

MINUTES

REGULAR MEETING OF THE BOARD OF WATER SUPPLY

July 28, 2014

At 2:01 PM on July 28, 2014 in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, Board Chair Miyashiro called to order the Regular Meeting.

Present: Duane R. Miyashiro, Chair
Adam C. Wong, Vice Chair
Mahealani Cypher
Theresa C. McMurdo (arrived at 2:08 p.m.)
David C. Hulihee
Ross S. Sasamura
Ford N. Fuchigami

Also Present: Ernest Lau, Manager and Chief Engineer
Ellen Kitamura, Deputy Manager and Chief Engineer
Alex Ubiadas
Barry Usagawa
Erwin Kawata
Duke Chung
Jason Takaki
Paul Kikuchi
Mike Matsuo
Kevin Ihu
Henderson Nuuhiwa
Jennifer Elflein
Joe Cooper
Karen Tom
Jill Kuramoto

Others Present: Krishna Jayaram, Deputy Corporation Counsel
Marilyn Ushijima, Deputy Corporation Counsel
Eugenia Yuen
Georgia Yamashita
Chris Cleveland, Brown and Caldwell
Russ Stepp, Stepp Consulting, Incorporated
Dave Jochim, Stepp Consulting, Incorporated
Michael Hernandez-Soria, Hawaiian Cool Water LLC
Susan Uyesugi

Board Chair Miyashiro introduced and welcomed new Board member Ford Fuchigami and also acknowledged the new Board Vice Chair Adam Wong.

**APPROVAL
OF MINUTES**

Approval of the Minutes of the Regular Meeting held on June 23, 2014

**MOTION
TO APPROVE**

Mahealani Cypher and David Hulihee motioned and seconded, respectively, to approve the Minutes of the Regular Session Meeting of June 23, 2014. The motion was unanimously carried.



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

RESOLUTION NO. 843, 2014

GEORGE A. L. YUEN

**TO HONOR HIS MEMORY AND ACCOMPLISHMENTS AS MANAGER AND CHIEF ENGINEER
OF THE BOARD OF WATER SUPPLY FROM 1967 TO 1974**

WHEREAS, GEORGE A. L. YUEN provided the Board of Water Supply (BWS) employees and Board of Directors with professionalism, excellence, integrity, loyal and continued support, and service during his 27 years of employment; and

WHEREAS, MR. YUEN began his career at the BWS in 1947 when he was hired as a Civil Engineer, steadily rose through the ranks, and was promoted to the positions of Manager of Field Operations and Chief Sanitary Engineer in February 1959, Assistant Chief Engineer in May 1967, and Deputy Manager and Chief Engineer in September 1967; and

WHEREAS, GEORGE YUEN was appointed as Manager and Chief Engineer in October 1967, after the sudden passing of BWS Manager Edward J. Morgan, where he served until 1974 when he left to join the State Department of Health as its Director; and

WHEREAS, in his seven-year tenure as the BWS's Manager, MR. YUEN demonstrated great foresight as he effected innovative plans and actions to lead the Department into the next era of water management, including the conversion from steam to electric pumps, the consolidation of the island's eight water systems into a single system, the computerized operation of the water system, and programs that improved protection of Oahu water resources; and

WHEREAS, his many contributions to the BWS and the community have impacted, and will continue to impact, the direction and operations of this Department for many years to come; and

WHEREAS, MR. YUEN remained a stalwart supporter of the BWS and its semi-autonomy until his recent passing on June 7, 2014; and

WHEREAS, his counsel, support, and actions throughout the years have earned MR. YUEN the respect and trust of the BWS's employees and Board of Directors and he will be missed by his family, colleagues, and the BWS ohana; now, therefore

BE IT RESOLVED by the Members of the Board of Water Supply, City and County of Honolulu, that we do hereby express to the family of GEORGE A. L. YUEN our deepest appreciation and heartfelt gratitude for the clear and unwavering direction, dedication and leadership he provided as Manager and Chief Engineer of the Honolulu Board of Water Supply; and

BE IT FURTHER RESOLVED that the Members of this Board extend its sincere sympathy to the family of GEORGE A. L. YUEN for their loss of this exceptional man; and

BE IT FINALLY RESOLVED that this Resolution be presented to the family of GEORGE A. L. YUEN.



Resolution No. 843, 2014

Adopted this 28th day of July 2014
Board of Water Supply, Honolulu, Hawaii

DUANE R. MIYASHIRO
Chair of the Board

DISCUSSION

Chair Miyashiro and Manager Lau welcomed Mr. George Yuen's wife and daughter, Eugenia Yuen and Georgia Yamashita, respectively, and honored them with leis.

Mr. Lau expressed his appreciation for Mr. Yuen saying that he was a mentor to him for many years, that he was a great man and true supporter of the BWS, and that he will be missed. Mr. Lau read the resolution and thanked Mrs. Yuen and Mrs. Yamashita.

Board member Cypher stated that she enjoyed working with Mr. Yuen on many different issues over the years. She stated that he was a great historian who shared his knowledge of BWS with employees and was always willing to help whenever the Department needed him.

Mr. Miyashiro added that he had the pleasure of meeting Mr. Yuen last year when he took time from his well-deserved retirement to help the Department remain semi-autonomous. It was a nice gesture that showed his passion for the BWS and Mr. Yuen's legacy will live on through Mr. Lau, Ms. Kitamura, and all the men and women of the BWS.

Mrs. Yuen shared things that she remembered. "I just thought I would share one or two things I remember. George was hired at the same day with Leslie Watson. If you have seen Leslie Watson on some of your old correspondence by Fred Ohrt, and Fred just sort of took everybody over, it was just like a big family from the beginning. And I also remember coming here when this building was built, they had a dedication. I think Ed Morgan was the Chief Engineer, maybe it was a Saturday afternoon. The families would come; we stood out here under the palm trees as they had this dedication for this lovely building. And another thing you might not have heard, but there were a few comments about - this was like a Waikiki hotel. It was a beautiful building for this part of town. So that was how it was referred to. George just enjoyed being here so much; he felt it was fortunate to have been here as long as he was. Thank you very much, Mr. Lau."

MOTION TO ADOPT RESOLUTION NO. 843, 2014

Ross Sasamura motioned to adopt Resolution No. 843, 2014 – George A. L. Yuen, To Honor His Memory and Accomplishments as Manager and Chief Engineer of the Board of Water Supply from 1967 to 1974. The motion was seconded by Mahealani Cypher and unanimously carried.

Mr. Miyashiro presented the resolution to Mrs. Yuen. Photos were taken of Mr. Miyashiro, Mr. Lau, Mrs. Yuen and Mrs. Yamashita.

RESOLUTION NO. 843, 2014 – GEORGE A. L. YUEN,
TO HONOR HIS MEMORY AND ACCOMPLISHMENTS
AS MANAGER AND CHIEF ENGINEER OF THE BOARD
OF WATER SUPPLY FROM 1967 TO 1974, ADOPTED
ON JULY 28, 2014

	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG	X		
MAHEALANI CYPHER	X		
THERESIA C. MCMURDO	X		
DAVID C. HULIHEE	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		

"July 28, 2014

ADOPTION OF
RESOLUTION
NO. 844, 2014

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

Chair and Members:

Subject: Adoption of Resolution No. 844, 2014, Acceptance of Gift to the Board of Water Supply from Hawaiian Earth Products, Incorporated, in Support of the 2014 Annual Halawa Xeriscape Garden Open House and Unthirsty Plant Sale

We recommend acceptance of the proposed gift to the Board of Water Supply (BWS), City and County of Honolulu, from Hawaiian Earth Products, Incorporated, in support of our 2014 Annual Halawa Xeriscape Garden Open House and Unthirsty Plant Sale. The donor's total value of this gift is \$890.00.

The BWS's Annual Halawa Xeriscape Garden Open House and Unthirsty Plant Sale is a successful public outreach program that focuses the attention of Oahu water users on the importance of outdoor water efficiency. Studies show that more than 50 percent of residential water use occurs outdoors, so it makes sense for the BWS to promote ways to achieve water savings in this area, which in turn can reduce the customer's combined water and wastewater bill. This event gives the BWS the opportunity to carry this out on a large scale.

This donation from Hawaiian Earth Products, Incorporated, will help the BWS provide free soil conditioner compost to Plant Sale visitors and encourage them to incorporate some of the techniques they learn at the event into their own home gardens.

We deeply appreciate the continued support of this Board for this very valuable and worthwhile public outreach program. Plant Sale attendees are encouraged to use the information we provide at the event to become better stewards of our precious water resource.

Respectfully submitted,

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

Attachment"

DISCUSSION: There were no comments or discussion.

MOTION TO ADOPT RESOLUTION NO. 844, 2014 Mahealani Cypher motioned to adopt Resolution No. 844, 2014, Acceptance of Gift to the Board of Water Supply from Hawaiian Earth Products, Incorporated, in Support of the 2014 Annual Halawa Xeriscape Garden Open House and Unthirsty Plant Sale. The motion was seconded by Ross Sasamura and unanimously carried.

RESOLUTION NO. 844, 2014, ACCEPTANCE OF GIFT TO THE BOARD OF WATER SUPPLY FROM HAWAIIAN EARTH PRODUCTS, INCORPORATED, IN SUPPORT OF THE 2014 ANNUAL HALAWA XERISCAPE GARDEN OPEN HOUSE AND UNTHIRSTY PLANT SALE, ADOPTED ON JULY 28, 2014

	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG	X		
MAHEALANI CYPHER	X		
THERESIA C. MCMURDO	X		
DAVID C. HULIHEE	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

RESOLUTION NO. 844, 2014

ACCEPTANCE OF GIFT TO THE BOARD OF WATER SUPPLY
FROM HAWAIIAN EARTH PRODUCTS, INCORPORATED,
IN SUPPORT OF THE
2014 ANNUAL HALAWA XERISCAPE GARDEN OPEN HOUSE
AND UNTHIRSTY PLANT SALE

WHEREAS, the Board of Water Supply's (BWS) Annual Halawa Xeriscape Garden Open House and Unthirsty Plant Sale is an annual public outreach activity that educates Oahu water users about incorporating drought tolerant plants, earth-friendly planting and maintenance techniques, and water conservation methods in their landscapes and gardens to promote efficient outdoor water use; and

WHEREAS, the BWS may accept gifts to the Department as long as it does not provide special consideration, treatment, advantage, privilege, or exemption for or coerces a potential donor; and

WHEREAS, Hawaiian Earth Products, Incorporated, is offering a gift of 25 cubic yards of Soil Conditioner Compost, totaling \$890.00 for the BWS to give away to the public at the 2014 Annual Halawa Xeriscape Garden Open House and Unthirsty Plant Sale where it is also commemorating the 25th anniversary of the opening of the garden; and

WHEREAS, the gift to the BWS is beneficial because using soil conditioner compost improves the soil's ability to retain water and reduces irrigation needs of landscapes or gardens that use it, further promoting outdoor water use efficiency; now, therefore

BE IT RESOLVED that the Board of Water Supply hereby accepts the gift valued at \$850.00 and directs the Manager and Chief Engineer, or his delegate, to accept and thank the donor for this gift.

ADOPTED:



DUANE R. MIYASHIRO
Chair

Honolulu, Hawaii
July 28, 2014

ITEM FOR INFORMATION NO. 1

"July 28, 2014

STRATEGIC
PLAN -
PRESENTATION
BY THE
PERMITTED
INTERACTION

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 Reports,
Presentation of Reports and Recommendations to the
Board by the HRS §92-2.5 Permitted Interaction Group

On May 2, 2014 and June 5, 2014, 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 a memo from Board Chair Miyashiro describing the activities of these two meetings.

Respectfully submitted,

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

Attachments"

The foregoing was for information only.

DISCUSSION:

Mr. Miyashiro's comments: "Good afternoon. Pursuant to Hawaii Revised Statutes, Section 92-2.5(b)(1)(A) and Board action taken on March 24, 2014, Vice Chair Cypher, Board member Hulihee and myself were all assigned to assist the Board of Water Supply senior management team with the creation of a strategic plan for the agency. Pursuant to Hawaii Revised Statutes, Section 92-2.5(b)(1)(B), our resulting findings and recommendations are being presented to the full Board today. The findings include a draft of the proposed strategic plan and we have asked that Deputy Ellen Kitamura make the short presentation on our behalf describing the major elements of the draft. Please note, that while you may ask questions of the BWS staff, myself, Vice Chair Cypher and Board member Hulihee, Hawaii Revised Statutes, Section 92-2.5(b)(1)(C) requires that Board discussion, deliberation and decision-making occur at a subsequent meeting. That 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 of the merits of the draft. If there are no questions, I would ask Deputy Ellen Kitamura to begin her presentation."

