest 3,088,165 2,148,814 Other 4,721,506 3,776,974 Total revenues 220,295,889 197,519,514 Deductions 183,533,096 179,579,388 Less: Depreciation expense (45,286,091) (45,941,002) Less: Allocated depreciation charges (1,540,393) (1,574,748) Total deductions 132,063,638 Net revenue Requirement (15,399,941) (20,513,303) (1) Aggregate debt service (15,399,941) (20,513,303) (2) Aggregate debt service ratio (2) Aggregate debt service ratio (2) Aggregate debt serv		2015	2014
Interest 3,088,165 2,148,814 3,088,165 2,148,814 4,721,506 3,776,974 7,000 7	Revenues		
Interest Other 3,088,165 2,148,814 Other 4,721,506 3,776,974 Total revenues 220,295,889 197,519,514 Deductions Operating expenses 183,533,096 179,579,388 Less: Depreciation expense (45,286,091) (45,941,002) Less: Allocated depreciation charges (1,540,393) (1,574,748) Total deductions 136,706,612 132,063,638 Net revenues 83,589,277 65,455,876 Net Revenue Requirement Greater of 15,399,941 \$20,513,303 Paggregate debt service \$15,399,941 \$20,513,303 2) Aggregate debt service 15,399,941 20,513,303 2) Aggregate debt service 15,399,941 20,513,303 Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$18,479,929 \$24,615,964	Water sales	\$ 212,486,218	\$ 191,593,726
Other Total revenues 4,721,506 3,776,974 Deductions 220,295,889 197,519,514 Operating expenses 183,533,096 179,579,388 Less: Depreciation expense (45,286,091) (45,941,002) Less: Allocated depreciation charges (1,540,393) (1,574,748) Total deductions 136,706,612 132,063,638 Net revenues 83,589,277 65,455,876 Net Revenue Requirement Greater of 15,399,941 20,513,303 Pequired deposits 15,399,941 20,513,303 Aggregate debt service 15,399,941 20,513,303 Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$ 18,479,929 \$ 24,615,964	Interest		
Deductions 220,295,889 197,519,514 Operating expenses 183,533,096 179,579,388 Less: Depreciation expense (45,286,091) (45,941,002) Less: Allocated depreciation charges (1,540,393) (1,574,748) Total deductions 136,706,612 132,063,638 Net revenues \$83,589,277 65,455,876 Net Revenue Requirement Greater of \$15,399,941 \$20,513,303 1) Aggregate debt service \$15,399,941 20,513,303 Required deposits 15,399,941 20,513,303 2) Aggregate debt service 15,399,941 20,513,303 Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$18,479,929 \$24,615,964	Other		· ·
Operating expenses 183,533,096 179,579,388 Less: Depreciation expense (45,286,091) (45,941,002) Less: Allocated depreciation charges (1,540,393) (1,574,748) Total deductions 136,706,612 132,063,638 Net revenues \$ 83,589,277 \$ 65,455,876 Net Revenue Requirement Greater of 15,399,941 \$ 20,513,303 1) Aggregate debt service \$ 15,399,941 \$ 20,513,303 Required deposits - - - 2) Aggregate debt service 15,399,941 20,513,303 Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$ 18,479,929 \$ 24,615,964	Total revenues		
Less: Depreciation expense (45,286,091) (45,941,002) Less: Allocated depreciation charges (1,540,393) (1,574,748) Total deductions 136,706,612 132,063,638 Net revenues \$ 83,589,277 \$ 65,455,876 Net Revenue Requirement Greater of 1) Aggregate debt service \$ 15,399,941 \$ 20,513,303 Required deposits 15,399,941 20,513,303 2) Aggregate debt service 15,399,941 20,513,303 Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$ 18,479,929 \$ 24,615,964	Deductions		
Less: Depreciation expense (45,286,091) (45,941,002) Less: Allocated depreciation charges (1,540,393) (1,574,748) Total deductions 136,706,612 132,063,638 Net revenues \$ 83,589,277 \$ 65,455,876 Net Revenue Requirement Greater of 1) Aggregate debt service \$ 15,399,941 \$ 20,513,303 Required deposits - - 2) Aggregate debt service 15,399,941 20,513,303 Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$ 18,479,929 \$ 24,615,964	Operating expenses	183,533,096	179,579,388
Total deductions	·	(45,286,091)	•
Total deductions 136,706,612 132,063,638 Net revenues \$ 83,589,277 \$ 65,455,876 Net Revenue Requirement Greater of \$ 15,399,941 \$ 20,513,303 1) Aggregate debt service Required deposits 15,399,941 20,513,303 2) Aggregate debt service Minimum required debt service ratio 15,399,941 20,513,303 Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$ 18,479,929 \$ 24,615,964	Less: Allocated depreciation charges	(1,540,393)	
Net Revenue Requirement Greater of \$ 15,399,941 \$ 20,513,303 Required deposits - - 2) Aggregate debt service Minimum required debt service ratio 15,399,941 20,513,303 Net revenue requirement \$ 18,479,929 \$ 24,615,964	Total deductions	136,706,612	
Greater of 1) Aggregate debt service Required deposits \$ 15,399,941 \$ 20,513,303 2) Aggregate debt service Minimum required debt service ratio 15,399,941 20,513,303 Net revenue requirement \$ 18,479,929 \$ 24,615,964	Net revenues	\$ 83,589,277	\$ 65,455,876
Required deposits			
2) Aggregate debt service 15,399,941 20,513,303 Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$ 18,479,929 \$ 24,615,964		\$ 15,399,941	\$ 20,513,303 -
Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$ 18,479,929 \$ 24,615,964		15,399,941	20,513,303
Minimum required debt service ratio x 1.20 x 1.20 Net revenue requirement \$ 18,479,929 \$ 24,615,964	2) Aggregate debt service	15.399.941	20.513.303
Not revenue to a represente deliberarile and	Minimum required debt service ratio		
Net revenue to aggregate debt service ratio 5.43 3.19	Net revenue requirement	\$ 18,479,929	\$ 24,615,964
	Net revenue to aggregate debt service ratio	5.43	3.19



Board of Water Supply City and County of Honolulu

Single Audit of Federal Financial Assistance Programs June 30, 2015

Quality Integrity Insight

Board of Water Supply City and County of Honolulu Index June 30, 2015

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Introduction

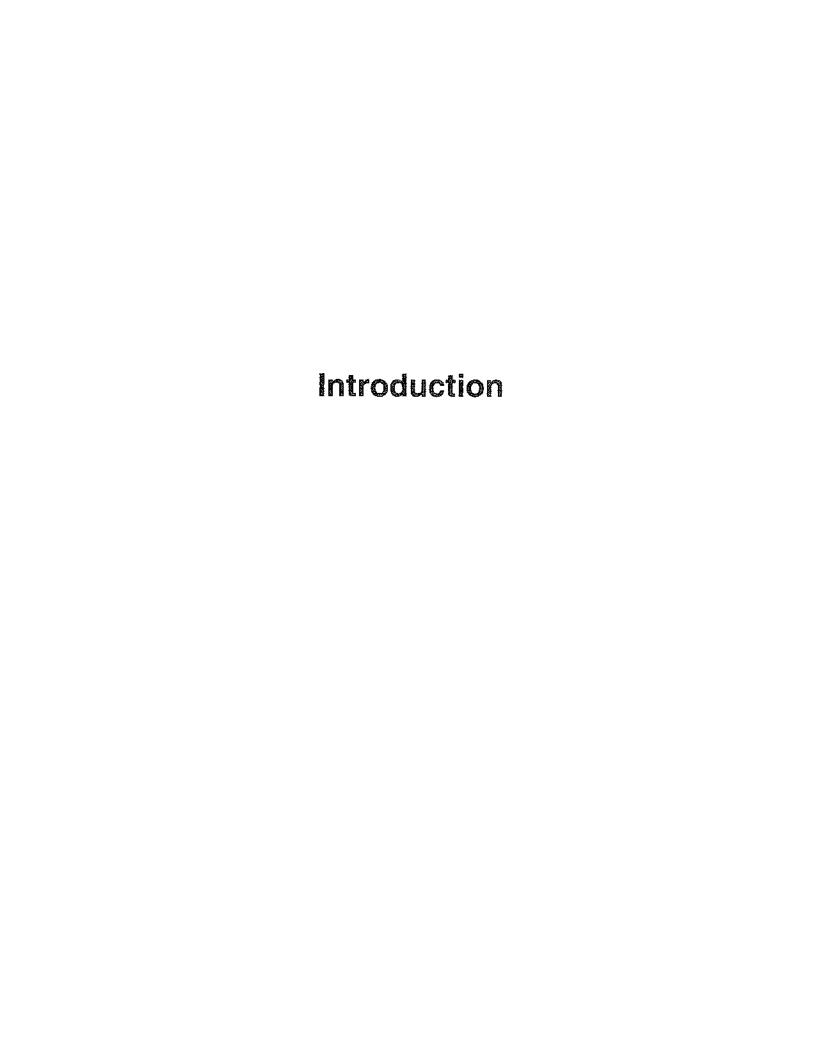
Compliance and Internal Control Over Financial Reporting

Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Compliance and Internal Control Over Federal Awards

Report of Independent Auditors on Compliance for Each Major Program, Internal Control Over Compliance, and Schedule of Expenditures of Federal Awards Required by OMB Circular A-133

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Schedule of Findings and Questioned Costs9-1	11
Status of Prior Year Findings and Questioned Costs	12





December 28, 2015

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

We have completed our audit of the financial statements of the Board of Water Supply ("BWS"), a component unit of the City and County of Honolulu, as of and for the year ended June 30, 2015. We have also audited the BWS's compliance with requirements applicable to its major federal financial assistance program. We submit herein our reports on compliance and on internal control over financial reporting and over federal awards, the BWS's schedule of expenditures of federal awards, and the schedule of findings and questioned costs.

The audit objectives and scope of the audit were as follows:

Audit Objectives

- To provide an opinion on the fair presentation of the BWS's financial statements and the schedule
 of expenditures of federal awards as of and for the year ended June 30, 2015 in accordance with
 accounting principles generally accepted in the United States of America.
- 2. To consider the BWS's internal control over financial reporting in order to design our auditing procedures for the purpose of expressing our opinion on the financial statements.
- 3. To perform tests of the BWS's compliance with certain provisions of laws, regulations, contracts and grant agreements that could have a direct and material effect on the determination of financial statement amounts.
- 4. To consider the BWS's internal control over compliance with the requirements that could have a direct and material effect on a major federal program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with U.S. Office of Management and Budget ("OMB") Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations.

Scope of Audit

We performed an audit of the BWS's financial statements and schedule of expenditures of federal awards as of and for the year ended June 30, 2015, in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the provisions of OMB Circular A-133.



