

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com



January 24, 2017

KIRK CALDWELL, MAYOR

BRYAN P. ANDAYA, Chair
ADAM C. WONG, Vice Chair
DAVID C. HULIHEE
KAPUA SPROAT
KAY C. MATSUI

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

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C & C OF HONOLULU

2017 JAN 24 AM 9:15

NOTICE

The Regular Meeting of the Board of Water Supply, will convene on Monday, January 30, 2017, 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:

1. Emailing to board@hbws.org;
2. Faxing to 748-5079;
3. Calling 748-5061;
4. 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 board@hbws.org 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 30, 2017 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 19, 2016
2. Approval of the Revision of the 2016-2017 Capital Improvement Program Budget – Amendment No. 1

ITEMS FOR INFORMATION

1. Financial Statements and Supplemental Information With Independent Auditors' Report, Fiscal Years Ended June 30, 2016 and 2015
2. Financial Update for the Quarter Ended December 31, 2016
3. Board of Water Supply Financial Plan and Rate Study Update
4. Board of Water Supply Red Hill Groundwater Project Update
5. Draft Board of Water Supply Strategic Plan Report and Presentation of Report and Recommendations to the Board by the HRS §92-2.5 Permitted Interaction Group
6. Status Update of Groundwater Levels at All Index Stations
7. Water Main Repair Report for December 2016

EXECUTIVE SESSION

1. Approval of the Minutes of the Executive Session Meeting Held on December 19, 2016
2. To Consider the Evaluation of the Chief Engineer, Where Consideration of Matters Affecting Privacy will be Involved [HRS §92-5(a)(2)]

M I N U T E S
REGULAR MEETING
OF THE
BOARD OF WATER SUPPLY

January 30, 2017

At 2:02 PM on January 30, 2017 in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, Board Chair Andaya called to order the Regular Meeting.

Present: Bryan P. Andaya, Chair
Adam C. Wong, Vice Chair
David C. Hulihee
Kay C. Matsui
Ross S. Sasamura

Also Present: Ernest Lau, Manager and Chief Engineer
Ellen Kitamura, Deputy Manager and Chief Engineer
Erwin Kawata
Barry Usagawa
Mike Fuke
Jason Takaki
Joe Cooper
Mike Matsuo
Kevin Ihu
Kathleen Pahinui
Henderson Nuuhiwa
Jennifer Elflein
Fred Ferreira
Leanne Matsumoto

Others Present: Moana Yost, Deputy Corporation Counsel
Jeff Lau, Deputy Corporation Counsel
Jessica Wong, Deputy Corporation Counsel
Lawrence Chew, N&K CPAs, Incorporated
Ryan Iwane, N&K CPAs, Incorporated
Chris Cleveland, Brown and Caldwell
Cliff Lum, SSFM International, Incorporated
Quincy Bedoya
John Montgomery
Kirsten Fujitani
Jodi Malinoski

Absent: Kapua Sproat
Ford N. Fuchigami

APPROVAL OF
MINUTES

Approval of the Minutes of the Regular Meeting held on December 19,
2016

MOTION
TO APPROVE

Ross Sasamura and David Hulihee motioned and seconded, respectively,
to approve the Minutes of the Regular Session Meeting of December 19,
2016. The motion was unanimously carried.

APPROVAL OF
REVISION OF
2016-2017 CIP
BUDGET –
AMENDMENT
NO. 1

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

“January 30, 2017

Chair and Members:

Subject: Approval of the Revision of the 2016-2017 Capital
Improvement Program Budget – Amendment No. 1

We recommend the current Capital Improvement Program (CIP) budget be amended as described below:

	<u>Appropriation</u>	
	<u>Present</u>	<u>Proposed</u>

1. Add the following CIP projects and appropriations:

Item No. 48A SLOPE STABILIZATION
NEAR 2250 KALENA DRIVE

OPERATING FUND CONST	-0-	200,000
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This project is an emergency procurement based on notification from the Hawaii Public Housing Authority.

Item No. 57A ANOI ROAD WATER SYSTEM
IMPROVEMENTS

OPERATING FUND - CONST (SRF ELIGIBLE)	-0-	6,200,000
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This project is being re-programmed into the FY 2017 CIP budget and is eligible for State Revolving Fund (SRF) funding. This project was originally budgeted in FY 2016, but the SRF loan did not materialize for this project.

2. Increase the appropriation for the following CIP project:

Item No. 7 PUMP RENEWAL AND
REPLACEMENT

OPERATING FUND CONST	1,200,000	2,100,000
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An increase in appropriation is needed to address additional requirements at Honouliuli Wells I and provide funding for the work identified under the Indefinite Delivery Indefinite Quantity contract that had to be rebid in FY 2017.

<u>Appropriation</u>	
<u>Present</u>	<u>Proposed</u>

Item No. 33 WATER MAIN INSTALLATION
& REPLACEMENT

OPERATING FUND P&E	100,000	600,000
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Additional funding for service lateral replacements and an emergency repair of the School Street box drain damaged by a water main break.

3. Decrease the appropriation for the following CIP project:

Item No. 38 FACILITY REPAIR AND
RENOVATION

OPERATING FUND CONST	1,500,000	1,100,000
------------------------	-----------	-----------

A window replacement project planned for FY 2017 will exceed available funds. This project will be budgeted in FY 2018.

4. To fund the CIP projects that have been added and to increase the appropriation of the CIP contract adjustment account, the following CIP projects and appropriations are deleted:

Item No. 3 CONSTRUCTION
MANAGEMENT FOR VARIOUS BWS
CONSTRUCTION PROJECTS

OPERATING FUND P&E	500,000	-0-
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This project is deferred to provide funding for the Anoi Road Water System Improvements project. Construction management services are not needed in FY 2017.

Item No. 54 PEARL CITY WELLS II
ISOLATION VALVES

OPERATING FUND CONST	700,000	-0-
------------------------	---------	-----

This project is deferred to provide funding for the Anoi Road Water System Improvements project. Due to improvements identified after budgeting, the construction estimate far exceeds the budgeted amount. This project will be budgeted in FY 2018.

<u>Appropriation</u>		
	<u>Present</u>	<u>Proposed</u>

Item No. 18 WAHIAWA WATER
SYSTEM IMPROVEMENTS, PART III

OPERATING FUND CONST	2,900,000	-0-
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This project is deferred to provide funding for the Anoi Road Water System Improvements project. Capital Projects Division anticipates advertising for this project at the end of FY 2017. This project will be budgeted in FY 2018.

Item No. 19 HUI ULILI
STREET: 12-INCH AND 8-INCH
MAINS

OPERATING FUND CONST	1,700,000	-0-
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This project is deferred to provide funding for the Anoi Road Water System Improvements project. Capital Projects Division anticipates advertising for this project at the end of FY 2017. This project will be budgeted in FY 2018.

Item No. 35 MILILANI WELLS I
GAC RENOVATION

OPERATING FUND P&E	600,000	-0-
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This project is deferred to provide funding for the Anoi Road Water System Improvements project. Additional project collaboration is needed prior to finalizing the scope of the project. The project will be budgeted in FY 2018.

Item No. 44 PILIUKA PRV
REPLACEMENT

OPERATING FUND P&E	200,000	-0-
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This project is deferred to provide funding for the Anoi Road Water System Improvements project. Additional project collaboration is needed prior to finalizing the scope of the project. The project will be budgeted in FY 2018.

<u>Appropriation</u>	
<u>Present</u>	<u>Proposed</u>

Item No. 49 KAMAILE WELLS –
REPLACEMENT OF PUMPING UNITS

OPERATING FUND – (SRF ELIGIBLE)	CONST	1,400,000	-0-
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This project is being deferred to provide funding for the Anoi Road Water System Improvements project. The drainage improvements required at this station are still to be constructed, pending approval of the Archaeological Inventory Survey by the State Historic Preservation Division. The planned pump renovations require the installation of drainage improvements.

Item No. 53 MOANALUA WELLS:
REPLACEMENT OF PUMP NO. 1

OPERATING FUND – (SRF ELIGIBLE)	CONST	1,500,000	-0-
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This project is being deferred to provide funding for the Anoi Road Water System Improvements project. This project has additional design requirements identified by the Water Systems Operations Division. The project will be budgeted in FY 2018.

5. Increase the appropriation of the CIP Contract Adjustment
Account

OPERATING FUND	8,000,000	10,100,000
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The following is a summarization of the FY 2017 CIP Budget Amendment No. 1:

FY 2017 CIP Budget (as Adopted)	\$80,790,500
Projects Added	6,400,000
Projects – Modified Appropriations	1,000,000
Projects Deferred	<u>(9,500,000)</u>
Sub-Total	\$78,690,500
Contract Adjustment Account	<u>2,100,000</u>
FY 2017 CIP Budget (as Amended)	<u>\$80,790,500</u>

Upon approval, the appropriate pages of the current Capital Improvement Program budget will be revised.

Respectfully submitted,

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

DISCUSSION: Manager Lau explained to the Board each revision of the Capital Improvement Program budget.

Board Vice Chair Wong asked if all of the deferrals are due to the additional funding needed for the Anoi Road Water Systems Improvement Project. Jason Takaki, Capital Projects Division Program Administrator, replied yes, except for the Kamaile Wells Project. The planned pump renovations require the installation of drainage improvements which are still pending. Mr. Lau added that for some of the projects, however, due to additional requirements, the construction costs became higher than the budgeted amount so these projects will be deferred.

Mr. Wong asked if all of these projects would have been completed if it wasn't for the Anoi System project. Mr. Takaki responded yes, they would complete the projects later in the current fiscal year (FY) rather than early next FY. Mr. Lau stated that they would have to tap their contingency budget.

Mr. Wong asked if the Anoi project was budgeted for FY16 but not completed, what happened to those funds allocated to that project. Deputy Manager Kitamura explained that funds for the Anoi project were going to be made available through the State Revolving Fund (SRF) loan program, however, BWS was unsuccessful in getting the loan commitment letter. Since it was identified as SRF funding, the funds lapsed. Funds are needed now because the project is ready to go.

Mr. Wong asked if BWS is applying for SRF funding this FY for the Anoi project. Mr. Lau responded yes. Mr. Wong asked if the SRF funds come in for the Anoi project, what happens to those funds since the Anoi project will already have been funded through the deferrals of these other projects. Ms. Kitamura explained that the way the SRF program works is that BWS fronts all payments to the contractor using BWS's operating funds. This is why there are commitment funds in the operating budget and SRF eligible projects are identified as such. As BWS receives invoices from the contractors, BWS seeks reimbursement from the Department of Health (DOH). Mr. Wong thanked Ms. Kitamura for the explanation but stated that he is always concerned when he sees deferrals of capital improvement program projects, particularly when it's replacement of pipelines, etc. He stated that even if the project gets deferred for three months, that means something else from next year's budget will get deferred. Mr. Lau agreed.

Board Chair Andaya asked why BWS didn't receive the SRF funding for the Anoi project. Ms. Kitamura responded that it was an administrative oversight. She explained that unfortunately, the Anoi project came up during the time that BWS and DOH were going through a transition period. Currently each project has their own loan agreement, but BWS and DOH were considering programmatic financing, where DOH would give BWS a lump sum of money to pay for the projects that were on the SRF eligible list. The project was awarded and was ready to go and that's when it was realized that the commitment letter was never issued. Mr. Lau added that the Anoi project is ready to move forward, and unfortunately it means delaying some of the other projects to the next FY. Mr. Lau stated that he is very sensitive to Mr. Wong's comments.

**MOTION TO
APPROVE
REVISION OF
2016-2017
CIP BUDGET -
AMENDMENT
NO. 1**

Ross Sasamura and David Hulihee motioned and seconded, respectively, to approve the Revision of the 2016-2017 Capital Improvement Program Budget - Amendment No. 1. The motion was unanimously carried.

REVISION OF THE 2016-2017 CAPITAL IMPROVEMENT PROGRAM BUDGET – AMENDMENT NO. 1 WAS APPROVED AT THE JANUARY 30, 2017 BOARD MEETING			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
ADAM C. WONG	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT			ABSENT
KAY C. MATSUI	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI			ABSENT

"January 30, 2017

FINANCIAL
STATEMENTS
AND
SUPPLEMENTARY
INFORMATION

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

Chair and Members:

Subject: Financial Statements and Supplemental Information With
Independent Auditors' Report, Fiscal Years Ended June 30,
2016 and 2015

Our auditors, N&K CPAs, Incorporated, have completed the audit of the financial statements and federal awards of the Board of Water Supply (BWS) and issued an unmodified opinion. They have indicated that there is one material weakness on internal control over financial reporting. A corrective action statement to address this deficiency was incorporated into the audit report.

Attached are copies of the financial statements of the BWS and the reports thereon by N&K CPAs, Incorporated, covering the results of their examination of the accounts and financial status of the BWS for the years ended June 30, 2016 and 2015, as required under Article VII, Section 7-108 of the Revised Charter. The auditors' required communication letters dated December 20, 2016 and January 10, 2017 are also attached.

Lawrence Chew and Ryan Iwane from N&K CPAs, Incorporated, will present highlights from the auditors' report.

Respectfully submitted,

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

Attachments"

The foregoing was for information only.

DISCUSSION:

Mr. Lau introduced Lawrence Chew and Ryan Iwane, auditors at N&K CPAs, Incorporated, and said they will give the report. Mr. Lau stated that last year BWS's auditors were from Accuity, but it's healthy to change auditors to do the independent financial audit.

Lawrence Chew introduced himself as the engagement principal in charge of the audit and also introduced Ryan Iwane as the senior manager on the audit. Mr. Chew discussed the scope of services and a summary of the results of the audit.

Ryan Iwane informed the Board that they identified one deficiency in internal controls over accounting for significant non-routine transactions that's reflected in the single audit report, reference item 2016-001. He stated that they identified two misstatements of the financial statements that collectively were materially enough to restate the previously issued financial statements of the BWS for fiscal year (FY) ended June 30, 2015.

Mr. Iwane explained that the first misstatement was an understatement of the deferred loss on refunding of debt of approximately \$5,044,000, with the corresponding overstatement of interest expense of \$5,044,000. This transaction was related to the BWS's 2014 bond issuance that refunded previously issued debt. In a refunding transaction, the difference between the amounts needed to repay the old debt and the carrying amount (or the book value of the old debt) is reflected as deferred loss on refunding of debt on the BWS financial statements. Mr. Iwane continued to explain that BWS realized the book loss in order to secure new financing to save money in interest costs in the future. This loss is not reflected all at one time. Initially, it's deferred, then it will be amortized, or expensed, evenly over time, and the loss or expense recognized will offset the future savings that BWS will realize in the future. The amortization period is generally the shorter of the life of the old debt or the life of the new debt. When considering the life of the old debt, the life is based off of the normal maturity dates as opposed to any earlier call date provisions.

Mr. Iwane said that the error they identified was a result of amortizing the loss over a two-year period when it should have been amortized over approximately 16 years. He stated that their understanding is that it was an inadvertent oversight on BWS's part.

Mr. Iwane explained the second misstatement, which pertained to State Revolving Fund (SRF) notes payable at June 30, 2015 that was overstated by \$1.6 million with a related understatement of contributions in aid of construction for the FY ended June 30, 2015, totaling \$1.6 million as well. He stated that this arose because these particular SRF loans had principal forgiveness clauses in them, where a portion of the loan would be forgiven upon the disbursements of the proceeds to the BWS, which occurred both in FY 2015 and in FY 2016. Once the proceeds were disbursed to BWS, in connection with an eligible project, that portion of the loan was forgiven. However, the loan balances of the BWS financial statements were not adjusted accordingly, so it was overstated as of June 30, 2015. N&K suggested BWS fix the error, which management did.

Mr. Iwane continued to explain the cause of the errors and their recommendations to BWS. He stated that management has responded to the findings and have drafted a corrective action plan reflected in the single audit report.

Board Member Hulihee referred to the first misstatement and asked why the loss will be deferred over a period of time. Mr. Chew responded that it's to match the future amortization, which becomes an element of interest expense. Mr. Hulihee asked if it's because the loss was due to the

refunding. Mr. Chew responded yes, it's the difference between the reacquisition price and the amount of the current debt on the refund date. It's the amount of the old debt plus any call premium, and if it's an advanced refunding, it would be the amount of the old debt, call premium, plus the future interest expense. The delta gets deferred and then amortized over the shorter of the old debt or the new debt, so the \$5 million got amortized over 16 years rather than two years.

Mr. Andaya asked what the consequences are for the BWS since there's a finding of a material weakness in the financial reporting. Mr. Chew stated that they proposed that BWS make adjustments to what was recorded in the June 30, 2015 beginning balance and also to correct the error within the 2016 financial statements, so in the end the financial statements would be fairly stated as presented.

Mr. Hulihee referred to the presentation where it stated that management should be actively involved in the proper accounting. Mr. Hulihee said that this is something BWS should be able to rely on the accounting firm to do. Mr. Chew informed the Board that whenever they enter into a situation as this, the current auditor is required to discuss it with their predecessor. N&K did have a meeting with management and Accuity, and Accuity did agree it was an error that was not found. Mr. Iwane clarified that they believe management has the ability to catch these types of errors, but more emphasis should be placed on management to better communicate with the accounting personnel responsible for recording the transactions to the BWS's accounting records. Mr. Chew added that they have informed management that they want to maintain an open dialogue during the year to help counter these types of transactions.

Mr. Hulihee inquired about refunding that occurred in previous years and asked if they were accounted for correctly or is it just this current year that wasn't recorded correctly. Mr. Chew replied that their focus was just on the current year so it seems like this is the only error. Mr. Hulihee stated that there are still numbers on the books from previous refunding that are still being amortized so it seems to be a recurring issue. Mr. Chew agreed and said the key is that it should have been set up properly that first year with the right amortization. Mr. Hulihee asked if it was just this instance that the shorter period was used and Mr. Chew responded yes.

Mr. Iwane concluded the presentation. Mr. Lau stated that it was a pleasure working with N&K, and it is healthy to periodically change auditors to bring new perspectives, which N&K did. Mr. Lau also thanked the Finance Division and other BWS staff for their hard work in supporting the auditors. Mr. Chew stated that it was their first year auditing the BWS, and he thanked management and the Finance Division staff for their support.

Mr. Andaya stated that if the procedures in place are followed, then there should be no material weaknesses and does not want to see similar findings of material weakness in the future. Mr. Chew stated that this is why they encourage open dialogue with BWS throughout the year so

issues can be addressed before the end of the year. Mr. Andaya said especially when there are non-routine transactions.

Mr. Hulihee stated that there should be a schedule to record the refunding transactions because this is a recurring situation. Mr. Iwane stated that because non-routine transactions don't occur all the time, they are inherently more susceptible to misstatement.



BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

Single Audit for the Fiscal Year Ended
June 30, 2016

Scope of Services

- To express an opinion on the fair presentation of the Board of Water Supply's financial statements as of and for the fiscal year ended June 30, 2016.
- To express an opinion on compliance with applicable federal requirements that could have a direct and material effect on each of the Board of Water Supply's major federal programs for the fiscal year ended June 30, 2016.
- Our audit was performed in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, and the audit requirements of the Uniform Guidance (Title 2 CFR Part 200)

Summary of Auditor's Results

Financial Statements

Type of auditor's report issued:

Unmodified

Internal control over financial reporting:

Material weaknesses?

☒ Yes ☐ No

Significant deficiencies?

☐ Yes ☒ None Reported

Noncompliance material to the financial statements noted?

☐ Yes ☒ No

Summary of Auditor's Results (Continued)

Federal Awards - CFDA 66.468

Type of auditor's report on compliance for major federal programs issued:

Unmodified

Internal control over major federal programs:

Material weaknesses?

_____ Yes ✓ No

Significant deficiencies?

_____ Yes ✓ None Reported

Any other findings disclosed required to be reported under the Uniform Guidance?

_____ Yes ✓ No

2016-001: Improve Internal Controls Over Accounting for Significant Nonroutine Transactions

- **Condition:** The previously issued 2015 financial statements of the BWS contained misstatements that resulted in the understatement of the change in net position for the fiscal year ended June 30, 2015 totaling \$6,611,890. Accordingly, the 2015 financial statements were restated by management to correct the following:
 - Deferred loss on refunding of debt at June 30, 2015 was understated by \$5,044,890 with a related overstatement of interest expense for the fiscal year ending June 30, 2015 totaling \$5,044,890.
 - SRF notes payable at June 30, 2015 was overstated by \$1,567,000 with a related understatement of contributions in aid of construction (principal loan forgiveness) for the fiscal year ended June 30, 2015 totaling \$1,567,000.

2016-001: Improve Internal Controls Over Accounting for Significant Nonroutine Transactions (Continued)

- **Cause:** Both errors involved significant, nonroutine transactions that were outside the normal course of business for the BWS:
 - Issuance of the Series 2014 water system revenue bonds that advanced refunded previously issued debt.
 - The receipt of SRF loan proceeds under an agreement that contained a principal forgiveness clause.
- **Criteria:** Management should be actively involved in the proper accounting for significant, nonroutine transactions that BWS personnel may not be familiar with.
- **Effect:** Significant, nonroutine transactions are inherently more susceptible to errors than routine transactions and therefore are more likely to result in a material misstatement.

2016-001: Improve Internal Controls Over Accounting for Significant Nonroutine Transactions (Continued)

- **Recommendation:** Management should proactively identify significant nonroutine transactions and be actively involved in both the determination of the accounting treatment and the timely review of recorded transactions.

- **Management's Response:**
 - The Finance division has competent, experienced staff who stay current with governmental accounting and financial reporting standards and industry practices.

 - Regular meetings are held between the Finance division management and senior finance staff to allow for the exchange of relevant financial and operational information.

 - A formal agenda will be developed with recurring topics that focus on non-routine transactions, new accounting pronouncements, financial risk, and other current issues.

 - Management will track the status of these issues and ensure that these issues are adequately addressed, documented and reflected in the BWS's financial statements.

Required Communication with Those Charged with Governance at the Conclusion of the Audit

- Auditor's views about the BWS's significant accounting policies, sensitive accounting estimates and financial statement disclosures.
- Significant difficulties, if any, encountered during the audit.
- Disagreement with management, if any.
- Material, corrected misstatements that were brought to the attention of management as a result of audit procedures.
- Uncorrected misstatements considered by management of BWS to be immaterial to the financial statements, both individually and in the aggregate.
- Other findings or issues, if any.



N&K CPAs, Inc.

ACCOUNTANTS|CONSULTANTS

**Board of Water Supply
City and County of Honolulu**

**FINANCIAL STATEMENTS AND SUPPLEMENTARY INFORMATION
WITH INDEPENDENT AUDITOR'S REPORT**

Fiscal Years Ended June 30, 2016 and 2015

**BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU**

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**Board of Water Supply
City and County of Honolulu
INTRODUCTION
Fiscal Year Ended June 30, 2016**

The Board of Water Supply of the City and County of Honolulu (BWS) is pleased to present its Annual Financial Report for Fiscal Year 2016. This introduction provides a brief overview of the mission, organization, and operations of the BWS. The following management's discussion and analysis is intended to provide the reader with an easily understandable analysis of the BWS's financial performance and all aspects of its financial position. Financial statements presenting the financial position and results of operations of the BWS is in conformity with accounting principles generally accepted in the United States of America, accompanied by the independent auditor's report, follows the management's discussion and analysis.

HISTORY OF THE BOARD OF WATER SUPPLY

The BWS was created in 1929 by the Territorial Legislature in response to public outcry for a truly effective water management system that was above politics. The 1929 Legislature passed Act 96 to create and define the powers and duties of the Honolulu Board of Water Supply. Although it remained as a department of the City and County of Honolulu, 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 2016, 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 BWS projects.

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

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

**Board of Water Supply
City and County of Honolulu
INTRODUCTION
Fiscal Year Ended June 30, 2016**

MISSION

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

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

ACCOMPLISHMENTS

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

Resource Sustainability (Safe)

- The BWS conducted 17,046 chemical tests, 9,290 microbiological tests, and 9,873 chlorine residual and other quality tests on samples collected from its sources, distribution systems, and treatment facilities to ensure all water served is safe to drink. Chemical tests performed this fiscal year include monitoring BWS wells near the Navy Red Hill Bulk Fuel Facility in response to a fuel leak reported by the Navy in January 2014. BWS is conducting its own studies to assess the impact the leak may have on the groundwater aquifer.
- In June 2016, BWS completed its annual production and delivery of the Consumer Confidence Report (CCR), also known as the Water Quality Report, to all BWS customers. The report provides information on the quality of the water delivered from the BWS system and was mailed to all customers on record and is also available at www.boardofwatersupply.com. The department also placed ads in Honolulu newspapers, including various ethnic language publications, to inform community members of the distribution.
- Potable water demand continues its downward trend of approximately 9% from 1990 to 2016 due to advanced water conservation efforts, economic incentives from sewer and water rate increases, recycled water, public education, and leak detection and repair programs in the BWS water system.
- The North Shore Watershed Management Plan (WMP) has been completed and is expected for adoption in FY 2017. The WMPs for the Ewa and Central Oahu districts are on-going. These are long-range water resource protection and water use and development plans for the city that are concurrent with and support the City's Development and Sustainable Communities Plans for Oahu. The WMPs guide the BWS's long-range capital improvement program, ensuring that adequate natural and alternative water supplies are available to meet Oahu's future water growth.

**Board of Water Supply
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INTRODUCTION
Fiscal Year Ended June 30, 2016**

- Recycled water is an important conservation strategy to reduce potable water consumption to extend our high-quality water supplies. Recycled water use from the Honouliuli Water Recycling Facility provides an alternative water supply in Ewa for irrigation and industrial purposes. Recycled water production from the BWS Honouliuli Water Recycling Facility averaged approximately eight million gallons per day. BWS is seeking State of Hawaii land to construct an elevated recycled water reservoir, which will increase recycled water use in Ewa.
- BWS staff held 26 outdoor water conservation classes at the Halawa Xeriscape Garden. These classes focused on reducing water use through efficient landscaping. In December 2015, the BWS launched a new "Seed of the Month" program -- in which visitors can pick up a free seedling or free seeds of an unthirsty plant -- to encourage residents to grow unthirsty plants.
- The BWS sponsored its 38th annual Water Conservation Week Poster Contest and the 8th annual Water Conservation Week Poetry Contest, receiving more than 1,500 posters and 450 poems from more than 60 Oahu schools, focused on the theme "Water Matters -- Conserve It." All winning entries will be featured in the 2017 Water Conservation Calendar scheduled for distribution in December 2016.
- The BWS started efforts to implement a pilot Water Conservation program, to begin in FY17, leveraging mobile app and web technologies to encourage water savings through targeted, direct customer engagements and the use of data analytics.

Operational Sustainability (Dependable)

- Preparing for our water future, the BWS has developed a long range Water Master Plan (WMP) which is a comprehensive evaluation of our water supplies, needs, and infrastructure over a 30-year period. It includes population and water use projections; an evaluation of the current system, including causes of water main breaks; and it also considers conservation, watershed management, recycled water and climate change adaptation. The WMP is scheduled for adoption in October 2016. The 30-year CIP will follow as well as the financial plan and water rate study thereafter. In April 2015, the BWS Board of Directors approved the formation of a Stakeholder Advisory Group (SAG) whose purpose is to provide important feedback on the BWS Water Master Plan (WMP), proposed rate study and other important initiatives such as water conservation, recycled water and watershed management. In May of 2016, we celebrated the one-year anniversary of the formation of the BWS Stakeholder Advisory Group. The group comprises nearly 30 highly respected local residents, civic organization leaders, and environmental and business professionals with a sustained interest in water issues, with representation covering all City Council districts. The SAG effort demonstrates BWS's commitment to increase our responsiveness and transparency of our communications and public engagement.
- The first class of trades apprentices for Plant Electrical/Electronic Equipment Repairer was hired in 2016. The five-year program provides classroom and on-the-job training for the electrical and mechanical skills needed to repair and maintain over 200 pump,

**Board of Water Supply
City and County of Honolulu
INTRODUCTION
Fiscal Year Ended June 30, 2016**

treatment and emergency generator facilities across the island. This is the second apprenticeship program in the department -- the first is our long-standing and successful Pipefitter program.

- The BWS completed the upgrade of its Computerized Maintenance Management System to a vendor-supported version, and is planning additional user enhancements in FY17.
- BWS entered into a partnership with the Hawaii State Fusion Center (HSFC) to increase its threat awareness via interagency sharing of information not otherwise available through other means. This access to shared information from federal sources, as well as other HSFC partners (e.g. Hawaiian Electric Company), supports our Cyber Security Program and its focus on Improving Critical Infrastructure Security and Resilience.
- A major redesign of the decade-old BWS website was initiated in FY16 and will be completed in early FY17. The redesign will provide a more dynamic website, with a cleaner look, easier navigation, and platform independence – allowing for a better customer experience whether using a desktop/laptop, tablet or smartphone.
- Also planned for FY17, is the development of a new Customer Self-Service web portal, and an Interactive Voice Response (IVR) capability integrated with our Customer Care and Billing system. This will provide our customers the ability to initiate actions and interactions with the BWS, at their convenience, without having to call in and speak with a Customer Service Representative.
- BWS staff responded to 287 main breaks, or about 14 breaks per 100 miles of pipeline.
- BWS staff helped protect Oahu's water resources and prevent damage to BWS infrastructure by handling 7,823 One Call locate requests and providing in-field support for 801 water line leaks and breaks. The BWS staff proactively investigated 27,576 meters to ensure accurate and timely billing and assisted 3,826 customers with concerns about bills reflecting high water consumption.
- BWS implemented upgraded service standards for the Customer Care Division. The standards cover methods of effective interaction with BWS customers, via telephone, to enhance customer service and experience. In keeping with the upgraded service standards, the BWS established two call center performance metrics measuring phone call abandon rates and average customer call wait time. In FY 2016, overall abandon rate was 11.4% and average customer wait time was two minutes or less. Additionally, the BWS established a direct customer care email to provide more efficient customer service.
- BWS staff assisted 161,034 customers: 148,291 (92.09%) by phone; 4,714 (2.93%) in-person; 6,936 (4.31%) via online forms; 263 (0.16%) through email, by mail and fax.

Financial Sustainability (Affordable)

- A total of over \$38 million in construction contracts and over \$12 million in professional

**Board of Water Supply
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Fiscal Year Ended June 30, 2016**

services contracts were awarded as of June 30, 2016. 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 \$6.7 million in water main construction projects were awarded by the BWS. Once completed, these projects will improve the water systems in the Kaneohe and Waianae areas and add fire hydrant installations at various locations. Design contracts were awarded for water main replacements in Kalihi, Keolu Hills, Lanakila, Makakilo, Moanalua, Pauoa, Pearl City, Waiau and Waipio.
- **Water Facility Improvement Program:** Identification and improvements of deficiencies to the appearance and integrity of aging BWS water facilities continues. These facilities include water reservoirs, wells and booster stations, and administrative offices belonging to the department. New construction contracts were awarded to repair, renovate, repaint and/or reroof the Beretania Complex, Hawaii Loa Booster No. 2, Heeia Corporation Yard, Kailua Heights Booster, Kalihi Corporation Yard, Kalihi Tunnel, Kawela 228 Reservoir, and Waimanalo Booster. New design contracts were awarded for facility improvements at Kalihi 614 Reservoir, Niu Valley Highlands 297 Reservoir, Waialae Iki 180 Reservoir, Waianae Plantation Tunnels, Waimanalo 230 Reservoir, and security fencing at various locations.
- **Mechanical and Electrical Renovation Projects:** Renovation projects ensure the dependable service and operational efficiency of the BWS's pump and booster stations. Construction contracts were awarded for the renovation of the mechanical and/or electrical systems at the Barbers Point Line Booster, Halawa Shaft, Kalihi Pump Station, Kalihi Shaft, Kalihi Yard, Keanu Line Booster, Kunia Wells I, Lualualei Line Booster, Makaha Wells II, and Waipio Heights Wells III. Design contracts were awarded for renovation work at Hoaeae Wells, Kamaile Wells, Mililani 994 Booster Stations, and Mililani Wells.
- In March 2016, BWS entered into a 20-year, \$33 million Energy Savings Performance Contract (ESPC) with NORESKO LLC. The partnership allows BWS to implement comprehensive energy efficiency, renewable energy, and operational improvements which guarantees enough energy savings over the next 20 years to pay for the contract. The project is financed by a loan from the Drinking Water State Revolving Fund, managed by the State of Hawaii Department of Health.
- BWS staff received mail-in payments via lockbox, which continued to be the most popular method of payment for BWS customers, with 37% using the service, down 4% from last fiscal year. Automatic bill payments account for 30% of the BWS' total bill collections. Credit card payments account for 14% of payments, a 3% increase over last fiscal year. Of these credit card payments, 11% were completed online while 3% were processed by phone or over the counter. Payments made at satellite city hall locations are at 3%, a decrease of 1%, and walk-in customers remain steady at 3%.