Deputy Manager Kitamura gave the presentation. She stated that the next step was for the division heads to deliver the draft Strategic Plan (SP) to their staff for discussion and feedback. Ms. Kitamura requested that the Board members review the SP and provide the Manager's Office with feedback by August 8, 2014. They will compile the feedback into a redline draft and will present it to the Board for discussion, revision, and adoption at the August Board meeting.

Mr. Miyashiro wanted clarification that any of the Board members, individually, could contact Mr. Lau's office with comments, revisions, etc. Mr. Lau replied yes, that the Board members could contact him directly by email or telephone.

Board member McMurdo inquired about page 9 of Ms. Kitamura's presentation. She stated that resource sustainability references "safe", however she sees them as two different things. Mr. Lau replied that safe also encompasses sustainable because if the water isn't sustainable, then the safety of the water could be compromised by degrading water quality. Ms. McMurdo inquired if that dilutes the importance of sustainability and safety. She suggested including a fourth circle to separate "safe." Ms. Kitamura made note of Ms. McMurdo's suggestion and will take it back to the staff for discussion.

Ms. McMurdo asked if the word "affordable" was just added to the mission. Ms. Kitamura replied that in the BWS's Annual Report, it was the mission of the BWS to provide safe and dependable water supply, and the next statement talked about affordability. In the discussions with the BWS management team, it was decided that "affordability" should be added to the mission statement because it was very important for the Department to be mindful of the need to provide affordable water service to the customers.

MEMORANDUM

DATE: JULY 28, 2014

TO: BOARD OF WATER SUPPLY BOARD MEMBERS

FROM: DUANE R. MIYASHIRO, CHAIR 

SUBJECT: PERMITTED INTERACTION GROUP (PIG) REPORT, STRATEGIC PLAN DEVELOPMENT PROCESS

This memorandum is made pursuant to the Board action approved on March 24, 2014, under the section STRATEGIC PLAN DEVELOPMENT PROCESS, to convene a Permitted Interaction Group (PIG) of three (3) Board Members to meet with the Board of Water Supply (BWS) senior management team and assist with the creation of a Strategic Plan for the BWS. The PIG would participate in a series of workshops with the BWS senior management team to discuss and develop and/or reaffirm the Vision, Mission, Values, Strategic Goals, and Objectives for the Department. Work products from these discussions will form the foundation of the BWS Strategic Plan and be presented to the Board for consideration and adoption.

Adam Wong motioned to approve Chair Miyashiro, Vice Chair Cypher, and Board Member Hulihee to serve on the PIG to develop a BWS Strategic Plan. The motion was seconded by Ross Sasamura and unanimously carried.

Glenn Hamamura of Systems Excellence, LLC was retained by the BWS to facilitate the strategic planning workshops with the PIG and BWS senior management team (BWS Strategic Planning Team, BWS-SPT). Two workshops were held to discuss and develop the elements of the Strategic Plan. The first workshop was held on May 2, 2014 in the Beretania Complex - Engineering Building, Engineering Conference Room. The second workshop was held on June 5, 2014 in the Beretania Complex - Public Service Building, Board Room. Listed below is the attendance at each of the two workshops:

May 2, 2014, 9:00 – 11:30 a.m.

Beretania Complex - Engineering Building, Engineering Conference Room

Duane Miyashiro, Chair
Mahealani Cypher, Vice Chair
David Hulihee, Board Member
Ernest Lau, Manager and Chief Engineer
Ellen Kitamura, Deputy Manager
Glenn Hamamura, Facilitator, Systems Excellence, LLC
Joseph Cooper, Waterworks Controller, Finance Division
Jennifer Elflein, Program Administrator, Customer Care Division
Daryl Hiromoto, Program Administrator, Field Operations Division
Kevin Ihu, Program Administrator, Water Systems Operations Division
Erwin Kawata, Program Administrator, Water Quality Division
Paul Kikuchi, Chief Financial Officer
Jill Kuramoto, Information Officer, Communications Division
Michael Matsuo, Land Administrator, Land Division
Clayton Shimazu, Executive Support Officer, Executive Support Office

Board of Water Supply Board Members

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July 28, 2014

Jason Takaki, Program Administrator, Capital Projects Division
Karen Tom, Human Resources Officer, Human Resources Office
Barry Usagawa, Program Administrator, Water Resources Division

June 5, 2014, 9:00-11:30 a.m.

Beretania Complex - Public Service Building, Board Room

Duane Miyashiro, Chair
Mahealani Cypher, Vice Chair
David Hulihee, Board Member
Ernest Lau, Manager and Chief Engineer
Ellen Kitamura, Deputy Manager
Glenn Hamamura, Facilitator, Systems Excellence, LLC
Tracy Burgo, Facilitator, BWS
Marc Chun, Facilitator, BWS
Joseph Cooper, Waterworks Controller, Finance Division
Jennifer Elflein, Program Administrator, Customer Care Division
Kevin Ihu, Program Administrator, Water Systems Operations Division
Erwin Kawata, Program Administrator, Water Quality Division
Paul Kikuchi, Chief Financial Officer
Jill Kuramoto, Information Officer, Communications Division
Michael Matsuo, Land Administrator, Land Division
Clayton Shimazu, Executive Support Officer, Executive Support Office
Jason Takaki, Program Administrator, Capital Projects Division
Karen Tom, Human Resources Officer, Human Resources Office
Barry Usagawa, Program Administrator, Water Resources Division
Ronald Wada, Assistant Program Administrator, Information Technology Division

MEETING: MAY 2, 2014

This workshop involved the review and validation of the work previously done by various BWS groups, past and present, on the development of the BWS Vision, Mission, Values, and Strategic Goals. The activities in this workshop also included a stakeholder identification, analysis, and evaluation of the internal and external key factors that could influence the development of the Strategic Plan. Workshop activities included the use of the Baldrige Performance Excellence Program and the Effective Utility Management (EUM) framework to provide industry accepted methodologies to identify and focus discussions on the elements of the Strategic Plan.

The work completed included the initial validation and concurrence of the BWS Vision, Mission, Values, and Strategic Goals by the workshop participants. Preliminary discussion also identified broad categories for consideration in developing the strategic objectives planned for the next workshop.

MEETING: JUNE 5, 2014

With the general validation and concurrence of the Strategic Goals and identification of preliminary categories for the strategic objectives, the BWS-SPT used this workshop to further discussions on the strategic advantages, challenges, and opportunities facing the BWS.

The work completed included a prioritized list of high-level strategic objectives aligned with the BWS Vision, Mission, Values, and Strategic Goals, with consideration for the Department's ability to meet the strategic objectives and respond to stakeholder expectations.

The BWS senior management team will be meeting to further refine these strategic objectives and develop action plans to fulfill these objectives. The results of these subsequent meetings will be a draft of the BWS Strategic Plan, which will be presented to the Board at the July 2014 Board Meeting.

PROPOSED ACTION:

The PIG participants seek input from the Board whether to recommend that the Department utilize the preliminary work developed in the two (2) BWS-SPT meetings and finalize the draft BWS Strategic Plan. The BWS Strategic Plan will be presented to the full Board for consideration and adoption at the August 2014 Board Meeting.



Board of Water Supply

STRATEGIC PLAN 2014 – 2017

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Introduction

In 2014, the Board of Water Supply (BWS) senior management team chartered a project to develop a 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 January to July 2014, to review and reconfirm the Vision, Mission, Values, Strategic Goals, and develop the Strategic Objectives and 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 three years. A shorter planning horizon, rather than the typical five year period, was proposed for this plan to foster organizational agility in light of major planning efforts like the BWS 30-year water master plan initiative.

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 Strategic 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)

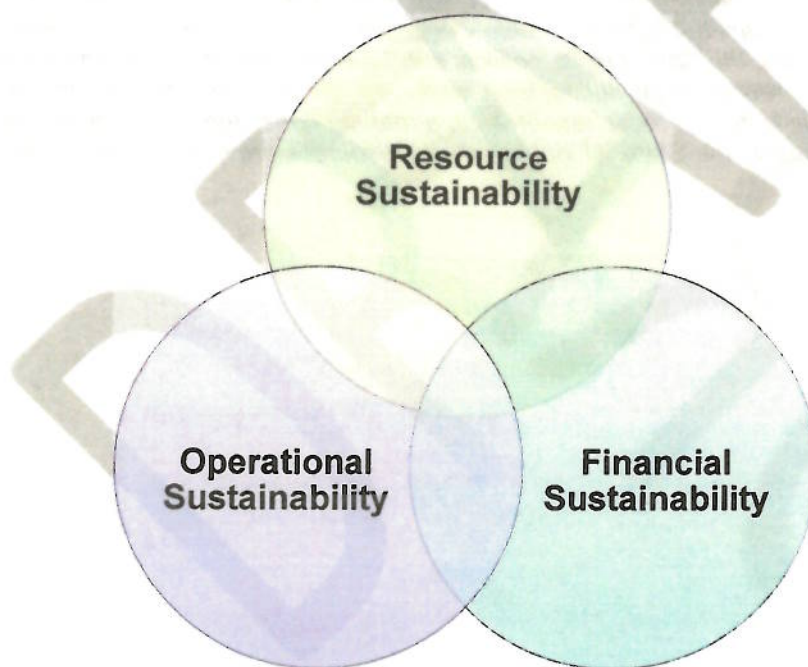
Protect and manage our groundwater supplies and watersheds through adaptive and integrated strategies.

Operational Sustainability (Dependable)

Foster a resilient and collaborative organization utilizing effective and proactive operational practices consistent with current industry standards.

Financial Sustainability (Affordable)

Implement sound fiscal strategies to finance our operating and capital needs to provide 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 identify factors in three areas: strategic challenges, strategic advantages, and strategic opportunities.

Using the factors from each area, seven broad categories were identified for which strategic objectives and action plans were developed.

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

Strategic Goals	Category	Strategic Objective
Resource	Water Resources – Climate Change	We will adapt to climate change to manage Oahu's water resources and protect the limited water supply.
	Water Resources – Water Quality	We will protect, preserve, and collaborate to ensure the safety and quality of Oahu's fresh water resource.
Resource	Communication	We will communicate the value of water to engage the community in a shared stewardship of Oahu's water resources.
Operational	Organization	We will ensure the necessary workforce and competencies to support the BWS 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.
Financial	Financial Management	We will pursue and leverage financial opportunities and implement strategies to affordably meet our financial and regulatory requirements.
Operational	Technology	We will ensure that our technology systems are current and leverage opportunities in technology to effectively support current and future BWS needs.

Strategic Objective	Action Plans
Water Resources – Climate Change: We will adapt to climate change to manage Oahu's water resources and protect the limited water supply.	<ul style="list-style-type: none"> • Directed hydro-geologic resource research • Watershed Management Plans • Active collaboration with American Water Works Association and other water agencies
Water Resources – 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"> • Regular water quality monitoring and reporting • Source water protection program • Treatment to meet water quality standards
Communication: We will communicate the value of water to engage the community in a shared stewardship of Oahu's water resources.	<ul style="list-style-type: none"> • Use multi-media to keep internal and external stakeholders informed of BWS programs, projects, and plans • Increase educational workshops and tours to instill better understanding of importance of water stewardship • Broaden the BWS message of the Value of Water
Organization: We will ensure the necessary workforce and competencies to support the BWS needs.	<ul style="list-style-type: none"> • Enterprise Organizational Study • Multi-Skill worker program • Field Operations (FO) and Water System Operations (WSO) Apprenticeship programs • Capital Projects (CP) – Construction Inspector Aide program
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"> • Annual Capital Improvement Program (CIP) • 6-Year CIP • BWS Water Master Plan and 30-Year CIP • FO and WSO Preventative maintenance program • FO Leak Detection Program
Customer Service: We will proactively and consistently provide a quality experience in every customer interaction.	<ul style="list-style-type: none"> • Quality assurance program
Financial Management: We will pursue and leverage financial opportunities and implement strategies to affordably meet our financial and regulatory requirements.	<ul style="list-style-type: none"> • State Revolving Fund Refinancing • Investment grade audit
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"> • 5-Year Information Technology Strategic Plan • Meter Reading Study

Acknowledgements

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

DRAFT

WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

BWS Strategic Plan

Board of Directors Meeting
July 28, 2014



WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Agenda

Background

Process

Draft Strategic Plan

Next Steps





Background

Several Strategic Plans over the years

- Last Strategic Implementation Plan started in 2011

- Implementation by agency began

- Not formally presented to the Board

2012 – 2014

- New management

- Strategic Plan to align management and Board

- Collaboration between management team and Board



Process



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



Board of Water Supply
City and County of Honolulu

Draft Strategic Plan – Table of Contents



Introduction

Letter from the Chair of the Board and the Chief Engineer

History of the Board of Water Supply

BWS Vision

BWS Mission

BWS Values

BWS Strategic Goals

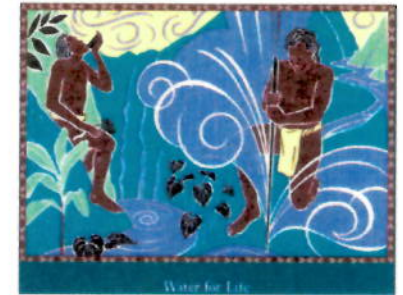
BWS Strategic Objectives

Key Action Plans

Acknowledgements



BWS Vision and Mission



Vision: 'Ka Wai Ola – Water for Life'

Mission: To provide safe, dependable, and *affordable* water now and into the future

WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

BWS Values

Environmental

We uphold the Public Trust as thoughtful stewards of Oahu's water resources and the environment.*

Societal

We provide quality service to our customers with the highest level of courtesy and efficiency.