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Organization of Report

Our report is organized as follows:

- 1. The Introduction describes the objectives and scope of our audit and the organization and contents of this report.
- The Compliance and Internal Control over Financial Reporting contains our report on the BWS's
 internal control over financial reporting and on compliance and other matters based upon our audit
 of the BWS's financial statements.
- 3. The Compliance and Internal Control over Federal Awards contains our report on the BWS's compliance for each major program and on the internal control over compliance required by OMB Circular A-133, the BWS's schedule of expenditures of federal awards, the schedule of findings and questioned costs, and the status of prior year findings and questioned costs.

Our report on the financial statements of the BWS as of and for the year ended June 30, 2015 is included under separate cover.

We will be pleased to discuss any questions that you may have regarding our report.

Very truly yours,

Accenty LLP

Compliance and Internal Control Over Financial Reporting



Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

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

We have audited, in accordance with the 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, the financial statements of the Board of Water Supply ("BWS"), a component unit of the City and County of Honolulu, as of and for the year ended June 30, 2015, and the related notes to the financial statements, and have issued our report thereon dated December 28, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the BWS's internal control over financial reporting ("internal control") to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the BWS's internal control. Accordingly, we do not express an opinion on the effectiveness of the BWS's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.



Compliance and Other Matters

As part of obtaining reasonable assurance about whether the BWS's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

Accenty LLP

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Honolulu, Hawaii December 28, 2015

Compliance and Internal Control Over Federal Awards



Report of Independent Auditors on Compliance for Each Major Program, Internal Control Over Compliance, and Schedule of Expenditures of Federal Awards Required by OMB Circular A-133

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

Report on Compliance for Each Major Federal Program

We have audited the Board of Water Supply's ("BWS"), a component unit of the City and County of Honolulu, compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on the BWS's major federal program for the year ended June 30, 2015. The BWS's major federal program is identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts and grants applicable to its federal programs.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for the BWS's major federal program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the BWS's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for its major federal program. However, our audit does not provide a legal determination of the BWS's compliance.

Opinion on Each Major Federal Program

In our opinion, the BWS complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2015.



Report on Internal Control Over Compliance

Management of the BWS is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the BWS's internal control over compliance with the types of requirements that could have a direct and material effect on its major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for its major federal program and to test and report on internal control over compliance in accordance with OMB Circular A-133, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the BWS's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of OMB Circular A-133. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by OMB Circular A-133

We have audited the financial statements of the BWS as of and for the year ended June 30, 2015, and the related notes to the financial statements. We issued our report thereon dated December 28, 2015, which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose of forming an opinion on the financial statements that comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by OMB Circular A-133 and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the 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 schedule of expenditure of federal awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

Honolulu, Hawaii December 28, 2015

Accenty LLP

Board of Water Supply City and County of Honolulu Schedule of Expenditures of Federal Awards Year Ended June 30, 2015

Federal Program or Pass-Through Entity	Catalog of Federal Domestic Assistance ("CFDA") Number	Pass-through Entity Identifying Number	Federal Expenditures
U.S. Environmental Protection Agency Pass-through from the State of Hawaii, Department of Health Capitalization Grants for Drinking			
Water State Revolving Funds	66.468	ASO LOG #15-079	\$ 3,415,108
•	66.468	ASO LOG #14-195	2,383,747
	66.468	ASO LOG #14-194	2,359,493
	66.468	ASO LOG #13-123	1,560,068
	66.468	ASO LOG #14-196	956,907
	66.468	ASO LOG #14-193	229,746
	66.468	ASO LOG #13-124	11,181
Total expenditures of federal awards			\$ 10,916,250

Board of Water Supply City and County of Honolulu Note to Schedule of Expenditures of Federal Awards Year Ended June 30, 2015

1. Basis of Presentation

The accompanying schedule of expenditures of federal awards includes the federal grant activity of the BWS and is presented on the accrual basis of accounting. The information in this schedule is presented in accordance with the requirements of OMB Circular A-133, *Audits of States, Local Governments and Non-Profit Organizations*.

Board of Water Supply City and County of Honolulu Schedule of Findings and Questioned Costs Year Ended June 30, 2015

Section I - Summary of Auditors' Results

Financial Statements			
Type of auditors' report	issued	Unmo	dified
Internal control over fina	ancial reporting		
 Material weakness 	es) identified?	yes	X no
 Significant deficiency 	cy(ies) identified?	yes	X none reported
Noncompliance materia	d to financial statements noted?	yes	X no
Federal Awards			
Internal control over ma	jor programs		
 Material weakness(es) identified?	yes	X no
 Significant deficience 	cy(ies) identified?	yes	X none reported
Type of auditors' report	issued on compliance for major programs	Unmod	dified
-	osed that are required to be reported tion 510(a) of OMB Circular A-133?	yes	X no
Identification of major p	rogram		
CFDA Number	Name of Federal Program or Cluster		
66.468	Capitalization Grants for Drinking Water State Revolving Funds		
Dollar threshold used to type B programs	distinguish between type A and	\$300,0	000
Auditee qualified as low	-risk auditee?	X ves	no

Board of Water Supply City and County of Honolulu Schedule of Findings and Questioned Costs Year Ended June 30, 2015

Section II - Financial Statement Findings

None

Board of Water Supply City and County of Honolulu Schedule of Findings and Questioned Costs Year Ended June 30, 2015

Section III - Federal Award Findings and Questioned Costs

None

Board of Water Supply City and County of Honolulu Status of Prior Year Findings and Questioned Costs Year Ended June 30, 2015

Status of Prior Year Findings and Questioned Costs

Financial Statement Findings

Finding No. 2014-001: Information Technology (Significant Deficiency)

Condition

As part of our financial statement audit for the year ended June 30, 2014, we performed an IT general controls review of the following systems operated by the BWS:

- J.D. Edwards
- · Oracle Utilities Customer Care and Billing
- Automated Meter Reading System
- Kronos Workforce Timekeeper

As BWS performed a significant migration to an updated version of J.D. Edwards in the year ended June 30, 2014, we performed additional migration testing over:

- Data Conversion
- Logical Security
- Interface implementation
- Project Governance
- Reporting

Our review resulted in several IT control deficiencies in the areas of logical security, change management, and IT operations.

Status

Resolved.



Quality. Integrity. Insight.

Board of Water Supply City and County of Honolulu June 30, 2015 Audit Results

Presentation to the Board January 25, 2016

Presented by: Donn Nakamura Matthew Oda



Table of Contents

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Scope of Services

- Provide an opinion on the fair presentation of the Board of Water Supply's (BWS) financial statements.
- Consider BWS's internal control over financial reporting in relation to our audit of the financial statements.
- Perform tests of the BWS's compliance with certain provisions of laws, regulations, contracts and grant agreements in relation to the financial statements.
- Provide an opinion on BWS's compliance with requirements related to major federal programs in accordance with the Office of Management and Budget (OMB) Circular A-133 and consider internal control over compliance.





Financial Statement Highlights

- Net position increased \$42.3 million in fiscal 2015 to \$1.05 billion compared to the \$20.5 million increase in fiscal 2014. The results in fiscal 2015 were primarily due to the increase in water sales of approximately \$20.9 million due to an average water rate increase of 9.65% and increase in consumption from drought in fiscal 2015.
- Unrestricted current assets at June 30, 2015 of \$90.7 million exceeded total current liabilities by \$50.8 million.
- Net capital assets decreased by approximately \$8.1 million due to annual depreciation expense less the change in assets placed into service and construction work in progress.
- Defined benefit pension liability of \$73.1 million as of June 30, 2015. A \$62.4 million adjustment to net position as of July 1, 2014 was recorded for the adoption of GASB Statement No. 68 on that date.
- Other postemployment benefits asset increased by approximately \$2.2 million due to the additional contributions in fiscal 2014.
- Notes payable increased by approximately \$39.0 million due to State Revolving Fund loans proceeds.
- Bonds payable decreased by approximately \$20.9 million due to current principal payments and refunding of a portion of the Series 2006 bonds through the issuance of new Series 2014 bonds.





- AU-C (American Institute of Certified Public Accountants professional auditing standards) Section 260 – Communication with those charged with governance in relation to an audit of financial statements. These required communications are addressed in the following pages. Our procedures and scope require communication of various matters to the individuals responsible consistent with our planned audit strategy.
- As a result of our audit procedures performed relating to the financial statements for the year ended June 30, 2015, there are no matters which came to our attention that would require further communication or action by management other than those discussed in the following pages.





Required Communications	Application to BWS
Auditor's responsibility under Generally Accepted Auditing Standards. The auditor should communicate the level of responsibility assumed for fraud and illegal acts, whether the financial statements are free of material misstatement and whether management's assessment of the effectiveness of the entity's internal control over financial reporting is fairly stated.	Our primary responsibility as the Board of Water Supply's (BWS) independent auditor is to evaluate and report on the fairness of the BWS's financial statements prepared in accordance with generally accepted accounting principles ("GAAP"). Based upon the results of our audit, which was performed in accordance with U.S. generally accepted auditing standards and Government Auditing Standards, we are prepared to issue an unmodified opinion on the BWS's financial statements.
Overview of the planned scope of the audit. The overview of the planned scope and timing of the audit should be communicated to those charged with governance.	This was communicated in our Contract No. C13590001 dated July 12, 2013.
Significant accounting policies, including critical accounting policies and the auditor's judgment about the quality of accounting principles. The entity's initial selection of and changes in significant accounting policies or their application; methods used to account for significant unusual transactions; and effect of significant policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus should be communicated to those charged with governance.	Management appropriately adopted Governmental Accounting Standards Board Statement Nos. 68, Accounting and Financial Reporting for Pensions, an Amendment of GASB Statement No. 27, and 71, Pension Transition for Contributions Made Subsequent to the Measurement Date, an Amendment of GASB Statement No. 68, in fiscal 2015. We believe that management has adopted appropriate and reasonable accounting policies and applied them in its financial reporting.





Required Communications	Application to BWS
Management judgments and accounting estimates. Those charged with governance should be informed about the process used by management in formulating sensitive accounting estimates and about the auditor's conclusions regarding the reasonableness of those estimates.	The more difficult and subjective judgments and estimates were: Allowance for uncollectible receivables. Depreciation and useful lives of capital assets. Calculation of defined benefit plan, other postemployment benefit and workers' compensation liabilities. Management's estimates were evaluated and appeared to be reasonable.
Audit adjustments. All significant financial statement adjustments arising from the audit or proposed during the audit and any uncorrected misstatements that were determined to be immaterial by management individually and in the aggregate should be communicated to those charged with governance.	There were two adjusting journal entry and two reclassifying journal entries in fiscal 2015. All of these journal entries were recorded by management in the audited financial statements and are shown on pages 9 and 10. There was one uncorrected misstatement above our de minimis during our fiscal 2015 audit that had no effect on the financial statements as shown on page 11.