INDEPENDENT AUDITOR'S REPORT

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

Report on the Financial Statements

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

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion

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

Emphasis of Matter

As discussed in Note B, the financial statements of the BWS are intended to present the financial position, the changes in financial position, and cash flows of only that portion of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City that is attributable to the transactions of the BWS. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2016, 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.

Adjustment to Prior Period Financial Statements

The basic financial statements of the BWS as of June 30, 2015, were audited by other auditors whose report dated December 28, 2015, expressed an unmodified opinion on those statements. As discussed in Note P to the financial statements, the BWS has restated its 2015 financial statements during the current year to correct certain misstatements. The other auditors reported on the 2015 financial statements before the restatement in accordance with accounting principles generally accepted in the United States of America.

As part of our audit of the 2016 financial statements, we also audited the adjustments described in Note P that were applied to restate the 2015 financial statements. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the 2015 financial statements of the BWS other than with respect to the adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2015 financial statements as a whole.

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 12 through 17 and the schedules of proportionate share of the net pension liability, contributions, and funding progress on pages 54 to 56 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

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

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

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

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 20, 2016 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.

N + K CPAs, INC.

Honolulu, Hawaii
December 20, 2016

**Board of Water Supply
City and County of Honolulu
MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)
Fiscal Years Ended June 30, 2016 and 2015**

This section presents management's discussion and analysis of the BWS's financial condition and activities for the fiscal year ended June 30, 2016. This information should be read in conjunction with the financial statements.

Financial Highlights

The BWS implemented the fifth of five scheduled rate increases in July 2015 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, 2015.

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 \$72.9 million in fiscal year 2016 compared to the \$48.9 million increase in fiscal year 2015.
- Total assets were \$1.6 billion and \$1.5 billion in fiscal year 2016 and 2015, respectively, which exceeded liabilities by \$1.0 billion at June 30, 2016 and 2015.
- The BWS's unrestricted current assets at June 30, 2016 were 4.0 times its related current liabilities compared to 4.3 times at June 30, 2015.
- The BWS's debt to equity ratio was 28.2% and 30.6% at June 30, 2016 and 2015, respectively, indicating the continuance of capacity to issue additional debt.

Overview of Financial Report

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

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

The basic financial statements include statements of net position, statements of revenues, expenses and changes in net position, statements of cash flows, and notes to the financial statements. The statements of net position present the resources and obligations of the BWS at June 30, 2016 and 2015. The statements of revenues, expenses and changes in net position presents the changes in net position for the fiscal years then ended, and the resultant ending net position balances.

**Board of Water Supply
City and County of Honolulu
MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)
Fiscal Years Ended June 30, 2016 and 2015**

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

Results of Operations

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

	<u>2016</u>	<u>2015</u> <u>(as restated)</u>	<u>% Change</u>
Operating revenues	\$ 238,696	\$ 216,578	10.2%
Operating expenses			
Administrative and general	61,626	58,385	5.6%
Depreciation	45,581	45,286	0.7%
Power and pumping	30,190	35,478	-14.9%
Other operating expenses	<u>46,315</u>	<u>44,384</u>	4.4%
Total operating expenses	<u>183,712</u>	<u>183,533</u>	0.1%
Operating income	<u>54,984</u>	<u>33,045</u>	66.4%
Nonoperating revenues (expenses)			
Interest income	4,151	3,088	34.4%
Interest expense	(7,821)	(6,912)	13.2%
Others	<u>2,672</u>	<u>(242)</u>	-1,204.1%
Total nonoperating expenses	<u>(998)</u>	<u>(4,066)</u>	-75.5%
Contributions in aid of construction	<u>18,916</u>	<u>19,917</u>	-5.0%
Change in net position	\$ <u>72,902</u>	\$ <u>48,896</u>	

The increase in net position for the year ended June 30, 2016 was \$72.9 million, compared to an increase of \$48.9 million for the year ended June 30, 2015.

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

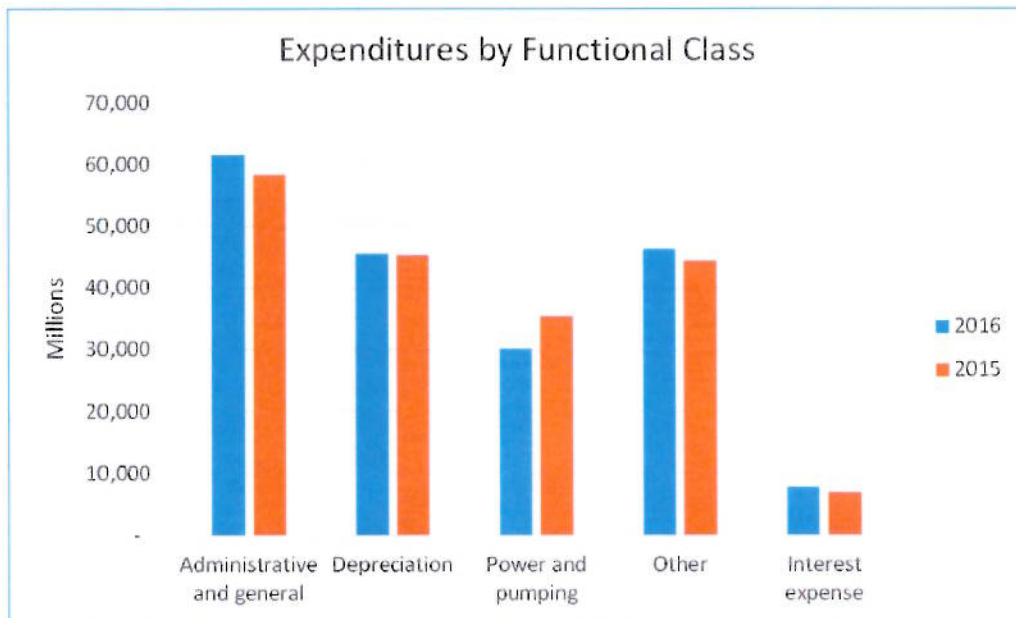
Total operating expenses increased slightly by \$0.2 million and \$4.0 million in fiscal years 2016 and 2015, respectively. Factors contributing to this change are explained below:

- Administrative and general expenses increased by \$3.2 million in fiscal year 2016, mainly due to increases in salaries, pension and supplies. Administrative and general expenses increased by \$9.8 million in fiscal year 2015, mainly due to increases in salaries, retirement health fund benefits, and other contractual services.

**Board of Water Supply
City and County of Honolulu
MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)
Fiscal Years Ended June 30, 2016 and 2015**

- Power and pumping expenses decreased by \$5.3 million in fiscal year 2016. This was primarily due to a decrease in electricity costs. Power and pumping expenses decreased slightly by \$0.1 million during fiscal year 2015.
- Other operating expenses increased \$1.9 million during fiscal year 2016, mainly due to an increase in transmission and distribution. Other operating expenses decreased by \$5.1 million during fiscal year 2015, mainly due to a decrease in water treatment maintenance and customer accounting and collection.

For the year ended June 30, 2016, net nonoperating revenues (expenses) increased by \$3.1 million, due primarily to an increase in realized and unrealized gain on investments. Nonoperating expenses decreased slightly by \$0.6 million for the year ended June 30, 2015.



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 \$18.9 million in fiscal year 2016 compared to \$19.9 million in fiscal year 2015. The decrease in contributions in aid of construction of \$1.0 million was due to a decrease in projects completed by governmental funds of \$4.2 million, offset by an increase in the Water Service Facilities Charge revenue ("WSFC") and private development contributions of \$3.2 million. During the year ended June 30, 2016, the major developments completed were Makakilo C & D, Phase 2 and Urban Core 3 Roads.

**Board of Water Supply
City and County of Honolulu
MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)
Fiscal Years Ended June 30, 2016 and 2015**

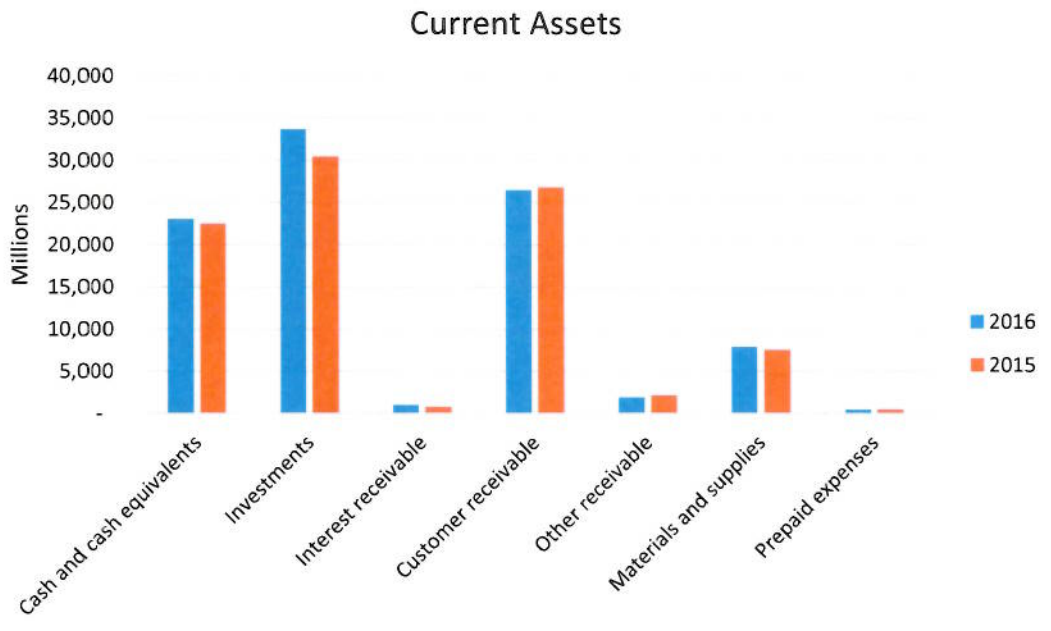
Financial Condition

**CONDENSED STATEMENTS OF NET POSITION
(Amounts in thousands)**

	<u>2016</u>	<u>2015</u> <u>(as restated)</u>	<u>% Change</u>
Current assets	\$ 94,517	\$ 90,657	4.3%
Restricted assets	47,768	46,061	3.7%
Investments	260,656	199,370	30.7%
Capital assets, net	1,121,711	1,112,393	0.8%
Other assets	<u>12,193</u>	<u>9,270</u>	31.5%
Total assets	<u>1,536,845</u>	<u>1,457,751</u>	5.4%
Deferred outflows of resources	<u>39,868</u>	<u>38,473</u>	3.6%
Total assets and deferred outflows of resources	\$ <u>1,576,713</u>	\$ <u>1,496,224</u>	5.4%
Current liabilities	\$ 23,921	\$ 21,198	12.8%
Payable from restricted assets	20,467	19,449	5.2%
Bonds payable, noncurrent	244,799	254,646	-3.9%
Net pension liability	81,526	73,142	11.5%
Other liabilities	<u>73,975</u>	<u>65,240</u>	13.4%
Total liabilities	<u>444,688</u>	<u>433,675</u>	2.5%
Deferred inflows of resources	<u>5,063</u>	<u>8,489</u>	-40.4%
Net position			
Net investment in capital assets	839,033	825,751	1.6%
Restricted for capital activity and debt service	24,292	23,610	2.9%
Unrestricted	<u>263,637</u>	<u>204,699</u>	28.8%
Total net position	<u>1,126,962</u>	<u>1,054,060</u>	6.9%
Total liabilities, deferred inflows of resources and net position	\$ <u>1,576,713</u>	\$ <u>1,496,224</u>	5.4%

**Board of Water Supply
City and County of Honolulu
MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)
Fiscal Years Ended June 30, 2016 and 2015**

The BWS's unrestricted current assets were 4.0 and 4.3 times its related current liabilities, payable from current assets, as of June 30, 2016 and 2015, respectively. The ratio decrease at June 30, 2016 was due to an increase in accounts payable and contracts payable. The ratio increase at June 30, 2015 was due to an increase in cash, short-term investments, and customer receivables.



As of June 30, 2016 and 2015, capital assets, net increased by \$9.3 million and decreased \$8.1 million, respectively. The increase in fiscal year 2016 was primarily due to the completion of various distributions mains projects and additions to construction work in progress, offset by dispositions and depreciation charges. The decrease in fiscal year 2015 was due to construction work in progress charge-offs and depreciation charges exceeding acquisitions.

As of June 30, 2016, current liabilities payable from current assets increased by \$2.7 million or 12.8%. 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 \$9.8 million during fiscal year 2016. The increase is primarily due to projects utilizing financing from the state revolving fund loan program.

The BWS's noncurrent bonds payable decreased by \$9.8 million and \$21.0 million as of June 30, 2016 and 2015, respectively. The decrease at June 30, 2016 was due to the Series 2006A and 2006B bonds maturing on July 1, 2016. The decrease at June 30, 2015 was due to a partial refunding of revenue bond Series 2006A and 2006B.

**Board of Water Supply
City and County of Honolulu
MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)
Fiscal Years Ended June 30, 2016 and 2015**

Net position increased by \$72.9 million and \$48.9 million as of June 30, 2016 and 2015, respectively. The increase in fiscal year 2016 was primarily due to an increase in operating revenue. The increase in fiscal year 2015 was primarily due to an increase in operating revenue and contributions in aid of construction.

Capital Assets and Long-Term Debt

During fiscal years 2016 and 2015, the BWS capitalized \$32.6 million and \$53.5 million, respectively, to its utility plant in service. Major assets added in fiscal year 2016 were Kamehameha Highway 16" and 8" Mains (Heeia), \$6.8 million; Kona Street 8" Main, \$3.3 million; Makakilo C & D, Phase 2, \$3.0 million; Urban Core 3 Roads, \$2.8 million; Woodlawn Water System Improvements, Part II, \$2.3 million; and Ewa Beach Water System Improvements, Part II, \$1.7 million.

The BWS issues long-term bonds to finance part of its capital improvement program. The BWS's debt to equity ratio has remained fairly constant at 28.2%, 30.6% and 28.7% for fiscal years 2016, 2015 and 2014, respectively.

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

Rate Covenant

The BWS is required under its bond indenture, among other things, to fix, charge and collect such rates and other charges in each fiscal year to meet the net revenue requirement for such fiscal year. The net revenue requirement is the greater of 1) the sum of the aggregate debt service and all deposits required by bond resolution to be made, or 2) 1.20 times the aggregate debt service. The BWS met the net revenue requirements for the fiscal years ended June 30, 2016 and 2015.

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, 2016 and 2015**

	2016	2015 (as restated)
ASSETS		
Current assets		
Cash and cash equivalents	\$ 23,084,857	\$ 22,518,020
Investments	33,721,976	30,454,513
Interest receivable	969,013	755,973
Customer receivables		
Billed, less allowances for uncollectible accounts of \$2,615,737 and \$2,459,554 in 2016 and 2015	14,188,771	15,294,688
Unbilled	12,299,162	11,519,361
Other receivables, less allowances for uncollectible accounts of \$510,868 in 2016 and 2015	1,891,233	2,135,259
Materials and supplies	7,900,769	7,510,010
Prepaid expenses	461,200	468,848
Total current assets	<u>94,516,981</u>	<u>90,656,672</u>
Restricted assets		
Cash and cash equivalents	14,571,741	16,502,337
Investments	33,195,912	29,558,634
Total restricted assets	<u>47,767,653</u>	<u>46,060,971</u>
Investments	<u>260,655,703</u>	<u>199,369,752</u>
Capital assets		
Infrastructure	1,469,794,915	1,450,128,280
Building and improvements	164,492,090	162,673,567
Equipment and machinery	305,454,875	304,512,242
	1,939,741,880	1,917,314,089
Less accumulated depreciation	<u>(937,722,307)</u>	<u>(900,416,227)</u>
	1,002,019,573	1,016,897,862
Land	32,373,064	32,373,064
Construction work in progress	87,318,572	63,122,418
Net capital assets	<u>1,121,711,209</u>	<u>1,112,393,344</u>
Other postemployment benefits asset	12,162,155	9,216,616
Other assets	31,370	54,120
Total other assets	<u>12,193,525</u>	<u>9,270,736</u>
Total assets	<u>1,536,845,071</u>	<u>1,457,751,475</u>
DEFERRED OUTFLOWS OF RESOURCES		
Deferred loss on refunding of debt	20,112,402	21,699,926
Deferred outflows of resources related to pensions	19,755,920	16,772,673
Total deferred outflows of resources	<u>39,868,322</u>	<u>38,472,599</u>
Total assets and deferred outflows of resources	<u>\$ 1,576,713,393</u>	<u>\$ 1,496,224,074</u>

See accompanying notes to financial statements.

**Board of Water Supply
City and County of Honolulu
STATEMENTS OF NET POSITION (Continued)
June 30, 2016 and 2015**

	2016	2015 (as restated)
LIABILITIES		
Current liabilities		
Payable from current assets		
Accounts payable	\$ 11,465,798	\$ 9,376,063
Contracts payable, including retainages	6,389,575	4,948,876
Accrued vacation, current portion	2,492,417	2,761,628
Accrued workers' compensation, current portion	916,000	830,000
Other	2,657,135	3,281,623
Total current liabilities	<u>23,920,925</u>	<u>21,198,190</u>
Payable from restricted assets		
Contracts payable, including retainages	3,007,142	2,621,828
Accrued interest payable	5,113,740	5,269,156
Bonds payable, current portion	8,135,000	7,810,000
Notes payable, current portion	4,211,328	3,748,230
Total payable from restricted assets	<u>20,467,210</u>	<u>19,449,214</u>
Other liabilities		
Customer advances	3,335,490	1,693,846
Accrued vacation, noncurrent portion	4,302,997	3,946,481
Accrued workers' compensation	1,880,735	1,741,877
Notes payable, noncurrent portion	61,000,319	56,697,967
Accrued arbitrage rebate	--	65,888
Other	3,455,480	1,094,266
Total other liabilities	<u>73,975,021</u>	<u>65,240,325</u>
Bonds payable, noncurrent	244,798,748	254,646,203
Net pension liability	81,526,553	73,141,824
Total liabilities	<u>444,688,457</u>	<u>433,675,756</u>
DEFERRED INFLOWS OF RESOURCES		
Deferred inflows of resources related to pensions	5,063,424	8,488,509
Total deferred inflows of resources	<u>5,063,424</u>	<u>8,488,509</u>
NET POSITION		
Net investment in capital assets	839,032,962	825,751,100
Restricted for capital activity and debt service	24,292,025	23,609,757
Unrestricted	263,636,525	204,698,952
Total net position	<u>1,126,961,512</u>	<u>1,054,059,809</u>
Total liabilities, deferred inflows of resources and net position	<u>\$ 1,576,713,393</u>	<u>\$ 1,496,224,074</u>

See accompanying notes to financial statements.

**Board of Water Supply
City and County of Honolulu
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
Fiscal Years Ended June 30, 2016 and 2015**

	<u>2016</u>	<u>2015</u> (as restated)
OPERATING REVENUES		
Water sales	\$ 234,725,808	\$ 212,486,218
Other, principally contract and service fees	<u>3,970,520</u>	<u>4,091,962</u>
Total operating revenues	<u>238,696,328</u>	<u>216,578,180</u>
OPERATING EXPENSES		
Administrative and general	61,626,128	58,384,569
Depreciation	45,581,460	45,286,091
Power and pumping	30,189,514	35,478,158
Transmission and distribution	20,745,074	16,942,891
Maintenance	12,440,083	12,338,299
Customers' accounting and collection	5,249,768	6,566,458
Water reclamation	4,553,447	5,203,162
Central administrative services expense fees	3,300,000	3,300,000
Source of supply	<u>27,037</u>	<u>33,468</u>
Total operating expenses	<u>183,712,511</u>	<u>183,533,096</u>
Operating income	<u>54,983,817</u>	<u>33,045,084</u>
NONOPERATING REVENUES (EXPENSES)		
Interest income	4,150,911	3,088,165
Interest expense, net of interest capitalized and amortization of bond premiums of \$3,750,860 and \$2,023,874 in 2016 and 2015	(7,821,072)	(6,912,365)
Loss from disposal of capital assets	(297,165)	(305,516)
Realized and unrealized gain (loss) on investments	2,662,097	(566,277)
Other	<u>307,227</u>	<u>629,544</u>
Total nonoperating expenses	<u>(998,002)</u>	<u>(4,066,449)</u>
CONTRIBUTIONS IN AID OF CONSTRUCTION	<u>18,915,888</u>	<u>19,917,178</u>
Change in net position	72,901,703	48,895,813
NET POSITION		
Beginning of year	<u>1,054,059,809</u>	<u>1,005,163,996</u>
End of year	\$ <u>1,126,961,512</u>	\$ <u>1,054,059,809</u>

See accompanying notes to financial statements.

**Board of Water Supply
City and County of Honolulu
STATEMENTS OF CASH FLOWS
Fiscal Years Ended June 30, 2016 and 2015**

	<u>2016</u>	<u>2015</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers	\$ 239,740,965	\$ 212,362,274
Payments to suppliers for goods and services	(76,916,714)	(86,387,085)
Payments to employees for services	(56,102,891)	(50,218,007)
Other operating revenue (expense)	<u>(41,416)</u>	<u>629,544</u>
Net cash provided by operating activities	<u>106,679,944</u>	<u>76,386,726</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and construction of capital assets	(46,046,346)	(30,600,185)
Customer payments for capital projects	12,678,171	10,422,675
Principal paid on bonds	(7,810,000)	(34,060,911)
Interest paid on bonds	(9,913,722)	(8,980,725)
Proceeds from notes payable	9,494,429	41,648,721
Interest paid on notes payable	(203,353)	(106,923)
Principal paid on notes payable	<u>(3,978,979)</u>	<u>(2,653,956)</u>
Net cash used in capital and related financing activities	<u>(45,779,800)</u>	<u>(24,331,304)</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of investments	(149,139,191)	(194,511,840)
Proceeds from maturity of investments	83,610,596	151,078,905
Interest on investments	<u>3,264,692</u>	<u>2,882,697</u>
Net cash used in investing activities	<u>(62,263,903)</u>	<u>(40,550,238)</u>
Net increase (decrease) in cash and cash equivalents	(1,363,759)	11,505,184
CASH AND CASH EQUIVALENTS		
Beginning of year	<u>39,020,357</u>	<u>27,515,173</u>
End of year	\$ <u>37,656,598</u>	\$ <u>39,020,357</u>
Reconciliation of cash and cash equivalents to the statement of net position		
Unrestricted	\$ 23,084,857	\$ 22,518,020
Restricted	<u>14,571,741</u>	<u>16,502,337</u>
	\$ <u>37,656,598</u>	\$ <u>39,020,357</u>

See accompanying notes to financial statements.

**Board of Water Supply
City and County of Honolulu
STATEMENTS OF CASH FLOWS (Continued)
Fiscal Years Ended June 30, 2016 and 2015**

	<u>2016</u>	<u>2015</u>
RECONCILIATION OF OPERATING INCOME		
TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income	\$ 54,983,817	\$ 33,045,084
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	47,165,935	46,826,484
Net pension expense	--	2,416,094
Provision for doubtful accounts	585,825	480,866
Other revenues	307,227	629,544
Change in assets, deferred outflows of resources, liabilities and deferred inflows of resources:		
Customer receivables	(259,709)	(6,250,350)
Materials and supplies	(390,759)	(2,221,438)
Other receivables	851,317	(233,060)
Prepaid expenses and other	7,648	(84,276)
Other postemployment benefits	(2,945,539)	(2,175,399)
Deferred outflows of resources related to pensions	(2,983,246)	--
Accounts and contracts payable	2,348,895	474,131
Customer advances	--	764,114
Accrued vacation	87,305	36,821
Accrued workers' compensation	224,858	520,351
Net pension liability	8,384,729	--
Other liabilities	1,736,726	2,157,760
Deferred inflows of resources	(3,425,085)	--
Net cash provided by operating activities	\$ <u>106,679,944</u>	\$ <u>76,386,726</u>
SUPPLEMENTAL DISCLOSURE OF NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES		
Contributions of capital assets from government agencies, developers and customers that are recorded as contributions in aid of construction, as restated	\$ 7,969,129	\$ 9,494,503
Amortization of other costs	\$ 22,750	\$ 25,417
Amortization of bond premium, net	\$ 1,712,455	\$ 2,829,599
Amortization of deferred loss on refunding, as restated	\$ 1,587,523	\$ 2,471,640
Bond proceeds deposited directly with escrow agent for refunding of previously issued debt	\$ --	\$ 183,212,091
Bond proceeds used for bond issuance costs	\$ --	\$ 835,581
Forgiveness of principal due on notes payable, as restated	\$ 750,000	\$ 1,567,000

See accompanying notes to financial statements.

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE A - OPERATIONS

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

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

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- (6) **Receivables** - Receivables are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the BWS's best estimate of the amount of probable credit losses in the BWS's existing receivables. The BWS determines the allowance based on past collection experience and the length of time individual receivables are past due. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.
- (7) **Materials and Supplies** - Materials and supplies are stated at weighted average cost (which approximates the first-in, first-out method). The cost of materials and supplies are recorded as expenses when consumed rather than when purchased.
- (8) **Restricted Assets** - Restricted assets are comprised of cash and cash equivalents and investments maintained in accordance with bond resolutions and other agreements for the purpose of funding certain debt service payments, construction, improvements, and renewal and replacements of the water system. When both restricted and unrestricted assets are available for use, it is the BWS's policy to use restricted assets first, then unrestricted assets as they are needed. Restricted assets comprise the following:
- The debt service account accumulates transfers from the operating account throughout the fiscal year to make principal and interest payments on the outstanding water revenue bonds and other notes payable.
 - The renewal and replacement account and the reserve release fund provides funding for improvements, reconstruction, emergency or extraordinary repairs, and renewals or replacements of the water system.
 - The improvement account holds the proceeds of the series bond issuance pursuant to the series resolution or series certificates. These proceeds are only applied to costs specified in the applicable series resolution or series certificates.
 - The extramural account holds reimbursements received from any governmental agency or private entity, pursuant to negotiated agreements, contracts and/or grants.
- (9) **Capital Assets** - Capital assets include those assets in excess of \$5,000 for buildings, 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 fiscal years ended June 30, 2016 and 2015 totaled \$11,572,000 and

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

\$8,936,000, respectively. Capitalized interest costs approximated \$2,038,405 and \$716,000 for the fiscal years ended June 30, 2016 and 2015, respectively. The BWS also capitalizes certain indirect costs to construction work based upon actual construction direct labor. Maintenance, repairs and replacements that do not improve or extend the lives of the assets are charged to expense.

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

The estimated useful lives of capital assets are as follows:

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

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

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

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

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

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

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

As of June 30, 2016 and 2015, accumulated sick leave aggregated approximately \$19,163,000 and \$18,310,000, respectively. Sick leave accumulates at the rate of one and three-quarters working days for each month of service without limit, but can be taken only in the event of illness and is not convertible to pay upon termination of employment. However, an employee who retires or leaves government service in good standing with 60 or more unused sick days is entitled to additional service credit in the State of Hawaii's Employees' Retirement System.

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

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

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

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

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

The ranges of insurance limits and deductibles are as follows:

Policy	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

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

- (20) **Reclassification** - Certain balances in the prior year financial statements have been reclassified for comparative purposes to confirm with the current year presentation. Such reclassifications had no effect on the previously reported change in net position.

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- (21) ***New Accounting Pronouncements*** - The Government Accounting Standards Board (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 financial statements for periods beginning after June 15, 2015. Management has adopted the new standard as presented in 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 fiscal years 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. Management has adopted the applicable requirements of the new standard as presented in 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 No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*. The Statement will require the liability of employers for defined benefit OPEB to be measured as the portion of the present value of projected benefit payments to be provided to current active and inactive employees that is attributed to those employees' past periods of service, less the amount of the OPEB plan's fiduciary net position. The requirements of this Statement are effective for fiscal years beginning after June 15, 2017. Management has not yet determined the effect this Statement will have on the BWS's financial statements, but anticipate that it will materially impact the BWS's financial statements.

The GASB issued Statement No. 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 adopted the applicable requirements of the new standard as presented in the BWS's financial statements.

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The GASB issued Statement No. 82, *Pension Issues an amendment of GASB Statements No. 67, No. 68, and No. 73*. This Statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The requirements of this Statement are effective for reporting periods beginning after June 15, 2016, except for the requirements of this Statement for the selection of assumptions in a circumstance in which an employer's pension liability is measured as of a date other than the employer's most recent fiscal year-end. In that circumstance, the requirements for the selection of assumptions are effective for that employer in the first reporting period in which the measurement date of the pension liability is on or after June 15, 2017. Management has not yet determined the effect this Statement will have on the BWS's financial statements.

NOTE C - CASH AND INVESTMENTS

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

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

Custodial Credit Risk - The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. At June 30, 2016, approximately \$11,075,000 in cash and cash equivalents and all investments were held by two financial institutions in the State of Hawaii. All investment

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE C - CASH AND INVESTMENTS (Continued)

securities are registered in the name of the BWS and are not exposed to custodial credit risk. Cash and cash equivalents held by these financial institutions are uncollateralized, however, amounts in excess of depository insurance are covered by commercial insurance obtained by each financial institution designed to insure against losses resulting from errors and omissions or fraud.

Credit Risk and Concentration of Credit Risk - Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. Concentration of credit risk is the risk of a loss attributed to the magnitude of a government's investment in a single issuer. 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, 2016 and 2015 consisted of the following:

	2016		2015	
	Cost	Fair Value	Cost	Fair Value
U. S. Treasury obligations	\$ 254,228,048	\$ 257,167,987	\$ 190,329,657	\$ 190,187,641
U. S. government agencies	70,131,159	70,405,604	69,807,266	69,195,258
	<u>\$ 324,359,207</u>	<u>\$ 327,573,591</u>	<u>\$ 260,136,923</u>	<u>\$ 259,382,899</u>

At June 30, 2016, 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	79%	\$ 257,167,987
U. S. government agencies		
Federal National Mortgage Association	13%	43,052,108
Federal Home Loan Mortgage Corporation	5%	17,314,197
Federal Home Loan Bank	3%	10,039,299
	<u>100%</u>	<u>\$ 327,573,591</u>

The fair value of investments at June 30, 2016 by contractual maturity is shown below:

	Fair Value	Investment Maturities (In Years)	
		Less Than 1	1 - 5
U. S. Treasury obligations	\$ 257,167,987	\$ 22,975,333	\$ 234,192,654
U. S. government agencies	70,405,604	22,487,055	47,918,549
	<u>\$ 327,573,591</u>	<u>\$ 45,462,388</u>	<u>\$ 282,111,203</u>

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NOTE D - RESTRICTED ASSETS

At June 30, 2016 and 2015, the BWS's restricted assets were comprised of cash, cash equivalents and investments and were held for the following purposes:

	2016	2015
Construction, renewals and replacements	\$ 5,927,984	\$ 2,876,622
Debt service	<u>41,839,669</u>	<u>43,184,349</u>
	<u>\$ 47,767,653</u>	<u>\$ 46,060,971</u>

NOTE E - FAIR VALUE MEASUREMENTS

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy are described as follows:

Level 1 - Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that a government can access at the measurement date. An active market is a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

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

- Quoted prices for similar assets or liabilities in active markets,
- Quoted prices for identical or similar assets or liabilities in markets that are not active,
- Inputs other than quoted prices that are observable for the asset or liability,
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Inputs are unobservable for an asset or liability.