Organizational

We provide a healthy and safe work environment through cooperation, participation and shared decision-making.

Team

We depend upon and support each other and treat each other with dignity and respect.

Personal

We are water professionals who earn and uphold the community's trust everyday through our actions and in doing our jobs right.

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



Board of Water Supply
City and County of Honolulu

BWS Values

***Public Trust**

Principle embedded in Hawaii Law

*“...All public natural resources are held in trust
by the State for the benefit of the people”*



Strategic Goals



Resource Sustainability (Safe)

Protect and manage our groundwater supplies and watersheds through adaptive and integrated strategies.

Operational Sustainability (Dependable)

Foster a resilient and collaborative organization utilizing effective and proactive operational practices consistent with current industry standards.

Financial Sustainability (Affordable)

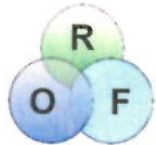
Implement sound fiscal strategies to finance our operating and capital needs to provide dependable and affordable water service.

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



Board of Water Supply
City and County of Honolulu



Strategic Objectives

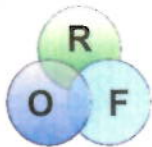
Strategic Goals	Category	Strategic Objectives
Resource	Climate Change	We will adapt to climate change to manage Oahu's water resources and protect the limited water supply.
Resource	Water Quality	We will protect, preserve and collaborate to ensure the safety and quality of Oahu's fresh water resource.
Resource	Communication	We will communicate the value of water to engage the community in a shared stewardship of Oahu's water resources.
Operational	Organization	We will ensure the necessary workforce and competencies to support the BWS 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 Management	We will pursue and leverage financial opportunities and implement strategies to affordably meet our financial and regulatory requirements.

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Board of Water Supply
City and County of Honolulu



Key Action Plans

Strategic Objective	Action Plans
Climate Change: We will adapt to climate change to manage Oahu's water resources and protect the limited water supply.	<ul style="list-style-type: none"> Directed hydro-geologic resource research Watershed Management Plans Active collaboration with AWWA and other water agencies
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"> Regular water quality monitoring and reporting Source water protection program Treatment to meet water quality standards
Communication: We will communicate the value of water to engage the community in a shared stewardship of Oahu's water resources.	<ul style="list-style-type: none"> Use multi-media to keep internal and external stakeholders informed of BWS programs, projects and plans Increase educational workshops and tours to instill better understanding of importance of water stewardship Broaden the BWS message of the Value of Water
Organization: We will ensure the necessary workforce and competencies to support the BWS needs.	<ul style="list-style-type: none"> Conduct an Enterprise Organizational Study Continue Multi-Skill worker program Expand/Develop FO and WSO Apprenticeship programs Develop Construction Inspector Aide program
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"> Annual CIP 6-Year CIP BWS Water Master Plan and 30-Year CIP FO and WSO Preventative maintenance program FO Leak Detection Program
Customer Service: We will proactively and consistently provide a quality experience in every customer interaction.	<ul style="list-style-type: none"> Quality assurance program
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"> 5 Year IT Strategic Plan Meter Reading Study
Financial Management: We will pursue and leverage financial opportunities and implement strategies to affordably meet our financial and regulatory requirements.	<ul style="list-style-type: none"> SRF Refinancing Investment grade audit

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



Board of Water Supply
City and County of Honolulu

Vision

Ka Wai Ola – “Water for Life”

Mission

To provide safe, dependable and affordable water now and into the future

Goals

Protect and manage our groundwater supplies and watersheds through adaptive and integrated strategies

Objectives

We will communicate the value of water to engage the community in a shared stewardship of Oahu’s water resources

Key Action Plans

*Broaden the BWS message of the Value of Water
Increase educational activities to emphasize the importance of shared stewardship
Use multi-media to keep internal & external stakeholders informed of BWS Programs*



Acknowledgements

Board Members

Senior Management Team

Glenn Hamamura – Systems Excellence, LLC

Tracy Burgo and Marc Chun (facilitators)





Next Steps

Senior Managers – share and obtain feedback from staff

Board Members – individual feedback to OMCE

Gather feedback by August 8

Compile feedback into report for August Board Meeting

August Board Meeting

Discuss revised Strategic Plan

Adopt Strategic Plan



Board of Water Supply

STRATEGIC PLAN 2014 – 2017

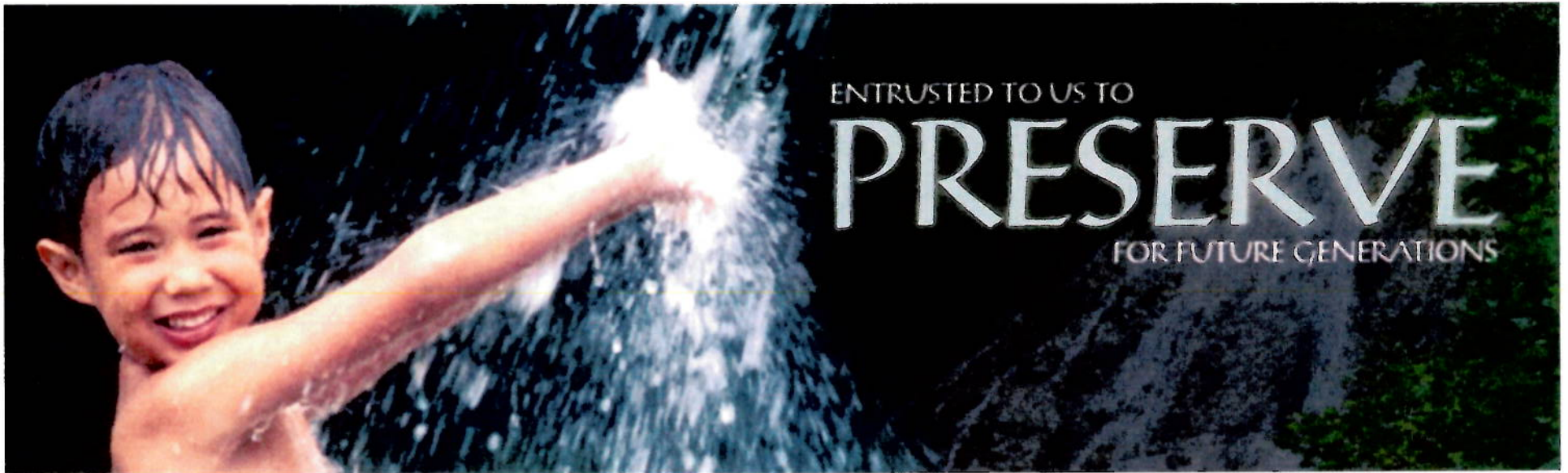


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Board of Water Supply
City and County of Honolulu



"July 28, 2014

MOANALUA
AND WAIMALU
AQUIFER
SYSTEMS
UPDATE

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

Chair and Members:

Subject: Moanalua and Waimalu Aquifer Systems Update

The Board of Water Supply Water Quality staff will present an update of our Moanalua and Waimalu Aquifer Systems.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION:

Mr. Lau informed new Board member Fuchigami that the Board requested monthly updates on the Red Hill underground fuel storage tank facility situation with the Navy.

Water Quality Program Administrator Erwin Kawata gave the presentation. Mr. Kawata explained that he and Mr. Lau went to Albuquerque, New Mexico to meet with the Albuquerque Bernalillo County Water Authority, the New Mexico Environment Department, and other officials to discuss their experiences with the Kirtland Air Force Base fuel spill that was discovered in 1999. The spill came from a pipeline that was leaking from 1951 up until 1999. Over the last 15 years, a lot of characterization and work has been done, and they are still working to clean up the spill. The spill has impacted their groundwater and is putting one of their major water wells at risk. Studies estimate anywhere from 6 to 24 million gallons of fuel that have leaked into the groundwater. Some of the take home messages are: 1) Albuquerque, like BWS, depends on groundwater. The spill is impacting the quantity and quality of Albuquerque's groundwater, as the spill plume is estimated to be 10 to 12 years away from one of their major wells. 2) Characterization is important. Understanding the magnitude of the spill, where it is located, where it is in relation to the wells is needed to understand its impact and how to mitigate it - these are similar to issues that concern BWS at Red Hill. Communication is also a key. Keeping everyone informed about the status of the situation and taking into account everyone's perspective - the regulators, the Air Force, the water utility, and also the public, creates a community solution to the problem.

Following the presentation, Board member Sasamura inquired if the Albuquerque water utility is treating their water or seeking different sources of water. Mr. Kawata replied that it's both. The contaminant of concern to them is Ethylene Dibromide (EDB), which is present in the fuel as an anti-knocking agent. The utility does not want any of the contamination in their wells and have called on the Air Force to put in either a substitute well or to clean it all up. Their Board of Directors has passed a resolution indicating zero tolerance for EDB in their wells. Mr. Sasamura asked if there are technologies to treat the water. Mr. Kawata replied that there are and one of them is granular activated carbon, which BWS uses to treat wells in Central Oahu.

Ms. Cypher questioned what the Air Force has done; being that this has been going on for 15 years. Mr. Kawata replied that they have done soil vapor extraction, which is removing some of the contaminant from underground. It would take them several hundred years to remove all of the contamination since removal rates are quite slow, so they are looking for an immediate solution. The Air Force put in a new project manager to get things moving, but progress has been lagging. Mr. Lau added that the utility has hired and dedicated one person to work full time on this issue.

Mr. Lau stated that there is a lot of frustration growing among the utility and community. Ever since the Assistant Secretary of the Air Force visited, things started changing in a positive sense. They are hopeful that there will be options to reverse the direction of the plume. They are considering pumping the groundwater at the fuel spill site to keep the fuel in the ground from reaching the wells. Mr. Lau added that going to Albuquerque was like going 15 years forward in time, where BWS could be in a similar situation as them.

Mr. Lau explained that he and Mr. Kawata attended 8-12 hours of meetings each day and attended a community meeting with upset members of the community asking the Air Force hard questions. Some of the things learned were to utilize the best technology, knowledge and expertise; plan very carefully the construction and location of monitor wells, sampling and testing; and make sure water quality testing is done correctly, properly and consistently so that the information is accurate. They also spoke to three of Albuquerque's congressional delegation staff and one of them commented that it was an excellent idea for BWS to go there to see what they have been experiencing.

Ms. Cypher inquired if the Air Force has improved their operations to manage their systems and facilities. Mr. Kawata replied that they have replaced their tanks and pipelines. Mr. Kawata added that they have additional leak detection systems in place and cathodic protection on top of their pipelines.

Mr. Miyashiro inquired if there is usefulness with the Board adopting a zero tolerance resolution. Mr. Lau stated that BWS's role is to advocate for protection of the resource, but he's not sure if he agrees with zero tolerance

because BWS has 20+ years of experience with treatment systems and the ability to use activated carbon to remove contaminants.

Board member Fuchigami asked if there was any indication of soil contamination around the area of the Kirtland Air Force Base fuel spill. Mr. Lau responded yes, that from the surface of the ground to the water table is about 500 feet, so there is contamination in the soil (the vadose zone). They found that the EDB is traveling at the same rate as the groundwater and the plume is over a mile and a half long, about 1000 feet wide and over 500 feet deep.