Required Communications	Application to BWS
Potential effect on the financial statements of any significant risks and exposures. Those charged with governance should be aware of major risks and exposures facing the entity and how they are disclosed.	No major risks and exposures noted.
Material uncertainties related to events and conditions, specifically going concern issues. Any doubt regarding the BWS's ability to continue as a going concern and any other material uncertainties should be communicated.	No issues related to the BWS's ability to continue as a going concern or other material uncertainties were noted.
Other information in documents containing audited financial information. Those charged with governance should be informed of the auditor's responsibility for information in a document containing audited financial statements, as well as of any procedures performed and the results.	We are unaware of any documents that will be submitted containing the audited financial statements.
Disagreements with management. Disagreements with management, whether or not satisfactorily resolved, about matters that could be significant to the entity's financial statement or the auditor's report should be communicated.	No such matters noted.
Consultation with other accountants. When the auditor is aware that management has consulted with other accountants about significant accounting or auditing matters, the auditor's view about the consultation subject should be communicated to those charged with governance.	We know of no such consultations made by management.





Required Communications	Application to BWS
Major issues discussed with management prior to retention. Any major accounting, auditing or reporting issues discussed with management in connection with our initial or recurring retention should be communicated.	There were none.
Difficulties encountered in performing the audit. Serious difficulties encountered in dealing with management that related to the performance of the audit are required to be brought to the attention of those charged with governance.	There were no serious difficulties encountered in performing the audit.
Internal control deficiencies. Those charged with governance should be informed of any significant deficiencies or material weaknesses in the design or operation of internal control that came to the auditor's attention during the audit.	There were no material weaknesses.
Fraud and illegal acts. Fraud or illegal acts involving senior management, or those responsible for internal controls, or causing a material misstatement of the financial statements where the auditor determines there is evidence that such fraud may exist should be communicated. Any illegal acts coming to the auditor's attention involving senior management and any other illegal acts, unless clearly inconsequential.	We are not aware of any fraud or illegal acts.





Required Communications	Application to BWS		
Other material written communications.			
Management representation letter.	Management representation letter is available upon request.		
Internal Control and Business Issues Report.	There were none.		
Engagement letter.	Contract is available upon request.		





Adjusting Journal Entries

Account	Description	Debit	Credit
Adjusting Jou	ırnal Entries JE # 101		
Control of the Contro	9-084 into service from CIP.		
1255-DMAIN5	0 Distribution Mains 50	723,657.00	
7072	INTEREST CAPITALIZED	163,021.00	
8029	DEPRECIATION EXPENSE	82,014.00	
8075	PROJECT COSTS EXPENSED	2,419.00	
1330-101	LABOR		43,847.00
1330-102	LABOR FRINGES		11,531.00
1330-104	CONTRACTS		463,854.00
1330-106	TRANSPORTATION		981.00
1330-110	INTEREST CAPITALIZED		353,126.00
1330-111	OTHERS		15,758.00
1360	ACCUMULATED DEPRECIATION		82,014.00
Total		971,111.00	971,111.00
Adjusting Jou	ırnal Entries JE # 102		
	cord the beginning and ending NPL and CY activity		
related to ERS	pension.		
2910	RETAINED EARNINGS	62,441,566.00	
6010	NORMAL	2,416,094.00	
ACC4	DIFFERENCE IN EXPERIENCE	930,101.00	
ACC6	SUBSEQUENT CONTRIBUTIONS	7,245,510	
ACC7	CHANGE IN PROPORTIONATE SHARE	8,597,062.00	
1777	NET PENSION LIABILITY		73,141,824.00
ACC5	DIFFERENCE IN EARNINGS		8,488,509.00
Total		81,630,333.00	81,630,333.00





Reclassifying Journal Entries

Account	Description	Debit	Credit
	ng Journal Entries JE # 201	I	
	restricted contract retainage as unrestricted.		
1630	CONTRACT RETAINAGE	239,192.00	
1530	CONTRACT RETAINAGE		239,192.00
Total		239,192.00	239,192.00
Reclassifyin	ng Journal Entries JE # 202		
To reclassify "Unrestricted	"Special Expendables" fund cash as ."		
	CASH - SPECIAL EXPENDITURE -		
NK16	UNRES	4,399,879.00	
1151	CASH		4,399,879.00
Total		4,399,879.00	4,399,879.00







Summary of Uncorrected Misstatements

		Statement of Net Position						Statement of Revenues, Expenses, and Change in Net Position				
1			Deferred		Deferred	Invested in	Restricted for					
SUD	Page A Commercial		Outflows of		Inflows of	Capital	Capital Activity			Diffe	rences	
No.	Description	Assets	Resources	Liabilities	Resources	Assets	& Debt Service	Unrestricted	Known	Proj.	Est.	Total
	To properly record and reflect the lost revenues due to stuck meters related to single-family units in FY 2015.										1,250,000 (1,250,000)	
Total (Uncorrected Misstatements	-	-	_	_		_	-	-			-
Financ	cial Statement Amounts	1,457,751,475	33,427,709	(435,242,756)	(8,488,509)	(819,139,210)	(23,609,757)	(204,698,952)			i	(42,283,923)
% of A	djustments to F/S Amounts	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			-	0.0%





Audit Plan for June 30, 2016 - Timeline

Discussion with management to understand any key risks or areas of focus for current year	May 2016
Planning and Interim fieldwork	June 2016
Year-end financial statement fieldwork	August – September 2016
Draft report to management	October 7, 2016
Issue final report	October 28, 2016







CERTIFIED PUBLIC ACCOUNTANTS

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BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU 630 SOUTH BERETANIA STREET HONOLULU, HI 96843



KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chair ADAM C. WONG, Vice Chair DAVID C. HULIHEE KAPUA SPROAT BRYAN P. ANDAYA

ROSS S. SASAMURA, Ex-Officio FORD N. FUCHIGAMI, Ex-Officio

ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

ELLEN E. KITAMURA, P.E. Deputy Manager and Chief Engineer

Chair and Members Board of Water Supply City and County of Honolulu Honolulu, Hawaii 96843

Chair and Members:

Subject: Update on the Red Hill Fuel Facility Administrative Order on

Consent and Statement of Work and the Requirements for

Non-Disclosure Agreements

The Administrative Order on Consent (AOC) Statement of Work contains provisions that state the need to sign a non-disclosure agreement in order for subject matter experts, like the Board of Water Supply (BWS) and Commission on Water Resource Management, to participate with federal and state regulators, the Navy and the Defense Logistics Agency, in developing the work plans under the AOC. BWS has examined the issues and presents the following update, discussion and recommendations on this matter.

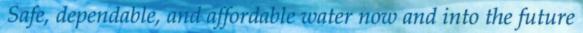
Respectfully submitted,

ERNESTY, W. LAU, P.E.

Manager and Chief Engineer

Attachment

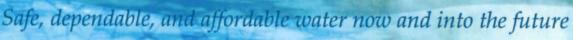
WATER FOR LIFE





Update on the Red Hill Fuel Facility Administrative Order on Consent (AOC) and Statement of Work (SOW) and the Requirements for Non-Disclosure Agreements (NDA)

Board Meeting January 25, 2016





Today's Discussion

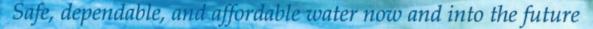
- December 3, 2015 meeting with Parties
- Red Hill AOC non-disclosure agreement (NDA)





December 3, 2015 Meeting

- BWS invited to meet with EPA, DOH, Navy
- Respond to questions from Parties
 - Water development
 - Site characterization
 - Tank vulnerability and risk assessment
- BWS submitted recommendations for parties to consider in developing AOC work plans
- Productive "at the table" meeting





Red Hill AOC NDA

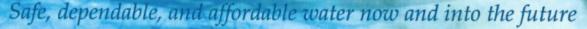
- Signing NDA needed to participate in process.
- AOC SOW paragraph 1.1
 - "...intent to seek the technical advice of subject matter experts, such as BWS and DLNR, <u>as</u> needed, for scoping and review of key deliverables."
 - "The Parties shall take actions that facilitate sharing of information with subject matter experts such as establishing confidentiality agreements and/or providing redacted versions of documents as necessary to address procurement integrity and security concerns."





Red Hill NDA - cont.

- Issues with signing NDA
 - BWS transparency.
 - Discussions in scoping and review of key deliverables only (AOC SOW paragraph 1.1).
 - Participation "at the table" to review and discuss confidential materials in development of work plans.
 - Consideration and use of subject matter experts' (SME) advice not assured.
 - Parties can make final decisions despite SME input.





Red Hill NDA - cont.

Options

- Defer signing NDA. Participate through review of redacted documents.
 - Allowed under AOC SOW paragraph 1.1.
 - Dec. 3, 2015 meeting demonstrates feasibility.
- Have small team of BWS staff and consultants sign individual NDA, participate and assess value "at the table".
- Manager sign organizational NDA that applies broadly to BWS staff to participate in the AOC and SOW process.



Next Steps

- Attend January 28, 2016 CWRM meeting to monitor DLNR presentation on Red Hill.
- Be available to answer any questions from CWRM.