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

U.S. Treasury obligations: Valued using quoted prices in active markets for identical assets.

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NOTE E - FAIR VALUE MEASUREMENTS (Continued)

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

The following table sets forth by level, within the fair value hierarchy, assets measured at fair value on a recurring basis as of June 30, 2016 and 2015:

Assets at Fair Value at June 30, 2016				
	Total	Level 1	Level 2	Level 3
U. S. Treasury obligations	\$ 257,167,987	\$ 257,167,987	\$ --	\$ --
U. S. government agencies	70,405,604	--	70,405,604	--
	<u>\$ 327,573,591</u>	<u>\$ 257,167,987</u>	<u>\$ 70,405,604</u>	<u>\$ --</u>
Assets at Fair Value at June 30, 2015				
	Total	Level 1	Level 2	Level 3
U. S. Treasury obligations	\$ 190,187,641	\$ 190,187,641	\$ --	\$ --
U. S. government agencies	69,195,258	--	69,195,258	--
	<u>\$ 259,382,899</u>	<u>\$ 190,187,641</u>	<u>\$ 69,195,258</u>	<u>\$ --</u>

NOTE F - CAPITAL ASSETS

Capital assets activity during the fiscal years ended June 30, 2016 and 2015, were as follows:

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

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NOTE F - CAPITAL ASSETS (Continued)

	Balance July 1, 2014	Additions	Transfers	Retirements	Balance June 30, 2015
Depreciable assets					
Infrastructure	\$ 1,425,668,553	\$ 8,014,579	\$ 17,236,120	\$ (790,972)	\$ 1,450,128,280
Building and improvements	157,657,127	--	5,074,540	(58,100)	162,673,567
Equipment and machinery	<u>282,710,681</u>	<u>3,495,970</u>	<u>19,687,362</u>	<u>(1,381,771)</u>	<u>304,512,242</u>
Total depreciable assets	1,866,036,361	11,510,549	41,998,022	(2,230,843)	1,917,314,089
Less: Accumulated depreciation	<u>(855,482,565)</u>	<u>(46,826,484)</u>	<u>--</u>	<u>1,892,822</u>	<u>(900,416,227)</u>
Total depreciable assets - net	1,010,553,796	(35,315,935)	41,998,022	(338,021)	1,016,897,862
Land	32,373,064	--	--	--	32,373,064
Construction work in progress	<u>77,550,957</u>	<u>47,663,230</u>	<u>(62,091,769)</u>	<u>--</u>	<u>63,122,418</u>
Net capital assets	\$ <u>1,120,477,817</u>	\$ <u>12,347,295</u>	\$ <u>(20,093,747)</u>	\$ <u>(338,021)</u>	\$ <u>1,112,393,344</u>

Depreciation charges allocated to various functions for the fiscal years ended June 30, 2016 and 2015 totaled \$1,584,475 and \$1,540,393, respectively.

NOTE G - BONDS PAYABLE

At June 30, 2016 and 2015, bonds payable consisted of the following:

	<u>2016</u>	<u>2015</u>
Water System Revenue Bonds, Series 2006A, with principal of \$2,795,000 due July 1, 2016, with interest at 4.25%. These bonds were partially refunded by Series 2014A bonds.	\$ 2,795,000	\$ 5,475,000
Water System Revenue Bonds, Series 2006B, with principal of \$3,605,000 due July 1, 2016, with interest at 5.00%. These bonds were partially refunded by Series 2014B bonds.	3,605,000	7,035,000
Water System Revenue Bonds, Series 2012A, annual principal due ranging from \$940,000 to \$8,535,000 through July 1, 2033, with interest ranging from 3.00% to 5.00%.	80,740,000	81,655,000
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%.	<u>101,655,000</u>	<u>101,655,000</u>
Balance forward	\$ <u>188,795,000</u>	\$ <u>195,820,000</u>

**Board of Water Supply
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NOTES TO FINANCIAL STATEMENTS
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NOTE G - BONDS PAYABLE (Continued)

	<u>2016</u>	<u>2015</u>
Balance carried forward	\$ 188,795,000	\$ 195,820,000
Water System Revenue Bonds, Series 2014B, annual principal due ranging from \$795,000 to to \$7,395,000 through July 1, 2031, with interest ranging from 0.81% to 3.86%.	<u>42,545,000</u>	<u>43,330,000</u>
	231,340,000	239,150,000
Add: unamortized premium	<u>21,593,748</u>	<u>23,306,203</u>
	252,933,748	262,456,203
Less: current portion	<u>8,135,000</u>	<u>7,810,000</u>
Noncurrent portion	\$ <u>244,798,748</u>	\$ <u>254,646,203</u>

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

Bonds payable activity during 2016 and 2015, were as follows:

	Balance July 1, 2015	Additions	Reductions	Balance June 30, 2016	Due Within One Year
Water System Revenue Bonds:					
Series 2006A	\$ 5,475,000	\$ —	\$ (2,680,000)	\$ 2,795,000	\$ 2,795,000
Series 2006B	7,035,000	—	(3,430,000)	3,605,000	3,605,000
Series 2012A	81,655,000	—	(915,000)	80,740,000	940,000
Series 2014A	101,655,000	—	—	101,655,000	—
Series 2014B	43,330,000	—	(785,000)	42,545,000	795,000
	<u>\$ 239,150,000</u>	<u>\$ —</u>	<u>\$ (7,810,000)</u>	<u>\$ 231,340,000</u>	<u>\$ 8,135,000</u>
	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)	\$ —	\$ —
Series 2006A	155,730,000	—	(150,255,000)	5,475,000	2,680,000
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	—
Series 2014B	—	43,330,000	—	43,330,000	785,000
	<u>\$ 269,845,000</u>	<u>\$ 144,985,000</u>	<u>\$ (175,680,000)</u>	<u>\$ 239,150,000</u>	<u>\$ 7,810,000</u>

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE G - BONDS PAYABLE (Continued)

At June 30, 2016, future bond principal and interest payments are as follows:

<u>Fiscal Year Ending June 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
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	9,110,000	8,613,000	17,723,000
2022 - 2026	53,395,000	36,565,000	89,960,000
2027 - 2031	68,115,000	22,389,000	90,504,000
2032 - 2036	57,645,000	7,169,000	64,814,000
2037	<u>9,205,000</u>	<u>184,000</u>	<u>9,389,000</u>
Total	\$ <u>231,340,000</u>	\$ <u>111,944,000</u>	\$ <u>343,284,000</u>

In December 2014, the BWS issued \$144,985,000 in water system revenue bonds which consisted of \$101,655,000 of Series 2014A and \$43,330,000 of Series 2014B bonds. The proceeds of the issuance and the proceeds from certain state revolving fund loans were used to advance refund a portion of the outstanding 2006A Series and 2006B Series bonds. Consequently, a portion of the 2006A Series and 2006B Series bonds were considered defeased and were removed from the BWS's financial statements in 2015. This refunding was undertaken to reduce total debt service payments by approximately \$24,667,000 and resulted in an economic gain of approximately \$19,182,000. At June 30, 2016 and 2015, defeased bonds totaled \$174,515,000 and \$178,630,000, respectively.

NOTE H - NOTES PAYABLE

At June 30, 2016 and 2015, notes payable consisted of the following:

	<u>2016</u>	<u>2015</u>
Notes payable to Department of Health		
Note payable in semi-annual installments of approximately \$63,000, including interest at .10%, due June 2025.	\$ 1,127,975	\$ 1,196,442
Non-interest bearing note payable in semi-annual installments of approximately \$75,000, due September 2025.	<u>1,424,109</u>	<u>1,574,015</u>
Balance forward	\$ <u>2,552,084</u>	\$ <u>2,770,457</u>

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE H - NOTES PAYABLE (Continued)

	<u>2016</u>	<u>2015</u>
Balance carried forward	\$ 2,552,084	\$ 2,770,457
Note payable in semi-annual installments of approximately \$104,400, including interest at .31%, November 2025.	1,953,944	2,156,283
Note payable in semi-annual installments of approximately \$328,700 including interest at .10%, due February 2026.	6,540,050	6,933,516
Note payable in semi-annual installments of approximately \$10,200, including interest at .10%, due January 2027.	213,598	233,832
Note payable in semi-annual installments of approximately \$70,200, including interest at .01%, due August 2027.	1,614,199	1,754,481
Note payable in semi-annual installments of approximately \$32,500, including interest at .01%, due March 2028.	779,698	844,631
Note payable in semi-annual installments of approximately \$49,700, including interest at .01%, due March 2028.	1,192,225	1,291,512
Note payable in semi-annual installments of approximately \$36,100, including interest at .36%, due June 2028.	845,796	914,742
Note payable in semi-annual installments of approximately \$30,400, including interest at 1.0%, due April 2033.	947,969	998,868
Note payable in semi-annual installments of approximately \$66,100, including interest at 1.0%, due April 2033.	2,063,496	1,969,220
Note payable in semi-annual installments of approximately \$73,200, including interest at .50%, due April 2033.	<u>2,383,869</u>	<u>1,285,846</u>
Balance forward	\$ <u>21,086,928</u>	\$ <u>21,153,388</u>

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NOTE H - NOTES PAYABLE (Continued)

	<u>2016</u>	<u>2015</u>
Balance carried forward	\$ 21,086,928	\$ 21,153,388
Note payable in semi-annual installments of approximately \$29,200, including interest at 1.0%, January 2034.	933,280	981,939
Non-interest bearing note payable in semi-annual installments of approximately \$676,900, due April 2034.	24,370,071	25,723,964
Note payable in semi-annual installments of approximately \$21,600, including interest .50%, due May 2034.	744,001	783,384
Note payable in semi-annual installments of approximately \$97,100, including interest at 1.0%, due May 2034.	3,192,231	3,270,250
Note payable in semi-annual installments of approximately \$109,200, including interest at .50%, due May 2034.	3,755,205	3,108,470
Note payable in semi-annual installments of approximately \$88,700, including interest at .50%, due May 2034.	3,049,253	1,220,307
Non-interest bearing note payable in semi-annual installments of approximately \$166,200, due November 2034.	6,150,200	2,725,436
Note payable in semi-annual installments of approximately \$2,600, including interest at .50%, due November 2034.	91,091	--
Non-interest bearing note payable in semi-annual installments of approximately \$13,400, due December 2037.	<u>474,946</u>	<u>--</u>
Balance forward	\$ <u>63,847,206</u>	\$ <u>58,967,138</u>

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NOTE H - NOTES PAYABLE (Continued)

	<u>2016</u>	<u>2015</u>
Balance carried forward	\$ 63,847,206	\$ 58,967,138
Notes payable to other lenders		
Note payable in monthly installments of approximately \$15,700, including interest at 5.0%, due September 2025	<u>1,364,441</u> 65,211,647	<u>1,479,059</u> 60,446,197
Less current maturities	<u>4,211,328</u>	<u>3,748,230</u>
	\$ <u>61,000,319</u>	\$ <u>56,697,967</u>

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

At June 30, 2016, future principal and interest payments for notes payable are as follows:

<u>Fiscal Year Ending June 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2017	\$ 4,211,000	\$ 200,000	\$ 4,411,000
2018	4,260,000	191,000	4,451,000
2019	4,297,000	177,000	4,474,000
2020	4,311,000	162,000	4,473,000
2021	4,327,000	146,000	4,473,000
2022-2026	21,429,000	487,000	21,916,000
2027-2031	14,243,000	196,000	14,439,000
2032-2036	8,093,000	31,000	8,124,000
2037-2038	41,000	--	41,000
	<u>\$ 65,212,000</u>	<u>\$ 1,590,000</u>	<u>\$ 66,802,000</u>

In July 2016, the BWS made a principal and interest prepayment of approximately \$9,230,000 to the Department of Health for certain state revolving fund loans.

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NOTE I - OTHER LONG-TERM LIABILITIES

The following is a summary of changes in other long-term liabilities for the fiscal years ended June 30, 2016 and 2015:

	Balance July 1, 2015	Additions	Reductions	Balance June 30, 2016	Current Portion
Customer advances	\$ 1,693,846	\$ 12,643,527	\$ (11,001,883)	\$ 3,335,490	\$ --
Accrued vacation	6,708,109	2,579,722	(2,492,417)	6,795,414	2,492,417
Accrued workers' compensation	2,571,877	1,054,492	(829,634)	2,796,735	916,000
Accrued arbitrage rebate liability	65,888	--	(65,888)	--	--
Notes payable	60,446,197	9,494,429	(4,728,979)	65,211,647	4,211,328
Other	1,094,266	2,445,989	(84,775)	3,455,480	--
	<u>\$ 72,580,183</u>	<u>\$ 28,218,159</u>	<u>\$ (19,203,576)</u>	<u>\$ 81,594,766</u>	<u>\$ 7,619,745</u>

	Balance July 1, 2014	Additions	Reductions	Balance June 30, 2015	Current Portion
Customer advances	\$ 929,732	\$ 764,114	\$ --	\$ 1,693,846	\$ --
Accrued vacation	6,671,288	2,798,449	(2,761,628)	6,708,109	2,761,628
Accrued workers' compensation	2,051,526	1,471,201	(950,850)	2,571,877	830,000
Accrued arbitrage rebate liability	65,888	--	--	65,888	--
Notes payable	23,018,432	41,648,721	(4,220,956)	60,446,197	3,748,230
Other	1,344,987	141,911	(392,632)	1,094,266	--
	<u>\$ 34,081,853</u>	<u>\$ 46,824,396</u>	<u>\$ (8,326,066)</u>	<u>\$ 72,580,183</u>	<u>\$ 7,339,858</u>

NOTE J - NET POSITION

The BWS's net position consisted of the following as of June 30, 2016 and 2015:

	2016	2015
Net investment in capital assets		
Capital assets, net	\$ 1,121,711,209	\$ 1,112,393,344
Deferred loss on refunding	20,112,402	21,699,926
Less: noncurrent portion of water system revenue bonds payable	(244,798,748)	(254,646,203)
Less: noncurrent portion of notes payable	(61,000,319)	(56,697,967)
Unspent debt proceeds	3,008,418	3,002,000
	<u>839,032,962</u>	<u>825,751,100</u>
Restricted for capital activity and debt service		
Restricted cash and cash equivalents	14,571,741	16,502,337
Restricted investments	33,195,912	29,558,634
Less: unspent debt proceeds	(3,008,418)	(3,002,000)
Less: contracts payable, including retainages	(3,007,142)	(2,621,828)
Less: accrued interest payable	(5,113,740)	(5,269,156)
Less: bonds payable, current portion	(8,135,000)	(7,810,000)
Less: notes payable, current portion	(4,211,328)	(3,748,230)
	<u>24,292,025</u>	<u>23,609,757</u>
Unrestricted	<u>263,636,525</u>	<u>204,698,952</u>
	<u>\$ 1,126,961,512</u>	<u>\$ 1,054,059,809</u>

**Board of Water Supply
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NOTE K - LEASES

The BWS leases space for its deep seawater cooling project on Oahu under an operating lease that extends through September 2025. The lease is subject to early cancellation contingent on mutual agreement between the BWS and the lessor.

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

The future minimum rental payments and revenue from these operating leases at June 30, 2016 were as follows:

Fiscal Year Ending June 30,	Future Minimum Rental Payments	Future Minimum Rental Revenue
2017	\$ (159,000)	\$ 202,000
2018	(159,000)	138,000
2019	(159,000)	115,000
2020	(159,000)	115,000
2021	(159,000)	115,000
2022-2026	(667,000)	507,000
2027-2031	--	500,000
	<u>\$ (1,462,000)</u>	<u>\$ 1,692,000</u>

NOTE L - RELATED PARTY TRANSACTIONS

The BWS has an agreement with the Department of Environmental Services, City and County of Honolulu to provide certain services relating to the billing and collection of sewer service charges. Fees related to these services were negotiated at approximately \$3,738,000 and \$3,257,000 for the fiscal years ended June 30, 2016 and 2015, respectively.

The BWS has an agreement with the City to pay a central administrative services expense ("CASE") fee for treasury, personnel, purchasing and other services that the City provides to the BWS on an on-going basis. The BWS's Charter allows for CASE fees to the extent that it represents a reasonable charge for services necessary for the BWS to perform its duties. CASE fees totaled \$3,300,000 for each the fiscal years ended June 30, 2016 and 2015.

Amounts due from the City totaled approximately \$535,000 and \$153,000, as of June 30, 2016 and 2015, respectively, and are included in other receivables.

The BWS has entered into agreements with the City for joint capital projects. Unexpended advanced funds totaled \$826,000 at each of the fiscal years ended June 30, 2016 and 2015, and are included in other liabilities on the statement of net position.

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NOTE M - EMPLOYEE BENEFIT PLANS

Defined Benefit Pension Plan

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

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

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

Noncontributory Class

- **Retirement Benefits** - General employees' retirement benefits are determined as 1.25% of average final compensation multiplied by the years of credited service. Employees with 10 years of credited service are eligible to retire at age 62. Employees with 30 years of credited service are eligible to retire at age 55.
- **Disability Benefits** - Members are eligible for service-related disability benefits regardless of length of service and receive a lifetime pension of 35% of their average final compensation. Ten years of credited service is required for ordinary disability. Ordinary disability benefits are determined in the same manner as retirement benefits but are payable immediately, without an actuarial reduction, and at a minimum of 12.5% of average final compensation.
- **Death Benefits** - 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.

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NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

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

Contributory Class for Employees Hired Prior to July 1, 2012

- Retirement Benefits - General employees' retirement benefits are determined as 2% of average final compensation multiplied by the years of credited service. General employees with five years of credited service are eligible to retire at age 55.
- 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.

Contributory Class for Employees Hired After June 30, 2012

- Retirement Benefits - General employees' retirement benefits are determined as 1.75% of average final compensation multiplied by the years of credited service. General employees with ten years of credited service are eligible to retire at age 60.

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

- Disability and Death Benefits - Disability and benefits for contributory class members hired after June 30, 2012 are generally the same as those for contributory class members hired June 30, 2012 and prior.

Hybrid Class for Employees Hired Prior to July 1, 2012

- 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.
- Disability Benefits - Members are eligible for service-related disability benefits regardless of length of service and receive a lifetime pension of 35% of their average final compensation plus refund of their contributions and accrued interest. Ten years of credited service is required for ordinary disability. Ordinary disability benefits are determined in the same manner as retirement benefits but are payable immediately, without an actuarial reduction, and at a minimum of 25% of average final compensation.
- Death Benefits - For service-connected deaths, the designated 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.

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NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

- 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 or if less than 10 years of service, return of the member's contributions and accrued interest.

Contributions - The employer contribution rate is a fixed percentage of compensation. The employer contribution rates for the fiscal years ended June 30, 2016 and 2015 was 17.00% and 16.50%, respectively. For the fiscal years ended June 30, 2016 and 2015, contributions to the pension plan from the BWS totaled \$5,871,134 and \$6,686,641, respectively.

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

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions - At June 30, 2016 and 2015, the BWS reported a liability of \$81,526,553 and \$73,141,824, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2015 and 2014, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of those dates. The BWS's proportion of the net pension liability was based on the actual employer contributions to the pension plan relative to the contributions of all participating employers. At June 30, 2015 and 2014, the BWS's proportion was 0.93% and 0.91%, respectively, which was an increase of 0.02% and 0.13%, respectively, from its proportion measured as of June 30, 2014 and 2013.

For the fiscal years ended June 30, 2016 and 2015, the BWS recognized pension expense of \$10,851,369 and \$9,661,604, respectively. At June 30, 2016 and 2015, the BWS reported

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NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	June 30, 2016	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 763,598	\$ 2,281,473
Changes of assumptions	1,924,472	--
Net difference between projected and actual earnings on pension plan investments	--	2,781,951
Changes in proportion and differences between employer contributions and proportionate share of contributions	9,367,788	--
Employer contributions subsequent to the measurement date	7,700,062	--
	<u>\$ 19,755,920</u>	<u>\$ 5,063,424</u>
	June 30, 2015	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 930,101	\$ --
Net difference between projected and actual earnings on pension plan investments	--	8,488,509
Changes in proportion and differences between employer contributions and proportionate share of contributions	8,597,062	--
Employer contributions subsequent to the measurement date	7,245,510	--
	<u>\$ 16,772,673</u>	<u>\$ 8,488,509</u>

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NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

The \$7,700,062 of deferred outflows of resources related to pensions at June 30, 2016 resulting from the BWS's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ended June 30, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources at June 30, 2016 will be recognized in pension expense as follows:

<u>Fiscal Year Ending June 30,</u>	<u>Amount</u>
2017	\$ 1,251,595
2018	1,251,595
2019	1,251,595
2020	2,987,104
2021	250,545
	<u>\$ 6,992,434</u>

Actuarial Assumptions

The following actuarial assumptions were used in the actuarial valuations as of June 30, 2015 and 2014:

	<u>2015</u>	<u>2014</u>
Inflation	3.00%	3.00%
Payroll growth rate	3.50%	3.50%
Investment rate of return, including inflation	7.65%	7.75%
Salary increases, including inflation		
Police and fire employees	5.00% to 19.00%	5.00% to 19.00%
General employees	4.00% to 8.00%	4.00% to 8.00%
Teachers	4.50% to 8.50%	4.50% to 8.50%

Mortality assumptions used in the actuarial valuations as of June 30, 2015 and 2014 included post-retirement mortality rates that were based on either the Client Specific Tables or the 1994 US Group Annuity Mortality Static Tables. Pre-retirement mortality rates were based on the RP-2000 Mortality Tables.

The actuarial assumptions used in the actuarial valuations as of June 30, 2015 and 2014 were based on the results of an actuarial experience study for the five-year period ended June 30, 2010. ERS updates their experience studies every five years.

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

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NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

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 used in the actuarial valuations as of June 30, 2015 and 2014 are summarized in the following table:

Asset Class	2015		2014	
	Target Allocation	Long-Term Expected Real Rate of Return	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	30.00%	8.50%	30.00%	8.50%
International equity	26.00%	9.25%	26.00%	9.00%
Total fixed-income	20.00%	3.10%	20.00%	3.10%
Real estate	7.00% *	9.20%	7.00%	8.46%
Private equity	7.00% *	11.85%	7.00%	11.45%
Real return	5.00% *	6.65%	5.00%	6.10%
Covered calls	5.00%	7.65%	5.00%	7.65%
	<u>100.00%</u>		<u>100.00%</u>	

* 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 at June 30, 2016 and 2015 was 7.65% and 7.75%, respectively. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

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

The following presents the BWS's proportionate share of the net pension liability calculated for the fiscal years ended June 30, 2016 and 2015 using the applicable discount rate, as well as what the BWS's proportionate share of the net pension liability would be if it were

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NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the applicable rate:

	June 30, 2016		
	1% Decrease (6.65%)	Discount Rate (7.65%)	1% Increase (8.65%)
Proportionate share of the net pension liability	\$ <u>102,639,120</u>	\$ <u>81,526,553</u>	\$ <u>60,413,986</u>

	June 30, 2015		
	1% Decrease (6.75%)	Discount Rate (7.75%)	1% Increase (8.75%)
Proportionate share of the net pension liability	\$ <u>92,705,833</u>	\$ <u>73,141,824</u>	\$ <u>53,577,814</u>

Plan Fiduciary Net Position

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

Payable to the Pension Plan

At June 30, 2016 and 2015, the amount payable to the ERS totaled \$487,947 and \$2,407,228, respectively. The amount payable at June 30, 2016 and 2015 consists of statutorily required employer contributions for the month of June 2016 and 2015, respectively. The amount payable at June 30, 2015 also includes excess pension costs incurred by the BWS, as required by the HRS, attributed to fiscal year 2015 and 2014.

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.

**Board of Water Supply
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NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

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

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

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

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

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

For the fiscal years ended June 30, 2016, 2015 and 2014, 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:

	2016	2015	2014
Annual required contribution	\$ 8,826,000	\$ 8,528,000	\$ 8,977,000
Interest on net OPEB obligation	(645,000)	493,000	32,000
Adjustments to annual required contribution	<u>602,000</u>	<u>(446,000)</u>	<u>(28,000)</u>
Annual OPEB cost	8,783,000	8,575,000	8,981,000
Contributions made	<u>(11,728,539)</u>	<u>(10,750,399)</u>	<u>(16,482,667)</u>
Change in net OPEB asset (obligation)	2,945,539	2,175,399	7,501,667
Net OPEB asset (obligation)			
Beginning of year	<u>9,216,616</u>	<u>7,041,217</u>	<u>(460,450)</u>
End of Year	\$ <u>12,162,155</u>	\$ <u>9,216,616</u>	\$ <u>7,041,217</u>
Percentage of annual OPEB cost contributed	<u>134%</u>	<u>125%</u>	<u>184%</u>

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE M - EMPLOYEE BENEFIT PLANS (Continued)

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

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

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

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

Projections of benefits for financial reporting purposes are based on the substantive plan and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point.

The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

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

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

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE N - COMMITMENTS

Commitments, primarily for capital improvements, approximated \$217,450,000 and \$185,570,000 as of June 30, 2016 and 2015, respectively. Such amounts are to be funded by operating revenues, contributed capital, cash and investments on hand.

NOTE O - CONTINGENCIES

Workers' Compensation Self-Insurance Liability

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

The liability for losses and loss adjustment expenses is comprised of case reserves and incurred but not reported loss reserves ("IBNR"). Case or outstanding loss reserves represent estimates of ultimate costs to settle reported claims. 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, 2016 and 2015, the arbitrage rebate and yield restriction liability totaled approximately \$-0- and \$66,000, respectively.

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.

**Board of Water Supply
City and County of Honolulu
NOTES TO FINANCIAL STATEMENTS
June 30, 2016 and 2015**

NOTE P - PRIOR PERIOD RESTATEMENT

The previously issued financial statements of the BWS as of June 30, 2015 have been restated to correct errors in accounting for the deferred loss on refunding of debt and state revolving fund notes payable. The misstatement of the deferred loss on refunding was the result of amortizing the loss over a period shorter than that required by accounting principles generally accepted in the United States of America. The misstatement of notes payable was due to the inclusion of the principal portion of the obligation that had been forgiven as of June 30, 2015.

The resulting effect on the change in net position for the fiscal year ended June 30, 2015 was an increase of \$6,611,890 from the previously reported amount. There was no effect on the net position balance as of July 1, 2014. The following is a summary of the effect of the correction on each financial statement line item:

	<u>2015 Previously Reported</u>	<u>Increase (Decrease)</u>	<u>2015 As Restated</u>
Statement of net position			
Deferred outflows of resources			
Deferred loss on refunding of debt	\$ 16,655,036	\$ 5,044,890	\$ 21,699,926
Liabilities			
Notes payable, noncurrent	\$ 58,264,967	\$ (1,567,000)	\$ 56,697,967
Net position			
Net investment in capital assets	\$819,139,210	\$ 6,611,890	\$825,751,100
Statement of revenue, expenses and changes in net position			
Interest expense	\$ 11,957,255	\$ (5,044,890)	\$ 6,912,365
Contributions in aid of construction	\$ 18,350,178	\$ 1,567,000	\$ 19,917,178

REQUIRED SUPPLEMENTARY INFORMATION

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

Measurement Period Ended	Proportion of the Net Pension Liability	Proportionate Share of the Net Pension Liability	Covered - Employee Payroll	Proportionate Share of the Net Pension Liability as a %age of Covered Payroll	Plan Fiduciary Net Position as a %age of the Total Pension Liability
June 30, 2015	0.93%	\$ 81,526,553	\$ 34,535,200	236%	62.42%
June 30, 2014	0.91%	73,141,824	33,200,116	220%	63.92%
June 30, 2013	0.78%	69,992,291	30,476,908	230%	57.96%

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

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

Fiscal Year Ended	Statutorily Required Contribution	Contributions in Relation to Statutorily Required Contributions	Contribution Deficiency (Excess)	Covered - Employee Payroll	Contributions as a %age of Covered Payroll
June 30, 2016	\$ 5,871,134	\$ 5,871,134	\$ --	\$ 35,672,123	16.5%
June 30, 2015	6,686,641	6,686,641	--	34,535,200	19.4%
June 30, 2014	5,931,238	5,931,238	--	33,200,116	17.9%
June 30, 2013	4,604,149	4,604,149	--	30,476,908	15.1%
June 30, 2012	4,404,845	4,404,845	--	30,192,006	14.6%
June 30, 2011	4,497,292	4,497,292	--	30,754,022	14.6%
June 30, 2010	4,850,928	4,850,928	--	33,089,421	14.7%
June 30, 2009	4,804,377	4,804,377	--	33,589,442	14.3%
June 30, 2008	4,273,765	4,273,765	--	31,576,266	13.5%
June 30, 2007	4,163,427	4,163,427	--	30,580,123	13.6%

**Board of Water Supply
City and County of Honolulu
SCHEDULE OF FUNDING PROGRESS
June 30, 2016**

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

SUPPLEMENTARY INFORMATION

**Board of Water Supply
City and County of Honolulu
SCHEDULE OF BONDS PAYABLE
June 30, 2016**

	<u>Interest Rate</u>	<u>Bond Dated</u>	<u>Maturing Serially From</u>	<u>Call Dates (1)</u>	<u>Outstanding June 30, 2016</u>
Water System Revenue Bonds					
Series 2006A (Non-AMT)					
Insured Serial Bonds	4.250%	7/7/2006	7/1/2016	(2)	\$ <u>2,795,000</u>
					<u>2,795,000</u>
Water System Revenue Bonds					
Series 2006B (AMT)					
Insured Serial Bonds	5.000%	7/7/2006	7/1/2016	(2)	<u>3,605,000</u>
					<u>3,605,000</u>
Water System Revenue Bonds					
Series 2012A					
Insured Serial Bonds	3.000%	3/29/2012	7/1/2016	(2)	940,000
Insured Serial Bonds	3.000%	3/29/2012	7/1/2017	(2)	970,000
Insured Serial Bonds	4.000%	3/29/2012	7/1/2018	(2)	3,960,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2019	(2)	4,140,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2020	(2)	2,320,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2021	(2)	6,865,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2022	(2)	8,535,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2023	7/1/2022	3,605,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2024	7/1/2022	3,790,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2025	7/1/2022	3,980,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2026	7/1/2022	4,185,000
Insured Serial Bonds	4.500%	3/29/2012	7/1/2027	7/1/2022	4,390,000
Insured Serial Bonds	4.500%	3/29/2012	7/1/2028	7/1/2022	4,595,000
Insured Serial Bonds	4.500%	3/29/2012	7/1/2029	7/1/2022	4,805,000
Insured Serial Bonds	4.500%	3/29/2012	7/1/2030	7/1/2022	5,025,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2031	7/1/2022	5,270,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2032	7/1/2022	5,540,000
Insured Serial Bonds	5.000%	3/29/2012	7/1/2033	7/1/2022	5,825,000
Bifurcated Serial Bonds	2.000%	3/29/2012	7/1/2020	(2)	<u>2,000,000</u>
					\$ <u>80,740,000</u>

(1) Call dates indicated are optional.