Mr. Fuchigami inquired if the Albuquerque water utility plans to do any mitigation of the soil. Mr. Lau replied that they are doing soil vapor extraction, trying to extract it from the vadose zone before it hits the groundwater. However, there is already a lot in the groundwater, so their challenge is how to mitigate that and to try to reverse the plume, pull it back to the base, pump it out and possibly treat and reuse it on the base.

Ms. Cypher inquired if there are efforts by BWS to find out if other military fuel lines on the west side of Oahu are leaking. Mr. Lau replied that there is a site in the Mililani, Waipio area that's been designated as a superfund site. There was a pipeline leak there for a number of years and they're doing clean up and monitoring of the groundwater. Ms. Cypher asked if BWS is checking wherever there are fuel lines or just reacting when something is found. Mr. Lau stated that they will start to look closer at the State Department of Health's records for other possible sites.

Mr. Lau informed the Board that it was Mr. Kawata who suggested the visit to Albuquerque, and Mr. Lau thanked Mr. Kawata for his excellent suggestion as it was a great opportunity.

WATER FOR LIFE

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Board of Water Supply
City and County of Honolulu

Moanalua and Waimalu Aquifer Systems Update

July 28, 2014



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Board of Water Supply
City and County of Honolulu

Moanalua and Waimalu Aquifer Systems Location



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Board of Water Supply
City and County of Honolulu

BWS Wells in the Moanalua and Waimalu Aquifer Systems In proximity to Red Hill Bulk Fuel Facility



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Board of Water Supply
City and County of Honolulu





July 2014 Update

- July 2014 – Routine samples collected from 5 BWS wells near Red Hill Facility.
- Navy Red Hill tank 5 investigation on-going
- DOH – Navy discussions on Red Hill next steps continue.
- Kirtland AFB fuel leak
 - Albuquerque Bernalillo County Water Utility Authority
 - New Mexico Environmental Department



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Board of Water Supply
City and County of Honolulu

Questions/ Discussion



ITEM FOR INFORMATION NO. 3

"July 28, 2014

WATER
MASTER
PLAN UPDATE

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

Chair and Members:

Subject: Board of Water Supply Water Master Plan Quarterly Update

The Board of Water Supply (BWS) Water Resources staff will present an update of the BWS Water Master Plan.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION:

Water Resources Program Administrator Barry Usagawa gave the presentation.

Mr. Usagawa referred to the Palolo pilot project, which involves a section of a 6-inch cast iron pipe, installed in the 1930s that is breaking. The project involves inserting a tool in the pipe and having the water flow along the pipeline to determine pipe wall thickness, find leaks, and provide an assessment of remaining pipe life. In order to do this, however, valves need to be closed to force the water through the specific pipe. Ms. McMurdo inquired if water will be shut off for customers in the area when the valves are closed. Mr. Usagawa replied that water would not be shut off because there is sufficient pipe grid and only a few valves will be closed. Mr. Usagawa stated that if this pilot is successful, they may be able to do this on large transmission mains and cross country mains, to determine pipe condition and estimate when to optimally replace it.

Ms. Cypher asked if it is a computerized device that goes in the pipe and sends data electronically. Mr. Lau explained that it's a long device, which has electronics, sensors, and a built in camera. Ms. Cypher asked if the tool could scrape off build up in the pipe and cause brown water complaints. Mr. Lau replied that it's possible, but the tool is not as big as the pipe itself. Mr. Usagawa added that the device is about 4-inches in diameter and can fit through a 6-inch tap, and the pipe diameter is 16-inches so it doesn't take up the entire diameter.

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Board of Water Supply
City and County of Honolulu

Water Master Plan

Board Quarterly Update



July 28, 2014



WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Water Master Plan Presentation Outline

- Goals and Objectives
- Schedule
- Tasks and Status
- About Condition Assessments and Status





BWS Water Master Plan

Provides an important and defensible road map for the prioritized replacement of over \$1 Billion in aging water system infrastructure

A comprehensive long range Capital Improvement Program and Financial Plan will ensure safe, dependable and affordable water now and into the future

Safe/Dependable

Affordable



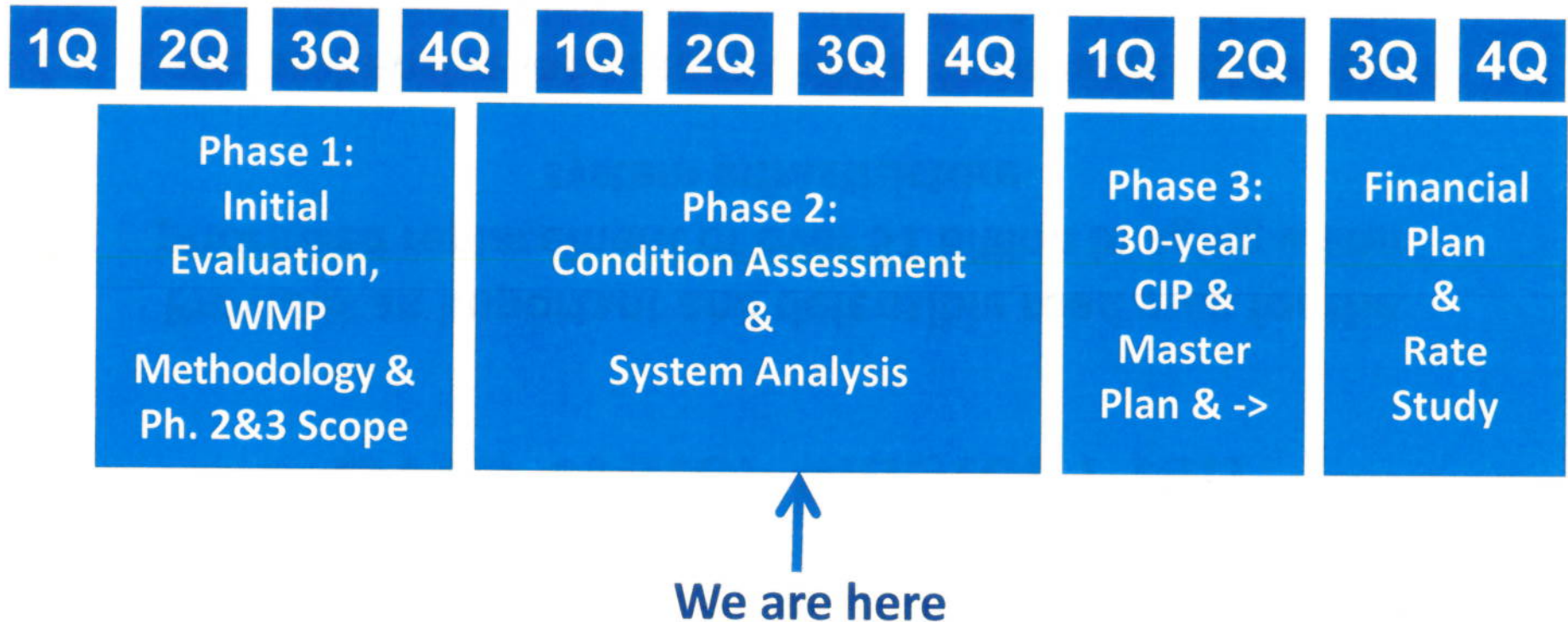
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Board of Water Supply
City and County of Honolulu

Water Master Plan Schedule





Water Master Plan Tasks

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





What are Condition Assessments?

- Condition assessments are the core of a well-run asset management program
- Determines the state of water system assets
- Enables the collection of standardized data
- Optimizes maintenance strategies
- Requires an understanding of:
 - Intended function of the asset
 - Failure modes
 - Required reliability
 - Current performance





Why do Condition Assessments?

- To extend asset life
 - Replacement is expensive and CA can identify actions to extend useful life
- To reduce incidence of failure
 - Unexpected failures have adverse consequences beyond replacement costs
- To save money
 - Proactive CA can cost effectively identify the worse pipes to replace first & good pipes that can be replaced later
 - Targeted maintenance costs less than multiple reactive repairs
- To protect public health and safety
 - Can reduce contamination due to sudden failures and identify potential sources of contamination before they happen





When to do Condition Assessments?

- When risks of failure are very high
- Condition Assessments can be expensive but necessary
- How much to spend on CA's depends on:
 - Criticality
 - Condition
 - Value
 - Risk of Failure
- For High Value-High Risk assets, a proactive approach is warranted



WATER FOR LIFE

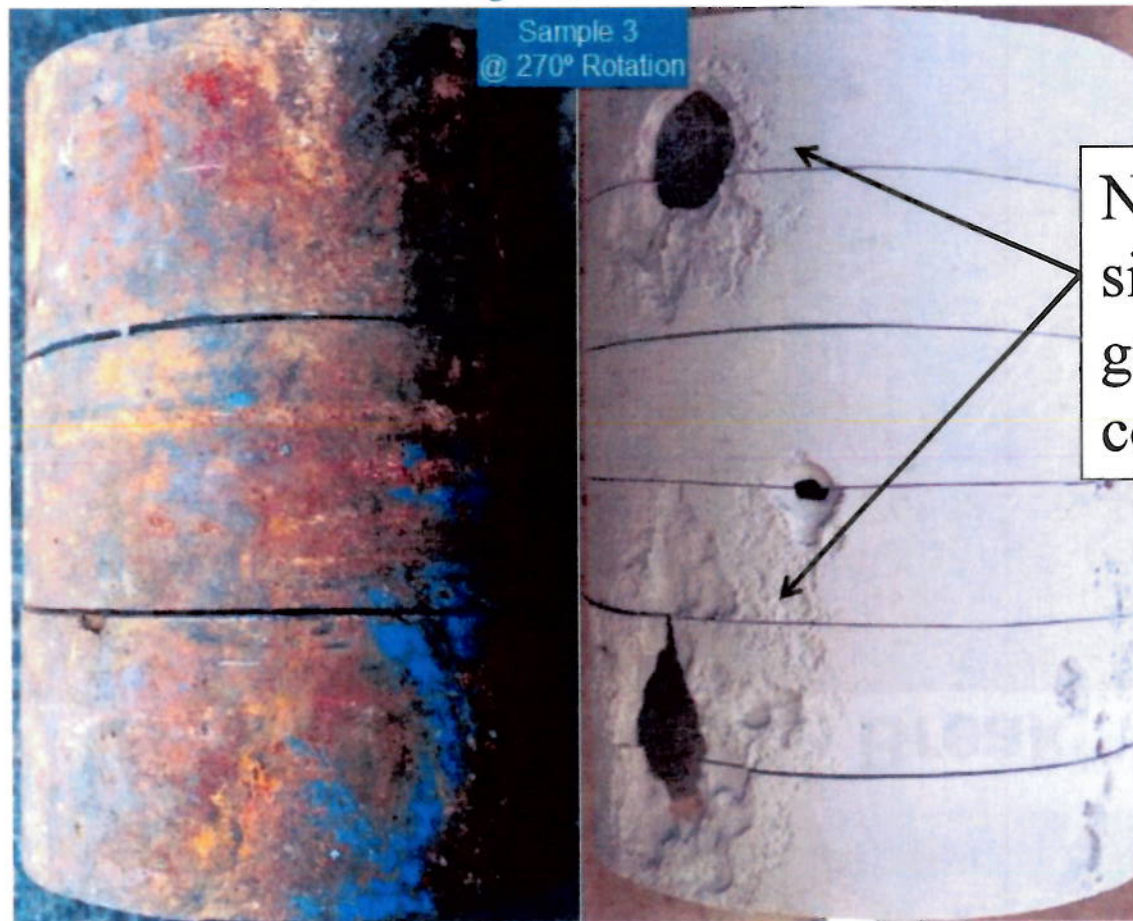
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Board of Water Supply
City and County of Honolulu