Discussion / Questions

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU 630 SOUTH BERETANIA STREET HONOLULU, HI 96843



January 25, 2016

KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chair ADAM C. WONG, Vice Chair DAVID C. HULIHEE KAPUA SPROAT BRYAN P. ANDAYA

ROSS S. SASAMURA, Ex-Officio FORD N. FUCHIGAMI, Ex-Officio

ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

ELLEN E. KITAMURA, P.E. Deputy Manager and Chief Engineer

Chair and Members Board of Water Supply City and County of Honolulu Honolulu, Hawaii 96843

Chair and Members:

Subject: Financial Update for the Quarter Ended December 31, 2015

The following Board of Water Supply's financial reports and graphs are attached:

- Budget vs Actual Revenue and Expense Totals
- Statement of Revenues, Expenses and Change in Net Assets
- Current Quarter Statement of Revenues, Expenses and Change in Net Assets
- Balance Sheet
- Budget vs Actual Appropriation Budget Total BWS Summary
- Graph Representing Operating Expenditures by Category
- Graphs of Total Budgeted Operating Expenditures and Total Budgeted Operating Revenues

Respectfully submitted,

ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

Attachments

Budget vs. Actual Revenue and Expense Totals As of December 31, 2015

			Favorable/ (Unfavorable)
	YTD Actuals	YTD Budget	Variance
Revenues	120,916,000	109,600,000	11,316,000
Operating Expenses	(68,214,000)	(95,175,000)	26,961,000
Net Revenues (expenditures)	52,702,000	14,425,000	38,277,000

R10211B BWSE0001

Board Of Water Supply Statement of Revenues, Expenses And Change in Net Assets As of December 31, 2015

1/12/2016

9:02:00 Page -

Current Month	8/o	Last Year	%	Description	Year to Date	%	Last Year to Date	%	b/a
Actual	Revenue	Actual	Revenue		Actual	Revenue	Actual	Revenue	Change
				REVENUE					
19,489,345.38	100.00	17,434,858.42	100.00	OPERATING REVENUE	121,303,958.71	100.00	108,215,734.04	100.00	12.09
19,489,345.38	100.00	17.434,858.42	100.00	REVENUE	121,303,958.71	100.00	108,215,734.04	100.00	12.09
				OPERATING EXPENSES					
2,742,142.78-	14.07	2,646,543.29-	15.18	LABOR COSTS	15,939,774.61-	13.14	16,036,863.84-	14.82	.61-
2,074,328.34-	10.64	1,447,780.06-	8.30	SERVICES	8,133,759.62-	6.71	4,768,935.11-	4.43	70.56
98,013.44-	.50	235,875.36-	1.35	SUPPLIES	1,780,196.97-	1.47	2,721,942.37-	2.52	34.60-
12,043.41-	.06	7,104.68-	.04	EDUCATION & TRAINING	82,343.79-	.07	45,870.54-	.04	79.51
2,300,124.51-	11.80	3,070,818.93-	17.61	UTILITIES	9,129,133.87-	7.53	11,325,353.33-	10.47	19.39-
201,603.24-	1.03	190,381.52-	1.09	REPAIR AND MAINTENANCE	975,483.60-	.80	774,912.37-	.72	25.88
1,561,279.97-	8.01	1.394,464.55-	8.00	MISC	9,973,502.69-	8.22	8,075,936.34-	7.46	23.50
1,363,579.90-	7.00	3,425,900.50-	19.65	RETIREMENT SYSTEM CONTRIBUTIO	10,870,135,15-	8.96	10,285,907.70-	9.51	5.68
34,964.97	.18	42,777.37	.25	MISC EMPLOYEES' BENEFITS	217,394.78	.18	217,680.39	.20	.13-
10,318,150.62-	52.94	12,376,091.52-	70.98	OPERATING EXPENSES	56,666,935,52-	46.71	53,818,041,21-	49.73	5.29
2,268,258.97-	11.64	112,869.31-	.65	NON OPERATING REVENUE AND EXPE	7,902,048.81-	6,51	2,617,271.86-	2.42	201.92
360,537.49	1.85	1,166,159.46	6.69	CONTRIBUTION IN AID	5,891,455.00	4.86	7,204,121,41	6.66	18.22-
3,810,204.89-	19.55	4,034,477.76-	23,14	OTHER EXPENSES	22,057,680.42-	18.18	21,891,371.74-	20.23	.76
3,453,268.39	17.72	2,077,579,29	11.92	Change In Net Assets	40,568,748.96	33,44	37,093,170.64	34.28	9.37

Board Of Water Supply Statement of Revenues, Expenses And Change in Net Assets As of December 31, 2015

Current Quarter	%	Last Year	%		Year to Date	%	Last Year to		
Actual	Revenue	Quarter Actual	Revenue	Description	Actual	Revenue	Date Actual	% Revenue	% Change
				REVENUE					
58,400,668	100.00	53,406,711	100.0000	OPERATING REVENUE	121,303,959	100.00	108,215,734	100.00	12.09
58,400,668	100.00	53,406,711	100.0000	REVENUE	121,303,959	100.00	108,215,734	100.00	12.09
				OPERATING EXPENSES					
-7,862,742	13.46	-8,094,351	15.1561	LABOR COSTS	-15,939,775	13.14	-16,036,864	14.82	-0.61
-5,031,319	8.62	-2,805,312	5.2527		-8,133,760	6.71	-4,768,935	4.41	70.56
-634,072	1.09	-1,970,443		SUPPLIES	-1,780,197	1.47	-2,721,942	2.52	-34.60
-50,316	0.09	-25,067	0.0469		-82,344	0.07	-45,871	0.04	79.51
-5,455,174	9.34	-5,929,689	11.1029	UTILITIES	-9,129,134	7.53	-11,325,353	10.47	-19.39
-613,341	1.05	-496,509	0.9297	REPAIR AND MAINTENANCE	-975,484	0.80	-774,912	0.72	25.88
-4,843,007	8.29	-4,017,824	7.5231	MISC	-9,973,503	8.22	-8,075,936	7.46	23.50
-5,687,955	9.74	-7,512,797	14.0671	RETIREMENT SYSTEM CONTRIBUTIO	-10,870,135	8.96	-10,285,908	9.51	5.68
98,243	-0.17	146,478	-0.2743	MISC EMPLOYEES' BENEFITS	217,395	0.18	217,680	0.20	-0.13
-30,079,683	51.51	-30,705,514	57.4937	OPERATING EXPENSES	-56,666,936	46.71	-53,818,041	49.73	5.29
-4,243,608	7.27	-328,054	0.6143	NON OPERATING REVENUE AND EXPE	-7,902,049	6.51	-2,617,272	2.42	201.92
1,824,148	-3.12	3,032,013	-5.6772	CONTRIBUTION IN AID	5,891,455	4.86	7,204,121	6.66	-18.22
-10,880,020	18.63	-11,675,042		OTHER EXPENSES	-22,057,680	18.18	-21,891,372	20.23	0.76
15,021,505	-25.72	13,730,114	-25.7086		40,568,749	33.44	37,093,171	34.28	9.37

Board Of Water Supply Balance Sheet As of December 31, 2015

	***********************	Amounts	******** ***********	*************	Change ************************************
Description	Current	Last Month End	Last Year End	This Month	This Year
ASSETS	· · · · · · · · · · · · · · · · · · ·				· ·
CURRENT ASSETS	89,461,490,33	85,400,874.39	59,233,751.43	4,060,615.94	30,227,738.90
RESTRICTED ASSETS	21,501,114.14	20,034,046.53	19,889,822.28	1,467,067.61	1,611,291.86
INVESTMENTS	265,255,674.56	265,255,674.56	264,221,987.12	0.00	
OTHER ASSETS	9,371,426.77	10,390,024.70	16,040,871.43	-1,018,597.93	• •
PROPERTY / PLANT	1,112,358,013.00	1,112,077,015.23	1,112,393,345.24	280,997.77	-35,332.24
TOTAL ASSETS	1,497,947,718.80	1,493,157,635.41	1,471,779,777.50	4,790,083.39	
LIABILITIES CURRENT LIABILITIES OTHER LIABILITIES BONDS PAYABLE, NONCURRENT LIABILITIES	17,050,508.71 36,586,214.34 291,436,666.17 345,073,389.22	15,023,936.31 36,730,816.63 291,981,821.28 343,736,574.22	37,053,783.95 291,874,137.70	2,026,572.40 -144,602.29 -545,155.11 1,336,815.00	-467,569.61 -437,471.53
NET ASSETS					
RETAINED EARNINGS	349,635,917.34	352,259,528.39	328,089,194.15	-2,623,611.05	21,546,723.19
FUND BALANCE	594,633,831.66	594,633,831.66	• •	0.00	0.00
RESERVE FOR ENCUMBRANCES	171,046,350.81	168,422,739.76		2.623.611.05	
CURRENT YEAR CHANGES TO FU	37,558,229.77	34,104,961.38		3,453,268.39	40,568,748.96
NET ASSETS	1,152,874,329.58	1,149,421,061.19	,	3,453,268.39	· · · · · · · · · · · · · · · · · · ·
TOTAL LIABILITIES AND NET ASSETS	1,497,947,718.80	1,493,157,635.41	1,471,259,426.50	4,790,083.39	26,688,292.30

Board Of Water Supply

Budget vs Actual Appropriation Budget - Total BWS Summary

1/12/2016

Page -

10.41·33

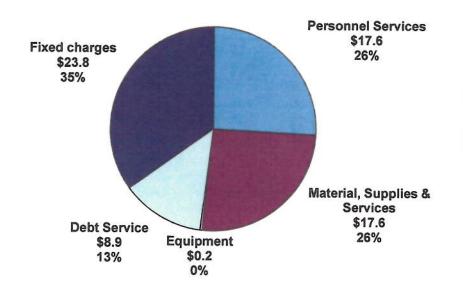
(\$000's)

OPER UNIT ALL BUSINESS UNIT ALL

CIFIS 16820-3021 AS OF 12/31/2015

YTD-TO-DATE FOR THE FISCAL YEAR YTD YTD Avail/ Object Revenues/ Open Annual Avail/ (Over) Actuals Budget (Over) % Description Expend Encumb Budget 96 120,916 REVENUE (11,316) 98,287 109,600 10 32-120,916 219,203 44 84 OPERATING EXPENSES 5,816 24 82 17.614 23,430 Personnel Services 17,614 46,790 29,176 62.36 MATERIALS AND SUPPLIES 6,710 13,501 6,791 50 30 Services 4,706 2,004 23,702 16,992 71.69 110,7 7,015 2,004 28 57 Supplies 2,578 15,439 10,428 67 54 2,433 88 308 220 71.43 Education & Training 75 13 651 563 86.48 100.00 13 6 Utilities 100 00 6 13 525 2,930 971 1,528 557 36 45 Repairs & Maint 446 1,959 66.86 2,585 34 79 4,641 11,960 4,845 7,430 Misc 204 7,115 59.49 187 906 719 79.36 Equipment 3,447 94.57 7 180 3,260 11,656 8.946 2,710 23.25 Debt Service 8,946 23,311 14,365 61.62 FIXED CHARGES: 15,904 33 14 Utilities 10,634 66 57 10,634 5,270 31,813 21,179 1,650 1,650 Case Fees 1,650 3,300 1,650 50 004,128 4,230 102 2.41 Retirement System Contribution 8,460 4,128 4,332 51.21 7,611 2.38 Misc Employees' Benefits 7,430 181 7,430 15,167 7,737 51.01 26,961 TOTAL OPERATING EXPENDITURES 62,934 5,280 186,983 118,769 63 52 68,214 95,175 28 33 NET REVENUES (EXPENDITURES) (5,280)32,220 (20,482)52,702 14,425 (38,277)57,982

Total Operating Expenditures - \$68.2 As of December 31, 2015 (millions of dollars)