(2) Noncallable.

**Board of Water Supply
City and County of Honolulu
SCHEDULE OF BONDS PAYABLE (Continued)
June 30, 2016**

	Interest Rate	Bond Dated	Maturing Serially From	Call Dates (1)	Outstanding June 30, 2016
Water System Revenue Bonds					
Series 2014A (Non-AMT)					
Tax-Exempt Serial Bonds					
Insured Serial Bonds	5.000%	12/9/2014	7/1/2023	(2)	\$ 5,585,000
Insured Serial Bonds	3.000%	12/9/2014	7/1/2024	(2)	410,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2024	(2)	5,455,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2025	7/1/2024	6,165,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2026	7/1/2024	6,480,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2027	7/1/2024	6,810,000
Insured Serial Bonds	3.000%	12/9/2014	7/1/2028	(2)	930,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2028	7/1/2024	6,215,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2029	7/1/2024	7,505,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2030	7/1/2024	7,930,000
Insured Serial Bonds	3.250%	12/9/2014	7/1/2031	(2)	4,470,000
Insured Serial Bonds	5.000%	12/9/2014	7/1/2031	7/1/2024	3,825,000
Insured Serial Bonds	4.000%	12/9/2014	7/1/2032	7/1/2024	6,575,000
Insured Serial Bonds	4.000%	12/9/2014	7/1/2033	7/1/2024	6,840,000
Insured Serial Bonds	4.000%	12/9/2014	7/1/2034	7/1/2024	8,500,000
Insured Serial Bonds	4.000%	12/9/2014	7/1/2035	7/1/2024	8,755,000
Insured Serial Bonds	4.000%	12/9/2014	7/1/2036	7/1/2024	9,205,000
					<u>101,655,000</u>
Water System Revenue Bonds					
Series 2014B (AMT)					
Taxable Serial Bonds					
Insured Serial Bonds	0.805%	12/9/2014	7/1/2016	(2)	795,000
Insured Serial Bonds	1.335%	12/9/2014	7/1/2017	(2)	7,395,000
Insured Serial Bonds	1.744%	12/9/2014	7/1/2018	(2)	4,590,000
Insured Serial Bonds	2.144%	12/9/2014	7/1/2019	(2)	4,680,000
Insured Serial Bonds	2.389%	12/9/2014	7/1/2020	(2)	4,790,000
Insured Serial Bonds	2.619%	12/9/2014	7/1/2021	(2)	2,585,000
Insured Serial Bonds	2.755%	12/9/2014	7/1/2022	(2)	1,540,000
Insured Serial Bonds	2.915%	12/9/2014	7/1/2023	(2)	1,585,000
Insured Serial Bonds	3.135%	12/9/2014	7/1/2024	(2)	1,625,000
Insured Serial Bonds	3.285%	12/9/2014	7/1/2025	(2)	1,670,000
Insured Serial Bonds	3.385%	12/9/2014	7/1/2026	(2)	1,730,000
Insured Serial Bonds	3.485%	12/9/2014	7/1/2027	(2)	1,785,000
Insured Serial Bonds	3.585%	12/9/2014	7/1/2028	(2)	1,845,000
Insured Serial Bonds	3.685%	12/9/2014	7/1/2029	(2)	1,910,000
Insured Serial Bonds	3.760%	12/9/2014	7/1/2030	(2)	1,975,000
Insured Serial Bonds	3.860%	12/9/2014	7/1/2031	(2)	2,045,000
					<u>42,545,000</u>
					<u>\$ 231,340,000</u>

(1) Call dates indicated are optional.

(2) Noncallable.

**Board of Water Supply
City and County of Honolulu
SCHEDULES OF NET REVENUE REQUIREMENT
Fiscal Years Ended June 30, 2016 and 2015**

	<u>2016</u>	<u>2015</u>
REVENUES		
Water sales	\$ 234,725,808	\$ 212,486,218
Interest	4,150,911	3,088,165
Other	<u>4,277,747</u>	<u>4,721,506</u>
Total revenues	<u>243,154,466</u>	<u>220,295,889</u>
DEDUCTIONS		
Operating expenses	183,712,511	183,533,096
Less: depreciation expense	(45,581,460)	(45,286,091)
Less: allocated depreciation charges	<u>(1,584,475)</u>	<u>(1,540,393)</u>
Total deductions	<u>136,546,576</u>	<u>136,706,612</u>
Net revenues	<u>\$ 106,607,890</u>	<u>\$ 83,589,277</u>
NET REVENUE REQUIREMENT		
Greater of:		
1) Aggregate debt service	\$ 17,890,708	\$ 15,399,941
Required deposits	<u>--</u>	<u>--</u>
	<u>\$ 17,890,708</u>	<u>\$ 15,399,941</u>
2) Aggregate debt service	\$ 17,890,708	\$ 15,399,941
Minimum required debt service ratio	x <u>1.20</u>	x <u>1.20</u>
Net revenue requirement	<u>\$ 21,468,850</u>	<u>\$ 18,479,929</u>
Net revenue to aggregate debt service ratio	<u>5.96</u>	<u>5.43</u>

**BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU**

SINGLE AUDIT REPORTS

Fiscal Year Ended June 30, 2016

January 10, 2017

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

We have completed our audit of the basic financial statements of the Board of Water Supply (the "BWS"), a component unit of the City and County of Honolulu, as of and for the fiscal year ended June 30, 2016. Our report containing our opinion on those basic financial statements is included under a separate cover. We submit herein our reports on the BWS's internal control over financial reporting and compliance, compliance for each major federal program, internal control over compliance, and on the schedule of expenditures of federal awards.

OBJECTIVES OF THE AUDIT

The primary objectives of the audit were as follows:

1. To express an opinion as to whether your financial statements are fairly presented, in all material respects, in accordance with accounting principles generally accepted in the United States of America and to report on the fairness of the schedules of expenditures of federal awards, bonds payable and net revenue requirement when considered in relation to the financial statements as a whole.
2. To report on internal control over financial reporting and compliance with provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements in accordance with *Government Auditing Standards*.
3. To report on internal control related to major federal programs and an opinion on compliance with federal statutes, regulations, and the terms and conditions of federal awards that could have a direct and material effect on each major program in accordance with the Single Audit Act Amendments of 1996 and Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance).

SCOPE OF THE AUDIT

Our audit was performed 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 audit requirements of the Uniform Guidance.

ORGANIZATION OF THE REPORT

This report is presented in five parts as follows:

- Part I - Our report on internal control over financial reporting and on compliance and other matters.
- Part II - Our report on compliance for each major federal program; report on internal control over compliance; and report on the schedule of expenditures of federal awards required by the Uniform Guidance.
- Part III - The schedule of findings and questioned costs.
- Part IV - The corrective action plan.
- Part V - The summary schedule of prior audit findings.

We wish to express our sincere appreciation for the excellent cooperation and assistance extended by the staff of the BWS.

Sincerely,

N&K CPAs, INC.

BOARD OF WATER SUPPLY

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PART I

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS

**REPORT 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**

INDEPENDENT AUDITOR'S REPORT

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 (the "BWS"), a component unit of the City and County of Honolulu, as of and for the fiscal year ended June 30, 2016, and the related notes to the financial statements, and have issued our report thereon dated December 20, 2016.

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 and therefore, material weaknesses or significant deficiencies may exist that were not identified. We did identify certain deficiencies in internal control, described in the accompanying schedule of findings and questioned costs as item 2016-001 that we consider to be a material weakness.

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*.

BWS's Response to Findings

The BWS's response to the findings identified in our audit in the accompanying corrective action plan. The BWS's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

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.

N + K CPAs, INC.

Honolulu, Hawai'i
December 20, 2016

PART II

**REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL
PROGRAM; REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND
REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
REQUIRED BY THE UNIFORM GUIDANCE**

**REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM;
REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND
REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL
AWARDS REQUIRED BY THE UNIFORM GUIDANCE**

INDEPENDENT AUDITOR'S REPORT

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 (the "BWS") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the BWS's major federal programs for the fiscal year ended June 30, 2016. The BWS's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the BWS's major federal programs 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 the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance 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 each 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 each of its major federal programs for the fiscal year ended June 30, 2016.

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 each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, 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 a 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 the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the BWS, as of and for the fiscal year ended June 30, 2016, and have issued our report thereon dated December 20, 2016, which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. We have not performed any procedures with respect to the audited financial statements subsequent to December 20, 2016. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance 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 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 schedule of expenditures of federal awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

N + K CPAs, INC.

Honolulu, Hawai'i
January 10, 2017

**Board of Water Supply
City and County of Honolulu
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
Fiscal Year Ended June 30, 2016**

Federal Grantor/Pass-through Grantor/Program or Cluster Title	Federal CFDA Number	Pass-through Entity Identifying Number	Total Federal Expenditures
U.S. ENVIRONMENTAL PROTECTION AGENCY			
Pass-through Department of Health, State of Hawai'i			
Capitalization Grants for Drinking Water State			
Revolving Funds	66.468	ASO LOG #15-079	\$ 2,352,973
	66.468	ASO LOG #14-196	2,294,057
	66.468	ASO LOG #15-059	1,267,053
	66.468	ASO LOG #16-105	1,070,149
	66.468	ASO LOG #14-195	712,707
	66.468	ASO LOG #13-123	419,707
	66.468	ASO LOG #06-170	<u>143,879</u>
TOTAL EXPENDITURES OF FEDERAL AWARDS			\$ <u>8,260,525</u>

The accompanying notes are an integral part of this schedule.

**Board of Water Supply
City and County of Honolulu
NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
Fiscal Year Ended June 30, 2016**

NOTE A - BASIS OF PRESENTATION

The accompanying schedule of expenditures of federal awards (the "Schedule") includes the federal award activity of the BWS under programs of the federal government for the fiscal year ended June 30, 2016. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of the BWS, it is not intended to, and does not, present the financial position, changes in net position, or cash flows of the BWS.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

The BWS has elected not to use the 10-percent de minimis indirect cost rate allowed under the Uniform Guidance.

PART III
SCHEDULE OF FINDINGS AND QUESTIONED COSTS

**Board of Water Supply
City and County of Honolulu
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
Fiscal Year Ended June 30, 2016**

SECTION I - SUMMARY OF AUDITOR'S RESULTS

Financial Statements

Type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP:

Unmodified

Internal control over financial reporting:

Material weakness(es) identified?

☒ yes

☐ no

Significant deficiency(ies) identified?

☐ yes

☒ none reported

Noncompliance material to financial statements noted?

☐ yes

☒ no

Federal Awards

Internal control over major federal programs:

Material weakness(es) identified?

☐ yes

☒ no

Significant deficiency(ies) identified?

☐ yes

☒ none reported

Type of auditor's report issued on compliance for major federal programs:

Unmodified

Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?

☐ yes

☒ no

Identification of major federal programs:

CFDA Number

Name of Federal Program or Cluster

66.468

Capitalization Grants for Drinking Water State Revolving Funds

Dollar threshold used to distinguish between type A and type B programs:

\$750,000

Auditee qualified as a low-risk auditee?

☒ yes

☐ no

**Board of Water Supply
City and County of Honolulu
SCHEDULE OF FINDINGS AND QUESTIONED COSTS (Continued)
Fiscal Year Ended June 30, 2016**

SECTION II - FINANCIAL STATEMENT FINDINGS

Ref. No.

2016-001 Improve Internal Controls over Accounting for Significant Nonroutine Transactions

Criteria:

Accounting for nonroutine transactions may require the application of accounting principles that an entity's personnel may not be familiar with. Management should proactively identify these types of transactions and determine the proper accounting treatment in accordance with accounting principles generally accepted in the United States of America (GAAP). Management should also be actively involved in the timely review of the nonroutine transactions that are posted to the entity's accounting system to ensure that the transactions are properly recorded.

Condition:

The 2015 financial statements of the BWS were restated to correct errors in the accounting for the deferred loss on refunding of debt and state revolving fund notes payable. The misstatement of the deferred loss on refunding was the result of amortizing the loss over a period shorter than the period required by GAAP. The misstatement of notes payable was due to the inclusion of the principal portion of the obligation that had been forgiven as of June 30, 2015. The resulting effect on the change in net position for the fiscal year ended June 30, 2015 was an increase of \$6,611,890 from the previously reported amount.

Cause:

Both errors involved accounting for significant transactions occurring during the fiscal year ended June 30, 2015 that were outside the normal course of business for the BWS: 1) the issuance of the Series 2014A and 2014B water system revenue bonds and certain state revolving loans that were used to advance refund a portion of previously issued bonds and, 2) the receipt of state revolving fund loan proceeds under a loan agreement that contained a principal forgiveness clause.

Effect:

Because of the infrequent nature of significant, nonroutine transactions, they are inherently more susceptible to material misstatement than routine transactions that an entity's personnel are accustomed to accounting for. As a result, these type of transactions have a significantly higher risk of a material error occurring.

**Board of Water Supply
City and County of Honolulu
SCHEDULE OF FINDINGS AND QUESTIONED COSTS (Continued)
Fiscal Year Ended June 30, 2016**

SECTION II - FINANCIAL STATEMENT FINDINGS (Continued)

Ref. No.

2016-001 Improve Internal Controls over Accounting for Significant Nonroutine Transactions (Continued)

Recommendation:

Management should proactively identify significant, nonroutine accounting transactions and ensure that a process is established whereby management-level fiscal personnel are actively involved in both the determination of the proper accounting treatment and the timely review of the transactions posted to the BWS's accounting system.

View of Responsible Officials and Planned Corrective Action:

Management agrees with the finding and recommendation. See Corrective Action Plan on page 20.

SECTION III - FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

No matters reported

PART IV
CORRECTIVE ACTION PLAN

BOARD OF WATER SUPPLY

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



January 10, 2017

KIRK CALDWELL, MAYOR

BRYAN P. ANDAYA, Chair
ADAM C. WONG, Vice Chair
DAVID C. HULIHEE
KAPUA SPROAT
KAY C. MATSUI

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 *ak*

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

N&K CPAs, Inc.
Attention: Mr. Ryan Iwane
American Savings Bank Tower
1001 Bishop Street, Suite 1700
Honolulu, Hawaii 96813

Subject: Internal Controls Review on the Financial Statement Audit for the Year
Ended June 30, 2016

The Honolulu Board of Water Supply (BWS) has reviewed the internal controls audit finding that you submitted. Subsequent to this review, the BWS has taken steps to address the recommendations stated therein via the attached detailed Corrective Action Plan.

As with any audit, management welcomes the comments and recommendation of the auditor that will assist us in becoming more efficient and effective in serving our customers and community.

We look forward to working with you and your staff during the current year to gain a stronger understanding of the audit process and clarity of audit documentation requirements along with your continued assistance in the development and implementation of our corrective action plan to appropriately address the audit findings, concerns, and recommendations.

Very truly yours,


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

Attachment

BOARD OF WATER SUPPLY

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



Corrective Action Plan January 10, 2017

KIRK CALDWELL, MAYOR

BRYAN P. ANDAYA, Chair
ADAM C. WONG, Vice Chair
DAVID C. HULIHEE
KAPUA SPROAT
KAY C. MATSUI

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

As noted in the Board of Water Supply, City and County of Honolulu, Single Audit of Federal Financial Assistance Programs June 30, 2016, Schedule of Findings and Questioned Costs, Fiscal Year Ended June 30, 2016, identified in Finding No. 2016-001 was the following significant deficiency.

The following will serve as a formal response to the recommendation noted in the Schedule of Findings and Questioned Costs, Year Ended June 30, 2016.

Improve Internal Controls over Accounting for Significant Non-routine Transactions

Recommendation:

Management should proactively identify significant non-routine accounting transactions and ensure that a process is established whereby management-level fiscal personnel are actively involved in both the determination of the proper accounting treatment and the timely review of the transactions posted to the BWS's accounting system.

View of Responsible Officials:

Management agrees with the finding and recommendation.

Corrective Action: Complete by December 31, 2016

The Finance Division has competent, experienced staff who stay current with governmental accounting and financial reporting standards, as well as industry practices. Regular meetings are held between the senior finance staff and the Finance Division management to allow for the exchange of relevant financial and operational information. Our internal controls will be strengthened by developing a formal agenda with recurring topics that focus on non-routine transactions, new accounting pronouncements, financial risk, and other current issues. The Finance Division management will track the status of these issues and assure that these issues are addressed, adequately documented, and reflected in the financial statements.

Responsible Person: Joe Cooper, Waterworks Controller

PART V

SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS

**Board of Water Supply
City and County of Honolulu
STATUS REPORT
Fiscal Year Ended June 30, 2016**

No prior audit findings which apply under the current criteria of the Uniform Guidance were noted.

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

We are engaged to audit the financial statements of the Board of Water Supply ("BWS"), a component unit of the City and County of Honolulu for the fiscal year ended June 30, 2016. Professional standards require that we provide you with the following information related to our audit. We would also appreciate the opportunity to meet with you to discuss this information further since a two-way dialogue can provide valuable information for the audit process.

Our Responsibility under Auditing Standards Generally Accepted in the United States of America, Government Auditing Standards and the Uniform Guidance

As stated in the agreement for professional services dated May 26, 2016, as modified effective November 2, 2016, our responsibility, as described by professional standards, is to express an opinion about whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, in conformity with accounting principles generally accepted in the United States of America. Our audit of the financial statements does not relieve you or management of your responsibilities.

In planning and performing our audit, we will consider the BWS's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. We will also consider internal control over compliance with 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 the Uniform Guidance.

As part of obtaining reasonable assurance about whether the BWS's financial statements are free of material misstatement, we will perform tests of its compliance with certain provisions of laws, regulations, contracts, and grants. However, providing an opinion on compliance with those provisions is not an objective of our audit. Also in accordance with the Uniform Guidance, we will examine, on a test basis, evidence about the BWS's compliance with the types of compliance requirements described in the Office of Management and Budget (OMB) Compliance Supplement applicable to each of its major federal programs for the purpose of expressing an opinion on the BWS's compliance with those requirements. While our audit will provide a reasonable basis for our opinion, it will not provide a legal determination on the BWS's compliance with those requirements.

Accounting principles generally accepted in the United States of America provide for certain required supplementary information (RSI) to supplement the basic financial statements. Our responsibility with respect to 1) management's discussion and analysis, 2) schedule of funding progress, 3) schedule of the proportionate share of the net pension liability and 4) schedule of contributions, which supplement the basic financial statements, is to apply certain limited procedures in accordance with auditing standards generally accepted in the United States of America. However, the RSI will not be audited and, because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance, we will not express an opinion or provide any assurance on the RSI.

We have been engaged to report on 1) the schedule of expenditures of federal awards, 2) schedule of bonds payable, and 3) schedule of net revenue requirements which accompany the financial statements

but are not RSI. Our responsibility for this supplementary information, as described by professional standards, is to evaluate the presentation of the supplementary information in relation to the financial statements as a whole and to report on whether the supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole.

We have not been engaged to report on the introductory section which accompanies the financial statements but is not RSI. Our responsibility with respect to this other information in documents containing the audited financial statements and auditor's report does not extend beyond the financial information identified in the report. We have no responsibility for determining whether this other information is properly stated. This other information will not be audited and we will not express an opinion or provide any assurance on it.

Planned Scope and Timing of the Audit

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested.

Our audit will include obtaining an understanding of the entity and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. Material misstatements may result from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the entity or to acts by management or employees acting on behalf of the entity. We will generally communicate our significant findings at the conclusion of the audit. However, some matters could be communicated sooner, particularly if significant difficulties are encountered during the audit where assistance is needed to overcome the difficulties or if the difficulties may lead to a modified opinion. We will also communicate any internal control related matters that are required to be communicated under professional standards.

We began our audit fieldwork on August 8, 2016 and expect to issue our report on approximately December 20, 2016. Lawrence M. T. Chew is the engagement partner and is responsible for supervising the engagement and signing the reports or authorizing another individual to sign them.

This information is intended solely for the use of the board of directors and management of the BWS and is not intended to be, and should not be, used by anyone other than these specified parties.

N + K CPAs, INC.

Honolulu, Hawai'i
December 20, 2016

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

We have audited 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 fiscal year ended June 30, 2016. Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America, *Government Auditing Standards* and the Uniform Guidance, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated December 20, 2016. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the BWS are described in Note B to the financial statements. As described in Note B (21) to the financial statements, the BWS adopted the provisions of Government Accounting Standards Board Statement No. 72, *Fair Value Measurement and Application*, in 2016. This standard added disclosures in Note E to the financial statements. We noted no transactions entered into by the Board of Water Supply during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the Board of Water Supply's financial statements were:

1. Valuation allowance for receivables
2. Depreciation of capital assets
3. Other postemployment benefit (other than pensions) asset
4. Net pension liability
5. Accrued workers' compensation liability

Management's estimate of the valuation allowances for receivables is based on historical collection experience and the length of time individual receivables are past due. We evaluated the key factors and assumptions used for the valuation allowance in determining that it is reasonable in relation to the financial statements taken as a whole.

Management's estimate of depreciation recorded on capital assets is based in part on the estimated useful lives of those capital assets. We evaluated the key factors and assumptions used to estimate depreciation of the Board of Water Supply's capital assets in determining that it is reasonable in relation to the financial statements taken as a whole.

Management's estimate of the other postemployment benefit (other than pensions) asset was determined using an actuarial valuation study performed by a third-party specialist. We evaluated the key factors and assumptions used to estimate the other postemployment benefit asset in determining that it is reasonable in relation to the financial statements taken as a whole.

The collective net pension liability, deferred inflows of resources, and deferred outflows of resources of the cost-sharing multiple employer defined pension plan administered by the State of Hawai'i's Employee Retirement System was determined by an actuarial valuation. The BWS's proportionate share of the collective net pension liability, deferred inflows of resources, deferred outflow of resources was based on the BWS's contributions to the pension plan relative to the contributions of all participating employers during the measurement period. We evaluated the key factors and assumptions used to estimate the BWS's proportionate share of the collective net pension liability, deferred inflows of resources, deferred outflow of resources in determining that it is reasonable in relation to the financial statements taken as a whole.

The accrued workers' compensation liability was determined using an actuarial analysis performed by a third-party specialist. We evaluated the key factors and assumptions used to estimate the accrued workers' compensation liability in determining that it is reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosure affecting the financial statements was the disclosure of the prior period restatement in Note P to the financial statements. The previously issued financial statements of the BWS as of June 30, 2015 were restated to correct errors in accounting for the deferred loss on refunding of debt and state revolving fund notes payable. The resulting effect on the change in net position for the fiscal year ended June 30, 2015 was an increase of \$6,611,890 from the previously reported amount. There was no effect on the net position balance as of July 1, 2014.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. The attached schedule summarizes uncorrected misstatements of the financial statements. Management has determined that their effects are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

The following material misstatements detected as a result of audit procedures were corrected by management:

1. Understatement of the deferred loss on refunding of debt at June 30, 2016 totaling \$13,693,273; overstatement of the related amortization expense for the fiscal year ending June 30, 2016 totaling \$8,648,383; and the understatement of net position at July 1, 2015 totaling \$5,044,890.
2. Overstatement of SRF notes payable at June 30, 2016 totaling \$2,317,000; understatement of contributions in aid of construction for the fiscal year ended June 30, 2016 totaling \$750,000; and the understatement of net position at July 1, 2015 totaling \$1,567,000.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letters dated December 20, 2016 and January 10, 2017.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the BWS's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the BWS's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to management's discussion and analysis and the schedules of proportionate share of the net pension liability, contributions and funding progress, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding 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 did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the schedules of expenditures of federal awards, bonds payable and net revenue requirement, which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introductory section, which accompanies the financial statements but are not RSI. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the information and use of the board of directors and management of the BWS and is not intended to be, and should not be, used by anyone other than these specified parties.

N + K CPAs, INC.

Honolulu, Hawai'i
January 10, 2017

Client: **Board of Water Supply**
Schedule: **Summary of Uncorrected Misstatements**
Period Ending: **6/30/2016**

<u>Account</u>	<u>Description</u>	<u>Debit</u>	<u>Credit</u>
Proposed JE # 201			
To pass on the correction of prior fiscal year overstatement of professional service fees.			
4270	PROFESSIONAL SERVICES	210,576.00	
2910	RETAINED EARNINGS		210,576.00
Total		210,576.00	210,576.00
Proposed JE # 202			
To correct AJE 9 to properly state beginning net position related to employer pension contributions that should have been recorded as pension expense in FY15.			
2910	RETAINED EARNINGS	769,725.00	
6010	NORMAL		769,725.00
Total		769,725.00	769,725.00
Proposed JE # 205			
To record a liability resulting from the overbilling of water revenue as of 6/30/16.			
3053	METERED SALES- GENERAL CU	358,428.00	
ACC3	Unearned Revenues		358,428.00
Total		358,428.00	358,428.00

ITEM FOR INFORMATION NO. 2

"January 30, 2017

FINANCIAL
UPDATE

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, 2016

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,

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

Attachments"

The foregoing was for information only.

DISCUSSION

Joe Cooper, Waterworks Controller, gave the report.

Mr. Cooper stated that the largest variance in the cost drivers was the services/supplies category at \$14 million, which was \$9 million under budget, mainly due to timing issues. Mr. Andaya asked if repairing water mains fall under the services/supplies category. Mr. Cooper replied yes, and explained that services/supplies is a broad category which includes things from repairing and maintaining BWS's physical assets to consulting and engineering services. Mr. Andaya stated that it's about 40 percent under budget. Mr. Cooper said that the \$14 million spent this year was more than the \$11 million spent last year, but the budget was set higher to ensure enough funds were available.

Board Member Hulihee stated that when BWS budgets for full employment, it will always be under budget. He stated that BWS is always 100 employees short so unless the budget is changed next year, there will

continue to be a large variance. Mr. Lau stated that next year on the personnel services budget, they will not budget for 100 percent employment, but will budget for the amount of positions they feel they can fill in the year.

Mr. Andaya stated that he understands the personnel services variance, but he's concerned about the services/supplies variance. Mr. Cooper mentioned the difficulty in executing consulting contracts and that the hope is to execute the contracts in the first or second quarter, but some of the projects get delayed to the fourth quarter. Mr. Lau added that this report represents only half the fiscal year and usually there's a rush at the end of the fiscal year to close all procurements, so the report will look different at that time. Mr. Lau said that they will be looking into a leaner operating budget, but the question is how lean because emergencies come up during the year.

Mr. Hulihee asked Mr. Cooper if he had comments on the auditor's report. Mr. Cooper said that he agrees with the auditor's interpretation that the deferred loss on refunding of debt was amortized over a two year period when it should have been amortized over a much longer period, but it was an oversight due to erroneously choosing the call date of two years versus the original maturity date of the whole series of bonds which would have extended out to about 16 years. Mr. Lau asked Mr. Cooper about having fixes in place, and Mr. Cooper replied that they have meetings with their senior accountants on a monthly basis to discuss routine, non-routine, and accounting issues in an open forum. Mr. Hulihee asked if the previous auditor did not find this error, and Mr. Cooper replied that they did not.