12" Hahione Main Break

May 1, 2014



Before Sandblasting

After Sandblasting



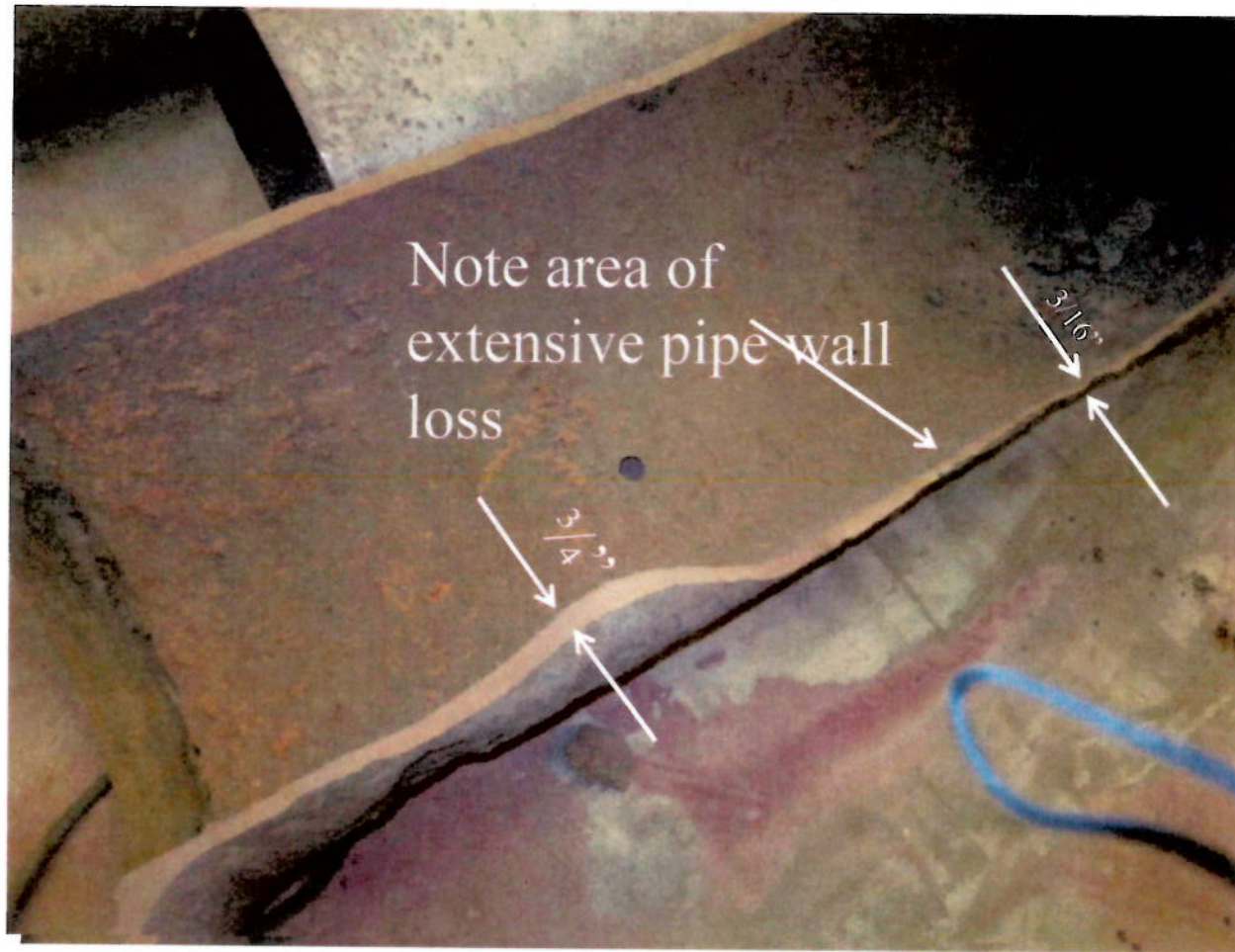
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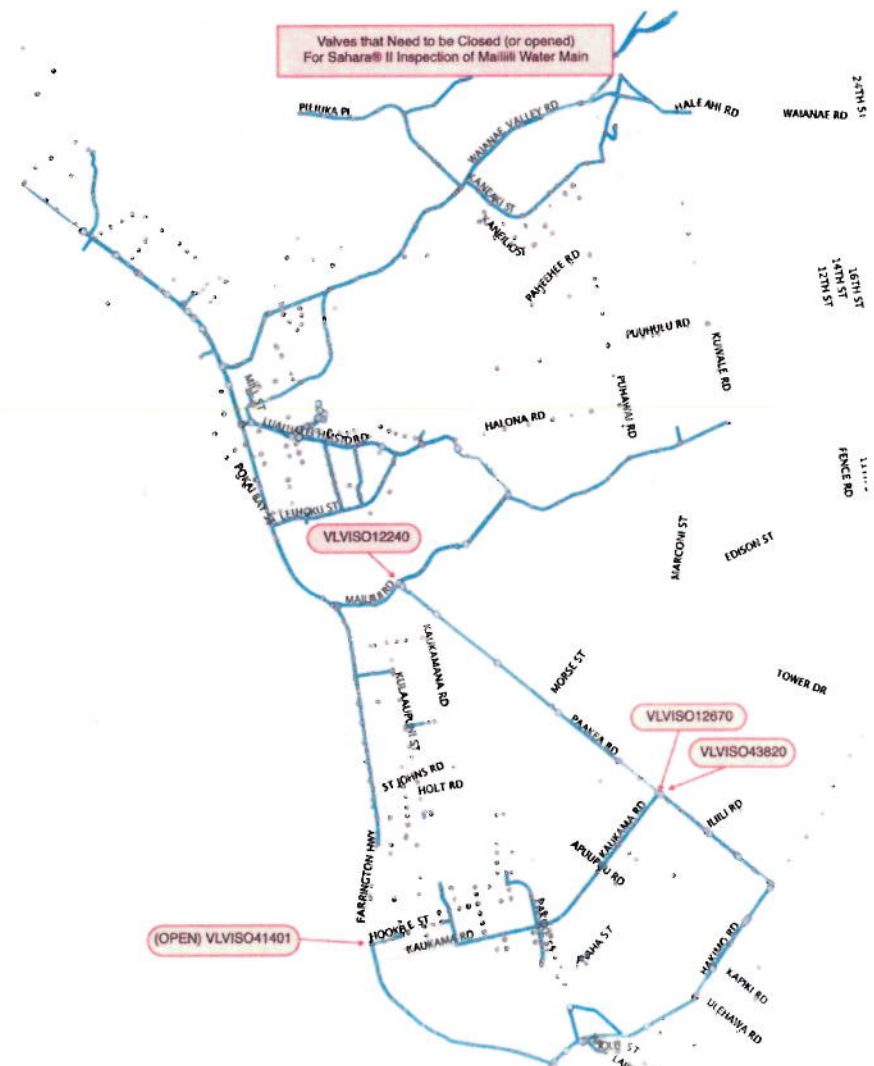
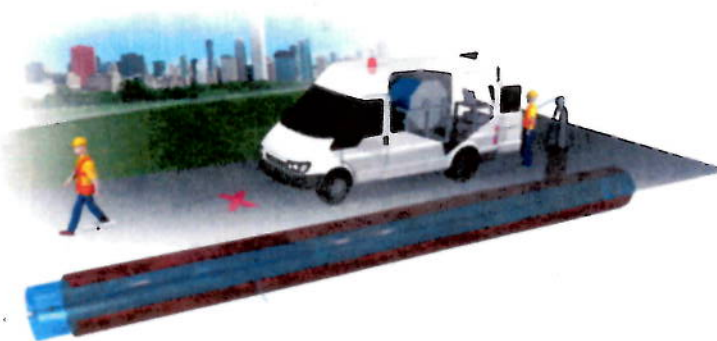
Board of Water Supply
City and County of Honolulu

20" Dole Street Main Break*



*This pipe is on display in the Beretania parking lot.

- **Piloting Sahara 2 internal pipeline CA tool for video, leak detection, acoustic and electro-magnetic pipe wall assessment**
- **Mailiili W20"**
 - **Pin-point known leak under drainage culvert**
 - **Provide pipe condition info**



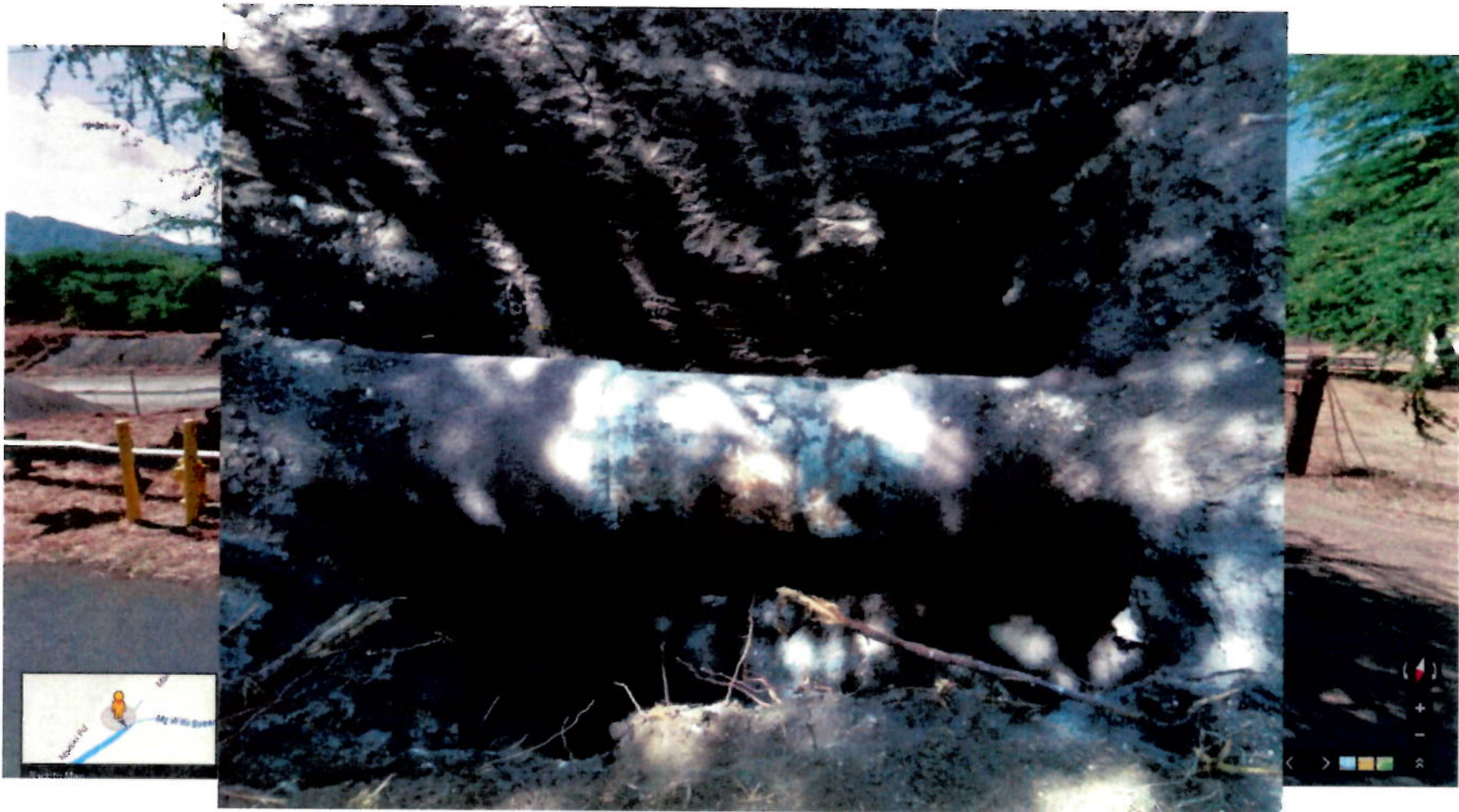
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Board of Water Supply
City and County of Honolulu

Mailiili W20" Tap Excavation



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City and County of Honolulu

Palolo W16" Sahara 2 Pilot





Reservoir Condition Assessment

- 120 of 172 reservoirs have been externally surveyed to date
- 30 reservoirs over 40 years old will be internally inspected
 - Remote Operated Vehicles Water Quality Assurance Procedures Approved
 - Anticipate start in August 2014
- 16 reservoirs will undergo structural evaluation



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Board of Water Supply
City and County of Honolulu

Waimanalo 230 Reservoir Inspection





Pump Condition Assessment

- Completed assessments of 94 source pumps and 90 booster pumps stations
- Currently developing a findings report, O&M guidance manual and prioritized CIP projects





Hydraulic Modeling

- Hydraulic Models will evaluate water system capacity ensuring adequate flows and pressures
- 4 of 13 models constructed & validation is planned





Financial Plan and Rate Study

- The Financial Plan and Rate Study will ensure sufficient funding of the CIP

- Revenue requirements
- User characteristics
- Financial Plan
- Cost of Service Study
- Water rates and structure
- Impact fees
- Key messaging for outreach
- Reviewing Work Plan Scope