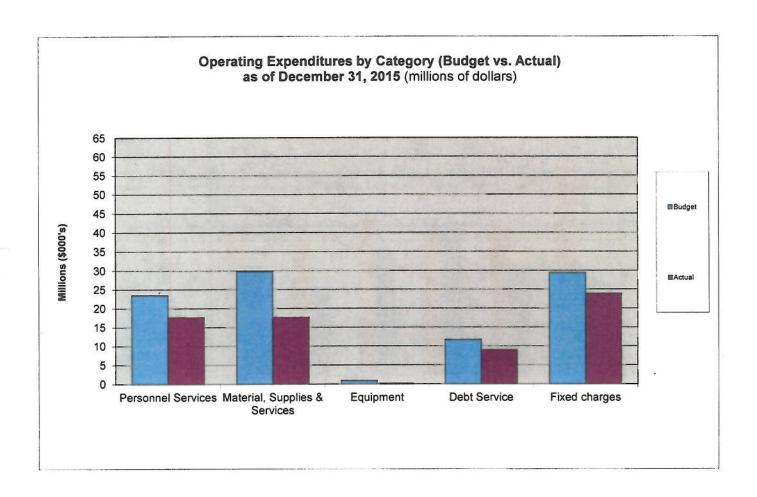
■Personnel Services

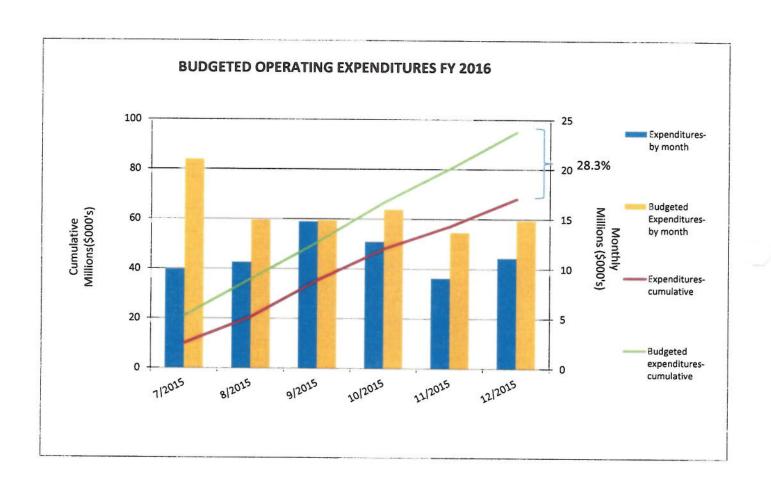
■Material, Supplies & Services

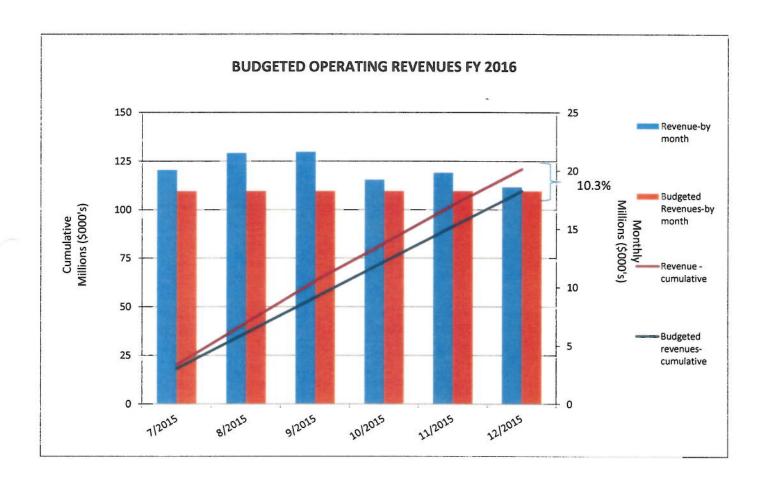
□Equipment

□Debt Service

■Fixed charges



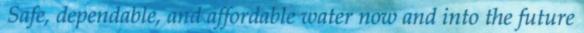






Financial Performance

July 2015 - Dec. 2015

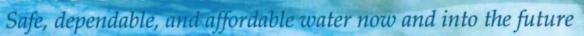




Budget to Actual July 2015 – Dec. 2015

- Actual Revenue \$121 million vs.
 Budgeted Revenue \$110 million
- Operating costs are \$68 million vs.

 Budgeted costs of \$95 million
- Actual Net Revenue \$53 million vs.
 Budgeted Net Revenue \$14 million

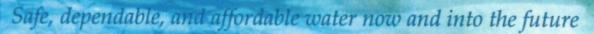




Cost Drivers

Year to Date Dec. 2015

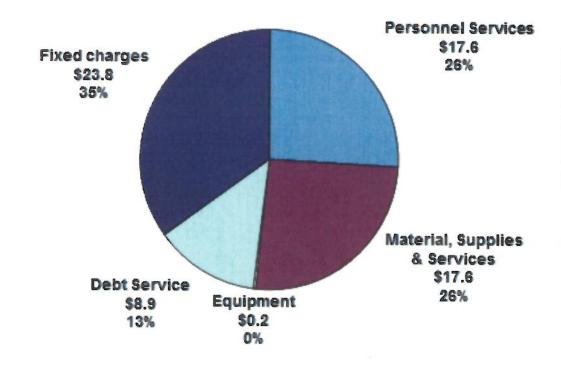
	Actual	Budget
	(millions)	(millions)
Personnel	\$17.6	\$23.4
Services/Supplies	\$11.8	\$20.8
Repairs & Misc.	\$ 5.8	\$ 9.0
Debt Service	\$ 8.9	\$11.7
Utilities	\$10.6	\$15.9



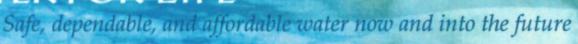


Total Operating Expenditures - \$68.2
As of December 31, 2015
(millions of dollars)

AVLVAVAVAVAVAVAVAVAVAVAVAVAVAVAVAVAVA

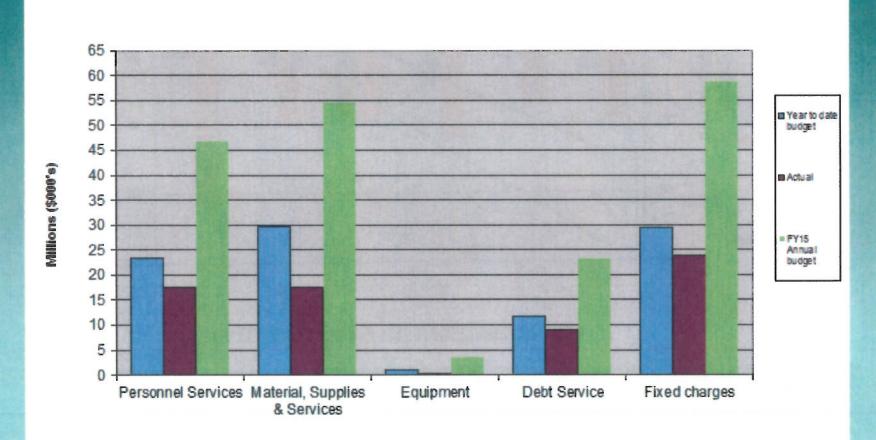


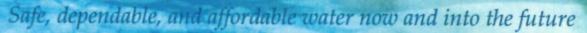
- Personnel Services
- Material, Supplies & Services
- □ Equipment
- □ Debt Service
- Fixed charges





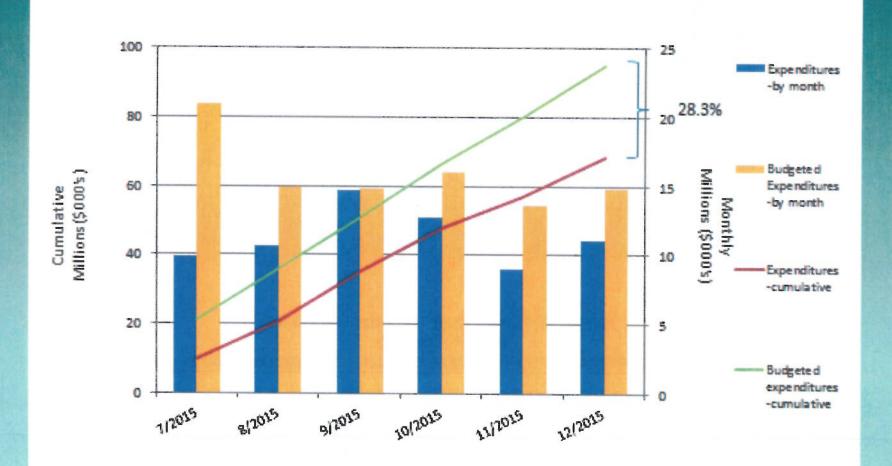
Operating Expenditures by Category (Budget vs. Actual Expenditures and Encumbrances) as of December 31, 2015 (millions of dollars)





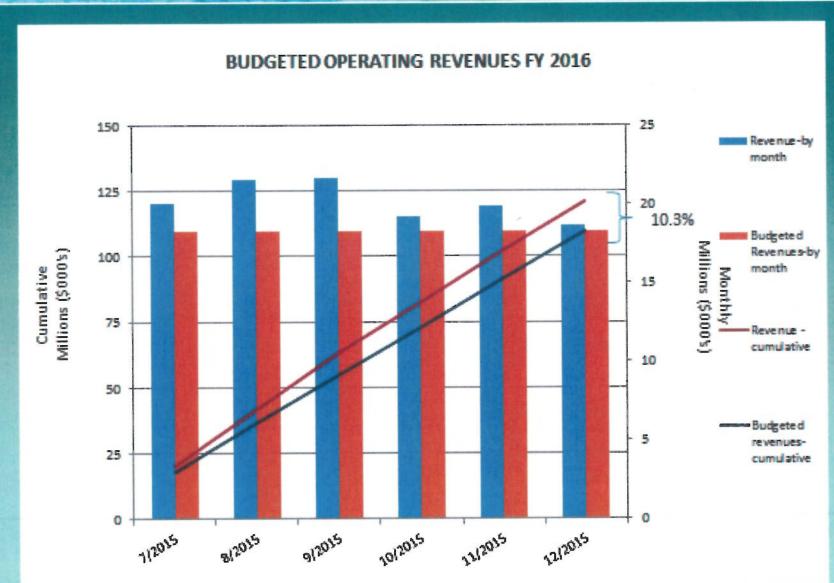


BUDGETED OPERATING EXPENDITURES FY 2016





Safe, dependable, and affordable water now and into the future



Safe, dependable, and affordable water now and into the future



Questions or Comments

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU 630 SOUTH BERETANIA STREET HONOLULU, HI 96843



KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chair ADAM C. WONG, Vice Chair DAVID C. HULIHEE KAPUA SPROAT BRYAN P. ANDAYA

ROSS S. SASAMURA, Ex-Officio FORD N. FUCHIGAMI, Ex-Officio

ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

ELLEN E. KITAMURA, P.E. Deputy Manager and Chief Engineer

Chair and Members Board of Water Supply City and County of Honolulu Honolulu, Hawaii 96843

Chair and Members:

Subject: Enterprise Organizational Study Update

An Enterprise Organizational Study was initiated to analyze the current Board of Water Supply (BWS) organizational structure and work processes, recommend improvements to increase operational efficiencies and develop an implementation plan. The implementation plan includes the appropriate organizational structure, span of control, staffing levels, competencies and training programs specifically for BWS. The selected consultant, Matrix Consulting Group, from Mountain View, California, began their work on June 29, 2015.