Budget vs. Actual
Revenue and Expense Totals
As of December 31, 2016

	YTD Actuals	YTD Budget	Favorable/ (Unfavorable) Variance
Revenues	120,352,000	115,402,000	4,950,000
Operating Expenses	(84,420,000)	(105,682,000)	21,262,000
Net Revenues (expenditures)	<u>35,932,000</u>	<u>9,720,000</u>	<u>26,212,000</u>

Board Of Water Supply
Statement of Revenues, Expenses And Change In Net Assets
As of December 31, 2016

Current Month	%	Last Year	%	Description	Year to Date	%	Last Year to Date	%	%
Actual	Revenue	Actual	Revenue		Actual	Revenue	Actual	Revenue	Change
				REVENUE					
18,659,652.12	100.00	19,489,345.38	100.00	OPERATING REVENUE	118,774,982.08	100.00	121,303,958.71	100.00	2.08-
18,659,652.12	100.00	19,489,345.38	100.00	REVENUE	118,774,982.08	100.00	121,303,958.71	100.00	2.08-
				OPERATING EXPENSES					
2,929,733.32-	15.70	2,742,142.78-	14.07	LABOR COSTS	17,342,927.74-	14.60	15,939,774.61-	13.14	8.80
1,516,076.23-	8.12	2,074,328.34-	10.64	SERVICES	8,657,720.96-	7.29	8,133,759.62-	6.71	6.44
265,173.92-	1.42	98,013.44-	.50	SUPPLIES	1,941,371.65-	1.63	1,780,196.97-	1.47	9.05
19,502.25-	.10	12,043.41-	.06	EDUCATION & TRAINING	88,548.78-	.07	82,343.79-	.07	7.54
2,423,146.33-	12.99	2,300,124.51-	11.80	UTILITIES	8,703,250.64-	7.33	9,129,133.87-	7.53	4.67-
136,327.04-	.73	201,603.24-	1.03	REPAIR AND MAINTENANCE	658,859.43-	.55	975,483.60-	.80	32.46-
1,417,771.21-	7.60	1,561,279.97-	8.01	MISC	9,224,714.67-	7.77	9,973,502.69-	8.22	7.51-
1,939,401.00-	10.39	1,363,579.90-	7.00	RETIREMENT SYSTEM CONTRIBUTIO	14,151,408.27-	11.91	10,870,135.15-	8.96	30.19
121,450.78-	.65	34,964.97	.18	MISC EMPLOYEES' BENEFITS	104,398.24-	.09	217,394.78	.18	148.02-
10,768,582.08-	57.71	10,318,150.62-	52.94	OPERATING EXPENSES	60,873,200.38-	51.25	56,666,935.52-	46.71	7.42
3,105,572.47-	16.64	2,268,258.97-	11.64	NON OPERATING REVENUE AND EXPE	7,285,284.43-	6.13	7,902,048.81-	6.51	7.81-
924,315.55	4.95	360,537.49	1.85	CONTRIBUTION IN AID	10,800,505.85	9.09	5,891,455.00	4.86	83.32
4,639,504.00-	24.86	3,810,204.89-	19.55	OTHER EXPENSES	24,909,564.27-	20.97	22,057,680.42-	18.18	12.93
1,070,309.12	5.74	3,453,268.39	17.72	Change In Net Assets	36,507,438.85	30.74	40,568,748.96	33.44	10.01-

Board Of Water Supply
Statement of Revenues, Expenses And Change In Net Assets
As of December 31, 2016

Current Quarter Actual	% Revenue	Last Year Quarter Actual	% Revenue	Description	Year to Date Actual	% Revenue	Last Year to Date Actual	% Revenue	% Change
REVENUE									
57,451,438	100.00	58,400,668	100.00	OPERATING REVENUE	118,774,982	100.00	121,303,959	100.00	-2.08
57,451,438	100.00	58,400,668	100.00	REVENUE	118,774,982	100.00	121,303,959	100.00	-2.08
OPERATING EXPENSES									
-8,598,260	14.97	-7,862,742	13.46	LABOR COSTS	-17,342,928	14.60	-15,939,775	13.14	8.80
-5,462,647	9.51	-5,031,319	8.62	SERVICES	-8,657,721	7.29	-8,133,760	6.71	6.44
-816,986	1.42	-634,072	1.09	SUPPLIES	-1,941,372	1.63	-1,780,197	1.47	9.05
-47,152	0.08	-50,316	0.09	EDUCATION & TRAINING	-88,549	0.07	-82,344	0.07	7.54
-5,347,260	9.31	-5,455,174	9.34	UTILITIES	-8,703,251	7.33	-9,129,134	7.53	-4.67
-379,045	0.66	-613,341	1.05	REPAIR AND MAINTENANCE	-658,859	0.55	-975,484	0.80	-32.46
-3,597,309	6.26	-4,843,007	8.29	MISC	-9,224,715	7.77	-9,973,503	8.22	-7.51
-4,312,013	7.51	-5,687,955	9.74	RETIREMENT SYSTEM CONTRIBUTIO	-14,151,408	11.91	-10,870,135	8.96	30.19
-320,379	0.56	98,243	-0.17	MISC EMPLOYEES' BENEFITS	-104,398	0.09	217,395	-0.18	-148.02
-28,881,049	50.27	-30,079,683	51.51	OPERATING EXPENSES	-60,873,200	51.25	-56,666,936	46.71	7.42
-4,465,198	7.77	-4,243,608	7.27	NON OPERATING REVENUE AND EXPE	-7,285,284	6.13	-7,902,049	6.51	-7.81
1,818,611	-3.17	1,824,148	-3.12	CONTRIBUTION IN AID	10,800,506	-9.09	5,891,455	-4.86	83.32
-12,638,863	22.00	-10,880,020	18.63	OTHER EXPENSES	-24,909,564	20.97	-22,057,680	18.18	12.93
13,284,940	23.12	15,021,505	-25.72	Change In Net Assets	36,507,439	30.74	40,568,749	33.44	-10.01

Board Of Water Supply
Balance Sheet
As of December 31, 2016

Description	Amounts					Change
	Current	Last Month End	Last Year End	This Month	This Year	
ASSETS						
CURRENT ASSETS	61,772,729.46	68,606,884.06	57,515,504.80	-6,834,154.60	4,257,224.66	
RESTRICTED ASSETS	-639,229.65	109,970.14	17,400,189.89	-749,199.79	-18,039,419.54	
INVESTMENTS	352,131,870.99	346,261,687.74	338,648,776.43	5,870,183.25	13,483,094.56	
OTHER ASSETS	17,171,922.54	17,621,130.21	19,731,067.69	-449,207.67	-2,559,145.15	
PROPERTY / PLANT	1,132,355,740.02	1,131,646,501.92	1,121,711,210.90	709,238.10	10,644,529.12	
DEFERRED OUTFLOWS OF RESOURCE	23,588,492.00	23,588,492.00	23,588,492.00	0.00	0.00	
TOTAL ASSETS	<u>1,586,381,525.36</u>	<u>1,587,834,666.07</u>	<u>1,578,595,241.71</u>	<u>-1,453,140.71</u>	<u>7,786,283.65</u>	
LIABILITIES						
CURRENT LIABILITIES	15,534,636.17	17,973,286.60	34,111,255.10	-2,438,650.43	-18,576,618.93	
OTHER LIABILITIES	39,094,573.51	39,230,858.95	37,964,054.97	-136,285.44	1,130,518.54	
BONDS PAYABLE, NONCURRENT	277,860,816.96	277,809,330.92	287,052,205.77	51,486.04	-9,191,388.81	
NET PENSION LIABILITY	81,526,553.00	81,526,553.00	81,526,553.00	0.00	0.00	
DEFERRED INFLOWS OF RESOURCES	8,895,996.00	8,895,996.00	8,895,996.00	0.00	0.00	
LIABILITIES	<u>422,912,575.64</u>	<u>425,436,025.47</u>	<u>449,550,064.84</u>	<u>-2,523,449.83</u>	<u>-26,637,489.20</u>	
NET ASSETS						
RETAINED EARNINGS	332,826,981.40	326,419,461.60	301,398,811.67	6,407,519.80	31,428,169.73	
FUND BALANCE	594,633,831.66	594,633,831.66	594,633,831.66	0.00	0.00	
RESERVE FOR ENCUMBRANCES	199,500,697.81	205,908,217.61	230,928,867.54	-6,407,519.80	-31,428,169.73	
CURRENT YEAR CHANGES TO FU	36,507,438.85	35,437,129.73	0.00	1,070,309.12	36,507,438.85	
NET ASSETS	<u>1,163,468,949.72</u>	<u>1,162,398,640.60</u>	<u>1,126,961,510.87</u>	<u>1,070,309.12</u>	<u>36,507,438.85</u>	
TOTAL LIABILITIES AND NET ASSETS	<u>1,586,381,525.36</u>	<u>1,587,834,666.07</u>	<u>1,576,511,575.71</u>	<u>-1,453,140.71</u>	<u>9,869,949.65</u>	

Board Of Water Supply
Budget vs Actual Appropriation Budget - Total BWS Summary

1/10/2017

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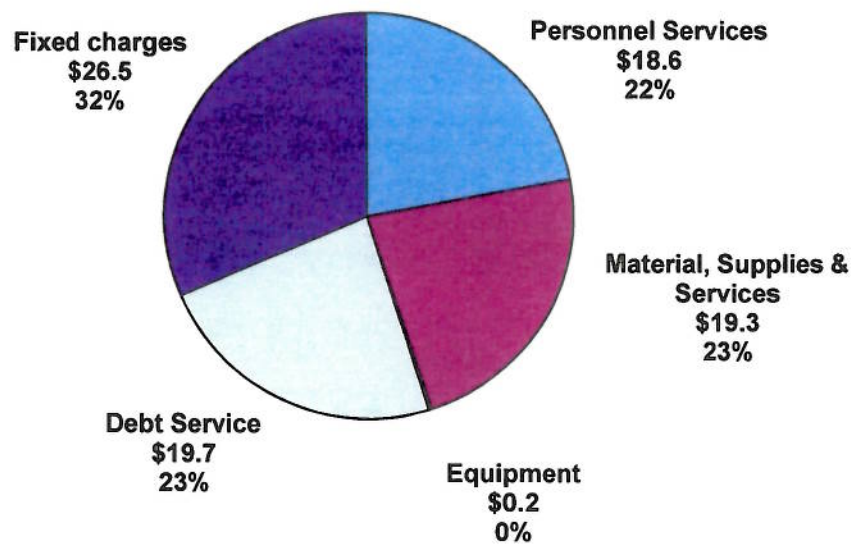
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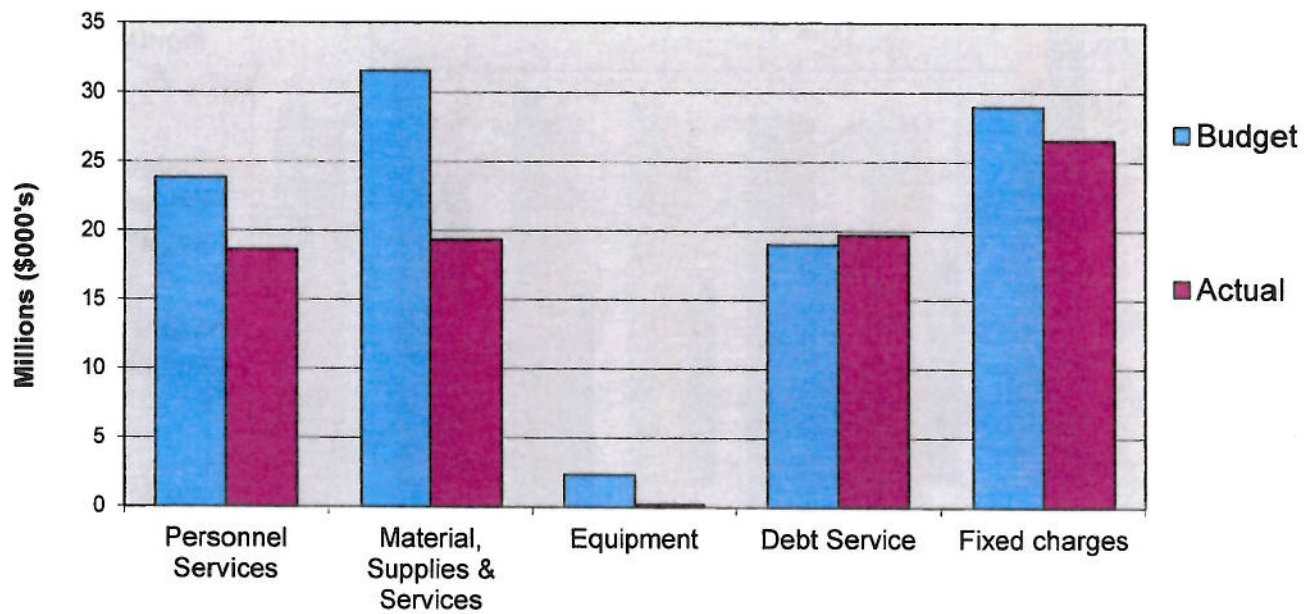
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YTD-TO-DATE				FOR THE FISCAL YEAR					
YTD Actuals	YTD Budget	Avail/ (Over)	%	Object Description	Revenues/ Expend	Open Encumb	Annual Budget	Avail/ (Over)	%
<u>120,352</u>	<u>115,402</u>	<u>(4,950)</u>	<u>4.29-</u>	<u>REVENUE</u>	<u>120,352</u>		<u>230,802</u>	<u>110,450</u>	<u>47.85</u>
				OPERATING EXPENSES:					
18,625	23,835	5,210	21.86	Personnel Services	18,625		47,687	29,062	60.94
				MATERIALS AND SUPPLIES					
9,003	13,588	4,585	33.74	Services	5,246	3,757	26,299	17,296	65.77
4,896	9,806	4,910	50.07	Supplies	2,267	2,629	19,346	14,450	74.69
151	391	240	61.38	Education & Training	134	17	882	731	82.88
	6	6	100.00	Utilities			13	13	100.00
817	1,618	801	49.51	Repairs & Maint	538	279	2,972	2,155	72.51
4,471	6,123	1,652	26.98	Misc	3,777	694	12,123	7,652	63.12
213	2,336	2,123	90.88	Equipment		213	4,807	4,594	95.57
19,706	19,020	(686)	3.61-	Debt Service	19,706		38,865	19,159	49.30
				FIXED CHARGES:					
9,883	15,113	5,230	34.61	Utilities	9,880	3	30,227	20,344	67.30
1,650	1,650			Case Fees	1,650		3,300	1,650	50.00
4,333	4,350	17	.39	Retirement System Contribution	4,329	4	8,700	4,367	50.20
10,672	7,846	(2,826)	36.02-	Misc Employees' Benefits	10,662	10	15,691	5,019	31.99
<u>84,420</u>	<u>105,682</u>	<u>21,262</u>	<u>20.12</u>	<u>TOTAL OPERATING EXPENDITURES</u>	<u>76,814</u>	<u>7,606</u>	<u>210,912</u>	<u>126,492</u>	<u>59.97</u>
<u>35,932</u>	<u>9,720</u>	<u>(26,212)</u>		<u>NET REVENUES (EXPENDITURES)</u>	<u>43,538</u>	<u>(7,606)</u>	<u>19,890</u>	<u>(16,042)</u>	

Total Operating Expenditures - \$84.4
As of December 31, 2016
(millions of dollars)



Operating Expenditures by Category (Budget vs. Actual)
as of December 31, 2016 (millions of dollars)



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Board of Water Supply
City and County of Honolulu

Financial Performance

July 2016 – December 2016





Budget to Actual July 2016 – December 2016

- Actual Revenue \$120.4 million vs. Budgeted Revenue \$115.4 million
- Operating costs are \$84.4 million vs. Budgeted costs of \$105.7 million
- Actual Net Revenue \$35.9 million vs. Budgeted Net Revenue \$9.7 million





Cost Drivers

Year to Date December 2016

	Actual (millions)	Budget (millions)
• Personnel	\$18.6	\$23.8
• Services/Supplies	\$13.9	\$23.4
• Repairs & Misc.	\$ 5.3	\$ 7.7
• Equipment	\$ 0.2	\$ 2.3
• Utilities	\$ 9.9	\$15.1

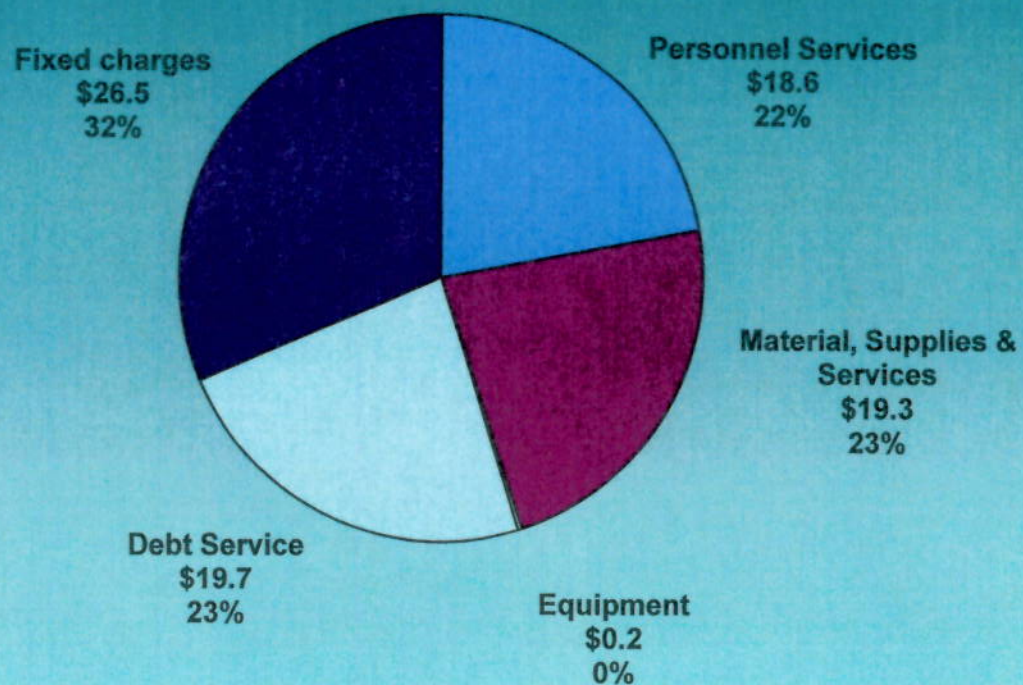
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Total Operating Expenditures - \$84.4
As of December 31, 2016
(millions of dollars)



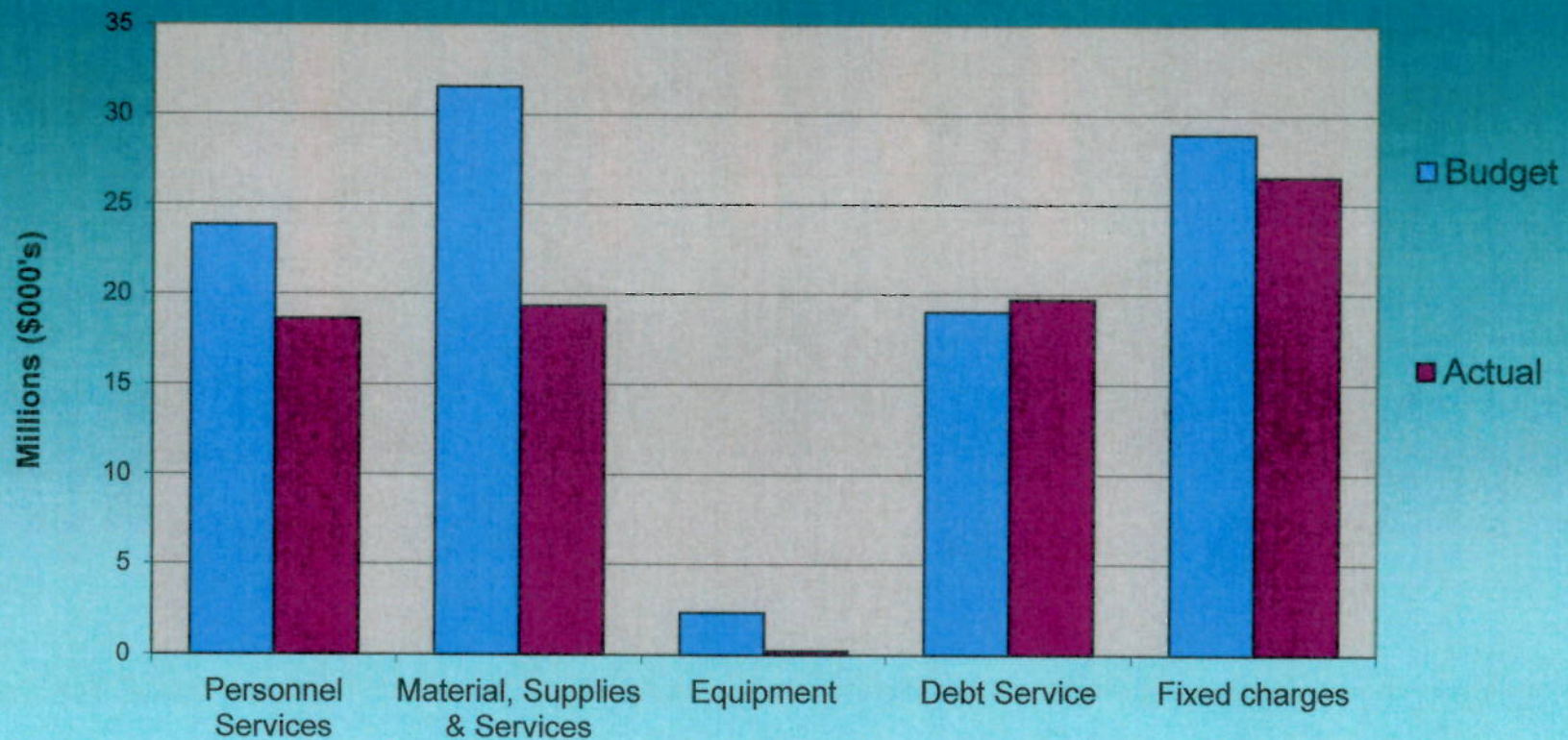
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**Operating Expenditures by Category (Budget vs. Actual)
as of December 31, 2016 (millions of dollars)**



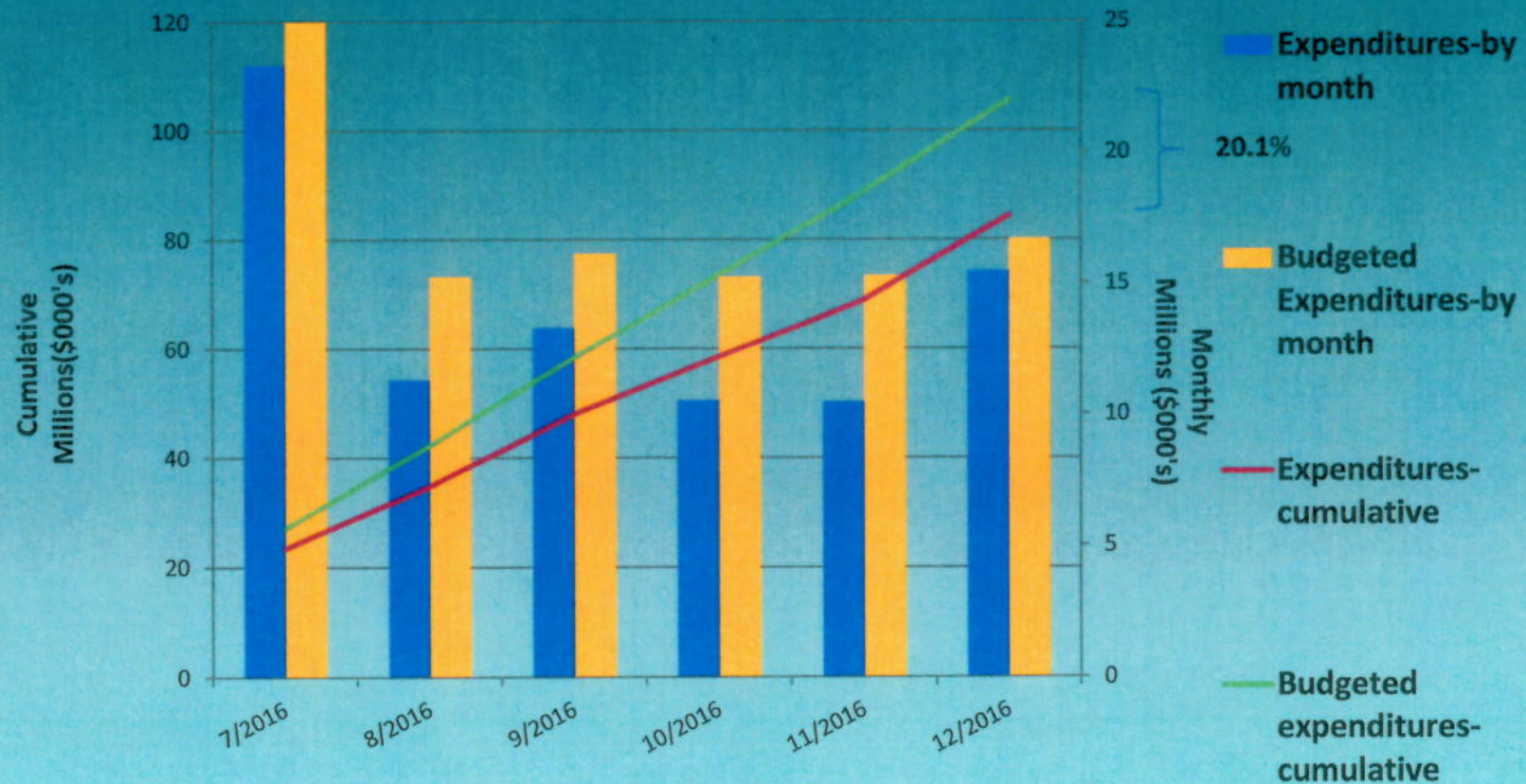
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BUDGETED OPERATING EXPENDITURES FY 2017



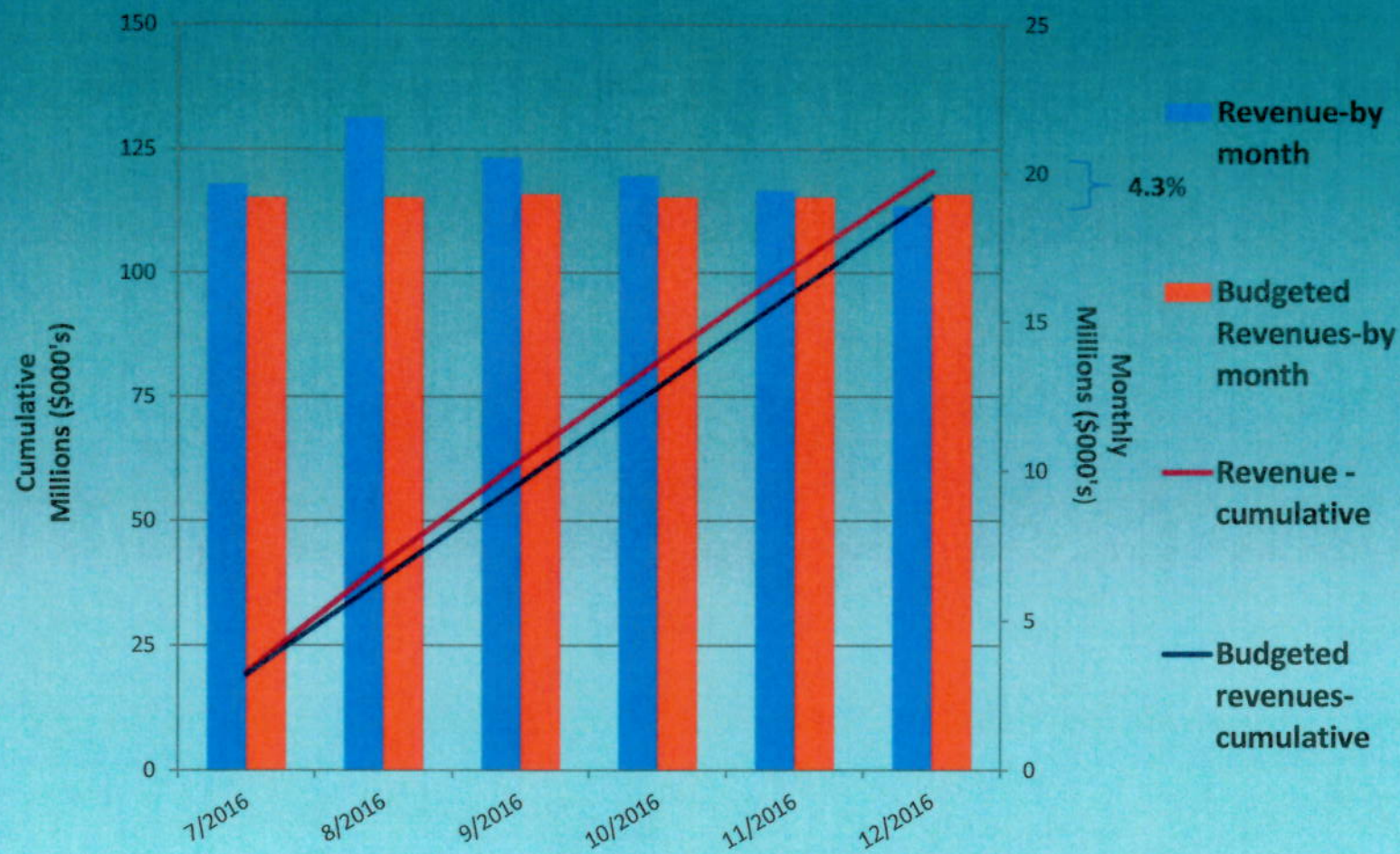
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Board of Water Supply
City and County of Honolulu

BUDGETED OPERATING REVENUES FY 2017



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Board of Water Supply
City and County of Honolulu

Questions
or
Comments



"January 30, 2017

FINANCIAL
PLAN AND
RATE STUDY
UPDATE

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

Chair and Members:

Subject: Board of Water Supply Financial Plan and Rate Study
Update

With the Board adoption of the Water Master Plan in October 2016, our planning effort has shifted to the development of the 30-year Capital Improvement Program and a 30-year financial plan that will form the basis for a Water Rate Study.

This process is iterative and began in November 2016, with extensive input from our Stakeholder Advisory Group. We are fully committed to an open and transparent process. All meetings will be appropriately noticed and open to the public, whose participation we encourage throughout the financial plan and rates process. Staff will present the Board update.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION:

Joe Cooper, Waterworks Controller, gave the presentation. He stated that BWS has been meeting with the Stakeholder Advisory Group (SAG) on the financial plan and rate process and will be updating the Board regularly on these meetings. Mr. Cooper discussed the importance of a long-term financial plan, the three key objectives for utilities, how the City Charter authorizes BWS to set rates, the primary steps of rate making, drivers of revenue requirements and rates, financial planning considerations, how prudent reserves and working capital provide important benefits, how debt financing provides multiple benefits, and the financial plan and rates schedule.

Following the presentation, Mr. Wong asked who makes up the SAG. Mr. Lau responded that there are 28 members. They represent a good cross section of the community such as council districts, the hotel industry, AARP, Board of Realtors, First Hawaiian Bank, the Native Hawaiian and environmental communities, Coca Cola, Hawaiian Electric, Nalu Farms, and the Chamber of Commerce. Meetings with the SAG are held monthly,

they are open to the public, and all Board Members are welcomed to attend. Mr. Lau said that they will send the Board a current list of those participating in the SAG. Mr. Wong said that it's a fantastic idea to engage the SAG, but asked BWS to be cautious so the SAG knows they are not setting the rates or policies for BWS. Mr. Lau stated that BWS understands that the Board is the ultimate decision making authority and the SAG understands that. Mr. Lau said that they meet with the SAG once a month so BWS will be doing monthly updates for the Board.

Mr. Lau informed the Board that they are looking into updating their financial policies to help set the direction. BWS also plans to engage the public before the Board is faced with making a decision, around mid-2018, on the rate schedule. BWS will also do an outreach to the community before a tentative implementation in January 2019.

Mr. Cooper said that the SAG is very collaborative, there's a lot of opinions and input. Mr. Lau thanked Board Member Matsui for attending two of the SAG meetings. Mr. Andaya asked when the next one will be, and Mr. Lau responded February 7, 4:00-6:30 p.m.

As a financial incentive to conserve potable water, Mr. Cooper stated that the concept of providing subsidies to support recycled water use has been introduced to the SAG. Mr. Lau stated that part of the Water Master Plan is to increase the use of recycled water to help preserve the highest quality water for people's lives. Mr. Wong asked if there's discussion relating to resource sustainability and how rates can be used to incentivize certain behaviors. Mr. Lau explained how the rate block structure could encourage water conservation because the more water you use, the higher the cost gets. Currently, there is only a single block for commercial, nonresidential and government, so adding the block structure concept may be considered. Mr. Lau welcomed the Board's ideas.

Mr. Andaya asked if the next rate adjustment is scheduled for mid-2018. Mr. Lau replied no, that they would like to reach out to the community before the Board approves the rates, around mid-2018, then engage the community again before tentative implementation in January 2019.

Mr. Lau concluded that what's important is to reliably provide safe water to the community, while keeping it affordable.