Billing Charge

There is a billing charge each time a bill is rendered effective as follows:

January 1, 2012	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015
\$6.40	\$7.02	\$7.70	\$8.44	\$9.26

Quantity Charge

In addition to the billing charge, there is a charge for all water drawn for each 1,000 gallons effective as follows:

Single Family Residential (Monthly Per Unit)	January 1, 2012	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015
Block 1 (Gallons) First 13,000 or any part thereof	\$3.06	\$3.35	\$3.68	\$4.03	\$4.42
Block 2 (Gallons) 13,001 - 30,000 or any part thereof	\$3.68	\$4.04	\$4.43	\$4.86	\$5.33
Block 3 (Gallons) Over 30,000	\$5.49	\$6.02	\$6.61	\$7.24	\$7.94
Multi-Family Residential (Monthly Per Unit)	January 1, 2012	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015
Block 1 (Gallons) First 9,000 or any part thereof	\$3.06	\$3.35	\$3.68	\$4.03	\$4.42
Block 2 (Gallons) 9,001 - 22,000 or any part thereof	\$3.68	\$4.04	\$4.43	\$4.86	\$5.33
Block 3 (Gallons) Over 22,000	\$5.49	\$6.02	\$6.61	\$7.24	\$7.94
Non-Residential	January 1, 2012	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015
All Usage	\$3.43	\$3.76	\$4.13	\$4.53	\$4.96
Agricultural ** (Monthly Per Account)	January 1, 2012	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015
Block 1 (Gallons) First 13,000 or any part thereof	\$3.06	\$3.35	\$3.68	\$4.03	\$4.42
Block 2 (Gallons) Over 13,000	\$1.31	\$1.43	\$1.57	\$1.72	\$1.89
Non-Potable **	January 1, 2012	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015
All Usage	\$1.71	\$1.88	\$2.06	\$2.26	\$2.47



WMP Communications Plan

- The Communications Plan will develop key messaging & outreach to inform our internal and external customers about the Water Master Plan and the overarching message about the Value of Water
- Work Plan Scope under review
 - Align with BWS strategic plan
 - Develop messages on Value of Water, Water Master Plan, main breaks, condition assessments, fact sheet & FAQs
 - Develop Stakeholder Engagement & support
 - Assist BWS in Proactive Messaging
 - Develop Communications Plan Metrics
 - Provide Communications updates to adjust to changing conditions and customer feedback



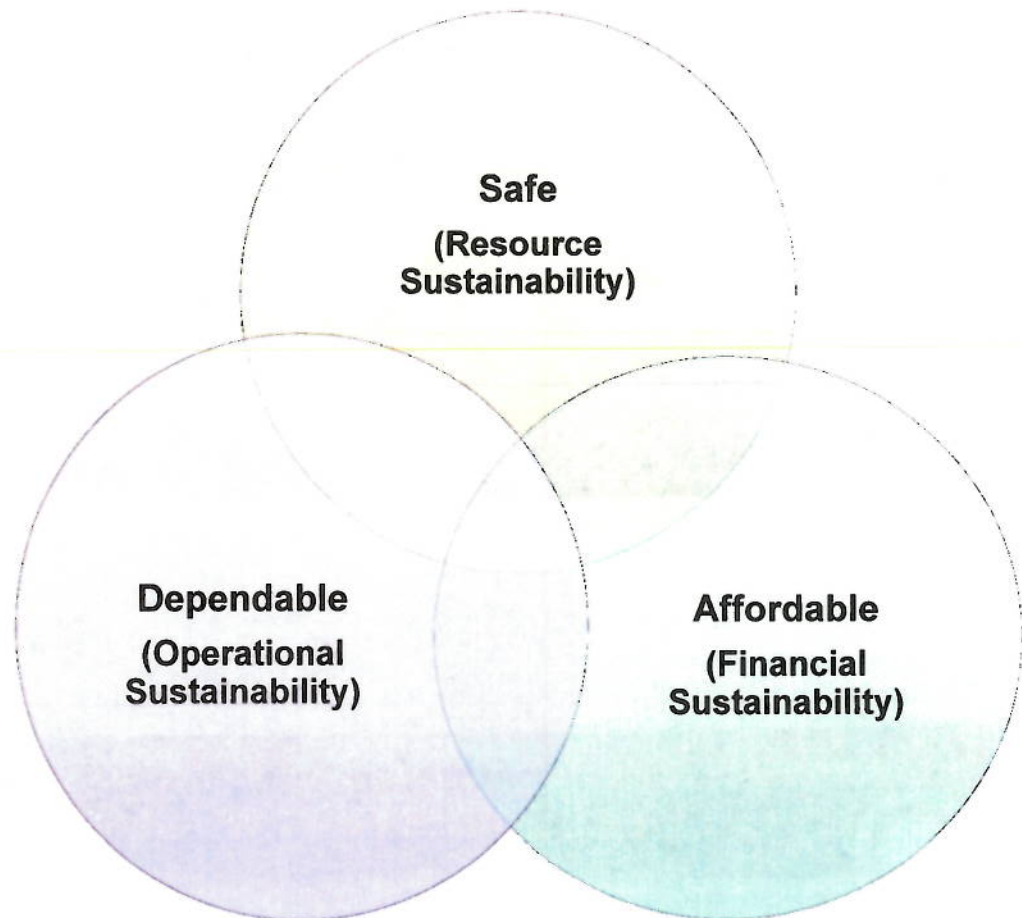
Capital Improvement Planning - a Continuous Process





Value of Water Framework

- BWS Communications goal is to build awareness of the **value of water** and the **role of BWS** in **providing this value**
- Everything BWS does adds to the value of water
 - Safe supply
 - Dependable service
 - Affordable price



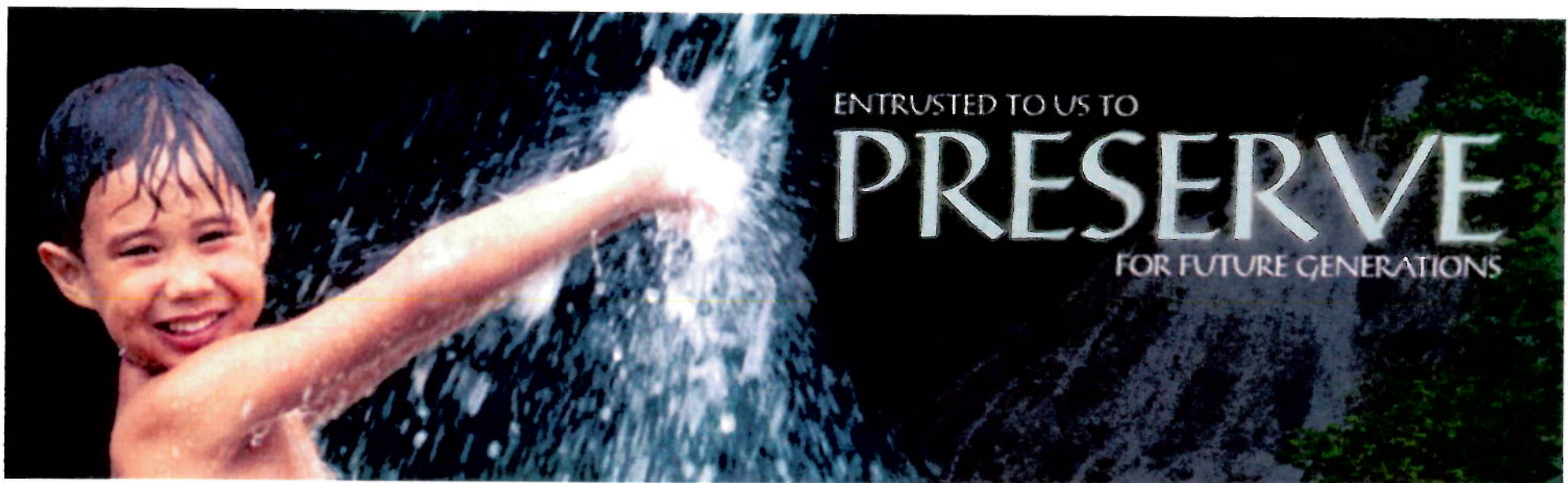


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Board of Water Supply
City and County of Honolulu



ITEM FOR INFORMATION NO. 4

"July 28, 2014

GROUNDWATER
LEVELS

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

Chair and Members:

Subject: Status Update of Groundwater Levels at All Index
Stations

There is one aquifer index well within low groundwater status for the production week that ended on July 5, 2014. Kaimuki is under an alert status. The weekly production average for the period was 140.88 million gallons per day.

The Board of Water Supply rainfall index for the month of June 2014 was 108 percent of normal, with a 5-month moving average of 112 percent. The Hawaii Drought Monitor indicates no abnormally dry conditions for Oahu as of July 8, 2014. The National Weather Service is forecasting above normal rainfall through November 2014, then below normal rainfall through March 2015. Most index monitor wells are exhibiting water level declines, as anticipated through the summer season (the Makaha index well trend reflects Makaha Shaft, which has not been in service for several months due to maintenance work).

Respectfully submitted,

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

Attachments"

The foregoing was for information only.

DISCUSSION:

Mr. Usagawa explained that winter would be below normal, perhaps all the way through March of next year, however, the rains occurring this summer have been good in terms of recharging the aquifers. Ms. Cypher commented that it is a reversed season, a rainy season now and a dry season in the winter. She suggested that BWS promote conservation for the fall going into the winter months. Mr. Usagawa stated that they will check what the head levels are in October, and if they are abnormally low, then they will recommend water conservation through the winter.

PUMPAGE, HEAD, AND RAINFALL REPORT

Week of 6/29/14 to 7/05/14

STATION	MGD	HEAD	STATION	MGD	HEAD	STATION	MGD	HEAD		MGD	HEAD
METRO			WINDWARD			EWA-WAIAANAE (CONT)			PH (CONT)		
KULIOUOU	0.00					MAKAHA IV	0.00		PEARL CITY II	1.16	
WAILUPE	0.00		WAIMANALO II	0.34		MAKAHA V	0.00		PEARL CITY III	0.35	
WAIALAE-IKI	0.00		WAIMANALO III	0.44		MAKAHA VI	0.56		WAI AU	0.85	
AINA KOA	0.48		KUOU I	0.58		MAKAHA SHAFT	0.00	14.42	NEWTOWN	2.03	
AINA KOA II	0.33		KUOU II	0.10		KAMAILE	0.71		KAONOH I	0.83	
WAIALAE SHAFT	0.00		KUOU III	0.73		WAIAANAE I	0.13		WAIMALU I	0.00	
MANOA II	0.00		LULUKU	0.83		WAIAANAE II	0.11		AIEA	0.00	
PALOLO	1.06		HAIKU	0.36		WAIAANAE III	0.27		AIEA GULCH 497	0.48	
KAIMUKI HIGH	2.99	22.21	IOLEKAA	0.24		MAKAKILO	0.59		AIEA GULCH 550	0.23	
KAIMUKI LOW	1.52		KAHALUU	0.49		HONOULIULI I	2.14		HALAWA 277	0.94	
WILDER	7.89		WAIHEE	0.00		HONOULIULI II	6.65		HALAWA 550	0.00	
BERETANIA HIGH	3.83	22.27	KAHANA	0.70		SUBTOTAL:	13.29		KAHUMANU MTR(-)	0.00	
BERETANIA LOW	3.10		PUNALUU I	0.00	17.54	IMPORT FROM PH			KAAMILO FLO MTR (-)	0.00	
KALIH I HIGH	2.50	21.97	PUNALUU II	2.02		KAPOLEI LINE BSTR	15.12		KUNIA I	5.02	18.57
KALIH I LOW	1.51		PUNALUU III	1.11		HONOULIULI LB FLOW	4.13		KUNIA II	1.64	
KAPALAMA	0.46		KALUANUI	1.30		EWA BEACH FLOW	1.07		KUNIA III	1.38	
KALIH I SHAFT	8.46		MAAKUA	0.27		HONOULIULI I (-)	-2.14		HOAEAE	6.19	
MOANALUA	0.46	19.00	HAUULA	0.00		HONOULIULI II (-)	-6.65		EWA SHAFT	0.00	
SUBTOTAL:	34.59					SUBTOTAL:	11.53		WAIPAHU INTCON. (-)	0.00	
			KAHUKU	0.38					EWA-WAIAANAE (-)	-11.53	
IMPORT FROM PH			OPANA	0.31		PEARL HARBOR			PH LOCAL USE:	28.63	
HALAWA SHAFT	7.51	16.53	WAI ALEE I	0.50		WAIHAWA	1.96		TOTAL SUBURBAN:	66.78	
KAAMILO	0.00		WAI ALEE II	0.55		WAIHAWA II	1.76				
KALAU AO	9.07	17.01	SUNSET BEACH	0.00		MILILANI I	2.17		KALAU AO SPRINGS	1.49	
PUNANANI	11.57		SUBTOTAL:	11.25		MILILANI II	0.00		BARBERS POINT (NP)	3.67	
KAONOH I II	0.00					MILILANI III	0.82		GLOVER TUNNEL (NP)	0.49	
WAIMALU II	0.00	14.97	WIND. EXPORT	0.14		MILILANI IV	2.28				
KAHUMANU	0.87					WAIPIO HTS.	0.27		HEAD CONDITION		
HECO WAI AU	2.75		HALEIWA-WAI ALUA			WAIPIO HTS. I	0.06		CAUTION	ALERT	CRITICAL
MANANA	0.12		HALEIWA	0.00		WAIPIO HTS. II	0.27			Kaimuki	
KAHUMANU FLOW MT	0.00		WAI ALUA	2.23		WAIPIO HTS. III	1.13				
KAAMILO FLOW MTR	0.00		SUBTOTAL:	2.23		WAI PAHU	3.53	18.25			
TOTAL IMP/EXP WAI P. INT:	0.00					WAI PAHU II	0.09				
IMPORT FRM WIND:	0.14		EWA-WAIAANAE			WAI PAHU III	1.45				
SUBTOTAL:	32.03		MAKAHA I	0.91		WAI PAHU IV	3.03				
			MAKAHA II	0.53		PEARL CITY SHAFT	0.00	14.68			
TOTAL METRO:	66.62		MAKAHA III	0.69		PEARL CITY I	0.23				