Matrix Consulting Group completed the requisite tasks and BWS is now reviewing the drafts and providing feedback on content and format changes that need to be made. The study should be available by the end of April 2016, as there is a significant amount of content to be reviewed.

Respectfully submitted,

ERNEST Y.W. LAU, P.E. Manager and Chief Engineer

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU 630 SOUTH BERETANIA STREET HONOLULU, HI 96843



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ELLEN E. KITAMURA, P.E. Deputy Manager and Chief Engineer

Chair and Members Board of Water Supply City and County of Honolulu Honolulu, Hawaii 96843

Chair and Members:

Subject:

Board of Water Supply Water Master Plan Quarterly Update

Barry Usagawa, Program Administrator of our Water Resources Division, will present an update of the Board of Water Supply Water Master Plan.

Respectfully submitted,

ERNEST Y.W. LAU, P.E.

Manager and Chief Engineer

Attachment





Water Master Plan Board Quarterly Update No. 9



January 25, 2016





Previous Water Master Plan Updates

- Water Master Plan Components
- Main Break Causal Factors
- Pipeline Condition Assessments
- Pilot Pipeline Condition Assessment Tools
- 3-Year Public Engagement Strategy
- Leak Detection & Special Design Projects
- Echologics Leak Finder Survey:
- Stakeholder Advisory Group & Reservoir Condition Assessments
- Smart Ball Ahuimanu W16" Pipeline Assessment Findings Today's Topic



BWS Water Master Plan

- ➤ The Water Master Plan is a comprehensive program that, looking ahead over the next 30 years, evaluates the entire water system, identifies necessary improvements, and balances needs and costs for our customers.
 - ➤ A best practice of water utilities seeking to ensure stewardship of water supplies and infrastructure.
 - Provides vital information for policy makers to make decisions about how to balance water service adequacy & dependability with the cost of infrastructure improvements and rate affordability to our customers.

Water Service
Adequacy & Dependability

Infrastructure Costs Rate Affordability

Safe, dependable, and affordable water now and into the future



IDENTIFY

needs for increasing existing supplies and improvements to existing facilities

PRIORITIZE

improvements over a 30-year period based on risks to the system and providing reliable service to customers

COMPARE

projections of future needs with existing water supplies and infrastructure

ANALYZE

funding options to pay for improvements, including rates



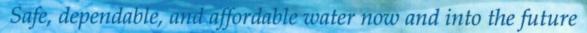
ASSESS

existing condition of pipes, pumps, reservoirs, wells, treatment plants, and other facilities

DEVELOP

a comprehensive plan to implement improvements, including priorities, schedules, costs, financing, and rates

WATER-FOR-LIFE





Water Master Plan Schedule

2013

Phase 1:
 Initial
 Evaluation,
 WMP
Methodology &
Ph. 2&3 Scope

2014

2015

2016-2018

Phase 2: Condition Assessment & System Analysis

Phase 3: 30-year CIP, Water Master Plan & Stakeholder Advisory Group

Financial
Plan
&
Rate
Study



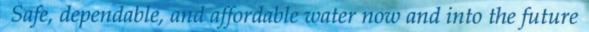
Approx. 80% Complete

Water Master Plan Tasks

Task	Description
1	Causal Factors Analysis for Pipelines
2	Risk Based Pipeline Prioritization Using CapPlan
3	Implement Pipeline Condition Assessment: Evaluation of CA technologies
4	Implement Non-Pipeline Condition Assessment
5	Background Info and Planning Data
6	Water Source Evaluation
7	Water Quality Treatment Evaluation
8	Water System Evaluation
9	Operation and Maintenance Evaluation
10	Recommended Capital Improvement Plan
11	Financial Plan and Rate Study (rescheduled to 2016)
12	Communications Plan
13	Project Management
14	Update Causal Factors
15	Recommend Transmission Pipeline Rehabilitation and Replacement
16	Water Master Plan Report
17	Implementation Plan Coordination
18	Project Support

Water Master Plan Table of Contents (Draft)

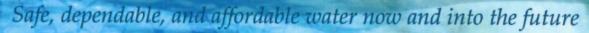
Chapter	Description
	Executive Summary
1	Water Master Plan Approach and Methodology
2	Description of BWS Water System
3	Historical and Future Water Demands
4	Current and Future Water Supply Sources
5	Water Quality, Regulations and Treatment
6	Water System Standards
7	System Capacity Evaluation
8	Facility Condition Assessment
9	Water Supply Sustainability
10	Stakeholder Advisory Group Recommendations
11	Findings
12	Implementation
	Appendices





Pipelines comprise 80 percent of the value of the BWS Water System

- Recently completed condition assessments with two innovative technologies
 - SmartBall PWA (Pipe Wall Assessment)
 - Sahara II (Findings are Pending)

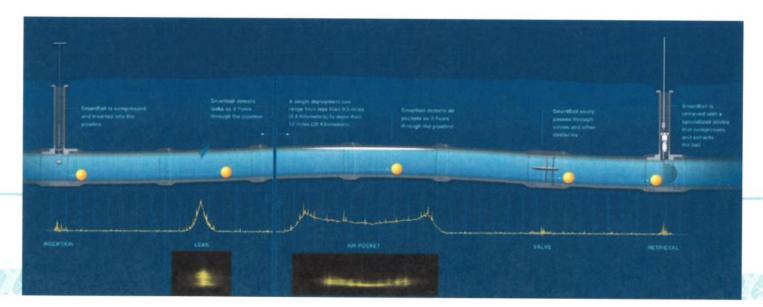




Smartball Pipe Wall Assessment

Findings:

- 25 significant leaks found along 2-mile cross-country Ahuimanu
 W16" pipeline from Ahuimanu to Heeia. Built in 1944.
- Also detected major sections of this pipeline with high internal stresses, indicative of localized corrosion
- Pipeline replacement alternatives being evaluated and will be included in CIP





Smartball Insertion/Extraction



WATER FOR LIFE

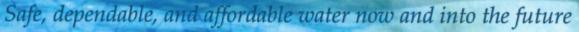




Ahuimanu W16" Leak & Pipe Wall Survey

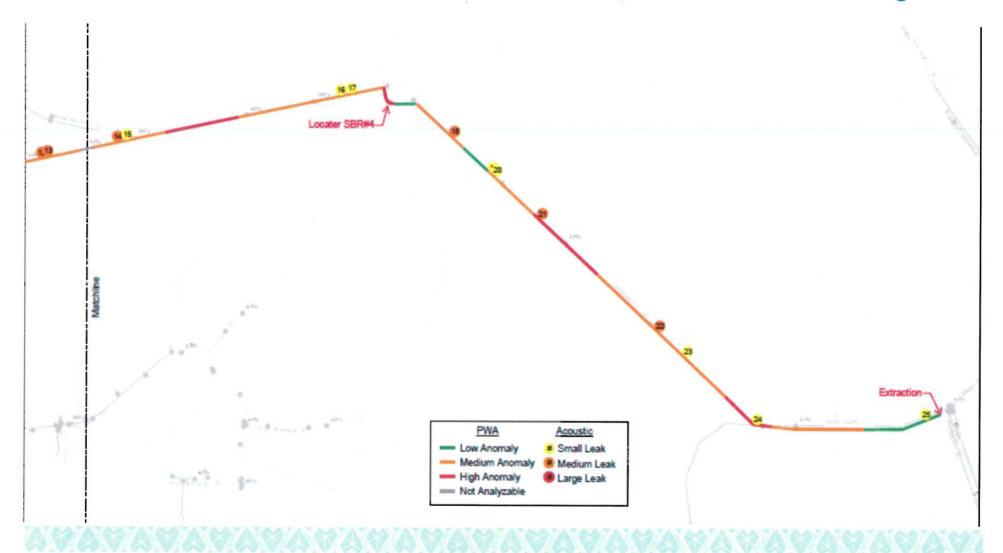


WATER FOR LIFE





Ahuimanu W16" Leak & Pipe Wall Survey





Stakeholder Advisory Group Active and Engaged

Meeting 5: January 12, 2016

- 24 of 28 members in attendance
- BWS Updates on Charter Commission & Red Hill
- Discussion of WMP Objectives
- Water Quality and Treatment
- Reservoir Condition Assessment

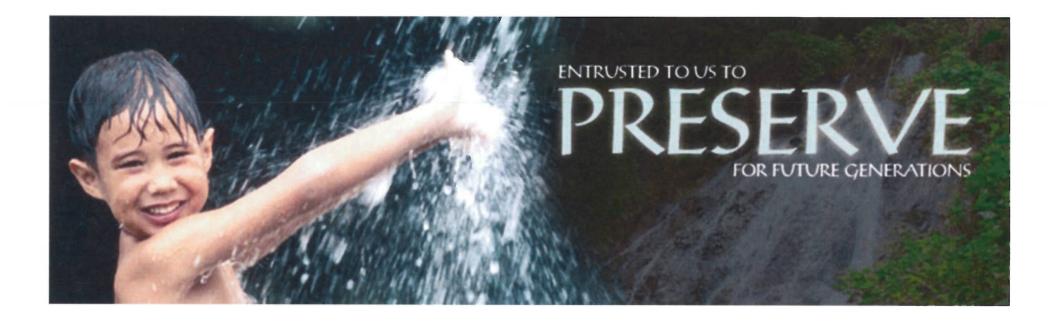
Field Trip: Halawa Shaft February 20, 2016

Next Meeting: March 16, 2016

WATER FOR LIFE

Safe, dependable, and affordable water now and into the future





BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU 630 SOUTH BERETANIA STREET HONOLULU, HI 96843



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ELLEN E. KITAMURA, P.E. Deputy Manager and Chief Engineer

Chair and Members Board of Water Supply City and County of Honolulu Honolulu, Hawaii 96843

Chair and Members:

Subject: Status Update of Groundwater Levels at All Index Stations

There is one aquifer index well within low groundwater status for the production week that ended on January 2, 2016. Kaimuki is under caution status. The weekly production average for the period was 130.19 million gallons per day.