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Board of Water Supply
City and County of Honolulu

Board Update

Long-Term Financial Plan and Rates Study

January 30, 2017

The Importance of a Long-Term Financial Plan

- 💧 Why we are developing a long-term financial plan
- 💧 Why the financial plan has a 30-year horizon
- 💧 The role of the Stakeholder Advisory Group

Cost-Based Ratemaking Supports

3 Key Objectives for Utilities

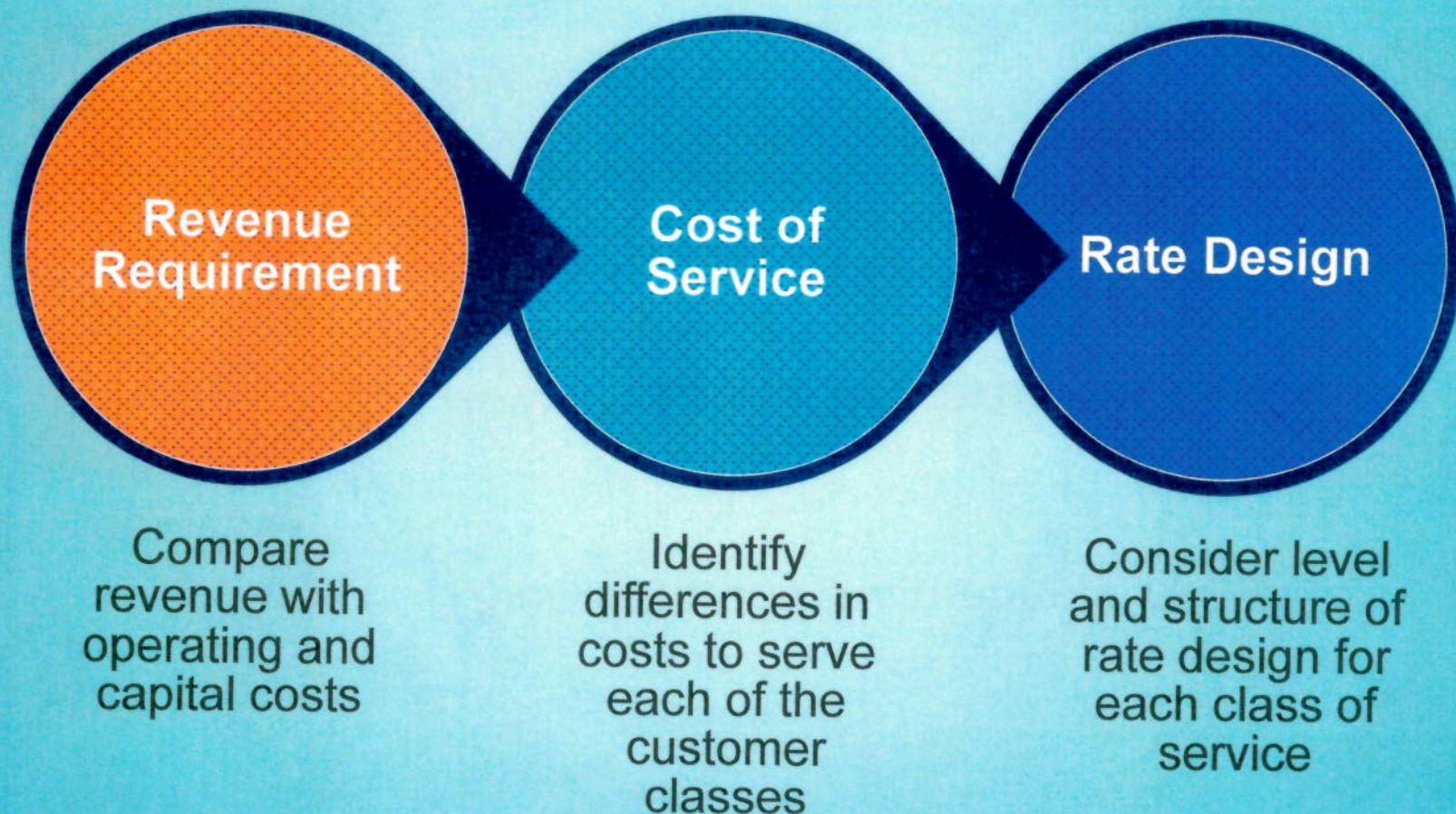
- ◆ Provide sufficient funding to build, operate, maintain and reinvest
- ◆ Provide safe and reliable drinking water and fire protection
- ◆ Allow for economic development and community sustainability

*American Water Works Association, Manual M1,
Principles of Water Rates, Fees and Charges, 6th Edition, 2012*

BWS's Authority to Make Rates is Established in City Charter

- 💧 “The board shall have the power to fix and adjust reasonable rates and charges for the furnishing of water and for water services so that the revenues derived therefrom shall be sufficient to make the department self-supporting.”
- 💧 PUC regulates privately owned utilities

Three Primary Steps of Rate Making



4 Major Drivers of Revenue Requirements and Rates

Operations &
Maintenance

Operations and maintenance costs

Capital
Expenses Paid
in Cash vs.
Debt

How the Capital Improvement Program
is financed

Reserves and
Working Capital

Financial policies for credit ratings
and stability

Trends and
Risks

Preparedness to respond to changing
trends and risks

Operations and Maintenance
Expenses

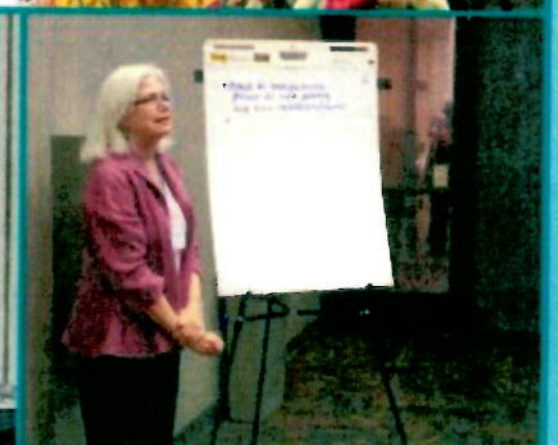
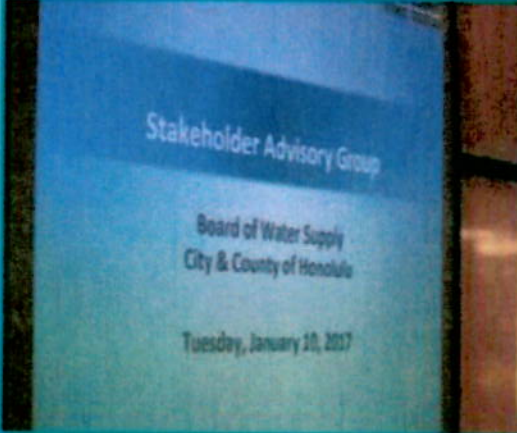
+ Capital Expenses Paid for With
Cash (Revenues)

+ Debt Service

+ Contributions to Reserve Funds
(e.g. emergency funds)

– Income from investments

= TOTAL REVENUES NEEDED ~\$ 226 million
FROM WATER SALES - FY 2017



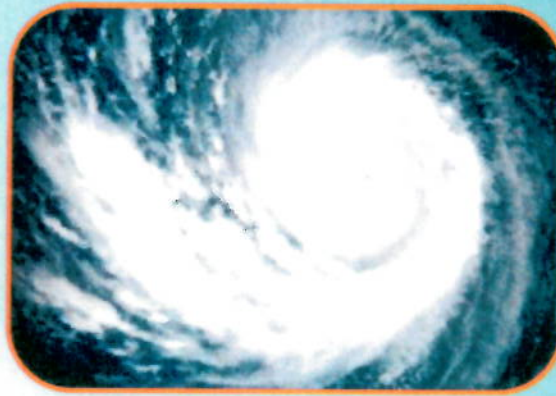
Financial Planning Considerations

- ◆ How much working capital is needed?
 - Cash on hand for normal operations
 - Money set aside for unforeseen events
- ◆ How should the BWS fund capital projects?
 - How much debt?
 - How much from revenues?
- ◆ What is an appropriate level of debt service coverage?
- ◆ What is the maximum ratio of debt to equity?

Prudent Reserves and Working Capital Provide Important Benefits



Higher credit ratings



Disaster recovery



Covers unanticipated costs



Reduces rate shock

Debt Financing Provides Multiple Benefits

- ◆ Allows system investments beyond available revenue
- ◆ Accommodates “spikes” in system needs
- ◆ Spreads the cost of long-term improvements to include future ratepayers
- ◆ Better matches life of the asset
- ◆ Helps keep rates affordable for current ratepayers

“It is essential that governments maintain adequate levels of fund balance [reserves] to mitigate current and future risks (e.g., revenue shortfalls and unanticipated expenditures) and to ensure stable rates”

Government Finance Officers Association (GFOA), “Determining the Appropriate Levels of Working Capital in Enterprise Funds”, Best Practice, approved February 2011

“Fitch views long-term financial planning as a fundamental component for successful utility operations given long-range planning can clearly highlight future structural deficits necessitating revenue development, expenditure containment or both...

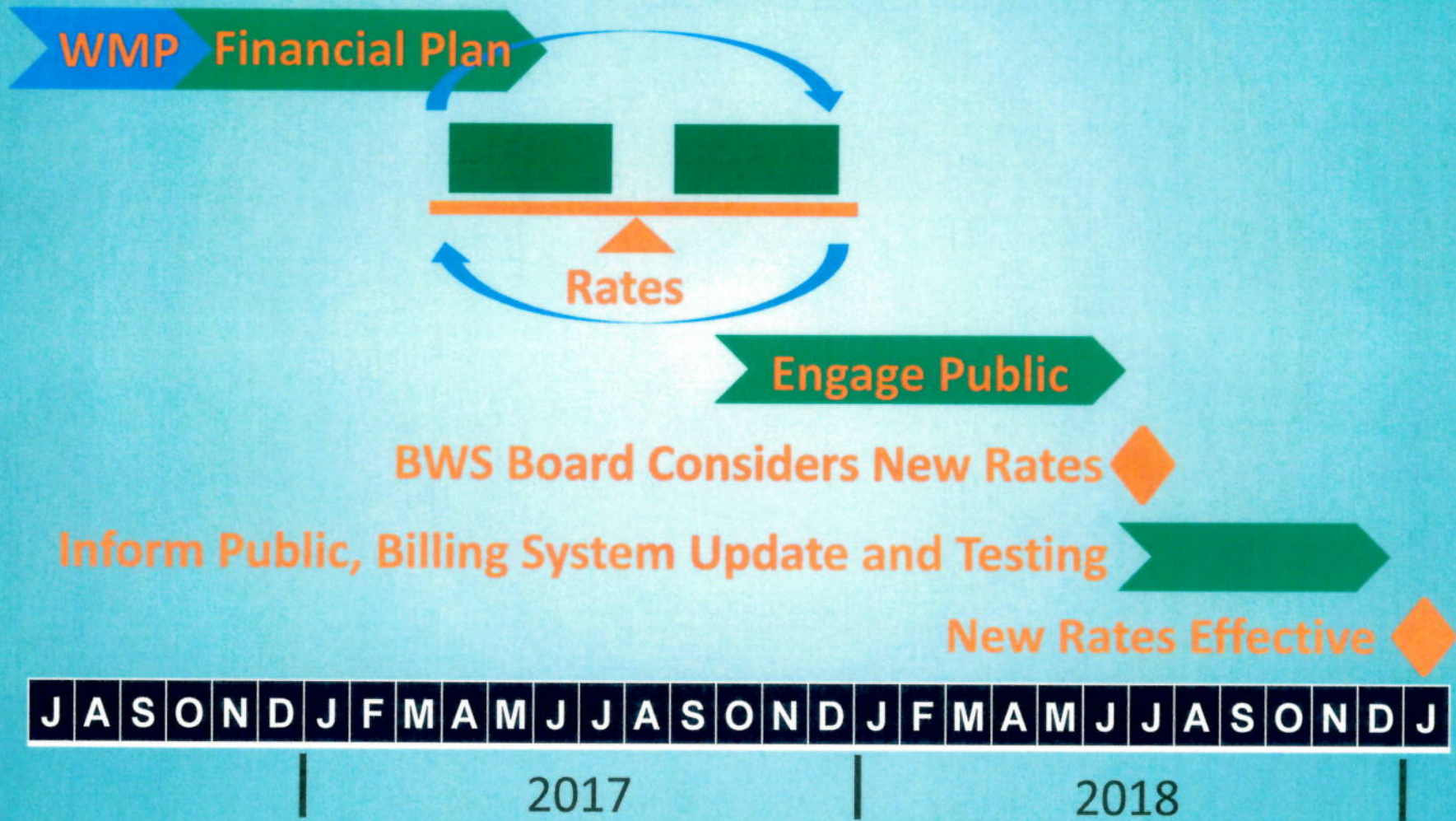
Fitch believes utilities are more likely to be stable when such decisions are considered in advance, as a result of financial forecasting....”

*Fitch Water and Sewer Revenue Bond Criteria,
November 30, 2016*

Some Things to Think About

- ◆ Are BWS's current financial policies adequate?
- ◆ What additional policies should be developed, e.g. rate stabilization, disaster recovery, repair and replacement?
- ◆ What levels of reserves and working capital should be associated with those policies?
- ◆ What should the BWS do (or not) from a financial policy perspective about trends and risks like climate change, conservation, and economic cycles?

Financial Plan and Rates Schedule



ITEM FOR INFORMATION NO. 4

"January 30, 2017

RED HILL
GROUNDWATER
PROJECT
UPDATE

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

Chair and Members:

Subject: Board of Water Supply Red Hill Groundwater Project Update

Erwin Kawata, Water Quality Division Program Administrator, will present the results of a toxicology study conducted under the Board of Water Supply Red Hill Groundwater Project.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION:

Erwin Kawata, Water Quality Program Administrator, gave the report. He stated that there are a number of monitoring wells in the Red Hill tank area, showing varying amounts of petroleum related contamination that's inside the groundwater. The highest amounts are being recorded by monitoring well no. 2 that's closest to Red Hill tank no. 5 that leaked in 2014. BWS contracted toxicology experts from Exponent and INTERA to evaluate whether the contaminant levels present in the groundwater underneath and near the Red Hill tanks are potentially harmful to human health.

Mr. Kawata showed the total petroleum hydrocarbons diesel (TPH-d) screening levels derived by Exponent and INTERA and compared them to the State Department of Health's (DOH) environmental action limit (EAL) and drinking water advisories set by other states. The comparisons were all consistent with each other. Mr. Kawata drew attention to monitor well no. 2 which exceeds the TPH-d screening level and stated that clean-up of the groundwater to reduce the levels to below the screening levels needs to be performed. Mr. Lau confirmed that this contaminant level is coming from the monitoring well and not the drinking water source.

Mr. Kawata discussed the health risks of consuming high levels of TPH-d and stated BWS's conclusions to the study. Mr. Lau informed the Board that they did inform the DOH and the U.S. Environmental Protection Agency about the studies and findings.

Mr. Kawata concluded his presentation by letting the Board know that on November 30, 2016, BWS found the BWS-Navy interconnection valve in an open position, which should have been closed. Mr. Lau mentioned that it takes 260 turns to open the hand wheel of the 24" gate valve, and the last time BWS was there to do replacement of an air relief valve, the crew left the valve in a closed position. Mr. Lau informed the Board that he did inform Admiral Fuller about this.

Mr. Wong stated that he and Board Member Matsui went on the Red Hill tour, and the Navy claimed that the tanks do not leak and they can track it down to 1/16 of an inch if they leak. Mr. Wong stated that the evidence of the TPH-d in monitoring well no. 2 contradicts the Navy's claim that the water is safe, particularly since the Navy's tests show petroleum contaminants in groundwater underneath and near the Red Hill tanks since 2005. Mr. Wong asked what the Navy's response was when given this data. Mr. Lau stated that he thinks there are just differences in opinion on what might be happening with the tanks over time. Mr. Lau stated that although BWS is not party to the Administrative Order on Consent process, BWS does actively provide its mana'o.

Mr. Lau said that there are 11 years of records on monitoring well no. 2, and the TPH-d levels have never gone down to zero. Mr. Lau explained that the levels do fluctuate and it's not known why, but the groundwater is always moving. Mr. Kawata added that because the groundwater always moves, the concern is that the petroleum contaminants could potentially move to other parts of the aquifer that are currently not contaminated. Mr. Lau stated that if the groundwater can be cleaned up in that area and the TPH-d levels can come down to 100 ppb, BWS's concerns would be greatly reduced about migration toward Halawa Shaft and Moanalua Wells.

Mr. Andaya thanked Mr. Lau and Mr. Kawata for vigilantly maintaining and paying close attention to this situation. He stated that he knows BWS has informed DOH in writing on this matter and Admiral Fuller about the open valve situation. Mr. Lau added that in the letter to Admiral Fuller, he also expressed the need to restore the flow meter that measures how much water flows from BWS's system toward the Navy's system through the 36" diameter pipe.

BWS Red Hill Groundwater Study

Board Meeting

January 30, 2017



Today's Update

- Red Hill groundwater – toxicology study results
- Study conclusions / recommendations
- Maintenance on BWS – Navy interconnection valve

Groundwater contamination
underneath Red Hill as of
samples taken **January 2016**

Monitor Well (RHMW02)

6,500 ppb	TPH diesel
0.51 ppb	Acenaphthalene
0.28 ppb	Fluorene
48 ppb	1-methylnaphthalene
7.9 ppb	2-methylnaphthalene
120 ppb	Naphthalene
0.014 ppb	Ethyl benzene
0.21 ppb	Xylenes

Navy drinking water well

21 ppb TPH diesel
<54 ppb TPH oil
<0.005 ppb Naphthalene
0.036 ppb dissolved lead

Monitor Well (RHMW05)

26 ppb TPH diesel
0.026 ppb dissolved lead

Monitor Well (RHMW01)

430 ppb TPH diesel
0.029 ppb 1-methylnaphthalene
0.18 ppb Naphthalene
0.035 ppb dissolved lead

Monitor Well (RHMW03)

150 ppb TPH diesel
<0.005 ppb 1-methylnaphthalene
<0.005 ppb Naphthalene
0.093 ppb dissolved lead

Dredging Date: May 8, 2008
Q1709 - Harborside Projects/Waterway/ACOM NEPA/Prelim EIS/7707 Red Hill Blvd./Assessment Phase 6/McNees NWRI Report/Deliverables/Finals/1 - Groundwater Sampling Locations.mxd



Red Hill GW Toxicology Study

- Since 2005, the Navy tests show petroleum contaminants in groundwater underneath and near the Red Hill tanks.
- BWS contracted toxicology experts from Exponent and INTERA to evaluate whether the contaminant levels present are potentially harmful to human health.



How was the study performed?

- Exponent and INTERA, worked independently of each other.
- Used EPA approved methods to derive screening levels that are protective of public health for total petroleum hydrocarbon as diesel (TPH-d).

What were the study results?

- TPH-d screening levels derived by Exponent and INTERA.

Exponent	TPH-d Screening level	210 ppb
INTERA	TPH-d Screening level	162 ppb

- Screening level is amount below which poses no unacceptable threat to human health or the environment.
- Results considered comparable under EPA's method for determining levels safe to human health and the environment.



How results compare to others

Exponent	TPH-d Screening level	210 ppb
INTERA	TPH-d Screening level	162 ppb

Hawaii DOH	TPH-d Gross contamination EAL (taste and odor)	100 ppb
Hawaii DOH	TPH-d drinking water toxicity EAL (Updated Nov. 2016)	160 ppb

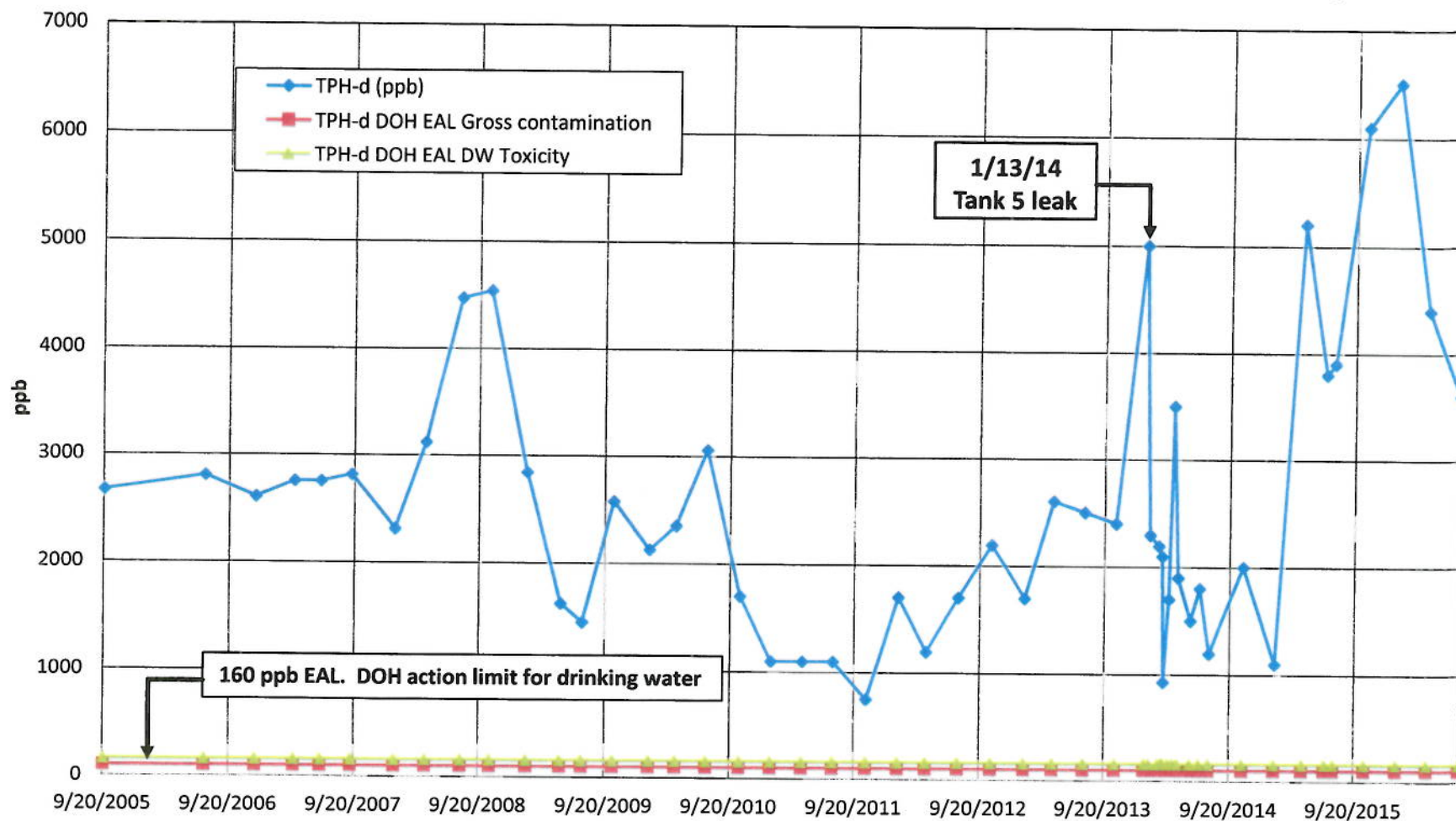
Massachusetts	TPH Drinking water guideline (2016)	200 ppb
Minnesota	TPH Drinking water criteria (2013)	200 ppb

How results compare to others – cont.

- The Exponent and INTERA screening levels (210 ppb and 162 ppb, respectively) are similar and consistent with the Hawaii DOH drinking water toxicity EAL of 160 ppb TPH-d.
- The Exponent and INTERA screening levels are also similar with drinking water limits for TPH established by Massachusetts and Minnesota.
- Screening levels are developed to be protective of public health and used to assess potential impacts on health from the groundwater contamination.



Groundwater Contamination underneath Red Hill Tanks (RHMW02) as of July 2016





Health risks above screening levels

- Health effects of high levels of TPH-d
 - Changes in red blood cell counts
 - Noncancerous liver and kidney changes.
- Consuming water containing TPH-d levels at or below the screening level is not expected to produce toxic effects
 - Safety factor of 10,000 included.
 - Safety factor accounts for different age groups and variability in the population.





Study conclusions

- DOH gross contamination EAL of 100 ppb is protective of public health.
- Clean-up the groundwater underneath and surrounding the Red Hill tanks
- Use the gross contamination EAL of 100 ppb as the minimum clean-up level. This EAL is based on a taste and odor threshold and concurrently provides protection of public health.



Study conclusions – cont.

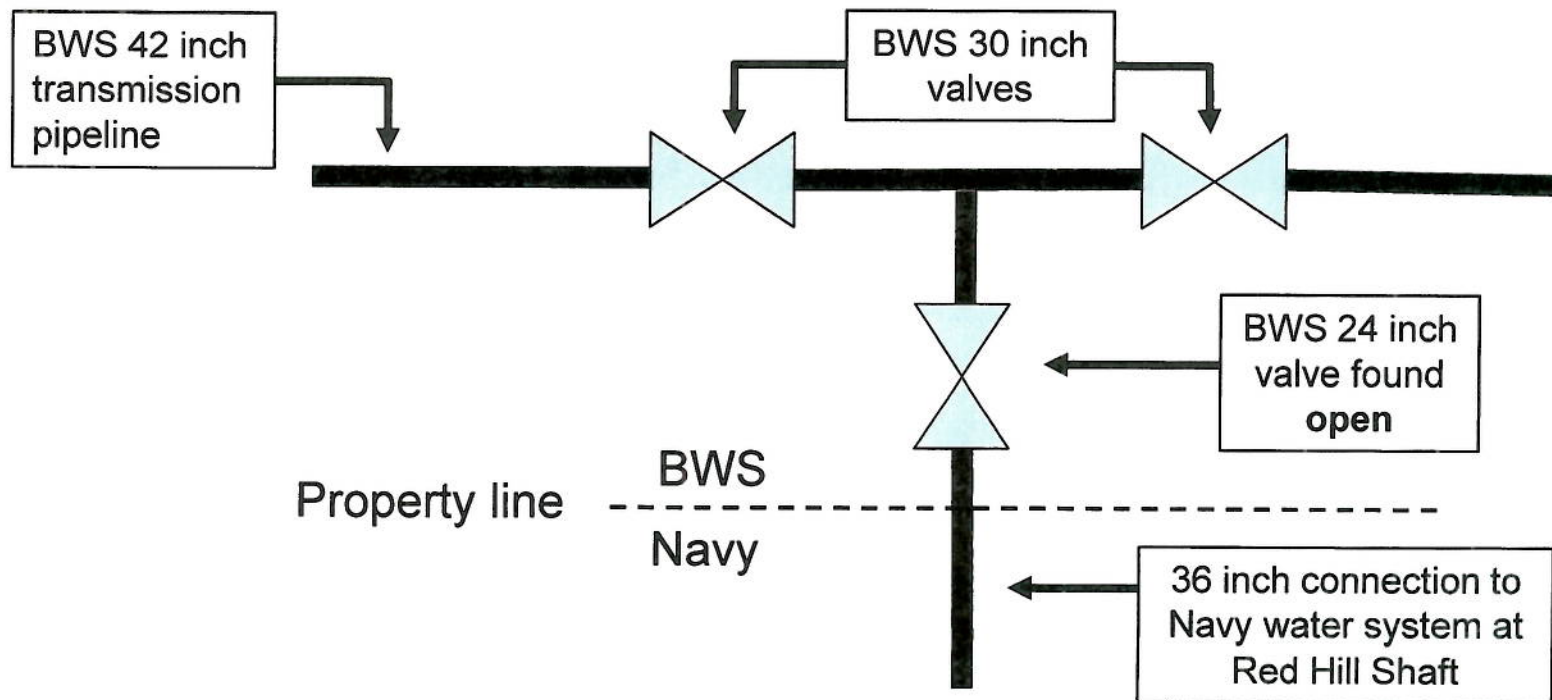
- Navy's groundwater monitoring wells sampled between 2010 and 2015 already exceed the TPH-d screening levels.
- Navy should increase monitoring frequency of groundwater from quarterly to monthly.
- Use DOH 100 ppb EAL as indicator for assessing impacts to other drinking water sources in the area.
- The 100 ppb EAL should be the minimum criteria to require corrective action to prevent further migration of such contamination in the aquifer.





BWS – Navy interconnection valve

- Maintenance on BWS – Navy emergency connection valve performed Nov. 30, 2016.
- BWS finds valve in open position – should be closed.



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Board of Water Supply
City and County of Honolulu

Questions/ Discussion



ITEM FOR INFORMATION NO. 5

"January 30, 2017

STRATEGIC
PLAN AND
PERMITTED
INTERACTION
GROUP
REPORTS

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

Chair and Members:

Subject: Draft Board of Water Supply Strategic Plan Report and
Presentation of Report and Recommendations to the Board
by the HRS §92-2.5 Permitted Interaction Group

On October 26, 2016, November 17, 2016 and December 12, 2016, the Permitted Interaction Group met with the Board of Water Supply (BWS) senior management team to develop the attached draft BWS Strategic Plan. Also attached is the Permitted Interaction Group report describing the activities, findings and recommendations of these three meetings.

Respectfully submitted,

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

Attachments"

The foregoing was for information only.

DISCUSSION:

Chair Andaya explained that as part of the Permitted Interaction Group and under the Hawaii Revised Statutes, Section 92-2.5(b)(1)(A) and Board action taken on September 26, 2016, he and Board Members Sproat and Matsui, were all assigned to assist the Board of Water Supply senior management team with the creation of a strategic plan for the agency.

Mr. Andaya stated that he personally attended two of the three sessions which were quite productive with very lively discussion, and he was very privileged to be part of the team. Under the Statutes, resulting findings and recommendations are being presented today. Deputy Kitamura will go into more details. The findings include a draft of the proposed strategic plan. Ms. Kitamura will be making a presentation on the Permitted Interaction Group's behalf, describing the major elements. Mr. Andaya explained to the Board that while they may ask questions of the BWS staff, him and Board Members Sproat and Matsui, the Statutes require that Board discussion, deliberation and decision-making occur at a subsequent meeting. This means that any questions directed specifically to Board Members should be limited to those that help you understand the proposed strategic plan, but the Board should be careful not to venture into a discussion into the merits of the draft to avoid violating the Statutes. Mr. Andaya asked Ms. Kitamura to begin her presentation.

Ms. Kitamura thanked Chair Andaya, Board Member Sproat who wasn't able to attend today's meeting, and Board Member Matsui for being part of the Permitted Interaction Group, participating in the meetings, and providing their input.

Ms. Kitamura mentioned that the proposed draft of the strategic plan is very similar to the prior strategic plan, but new, revised strategic goals, objectives, and action plans that were developed during the three workshops with the Permitted Interaction Group, were added.

Ms. Kitamura called attention to the changes in the action plan, which are the action elements the BWS plans to undertake in the next five years. There is a new section which covers performance metrics. The previous strategic plan did not include the performance metrics in the plan itself, however, this time, it has been included in the document.

Ms. Kitamura discussed the Permitted Interaction Group report, which outlines the meetings held, what was discussed, and the findings and recommendations of the Permitted Interaction Group which were incorporated into the draft strategic plan.

Ms. Kitamura asked the Board to review the draft strategic plan and to provide her with recommendations, revisions, or comments. The senior managers will be requesting feedback from their staff. The reports will also be posted on BWS's website as part of the Board minutes, so the public will also be able to review the reports. Hopefully adoption of the strategic plan can be done at March's Board meeting, which will give everyone about two months to review the report. Mr. Lau added that they welcome the Board's input and ideas.



Board of Water Supply

STRATEGIC PLAN 2018 – 2022

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Introduction

On September 26, 2016, the Board of Water Supply (BWS) senior management team chartered a project to update the Strategic Plan and document the ongoing work of the BWS in providing water to the citizens of the City and County of Honolulu.

This project was a collaboration with the BWS Board of Directors (Board) in their role of providing oversight and foresight into the direction of the BWS. Members of the Board and the senior management team participated in a series of facilitated workshops between October to December 2016, to review and reconfirm the Vision, Mission, Values, Strategic Goals, and the Strategic Objectives and develop Key Action Plans for the agency.

The intent of this Strategic Plan is to provide an internal and external perspective of the commitment of the BWS employees to deliver safe, dependable, and affordable water, now and into the future. The plan's timeframe is five years.

This document formalizes the BWS's Vision, Mission, Values, Strategic Goals, Strategic Objectives, and Key Action Plans.

Letter from the Chair of the Board and the Chief Engineer

DRAFT

History of the Board of Water Supply

The Honolulu Board of Water Supply (BWS) was created in 1929. It was an action taken by the then-State Territorial Legislature in response to public outcry for a need for a truly effective water management system that was above politics.

In the previous years, droughts and the failure of the City Water Works Department to effectively manage uncontrolled drilling, led to drastically decreasing aquifer levels and water shortages. Several important meetings were held in Honolulu during this time, with citizens, legislators, engineering experts, and water works officials all working together to solve the critical water problem.

Local citizens and experts alike recommended the establishment of a commission to manage the municipal water system. A prime consideration in the creation of this commission was to remove the operation and management of the waterworks from direct political influence and control. Both groups agreed that proper management of the water system would be most effectively accomplished through the establishment of an independent, non-political commission whose members would be responsible citizens serving overlapping terms to assure continuity.

The 1929 Legislature considered these recommendations and passed Act 96 that created and defined the powers and duties of the Honolulu BWS. With this Act, the Legislature took the control of water away from the City and turned it over to the newly-created, semi-autonomous City agency, the Honolulu BWS.

Although it remained with the City and County, it was designed to be semi-autonomous and self-supporting 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.

Today, a seven-member Board of Directors (Board) presides over the agency and sets its policies. Five at-large members are nominated by the Mayor and approved by the City Council. Two serve as ex-officio members, the Director of the State Department of Transportation and the Chief Engineer of the City Department of Facility Maintenance.

This Board sets the policy of the BWS. It also appoints the Manager and Chief Engineer who is responsible to administer the water department and its operation.

The monies collected from water usage are used to finance the Department's operations and projects. The BWS does not receive nor request money collected from property or other county taxes or fees, or from the State, to manage and operate the water supply.

Its semi-autonomous operations allow the BWS to continue to successfully fulfill its mission to provide Oahu water users with a safe, dependable, and affordable drinking water supply now and into the future.

BWS Vision

‘Ka Wai Ola – Water for Life’

The vision of the BWS captures the critical need of water, that water is the basis for life. With this vision comes the responsibility of the BWS’s stewardship of, and the duty to manage, our natural water resources for the present and future generations.