CWRM PERMITTED USE FOR BWS POTABLE SOURCES						PUMPAGE	2014	2013	GRAVITY	2014	2013
	A	B	C	D	E	SUBURB.	66.78	59.62	SUBURB.	7.06	7.55
WATER DISTRICTS	PERMITTED USE	2014	DIFF. B-A	YEAR/ DATE	DIFF. D-A	METRO	66.62	69.89	METRO	0.42	0.42
						TOTAL:	133.40	129.51	TOTAL:	7.48	7.97
HONOLULU	45.27	35.01	-10.26						Manoa	0.17	
WINDWARD	25.21	15.01	-10.20			NUUANU #5			Palolo	0.25	
NORTH SHORE	4.08	3.97	-0.11			(rainfall)	1.01"	1.19"	Waim. I&II	0.25	
WAIHAWA	4.27	3.71	-0.56						Waim. III&IV	0.19	
WAIAANAE	4.34	4.77	0.43						Waihee incl.	0.95	
EWA-KUNIA	15.88	9.38	-6.50						Waihee tun.	1.54	
PEARL HARBOR	92.66	68.34	-24.32						Luluku	0.18	
TOTAL:	191.71	140.19	-51.51						Haiku	0.02	
									Kahaluu	2.37	
									Waia. C&C	1.40	
									Waia plant.	0.16	

DROUGHT STATUS REPORT
DRAFT IN MGD

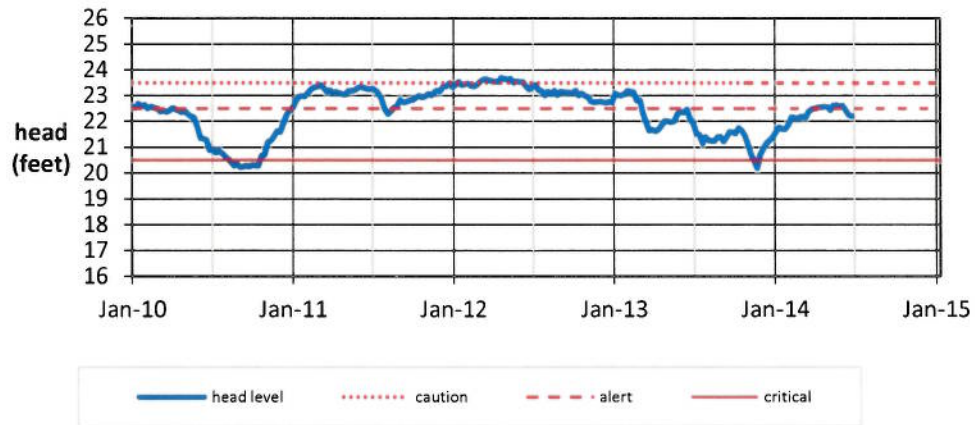
WATER USE DISTRICT	AUTHORIZED USE	2013	6/15-6/21 2014	2013	6/22-6/28 2014	2013	6/29-7/05 2014		
HONOLULU	45.27	38.38	35.30	39.89	35.66	38.13	35.15		
WINDWARD	25.21	14.58	14.79	13.34	13.67	13.25	14.87		
NORTH SHORE	4.08	4.08	3.87	3.85	3.90	4.06	3.97		
WAHIAWA	4.27	2.77	3.55	2.68	3.63	2.85	3.71		
EWA-WAIANAE	20.22	20.20	24.03	20.39	26.10	20.37	26.37		
PEARL HARBOR	92.66	59.62	59.97	56.45	54.68	58.82	56.81		
TOTAL	191.71	139.62	141.51	136.60	137.64	137.48	140.88		

Accounts for in-district pumpage and transfers

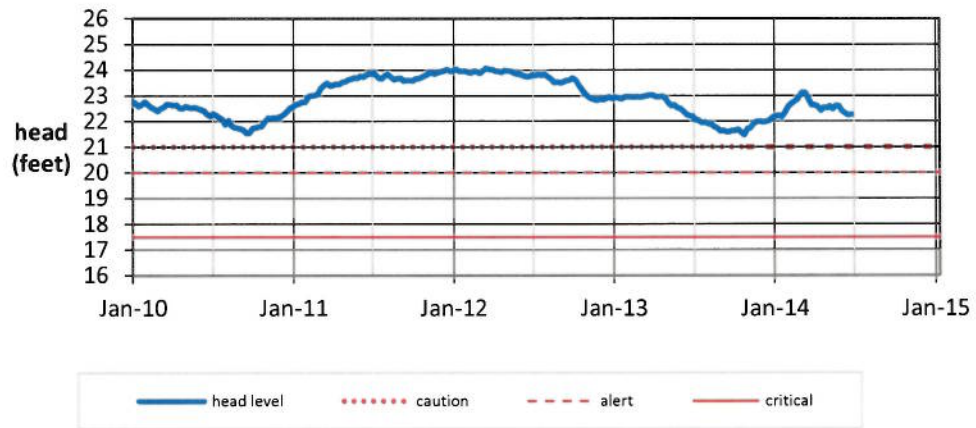
HEAD IN FEET

		2013	6/15-6/21 2014	2013	6/22-6/28 2014	2013	6/29-7/05 2014		
HONOLULU									
KAIMUKI		22.46	22.43	22.09	22.27	21.92	22.21		
BERETANIA		22.27	22.31	22.22	22.24	22.19	22.27		
KALIHI		21.95	21.98	21.87	21.97	21.82	21.97		
MOANALUA		18.81	19.01	18.86	19.00	18.85	19.00		
PEARL HARBOR									
HALAWA		16.43	16.56	16.49	16.54	16.51	16.53		
KALAUAO		16.90	16.95	16.91	16.97	16.92	17.01		
PEARL CITY		14.64	14.68	14.62	14.70	14.61	14.68		
WAIPAHU		18.15	18.30	18.14	18.29	18.15	18.25		
KUNIA		18.48	18.58	18.47	18.56	18.48	18.57		
EWA-WAIANAE									
MAKAHA		8.57	14.16	7.87	14.36	8.22	14.42		
WINDWARD									
PUNALUU		15.76	18.10	15.68	17.91	16.37	17.54		
KALUANUI		15.73	18.22	15.68	18.05	15.97	17.48		
NORTH SHORE									
WAIALUA		11.20	11.15	11.19	11.19	11.25	11.15		