The Board of Water Supply rainfall index for the month of December 2015 was 76 percent of normal with a 5-month moving average of 173 percent. As of January 5, 2015, the Hawaii Drought Monitor shows abnormally dry conditions for most of Oahu except for the Koolau Range.

Per the National Weather Service, there is a modest prediction of below normal rainfall for January 2016. Climate models indicate El Niňo conditions may continue through the winter season, yielding possible below-normal rainfall from January through June 2016.

Most index monitor wells still exhibit slightly increasing or static trends due to the increased rainfall from the months of August through November 2015.

Respectfully submitted,

ERNESTY.W. LAU, P.E.

Manager and Chief Engineer

Attachment

PUMPAGE, HEAD, AND RAINFALL REPORT Week of 12/27/15 to 1/02/16

STATION			HEAD	STAT	ION	MGD	HEAD	STAT	ON	MGD	HEAD			MGD	HEAD.
METR	0			WINDWA	RD		L	EWA-WAIAN	AE (CONT)			PH (C	ONT)		
KULIOUOU	00.0				MAKAHA IV		0.00		PEARL CITY II		0.96	· · · · · · ·			
WAILUPE		0.00	00 WAIMANALO II		0.24		MAKAHA V		0.00		PEARL CITY III		0.46		
WAIALAE-IKI		0.00		WAIMANALC	111	0.13		MAKAHA VI		0.00		WAIAU		0.63	
AINA KOA		0.46		KUOUT		0.00		MAKAHA SHA	FT.	0.00	nodata	NEWTOWN		2,19	
AINA KOA II		1.02		KUOU II		0.07		KAMAILE		0.00		KAONOHIII		0.82	
WAIALAE SHAFT		0.00		KUOU III		0,23		WAIANAE I		0.33		WAIMALU I		0.00	
MANOA II		0.00		LULUKU		1,02		WAJANAE II		0,52		AJĒA		0.23	
PALOLO		0.98		HAIKU		0.36		WAIANAE III		0.47		AIEA GULCI	1497	0,51	
KAIMUKI HIGH		2,35	23,44	IOLEKAA		0.00		MAKAKILO		0.98		AIEA GULC	1550	0.22	
KAIMUKI LOW		0.77	20.77	KAHALUU		0.93	<u> </u>	HONOULIULI		0.46		HALAWA 27	7	1.80	
WILDER		6.93		WAIHEE		0.00	<u> </u>	HONOULIULI	1	5,76		HALAWA 55	0	0,00	
BERETANIA HIGH	1	2,32	22.84	KAHANA		0.54	<u> </u>		SUBTOTAL:	10.38		KAAHUM	ANU MTR(-)	0.00	
BERETANIA LOW		3 89	22.04	PUNALUU1		0.00	19.00	IMPORT F.	ROM PH		<u> </u>	KAAMILO	FLO MTR (-)	0.00	
KALIHI HIGH		3.35	22.40	PUNALUU II		0,11		KAPOLELLINE	BSTR	13.99		KUNIA F	· · · · · · · · · · · · · · · · · · ·	5.19	18.92
KALIHI LOW		2.17	22.40	PUNALUU III		1.62		HONOULIULI	B FLOW	0.00	<u> </u>	KUNIA II		1,84	
KAPALAMA		0.18		KALUANUI		0.00		EWA BEACH I	FLOW.	0.00	<u> </u>	KUNIA III		1.32	
KALIHI SHAFT		8,58		MAAKUA		0.40		HON	<u>OULIULI (-)</u>	-0,46		HOAEAE		5.85	
MOANALUA		1.29	19.42	HAUULA		0.00		HONG	OULIULI II (-)	-5.76		EWA SHAFT		0.00	
	SUBTOTAL:	34.29							SUBTOTAL:	7.77		WAIPAHU	INTCON. (-)	-2.82	
				KAHUKU		0.32						EWA-\	VAIANAE (-)	-7.77	
IMPORT FE	ROM PH			OPANA		1,03		PEARLH	ARBOR			PHI	OCAL USE	30.41	
HALAWA SHAFT	-	6.29	16 99	WAIALEE I		0.00		WAHIAWA		2.31		TOTAL	SUBURBAN	57,38	
KAAMILO		1.01		WAIALEE II		0.00		WAHIAWA II		1.03					
KALAUAO		7.47	17.35	SUNSET BE	ACH	0.00		MILILANI I		2.56		KALAUAO SPRINGS		0.45	
PUNANANI		11.15		SI	SUBTOTAL:			MILILANI II		0.00		BARBERS POINT (NP)		0,90	
KAONOHIII		0.00						MILILANI III		0.82		GLOVER TUNNEL (NP)		0.46	
WAIMALU II		0.00	15.45	WIND, EXPORT		0.14		MILILANI IV		1.20					
KAAHUMANU		1,03						WAIPIO HTS.		0.20		н	EAD CONDIT	ΠΟΝ	
HECO WAIAU		0.00		HALEIWA-W	AIALUA			WAIPIO HTS.	1	0.49		CAUTION	ALERT	CRIT	TCAL
MANANA		0,49		HALEIWA		0.00		WAIPIO HTS.	11	0.00		KAIMUKI			
KAAHUMA	NU FLOW MT	0.00		WAIALUA		1.96		WAIPIO HTS. III		1.17					
	O FLOW MTR	0.00		Si	UBTOTAL:	1.96		WAIPAHU		2.82	18.63				
TOTAL IMP/EX	XP WAIP, INT:	0.00						WAIPAHU II		1,13					
	T FRM WIND:	0.14		EWA-WA	MANAE			WAIPAHU III		1.06					
1	SUBTOTAL:	27.58		MAKAHA I		0.89		WAIPAHU IV	·	2.47					
				MAKAHA II		0.14		PEARL CITY S	SHAFT	1.22	14.97				
т	TAL METRO:	61.87		MAKAHA III		0.83		PEARL CITY	1	0.50					
										1					
	VRM PERMIT			T		<u>s</u>		PUMPAGE	2016		015	GRAVITY	2016		15
	Α	<u> </u>	3	C	D	 	<u>Ė</u>	SUBURB.	57.38		.85	SUBURB.	10.54		05
WATER	PERMITTED	ŀ		DIFF.	YEAR/	l	₩FF.	METRO	61.87		28	METRO	0.40	F	45
DISTRICTS	USE	20		B-A	DATE	<u> </u>	D-A	TOTAL:	119.25	12	5.13	TOTAL:	10.94	8.	50
HONOLULU	45.27	34.		-10.58					ļ	 		Manoa	0.17	 	
WINDWARD	25,21		.63	-10.58				NUUANU #5		 		Palolo	0.23		
NORTH SHORE	4.08	3.3		-0.77		-		(rainfall)	4.28"	 	92"	Waim, I&II	80.0	 	
WAHIAWA	4.27		34	-0.93					<u> </u>	1-		Waim. III&IV			
WAIANAE	4.34	3.9		-0.43		ļ		 	<u> </u>	 		Waihee Incl.	0.96	 	
EWA-KUNIA	15,88		20	-8.68	<u> </u>			!	[<u> </u>		Waihee tun.	5.82		
PEARL HARBOR	92,66	65.		-27.56				 	<u> </u>	├		Luluku	0.08	 	
TOTAL:	191.71	132	1.1B	-59.53		-		ļ	<u></u>	 		Haiku	0,00	 	
		ļ			ļ			 	<u> </u>		· · · · · ·	Kahaluu	1.85	1	
				ļ		<u> </u>	· · · · · · · · · · · · · · · · · · ·	<u> </u>	<u> </u>	 		Waia, C&C	1,40		
		<u> </u>		L	L	<u> </u>		I.	l	L		Waia plant.	0.16	1	

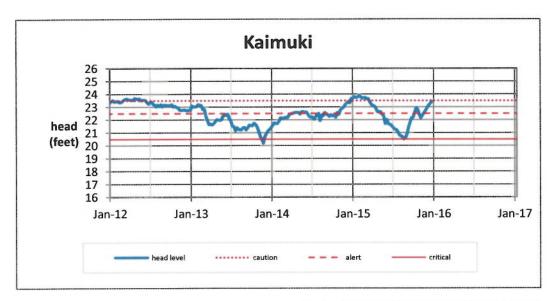
DROUGHT STATUS REPORT DRAFT IN MGD

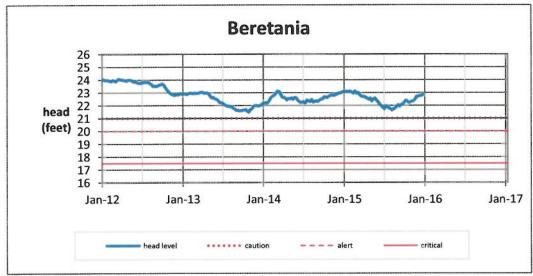
WATER USE DISTRICT	AUTHORIZED USE	12/27- 1/02 2016			
HONOLULU	45,27	34.83			
WINDWARD	25.21	14.49			
NORTH SHORE	4.08	3.31		 	
WAHIAWA	4.27	3.34		 :	
EWA-WAIANAE	20.22	19.71			
PEARL HARBOR	92.66	54.51			
TOTAL	191.71	130.19			

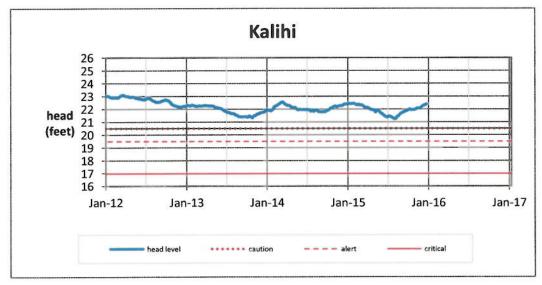
Accounts for in-district pumpage and transfers