The ancient Hawaiians valued water as one of nature’s greatest gifts and they lived in harmony with water. Land divisions (ahupua’a) mirrored the natural ecosystem – from the mountain top through upland forests to flatlands and the shore. Formal rules governed the use of water, and regulations were established and enforced over water use in upland areas so that a pure flow was always available to those who lived at lower elevations.

BWS Mission

The Board of Water Supply provides safe, dependable, and affordable water now and into the future

Safe addresses the multiple areas of individual and community needs.

- Our water must meet all statutory and regulatory compliance standards in providing water for consumption and other uses.
- Our water must provide for public health and safety such as for firefighting and sanitation needs.

Dependable relies upon three factors:

- The **source of our water** must be sufficient and available now and into the future. The BWS ensures this through management of the watershed and groundwater supply, long-range planning, and possible development of alternative sources of water.
- A **water system** that is designed, constructed, and operated with system redundancy that continues delivery of water even with disruptions in the system.
- The **employees of BWS** who are committed to providing our customers with high quality water and excellent service.

Affordable water delivery is primary. We establish programs for efficiency in water use via conservation, infrastructure installation, and water system operations and maintenance. We continually implement changes to our systems to deliver water at the most responsible cost to the customer.

BWS Values

These values guide our employees, teams, and the organization in how we work together to accomplish our mission. The values reflect and reinforce our culture in our delivery of water service to our customers.

BWS Values	
Personal Responsibility	We are water professionals who earn and uphold the community's trust everyday through our actions and in doing our jobs right.
Team Responsibility	We depend upon and support each other and treat each other with dignity and respect.
Organizational Responsibility	We provide a healthy and safe work environment through cooperation, participation, and shared decision-making.
Societal Responsibility	We provide quality service to our customers with the highest level of courtesy and efficiency.
Environmental Responsibility	We uphold the Public Trust* as thoughtful stewards of Oahu's water resources and the environment.

**Public Trust – Principle embedded in Hawaii Law that recognizes that water is held in trust by the State of Hawaii for present and future generations. Pursuant to the Hawaii State Constitution, Article XI, Section 1, "For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals, and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people."*

BWS Sustainability Goals

For many years, BWS has communicated its efforts through three strategic goals: Resource Sustainability, Operational Sustainability, and Financial Sustainability. These over-arching agency goals create alignment with the vision and mission, program priorities, and action plans.

Resource Sustainability (Safe)

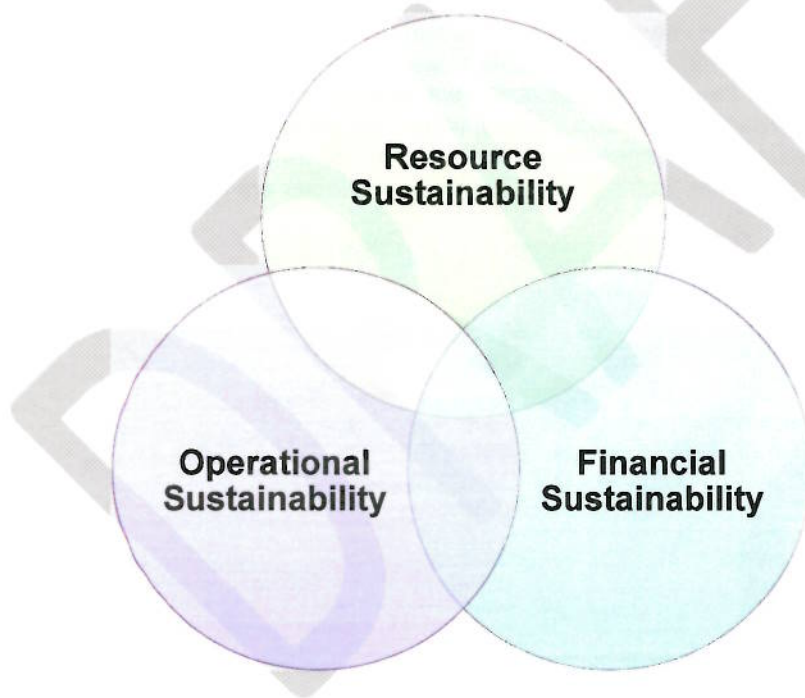
Protect, conserve and manage Oahu's water supplies and watersheds now and into the future through adaptive and integrated strategies.

Operational Sustainability (Dependable)

Build an effective organization to continuously improve dependable service.

Financial Sustainability (Affordable)

Implement sound fiscal strategies to provide safe, dependable and affordable water service.



BWS Strategic Objectives and Key Action Plans

With the validation of the three strategic goals, the Board Members and senior management team participated in a workshop to review the strategic objectives and identify potential strategic actions to support the three overarching sustainability goals.

Periodic progress reports to the Board and an annual review by the senior management team will ensure that BWS meets these strategic objectives and actions to reaffirm their alignment to the agency's strategic sustainability goals.

Sustainability Goals and Strategic Objectives

Sustainability Goals	Category	Strategic Objective
	Climate Change	We will increase our understanding and adapt to climate change to manage Oahu's water resources and protect the limited water supply.
Resource	Water Quality	We will protect, preserve, and collaborate to ensure the safety and quality of Oahu's fresh water resource.
Resource	Watershed Management	We will ensure healthy forests, recognizing the essential role of watersheds for a sustainable water supply (capture and recharge).
Resource	Water Conservation	We will conserve supply and system capacity by reducing per capita demand and increasing water efficiency.
Operational	Organization	We will ensure the necessary workforce, competencies, tools and resources to support current and future needs.
Operational	Infrastructure	We will renew and improve the water system to ensure water system adequacy, dependable service, and operational efficiency.
Operational	Customer Service	We will proactively and consistently provide a quality experience in every customer interaction.
Operational	Technology	We will ensure that our technology systems are current and leverage opportunities in technology to effectively support current and future BWS needs.
Financial	Financial Opportunities	We will pursue and leverage financial opportunities.

Financial	Financial Planning	We will develop and implement short and long term financial plans and policies.
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Strategic Objectives and Action Plans

Strategic Objective	Action Plans
Climate Change: We will increase our understanding and adapt to climate change to manage Oahu's water resources and protect the limited water supply.	<ul style="list-style-type: none"> • Incorporate vulnerability assessment research to increase infrastructure resiliency. • Complete hydro-geologic research on climate change impacts to the water supply. • Continue active collaboration with water organizations and agencies on adapting to climate change. (Water Master Plan - WMP) • Complete the Kalaeloa seawater desalination plant – 1.0 MGD. (WMP)
Water Quality: We will protect, preserve, and collaborate to ensure the safety and quality of Oahu's fresh water resource.	<ul style="list-style-type: none"> • Perform water quality monitoring and reporting. • Formalize the source water protection program. • Monitor the Red Hill situation and take action to protect and preserve the groundwater resource, including, but not limited to participating in the Red Hill Underground Fuel Storage Facility Administrative Order on Consent.
Watershed Management – We will ensure healthy forests, recognizing the essential role of watersheds for a sustainable water supply (capture & recharge).	<ul style="list-style-type: none"> • Appropriate up to 4% of annual Capital Improvement Program funding for watershed management and invasive species control. (WMP) • Complete Watershed Management Plans for Ewa, Central Oahu, Primary Urban Center, and East Honolulu. (WMP) • Promote Low Impact Development (LID) and stormwater capture for aquifer recharge. (WMP) • Revisit sustainable yields for all major aquifer systems with Commission on Water Resource Management.
Water Conservation – We will conserve supply and system capacity by reducing per capital demand and increasing water efficiency.	<ul style="list-style-type: none"> • Appropriate up to 4% of annual Capital Improvement Program funding for conservation to reduce per capita demand toward 2040 goal of 145 GPCD. (WMP) • Reduce water loss to less than 10%. (WMP) • Increase use of non-potable/recycled water. (WMP) • Establish mandatory and incentive-based rules for conservation/recycled water for all customers. • Continue consumer education and expand partnerships with government agencies and private entities.
Organization: We will ensure the necessary workforce, competencies, tools and resources to support current and future needs.	<ul style="list-style-type: none"> • Establish and implement leadership development program. • Incorporate the Field Operations Multi-Skilled Worker program into City civil service. • Incorporate workforce improvements and technology efficiencies into the organization.
Infrastructure: We will renew and improve the water system to ensure water system adequacy, dependable service, and operational efficiency.	<ul style="list-style-type: none"> • Expand preventative and predictive maintenance programs. • Initiate implementation of findings and recommendations of the BWS Water Master Plan and 30-Year Capital Improvement Program. (WMP)
Customer Service: We will proactively and consistently provide a quality experience in every customer interaction.	<ul style="list-style-type: none"> • Continue process improvement and quality assurance program in the Customer Care Division. • Improve accuracy and efficiency in meter reads collection.
Technology: We will ensure that our technology systems are current and leverage opportunities in technology to effectively support current and future BWS needs.	<ul style="list-style-type: none"> • Adopt user friendly technologies, tools, and applications to support the action plans in the BWS Strategic Plan. (customer improvements) • Increase customer satisfaction with IT Services rendered.

Financial Opportunities: We will pursue and leverage financial opportunities.	<ul style="list-style-type: none"> Effectively leverage debt and governmental funding for infrastructure investments. Develop other sources of revenue to supplement BWS water rate revenue. Execute RFP for the Beretania Complex property development.
Financial Planning – We will develop and implement short and long term financial plans and policies.	<ul style="list-style-type: none"> Develop 10-Year operating budget plan. Complete 30-Year Long Range Financial Plan and water rate study in collaboration with BWS Stakeholder Advisory Group. Update financial policies to support the financial plan.

Stakeholder Analysis

The BWS serves and interacts with many stakeholders in its actions to fulfill its mission to provide safe, dependable, and affordable water to the Citizens of the City and County of Honolulu. The strategic planning process included a discussion on the key stakeholders and considerations for support and collaboration were listed that could be included in future strategies of the BWS based on future assessment and prioritization.

BWS Water Master Plan

The Board of Directors adopted the BWS 30-Year Water Master Plan (WMP) on October 24, 2016. The WMP is an essential component of the strategic plan as it serves the visionary 30-year road map for the department.

The WMP is a comprehensive, broad-based technical plan that determines the necessary water system improvements to support projected growth and provide safe, dependable and affordable water service to our customers. The development of the plan included a rigorous condition assessment of the existing water system to prioritize investment in renewal and replacement projects and the use of sophisticated computer modeling and statistical tools to identify capacity expansion projects to support areas of growth. The plan is also taking into consideration the effects of climate change with recommended active collaboration with industry experts on climate change research to determine its impacts on water infrastructure and watershed sustainability.

The BWS is currently developing a 30-Year Capital Improvement Program, financial plan and rate study to finance the infrastructure projects, programs, and recommendations identified in the plan. Several action plans in this strategic plan were the result of the findings and recommendations from the WMP.

Performance Metrics

The following performance metrics help assess the progress of the BWS towards meeting the Sustainability Goals, Strategic Objective and Action Plans identified in the new Strategic Plan.

RESOURCE SUSTAINABILITY Protect, conserve and manage Oahu's water supplies now and into the future through adaptive and integrated strategies.		
METRIC	DESCRIPTION	PURPOSE
Stable Head Levels at Index Wells (%)	(Number of Index Wells above Low <u>Ground Water Levels</u>) (Total Number of Index Wells)	Measures the water level at the index wells and which are stable above Low Ground Water Levels. The purpose of this metric is to monitor the health of the ground water aquifer and prevent detrimental impact to the ground water sources.
Days in compliance with DOH-EPA Drinking Water Standards (%)	(<u>Number of Days in Compliance</u>) Total Days in Fiscal Year	Measures the compliance with water quality regulations. The purpose of this metric is to ensure supply of water that is safe for intended use
Watershed Management	Area of watershed surveyed for invasive plant species removal per year	Measures the area of BWS priority watersheds (26,085 acres) surveyed for invasive plant species per year. This purpose of this metric is to monitor invasive plant species removal.
Water Conservation	Per capita consumption	Measures the effect of conservations programs on per capita consumption. The purpose of this metric is to determine if the target goal of 145 gpcd by year 2040 is being realized.
OPERATIONAL SUSTAINABILITY Build an effective organization to continuously improve dependable services.		
METRIC	DESCRIPTION	PURPOSE
Resident Overall Satisfaction with BWS (%)	% Strong Overall Satisfaction with BWS	Measures the percentage of residents that are strongly satisfied with overall services provided by BWS. The purpose of this metric is to measure the perceived satisfaction of residents with BWS and determine areas for improvement in delivery of BWS services
Employee Turn-Over Rate (%)	(Total number of Employee <u>Departures</u>) (Average number of Regular FTE)	Measure the rate of regular employee departure through voluntary, involuntary or retirement. The purpose of this metric to determine the rate of employee departs and develop strategies to retain employees.
Pipeline Leak Detection	(<u>Miles of Pipes Tested for Leaks</u>) (Total Miles of Pipe)	Measures the percentage of pipelines that were checked for leaks. The purpose of this metric is to track progress toward the goal of surveying 25% of the water system pipelines annually.
Pipeline Breaks (count per 100 miles of pipeline)	Total Number of Annual <u>Mainbreaks</u> (Total Miles of Pipe/100)	Measures the 3-Year annual average total mainbreak count across the BWS water system. The purpose of this metric is to track the overall condition of the pipelines.
FINANCIAL SUSTAINABILITY Implement sound fiscal strategies to provide safe, dependable and affordable water service.		
METRIC	DESCRIPTION	PURPOSE
Bond Rating	AA+ - Fitch Aa2 – Moody's	Monitor and maintain the current ratings by the bond agencies. Measures financial strength and stability of the department.

Acknowledgements

Thanks to the following individuals who contributed their ideas, experience, and commitment to developing this plan.

DRAFT

Report of the Permitted Interaction Group

Honolulu Board of Water Supply Draft Strategic Plan FY 2018 - 2022 January 30, 2017

Members:

Bryan P. Andaya, Chair

Kapua Sproat

Kay C. Matsui

Background

In 2014, the Board of Water Supply (BWS) senior management team and a Permitted Interaction Group comprised of three Board members (Duane R. Miyashiro - Chair, Mahealani Cypher, and David C. Hulihee) developed a strategic plan for Fiscal Year (FY) 2014-2017. This strategic plan was adopted by the Board on August 25, 2014. Since then, the BWS senior management directed and managed operations to execute the BWS strategic objectives and actions plans as described in the plan.

During the past 3 years, senior management team provided regular updates to the Board on the status of the Strategic Plan. On August 22, 2016 a final update report was presented to the Board to summarize the accomplishments of the FY 2014 -2017 Strategic Plan and lay the groundwork to develop the next 5-Year Strategic Plan for FY 2018 - 2022.

On September 26, 2016, a new Permitted Interaction Group comprised of three Board members (Bryan P. Andaya - Chair, Kapua Sproat, and Kay C. Matsui) was approved by the Board. This Permitted Interaction Group collaborated with the BWS senior management team to prepare the new FY 2018 - 2022 Strategic Plan. Three (3) workshops were held to prepare a draft Strategic Plan for Board review by January 2017 and possible adoption in February 2017.

Workshop Schedule and Activities

From October to December 2016, three workshops were conducted to develop the draft strategic plan. Below is the workshop schedule and activities conducted during each workshop.

Workshop 1 - October 26, 2016

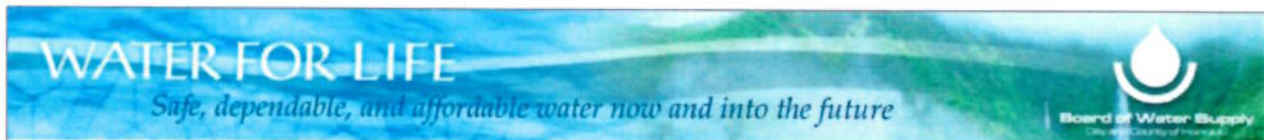
Activity 1: Vision/Mission Review

The purpose of this activity was to review the BWS's mission and vision and discuss what these organizational elements mean individually and collectively to the workshop participants.

Activity 2: Stakeholder Analysis

The purpose of this activity was to collect ideas and have discussions around the current and future needs of key stakeholders that have interests in BWS.

Activity 3: Sustainability Goals Analysis



The purpose of this activity was to identify possible strategic actions that might be taken to support the accomplishment each of the three Sustainability Goals - Resource Sustainability, Operational Sustainability and Financial Sustainability.

Workshop 2: November 17, 2016

Activity 1: Sustainability Goals Review

The purpose of this activity was to review and revise, if necessary the description of the three Sustainability Goals - Resource Sustainability, Operational Sustainability and Financial Sustainability.

Activity 2: Strategic Objectives and Action Plans Development (Part 1)

The purpose of this activity was to review strategic objectives and identify potential strategic actions to accomplish each of these objectives to support the three overarching strategic goals.

Workshop 3: December 12, 2016

Activity 1: Strategic Objectives and Actions Plans Development (Part 2)

The purpose of this activity was to complete the review and development of the strategic objectives and action plans from Workshop 2.

Activity 2: Stakeholder Analysis Review and Needs Assessment

The purpose of this activity was to have a collective discussion about stakeholder expectation and develop action plans to address their service expectations and needs.

Activity 3: Key Measures Identification

The purpose of this activity is to identify key measures that are meaningful to the public and can be used to demonstrate the effectiveness of BWS is meeting the Sustainability Goals, Strategic Objectives and Actions plans identified in the new Strategic Plan.

Findings and Recommendations

SUSTAINABILITY GOALS

The description of three overarching Sustainability Goals were amended as follows:

Goal	Old Description	New Description
Resource	Protect and manage our groundwater supplies and watersheds through adaptive and integrated strategies.	Protect, conserve and manage Oahu's water supplies now and into the future through adaptive and integrated strategies.
Operational	Foster a resilient and collaborative organization utilizing effective and proactive operational practices consistent with current industry standards.	Build an effective organization to continuously improve dependable service.
Financial	Implement sound fiscal strategies to finance our operating and capital needs to provide dependable and affordable water service.	Implement sound fiscal strategies to provide safe, dependable and affordable water service.

STRATEGIC OBJECTIVES AND ACTION PLANS

The Strategic Objectives and Action Plans to support the three overarching Sustainability Goals are as follows:

Resource Sustainability:

Strategic Objective: Climate Change - We will increase our understanding and adapt to climate change to manage Oahu's water resources and protect the limited water supply.

Action Plans:

- Incorporate vulnerability assessment research to increase infrastructure resiliency.

- Complete hydro-geologic research on climate change impacts to the water supply.
- Continue active collaboration with water organizations and agencies on adapting to climate change.
- Complete the Kalaeloa seawater desalination plant - 1.0 MGD.

Strategic Objective: Water Quality - We will protect, preserve and collaborate to ensure the safety and quality of Oahu's fresh water resource.

Action Plans:

- Perform water quality monitoring and reporting.
- Formalize the source water protection program.
- Monitor the Red Hill situation and take action to protect and preserve the groundwater resource, including, but not limited to participating in the Red Hill Underground Fuel Storage Facility Administrative Order on Consent.

Strategic Objective: Watershed Management - We will ensure healthy forests, recognizing the essential role of watersheds for a sustainable water supply (capture & recharge).

Action Plans:

- Appropriate up to 4% of annual Capital Improvement Program funding for watershed management and invasive species control.
- Complete Watershed Management Plans for Ewa, Central Oahu, Primary Urban Center, and East Honolulu.
- Promote Low Impact Development (LID) and stormwater capture for aquifer recharge.
- Revisit sustainable yields for all major aquifer systems with Commission on Water Resource Management.

Strategic Objective: Water Conservation - We will conserve supply and system capacity by reducing per capita demand and increasing water efficiency.

Action Plans:

- Appropriate up to 4% of annual Capital Improvement Program funding for conservation to reduce per capita demand toward 2040 goal of 145 GPCD.

- Reduce water loss (from 10% to 8%).
- Increase use of non-potable/recycled water.
- Establish mandatory and incentive-based rules for conservation/recycled water for all customers.
- Continue consumer education and expand partnerships with government agencies and private entities.

Operational Sustainability:

Strategic Objective: Organization - We will ensure the necessary workforce, competencies, tools and resources to support current and future needs.

Action Plans:

- Establish and implement leadership development program.
- Incorporate the Field Operations Multi-Skilled Worker program into City civil service.
- Incorporate workforce improvements and technology efficiencies into the organization.

Strategic Objective: Infrastructure - We will renew and improve the water system to ensure adequacy, dependable service, and operational efficiency.

Action Plans:

- Expand preventative and predictive maintenance programs.
- Initiate implementation of findings and recommendations of the BWS Water Master Plan and 30-Year Capital Improvement Program.

Strategic Objective: Customer Service - We will proactively and consistently provide a quality experience in every customer interaction.

Action Plans:

- Continue process improvement and quality assurance program in the Customer Care Division.
- Improve accuracy and efficiency in meter reads collection.

Strategic Objective: Technology - We will ensure that our technology systems are current and leverage opportunities in technology to effectively support current and future BWS needs.

Action Plans:

- Adopt user friendly technologies, tools, and applications to support the action plans in the BWS Strategic Plan.
- Increase customer satisfaction with IT services rendered.

Financial Sustainability:

Strategic Objective: Financial Opportunities - We will pursue and leverage financial opportunities.

Action Plans:

- Effectively leverage debt and governmental funding for infrastructure investments.
- Develop other sources of revenue to supplement BWS water rate revenue.
- Execute RFP for the Beretania Complex property development.

Strategic Objective: Financial Planning - We will develop and implement short and long term financial plans and policies.

Action Plans:

- Develop 6-Year operating budget plan.
- Complete 30-Year Long Range Financial Plan and water rate study in collaboration with BWS Stakeholder Advisory Group.
- Update financial policies to support the financial plan.

STAKEHOLDER ANALYSIS

The strategic planning process included a discussion of the key stakeholders that BWS serves and interacts with to accomplish its mission. Key stakeholders were identified and considerations for support and collaboration were listed that could be included in future strategies of the BWS based on further assessment and prioritization.

PERFORMANCE MEASURES

The following performance measures were identified to help assess the progress of the BWS towards meeting the Sustainability Goals, Strategic Objectives and Actions plans identified in the new Strategic Plan.

RESOURCE SUSTAINABILITY		
Protect, conserve and manage Oahu's water supplies now and into the future through adaptive and integrated strategies.		
METRIC	DESCRIPTION	PURPOSE
Stable Head Levels at Index Wells (%)	(Number of Index Wells above Low Ground Water Levels) (Total Number of Index Wells)	Measures the water level at the index wells and which are stable above Low Ground Water Levels. The purpose of this metric is to monitor the health of the ground water aquifer and prevent detrimental impact to the ground water sources.
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OPERATIONAL SUSTAINABILITY		
Build an effective organization to continuously improve dependable services.		
METRIC	DESCRIPTION	PURPOSE
Resident Overall Satisfaction with BWS (%)	% Strong Overall Satisfaction with BWS	Measures the percentage of residents that are strongly satisfied with overall services provided by BWS. The purpose of this metric is to measure the perceived satisfaction of residents with BWS and determine areas for improvement in delivery of BWS services
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FINANCIAL SUSTAINABILITY		
Implement sound fiscal strategies to provide safe, dependable and affordable water service.		
METRIC	DESCRIPTION	PURPOSE
Bond Rating	AA+ - Fitch Aa2 - Moody's	Monitor and maintain the current ratings by the bond agencies. Measures financial strength and stability of the department.

Next Steps

To comply with Hawaii Revised Statutes (HRS), Section 92.2.5(b)(1)(B), the Permitted Interaction Group report describing their findings and recommendations will be presented at the January 30, 2017 Board Meeting. The findings will include a draft of the proposed Strategic Plan for FY 2018 - 2022. The Board may ask questions regarding the Permitted Interaction Group report to help get an understanding of the report and draft strategic plan. However, HRS, Section 92-2.5.(b)(1)(C) requires that Board discussion, deliberation and decision-making occur at a subsequent meeting, tentatively scheduled for the next monthly Board meeting.

We are planning to finalize the new 5-Year Strategic Plan for FY 2018 - 2022 and present it for Board adoption in FY 2017 to allow implementation of the plan beginning in July 2017.

"January 30, 2017

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 were no aquifer index wells within low groundwater status for the production month of December 2016. The monthly production average for December 2016 was 127.09 million gallons per day.

The Board of Water Supply rainfall index for the month of December 2016 was 75 percent of normal; with a 5-month moving average of 125 percent. As of January 10, 2017, the Hawaii Drought Monitor shows abnormally dry conditions for most of leeward Oahu.

The National Weather Service is forecasting above normal rainfall from January 2017 to May 2017, with higher probabilities in windward areas during the winter season.

Most index monitoring wells are exhibiting slightly increasing trends due to the decreased pumpage during the winter months.

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 Division Program Administrator, gave the report. There were no comments or discussion.

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF DECEMBER 2016**

POTABLE

STATION	MGD
HONOLULU (1)	
KULIOUOU	0.06
WAILUPE	0.03
AINA KOA	0.32
AINA KOA II	1.02
MANOA II	0.00
PALOLO	1.12
KAIMUKI HIGH	1.57
KAIMUKI LOW	1.89
WILDER	7.32
BERETANIA HIGH	5.09
BERETANIA LOW	0.78
KALIHI HIGH	1.15
KALIHI LOW	2.31
KAPALAMA	0.78
KALIHI SHAFT	8.77
MOANALUA	0.62
HALAWA SHAFT	6.47
KAAMILO	0.00
KALAUAO	5.91
PUNANANI	12.20
KAAHUMANU	0.74
HECO WAIU	2.81
MANANA	0.42
WELLS SUBTOTAL:	61.20
MANOA TUNNEL	0.17
PALOLO TUNNEL	0.23
GRAVITY SUBTOTAL:	0.40
HONO. SUBTOTAL:	61.60

STATION	MGD
WINDWARD (2)	
WAIMANALO II	0.22
WAIMANALO III	0.27
KUOU I	0.13
KUOU II	0.10
KUOU III	0.05
LULUKU	1.04
HAIKU	0.00
IOLEKAA	0.00
KAHALUU	0.87
KAHANA	0.84
PUNALUU I	0.00
PUNALUU II	1.73
PUNALUU III	1.22
KALUANUI	0.00
MAAKUA	0.36
HAUULA	0.00
WELLS SUBTOTAL:	6.84
WAIM. TUNNELS I & II	0.00
WAIM. TUNNELS III&IV	0.19
WAIHEE INCL. WELLS	0.94
WAIHEE TUNNEL	5.05
LULUKU TUNNEL	0.07
HAIKU TUNNEL	0.00
KAHALUU TUNNEL	1.61
GRAVITY SUBTOTAL:	7.86
WIND. SUBTOTAL:	14.69

STATION	MGD
NORTH SHORE (3)	
KAHUKU	0.28
OPANA	0.43
WAIALEE I	0.00
WAIALEE II	0.44
HALEIWA	0.00
WAIALUA	1.29
N.SHORE SUBTOTAL:	2.44

STATION	MGD
MILILANI (4)	
MILILANI I	2.47
MILILANI II	0.00
MILILANI III	0.00
MILILANI IV	1.60
MILILANI SUBTOTAL:	4.07

STATION	MGD
WAHIAWA (5)	
WAHIAWA	1.65
WAHIAWA II	1.23
WAHIAWA SUBTOTAL:	2.89

STATION	MGD
PEARL CITY-HALAWA (6)	
HALAWA 277	0.82
HALAWA 550	0.00
AIEA	0.95
AIEA GULCH 497	0.53
AIEA GULCH 550	0.20
KAONOHI I	0.80
WAIMALU I	0.00
NEWTOWN	0.76
WAIU	0.60
PEARL CITY I	0.51
PEARL CITY II	0.96
PEARL CITY III	0.35
PEARL CITY SHAFT	0.92
PEARL CITY-HALAWA SUBTOTAL:	7.42

STATION	MGD
WAIPAHU-EWA (7)	
WAIPIO HTS.	1.49
WAIPIO HTS. I	0.91
WAIPIO HTS. II	0.05
WAIPIO HTS. III	1.15
WAIPAHU	1.22
WAIPAHU II	0.87
WAIPAHU III	3.76
WAIPAHU IV	2.30
KUNIA I	4.85
KUNIA II	1.76
KUNIA III	1.33
HOAEAE	5.63
HONOULIULI I	0.00
HONOULIULI II	4.29
MAKAKILO	0.29
WAIPAHU-EWA SUBTOTAL:	29.92

STATION	MGD
WAIANAE (8)	
MAKAHA I	0.69
MAKAHA II	0.13
MAKAHA III	0.48
MAKAHA V	0.23
MAKAHA VI	0.00
MAKAHA SHAFT	0.00
KAMAILE	0.29
WAIANAE I	0.14
WAIANAE II	0.01
WAIANAE III	0.53
WELLS SUBTOTAL:	2.51
WAI. C&C TUNNEL	1.40
WAI. PLANT. TUNNELS	0.16
GRAVITY SUBTOTAL:	1.56
WAIANAE SUBTOTAL:	4.07

NONPOTABLE

NONPOTABLE	MGD
KALAUAO SPRINGS	0.44
BARBERS POINT WELL	1.09
GLOVER TUNNEL NP	0.46
NONPOTABLE TOTAL:	1.99

RECYCLED WATER (NOVEMBER 2016)

RECYCLED WATER	MGD
HONOULIULI WRF R-1	7.31
HONOULIULI WRF RO	1.45
RECYCLED WATER TOTAL:	8.76

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF DECEMBER 2016**

PRODUCTION SUMMARIES

TOTAL WATER	MGD
PUMPAGE	117.28
GRAVITY	9.82
POTABLE TOTAL:	127.09
NONPOTABLE	1.99
RECYCLED WATER	8.76
TOTAL WATER:	137.84

CWRM PERMITTED USE AND BWS ASSESSED YIELDS FOR BWS POTABLE SOURCES				
WATER USE DISTRICTS		A PERMITTED USE/ BWS YLDS	B DEC 2016	C DIFF. A-B
1	HONOLULU	82.93	61.20	21.73
2	WINDWARD	25.02	8.70	16.32
3	NORTH SHORE	4.74	2.44	2.30
4	MILILANI	7.53	4.07	3.46
5	WAHIAWA	4.27	2.89	1.38
6	PEARL CITY-HALAWA	12.25	7.42	4.83
7	WAIPAHU-EWA	50.63	29.92	20.71
8	WAIANAE	4.34	2.51	1.83
TOTAL:		191.71	119.14	72.57

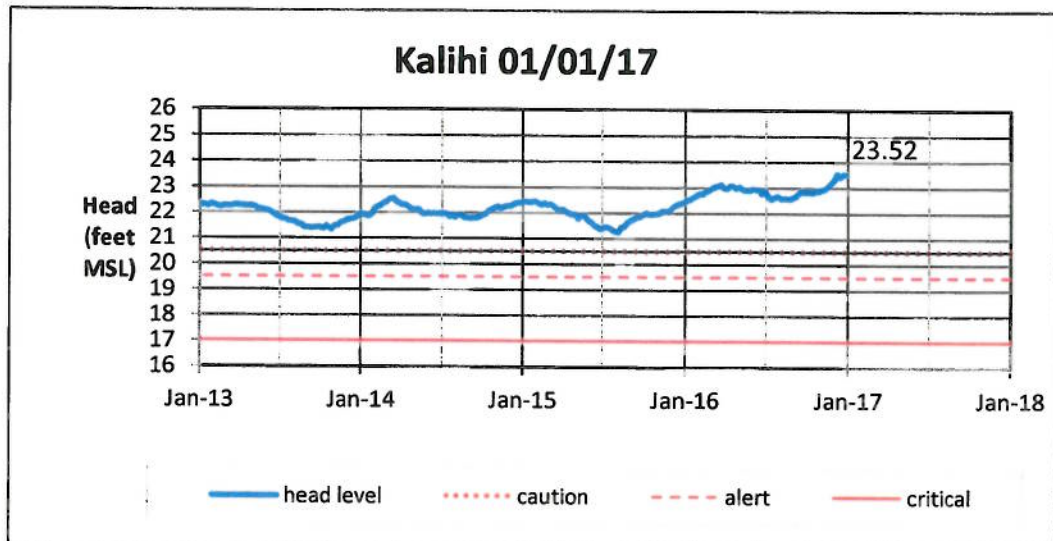
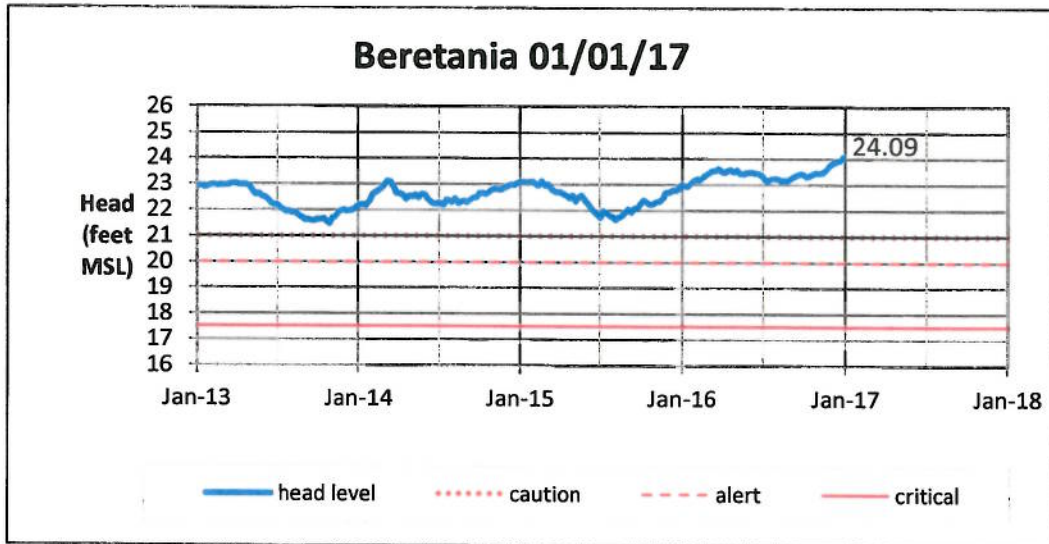
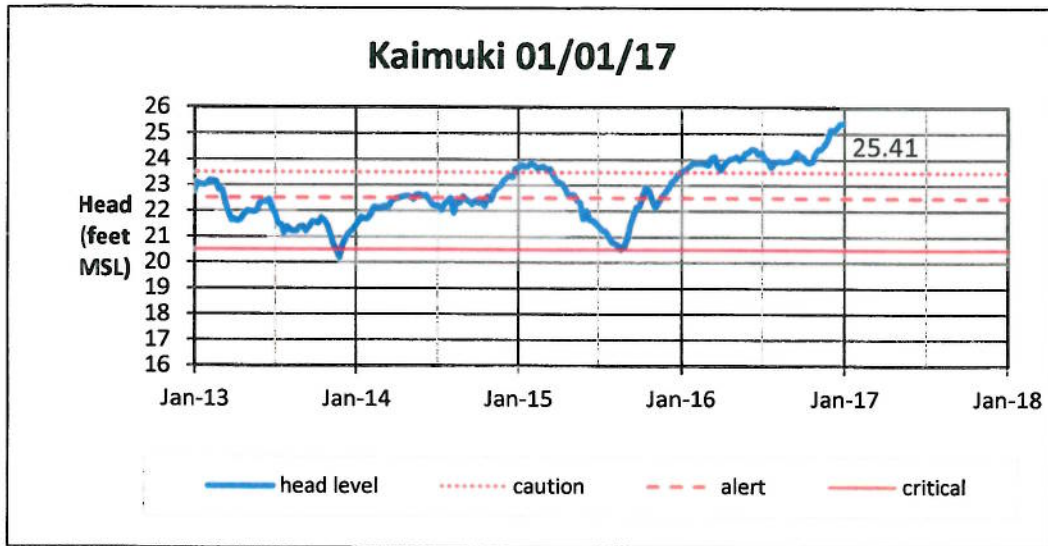
CWRM PERMITTED USE FOR BWS NONPOTABLE SOURCES				
WATER USE DISTRICTS		A PERMITTED USE	B DEC 2016	C DIFF. A-B
7	WAIPAHU-EWA (BARBERS POINT WELL)	1.00	1.09	-0.09
TOTAL:		1.00	1.09	-0.09

EFFECTIVE WATER DEMAND PER DISTRICT

IMPORT/EXPORT BETWEEN WATER USE DISTRICTS			
FROM	TO		MGD
2	1	WINDWARD EXPORT	0.14
7	8	BARBERS PT LB	4.71

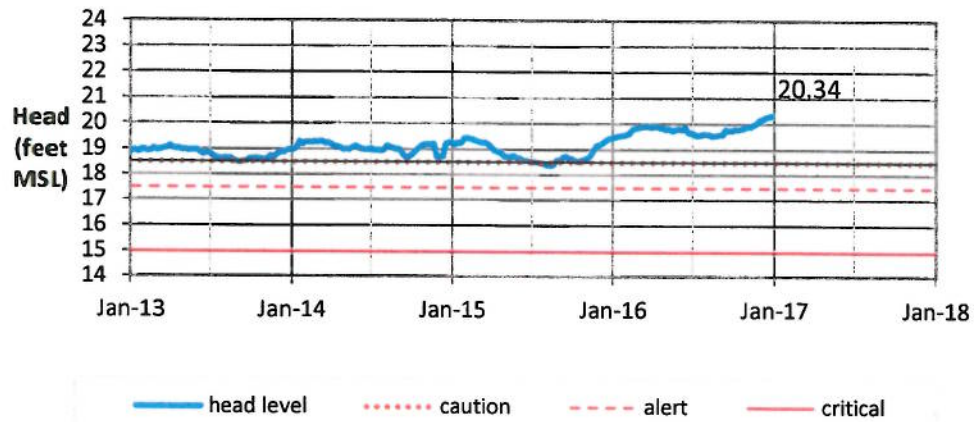
WATER USE DISTRICTS		SUBTOTAL	IMPORT	EXPORT	EFFECTIVE WATER DEMAND
1	HONOLULU	61.20	0.14	-	61.34
2	WINDWARD	8.70	-	0.14	8.56
3	NORTH SHORE	2.44	-	-	2.44
4	MILILANI	4.07	-	-	4.07
5	WAHIAWA	2.89	-	-	2.89
6	PEARL CITY-HALAWA	7.42	-	-	7.42
7	WAIPAHU-EWA	29.92	-	4.71	25.20
8	WAIANAE	2.51	4.71	-	7.22
TOTAL:		119.14	4.85	4.85	119.14

Weekly Head Report

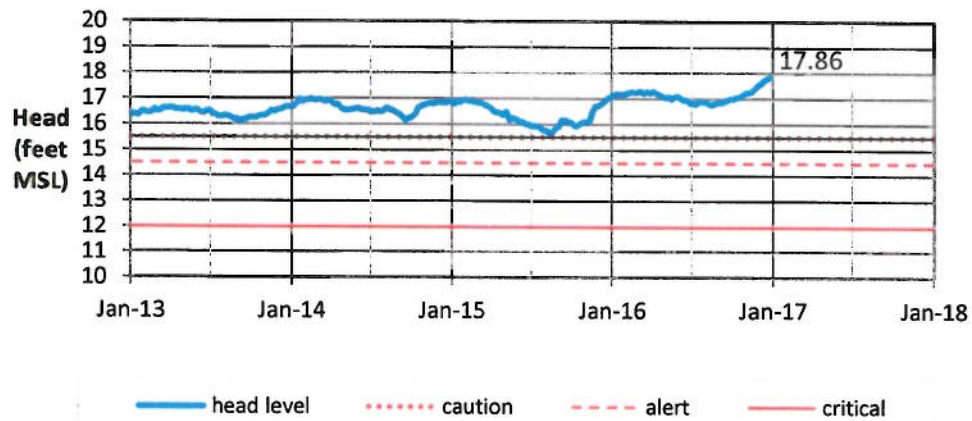


Weekly Head Report

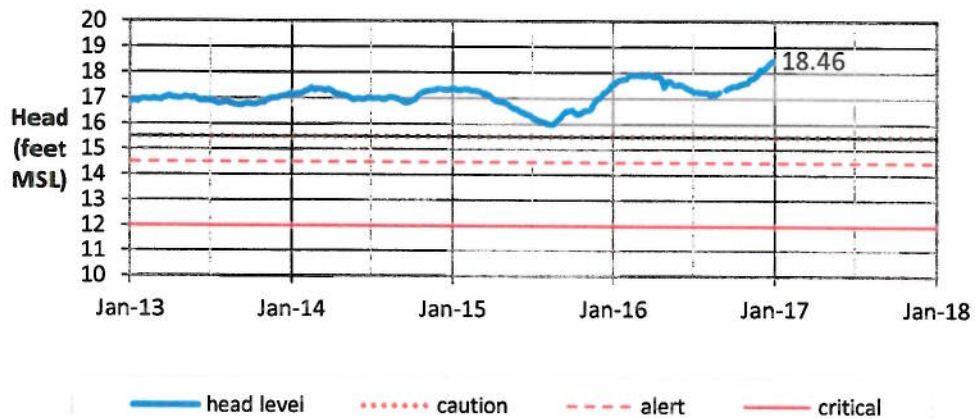
Moanalua 01/01/17



Halawa 01/01/17

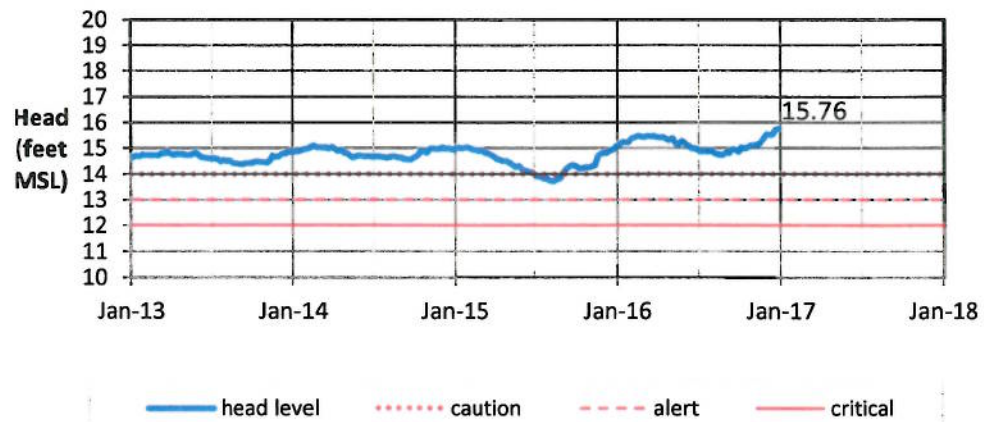


Kalauao 01/01/17

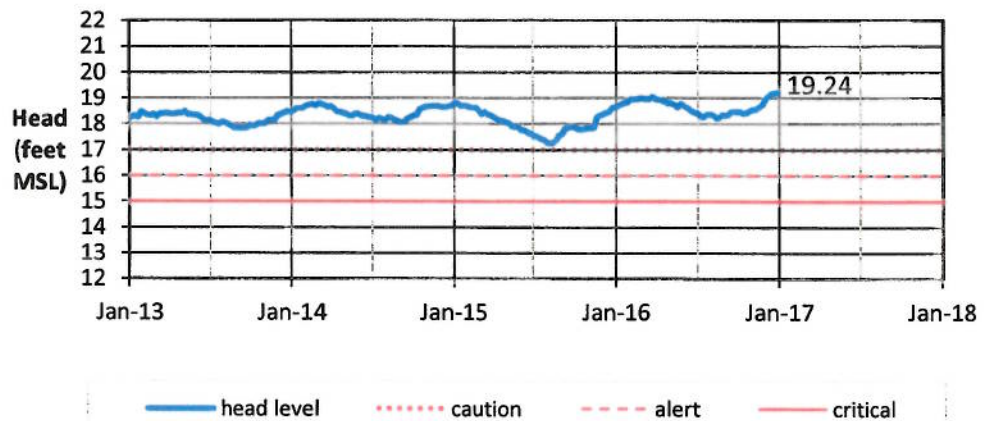


Weekly Head Report

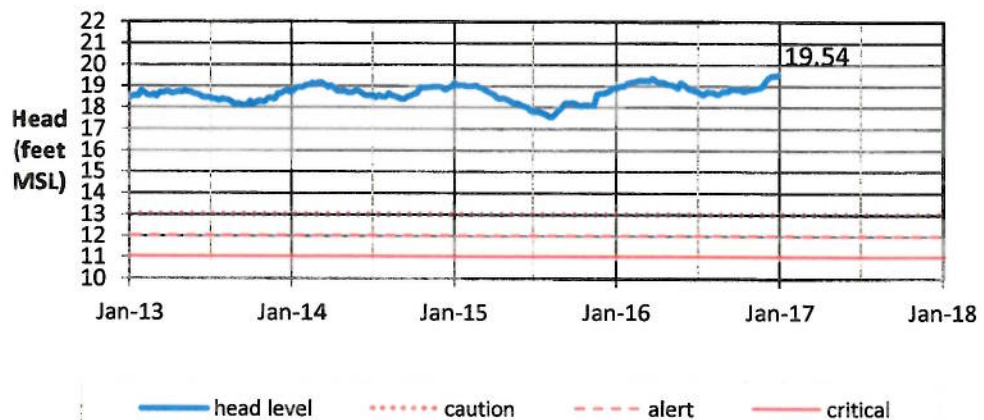
Pearl City 01/01/17



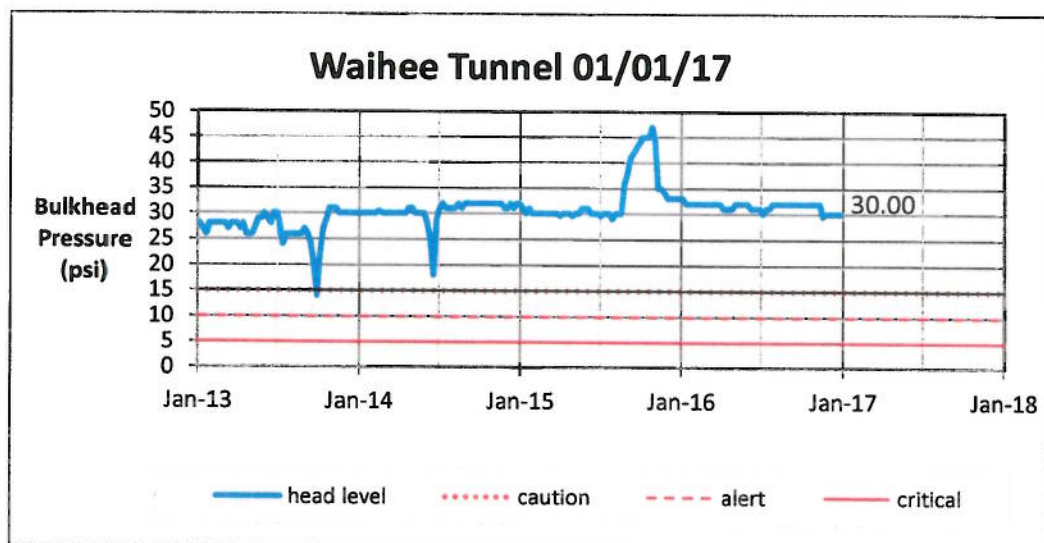
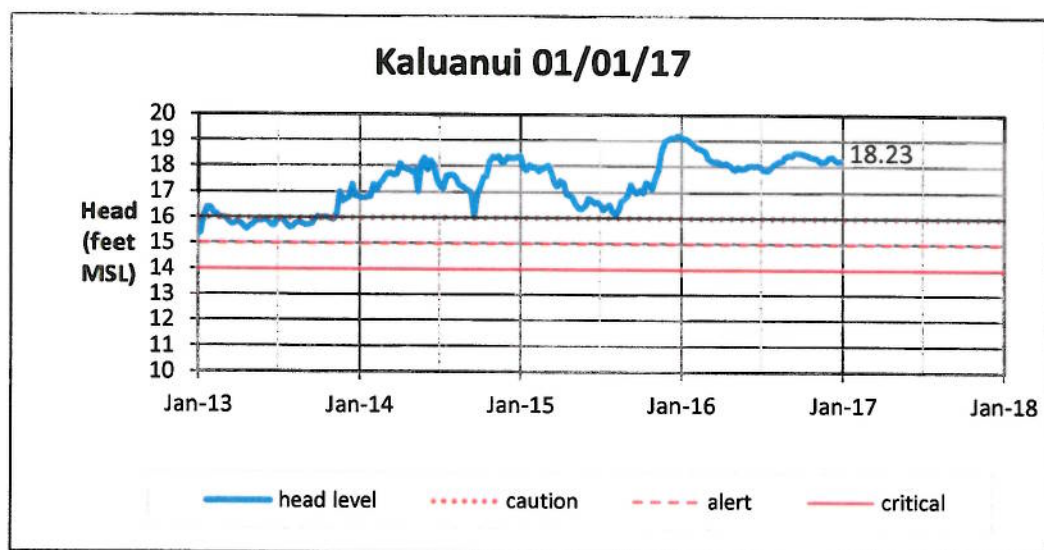
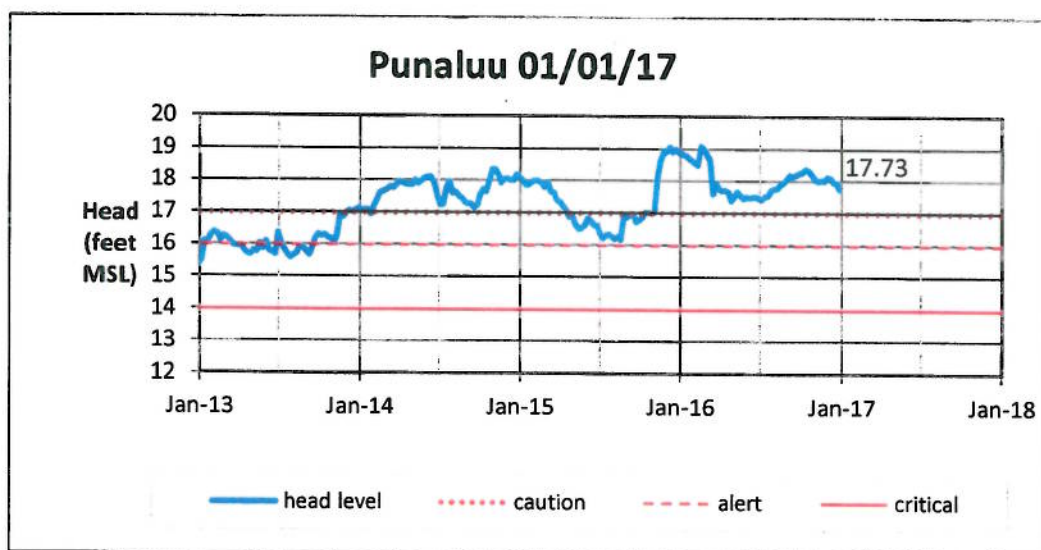
Waipahu 01/01/17



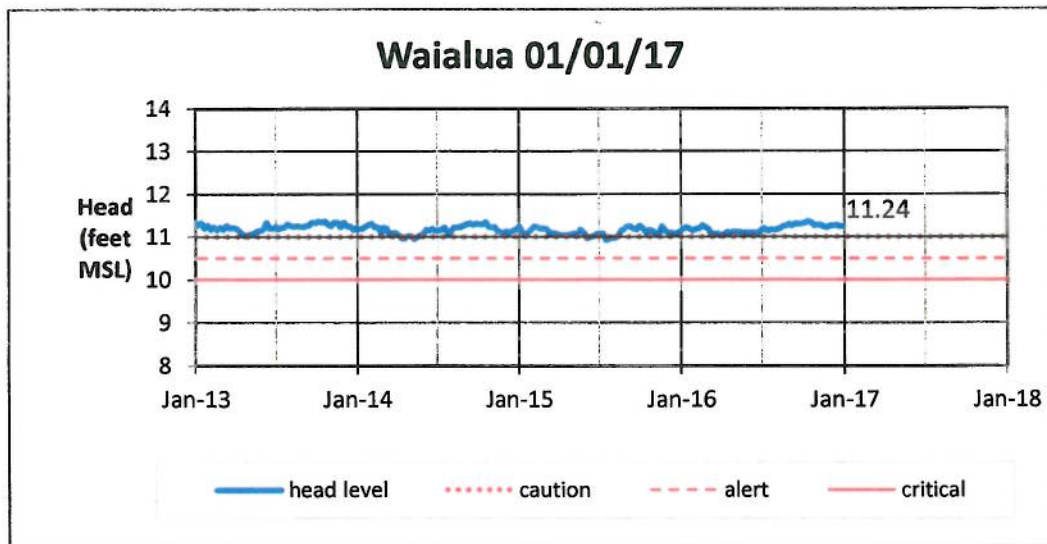
Hoeaee-Kunia 01/01/17

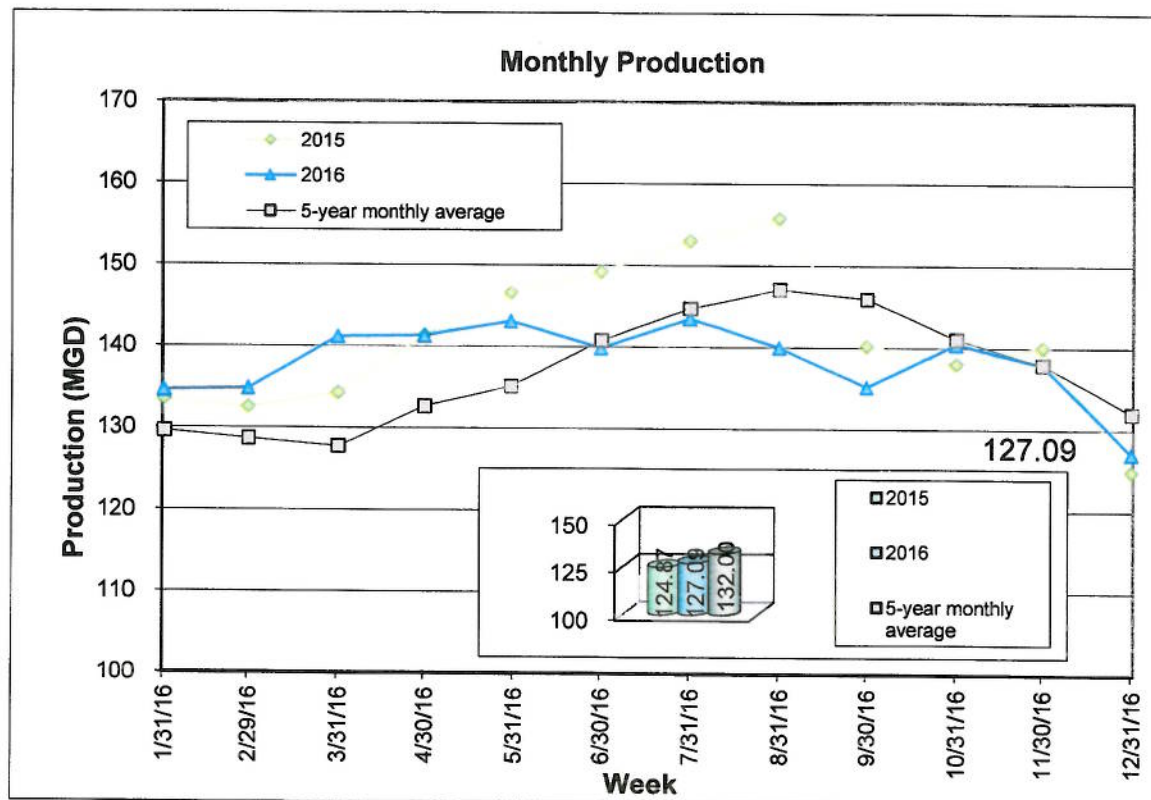
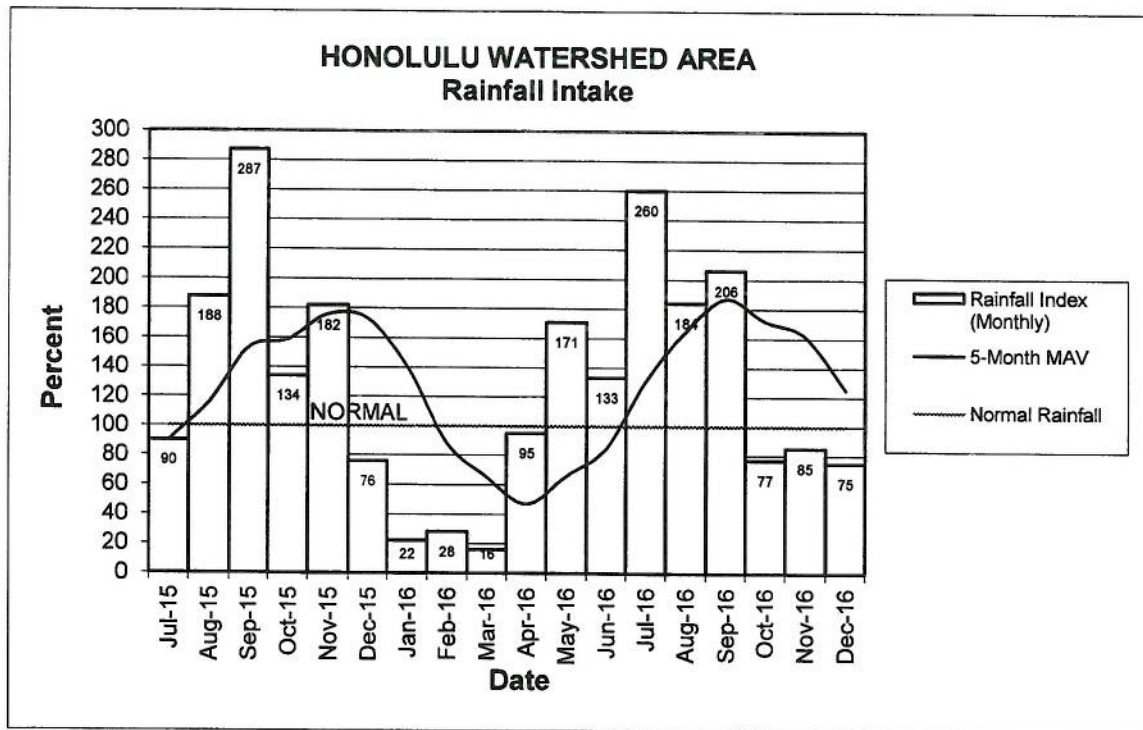


Weekly Head Report



Weekly Head Report



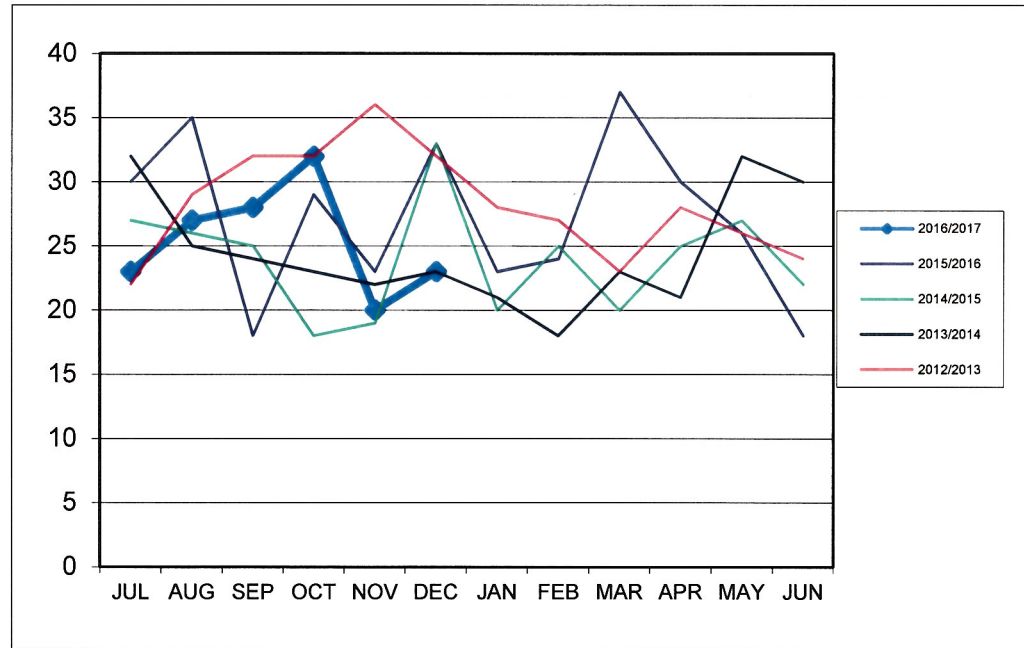


WATER MAIN REPAIR REPORT

for December 2016

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2016/2017	23	27	28	32	20	23							153
2015/2016	30	35	18	29	23	33	23	24	37	30	26	18	326
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

Date	Address	Size (In)	Pipe Type
12/3	1261 Pihana St.	8	CI
12/9	98-150 Lipoa Pl.	8	CI
12/9	1314 Kainui Dr.	12	CI
12/10	98-151 Lipoa Pl.	8	CI
12/11	40 S. School St.	24	CI
12/12	Laulele St. & Heleuma St.	8	CI
12/13	2280 Kuhio Av.	24	DI
12/15	89-820 Haleakala Av.	8	AC
12/15	3045 Hiehie St.	8	CI
12/16	easement--2027 Puu Pl.	6	CI
12/16	84-290 Makau St.	8	PVC
12/16	3045 Hiehie St.	8	CI
12/16	98-1739 Ulu St.	8	CI
12/17	85-193 McArthur St.	8	PVC
12/22	1320 Aloha Oe Dr.	8	CI
12/22	91-476 Pupu St.	8	CI
12/23	788 Eleele Pl.	4	CI
12/25	860 Halekauwila St.	8	DI
12/26	Kamakee St. near Ala Moana Bl.	12	PVC
12/29	85-220 McArthur St.	8	PVC
12/31	1 Keahole Pl.	12	CI
12/31	45-995 Waialele Rd.	12	CI



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

DISCUSSION

Mike Fuke, Field Operations Division Acting 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)(2)] at 3:44 PM to Consider Issues Pertaining to Matters Posted for Discussion at an Executive Session

OPEN
SESSION

The Board reconvened in Open Session at 3:49 PM

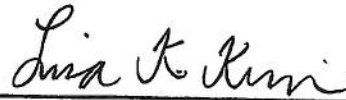
MOTION TO
ADJOURN

There being no further business Chair Andaya at 3:49 PM called for a motion to adjourn the Open Session. David Hulihee so moved; seconded by Adam Wong and unanimously carried.

Respectfully submitted,

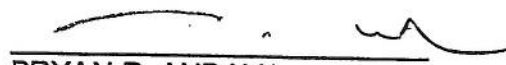
THE MINUTES OF THE REGULAR SESSION BOARD
MEETING ON JANUARY 30, 2017 WERE APPROVED
AT THE FEBRUARY 27, 2017 BOARD MEETING

	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
ADAM C. WONG			ABSENT
DAVID C. HULIHEE			ABSENT
KAPUA SPROAT	X		
KAY C. MATSUI	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI			ABSENT



LISA K. KIM

APPROVED:


BRYAN P. ANDAYA
Chair of the Board

FEB 27 2017

Date