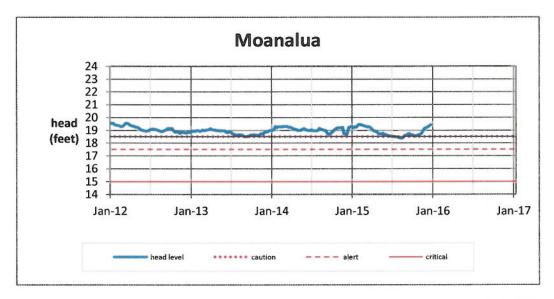
HEAD IN FEET

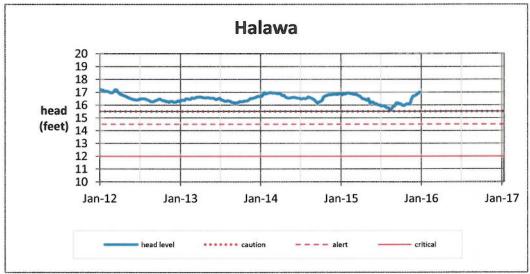
	·····			,	 1	·	 · · · · · · · · · · · · · · · · · · ·
		2015	12/27- 1/02 2016				
HONOLULU					 		
KAIMUKI		23.65	23.44				
BERETANIA		23.06	22.84				
KALIHI		22.39	22,40				
MOANALUA		19.24	19.42				
PEARL HARBOR							
HALAWA		16.89	16.99				
KALAUAO		17.33	17.35				
PEARL CITY		14.96	14.97				
WAIPAHU		18.71	18.63				
KUNIA		19.00	18.92				
EWA-WAIANAE							
МАКАНА		16.40	NO DATA				
WINDWARD							
PUNALUU		18.18	19.00				
KALUANUI		18.35	19.19				
NORTH SHORE							
WAIALUA		11.17	11.11				

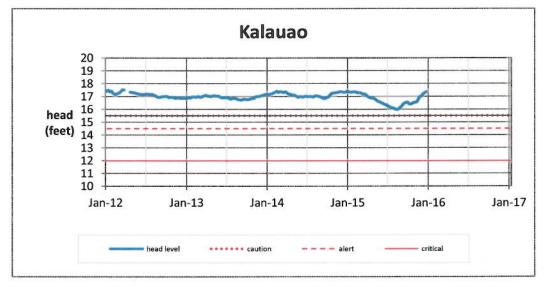


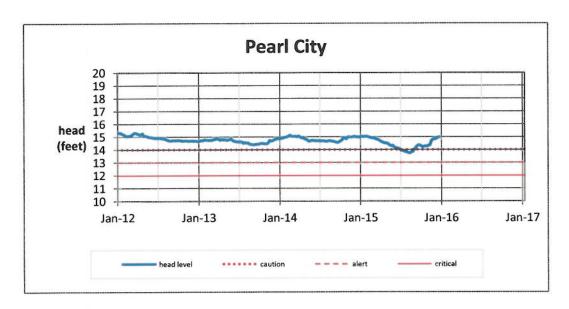


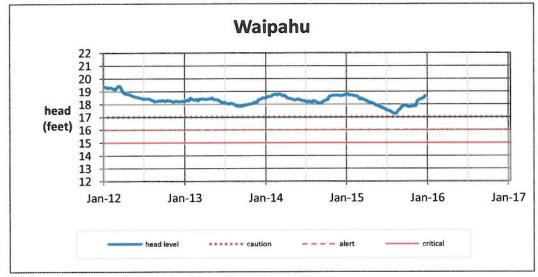


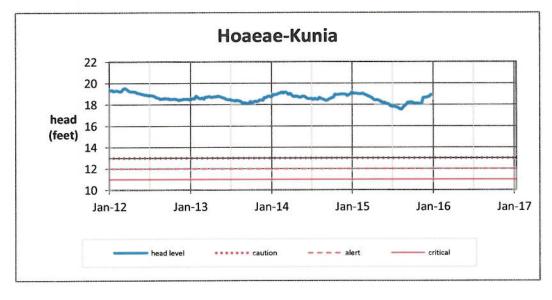


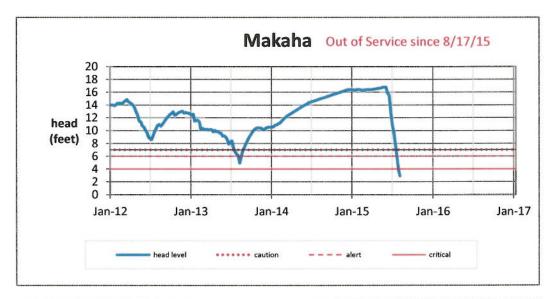


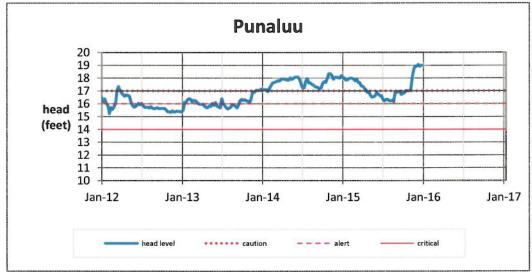


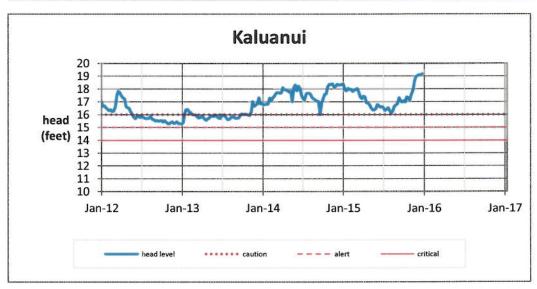


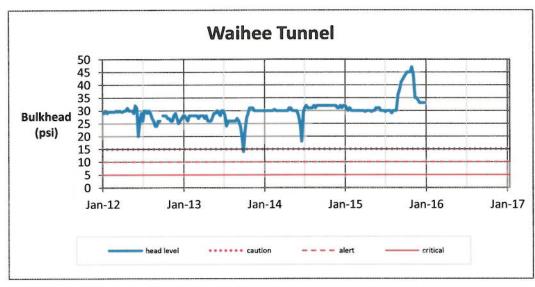


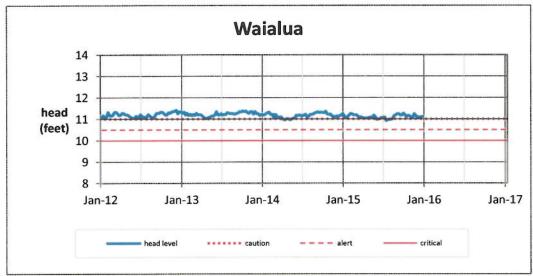


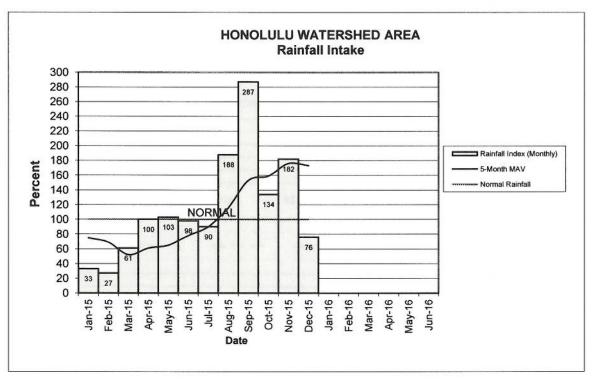


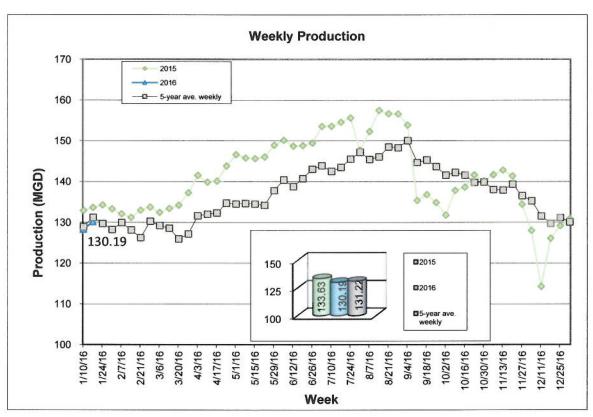










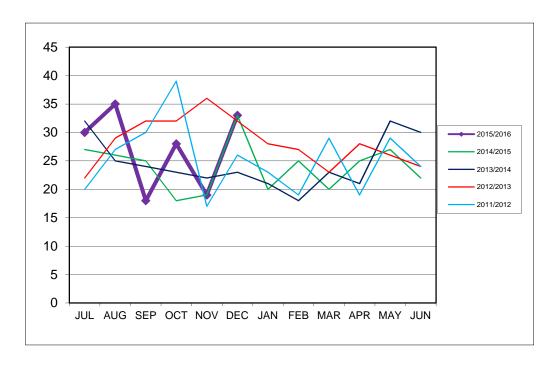


WATER MAIN REPAIR REPORT

for December 2015

_	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2015/2016	30	35	18	28	19	33							163
2014/2015	27	26	25	18	19	33	20	25	20	25	27	22	287
2013/2014	32	25	24	23	22	23	21	18	23	21	32	30	294
2012/2013	22	29	32	32	36	32	28	27	23	28	26	24	339
2011/2012	20	27	30	39	17	26	23	19	29	19	29	24	302

<u>Date</u>	<u>Address</u>	<u>Size</u>
12/1	99-103 Pamoho Pl.	6" C.I.
12/1	42 Puiwa Rd.	12" P.V.C.
12/1	1026 Puuwai St.	12" P.V.C.
12/1	99-040 Nalopaka Pl.	6" C.I.
12/3	3752 Old Pali Rd.	6" C.I.
12/3	98-546 Kaimu Lp.	8" C.I.
12/4	3577 Manoa Rd.	12" C.I.
12/4	98-073 Lii-Ipo St.	8" P.V.C.
12/6	1482 Humuwili Pl.	4" C.I.
12/7	94-1096 Kahuamo St.	8" C.I.
12/7	94-1120 Kahuamo St.	6" C.I.
12/8	98-107 Kamehameha Hwy.	12" C.I.
12/9	84-700 bl. Huipu Dr.	16" A.C.
12/9	67-190 Kanoena St.	8" C.I.
12/9	Waimea Bay Beach Park	16" C.C.
12/9	767 17th Ave.	4" Galv.
12/10	7069 Niumalu Lp.	8" P.V.C.
12/13	Aikahi Lp. & Aikahi Pl.	12" A.C.
12/14	270 Ilihau St.	12" A.C.
12/14	1272 Kina St.	8" C.I.
12/15	47-383 Kapehe St.	8" D.I.
12/18	1464 Ulupuni St.	12" A.C.



Bold * - Pro-active Leak Repair

18.72 miles of pipelines were surveyed by the Leak Detection Team in the month of December.

12/18	602 Poipu Dr.	4" C.I.
12/18	92 Dowsett Av.	8" P.V.C.
12/18	1731 Mikahala Way	6" C.I.
12/19	1464 Onioni St.	8" C.I.
12/23	2517 Ala Wai Bl.	6" C.I.
12/27	87-209 Ohiohi Pl.	8" C.I.
12/28	5305 Malu Pl.	4" C.I.
12/30	99-122 Heleconia Pl.	8" C.I.
12/30	726 Mokulua Dr.	8" P.V.C.
12/30	47-721 Hui Kelu St.	12" C.I.
12/31	46-242 Ahui Nani Pl.	8" C.I.