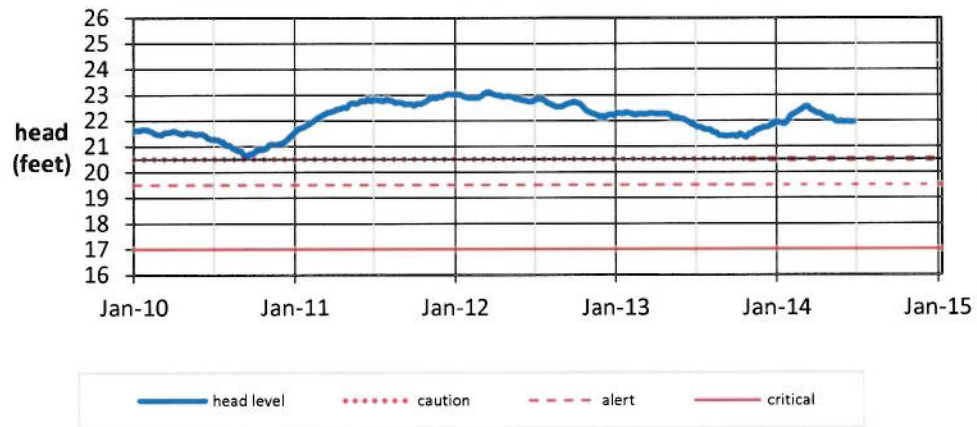
Kaimuki



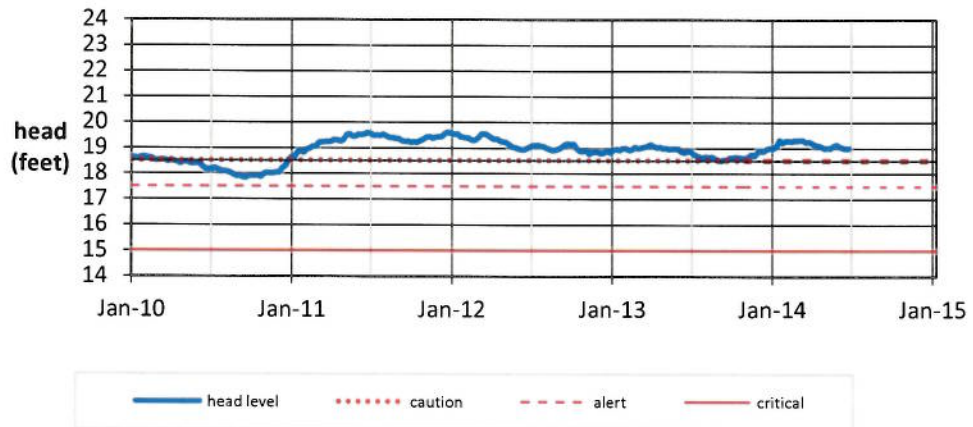
Beretania



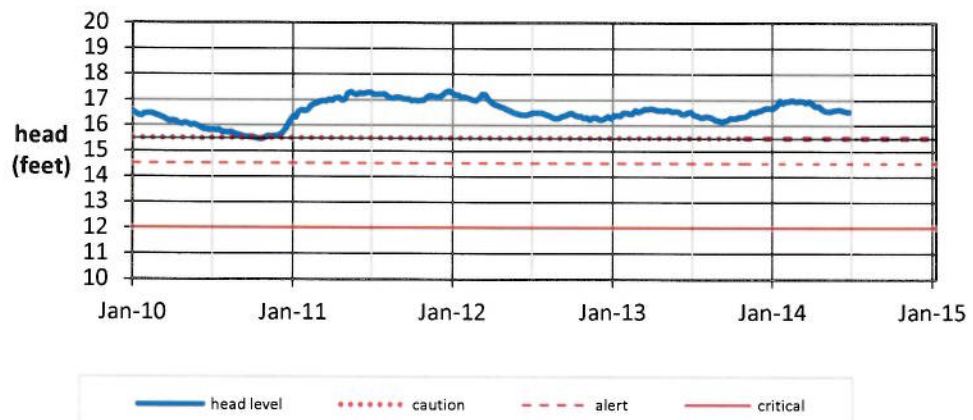
Kalihi



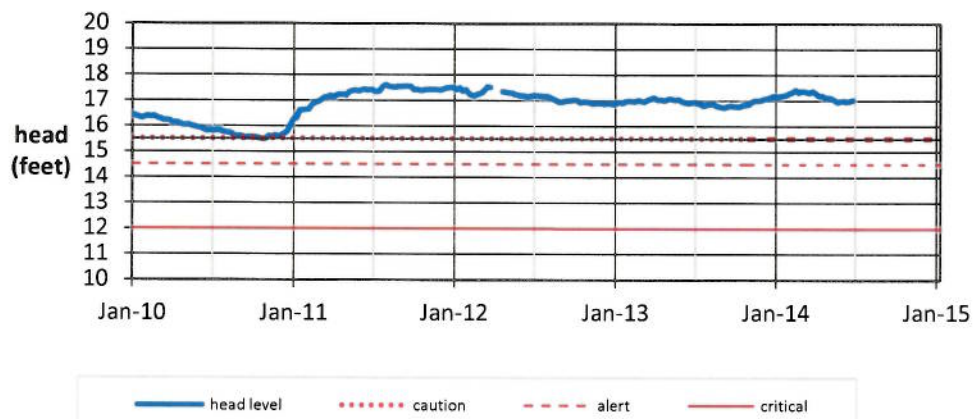
Moanalua



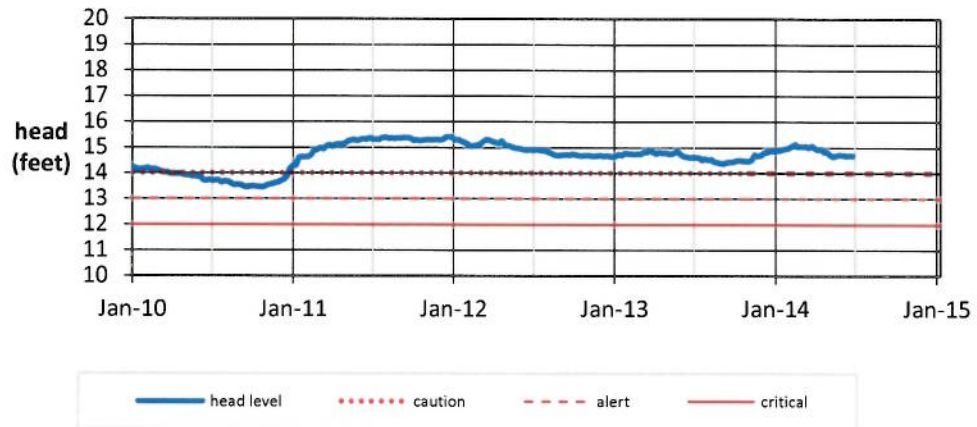
Halawa



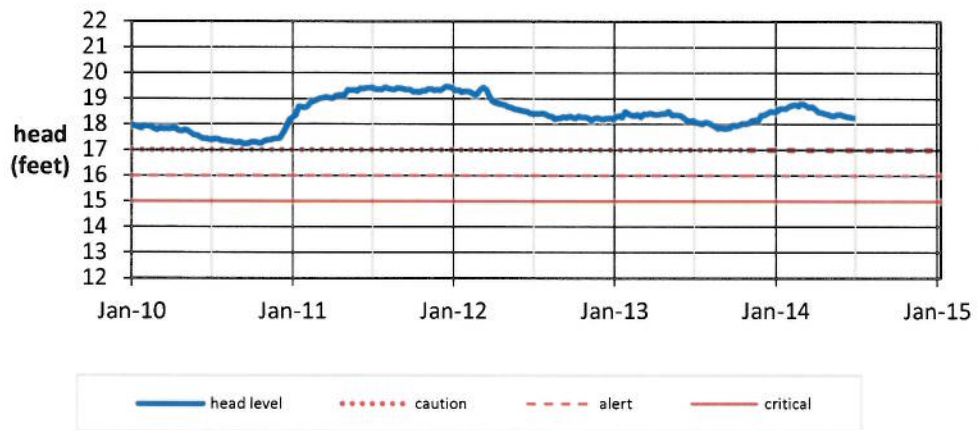
Kalauao



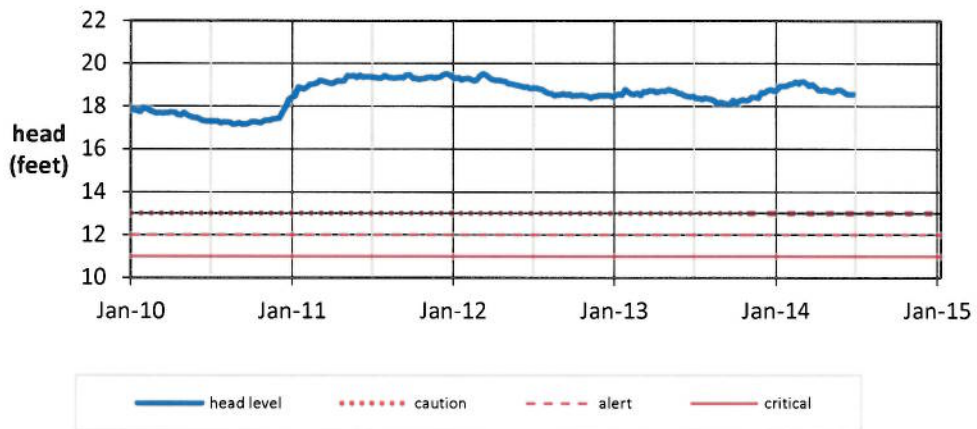
Pearl City



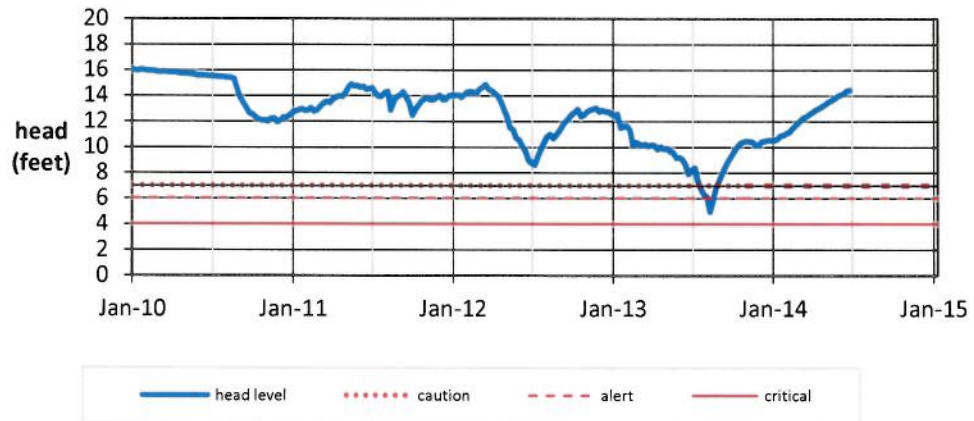
Waipahu



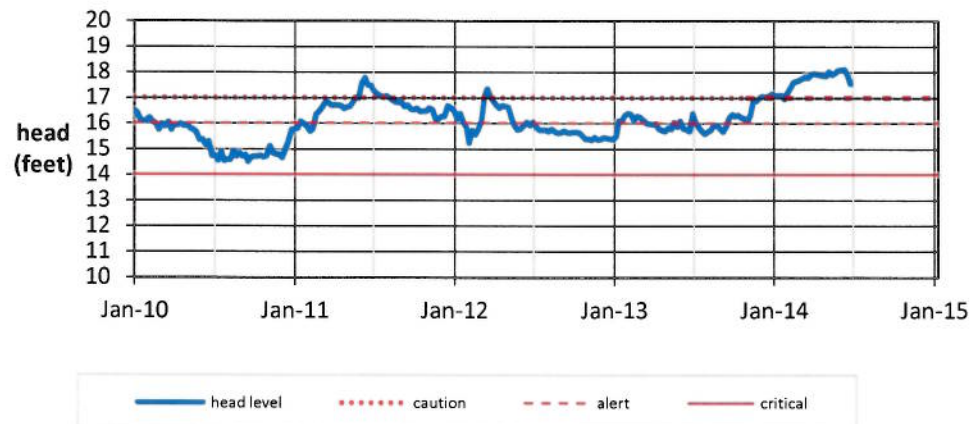
Hoeae-Kunia



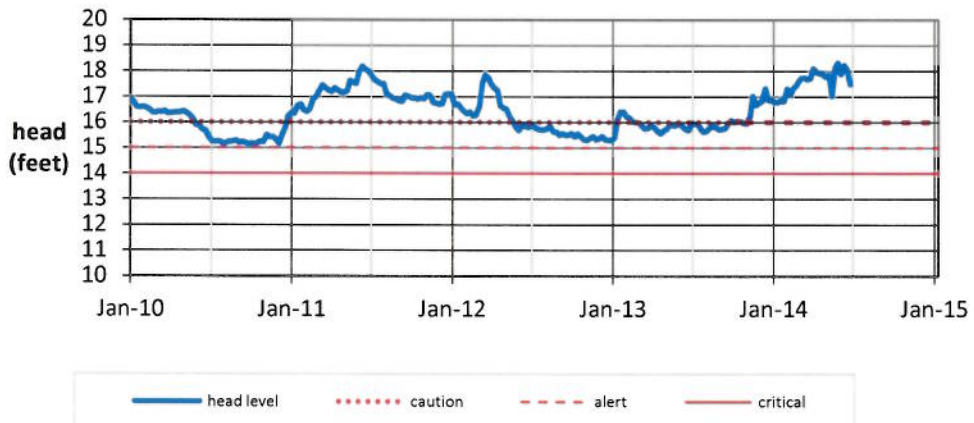
Makaha



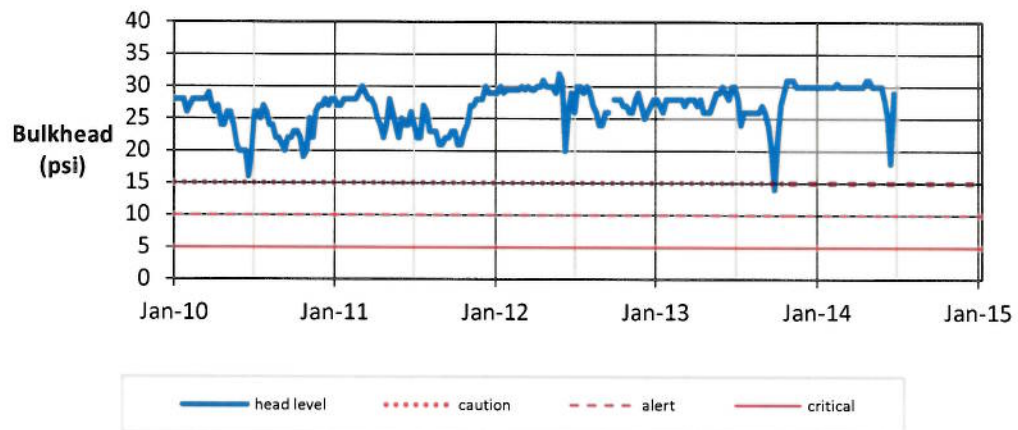
Punaluu



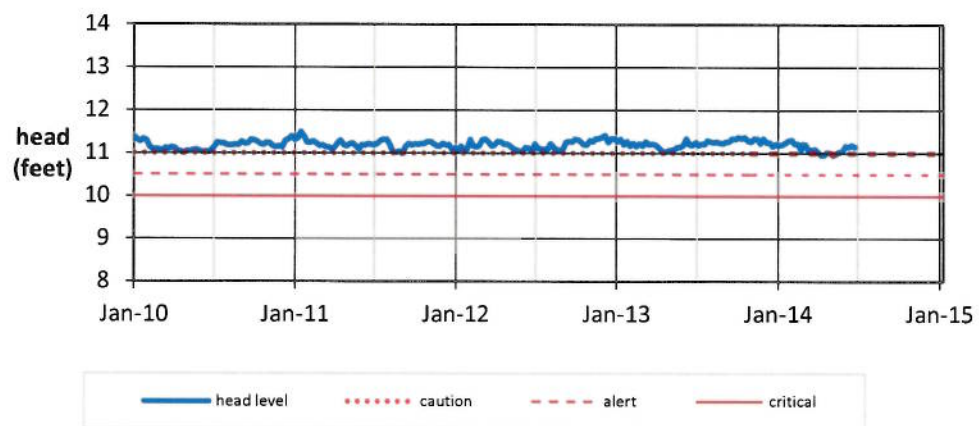
Kaluanui

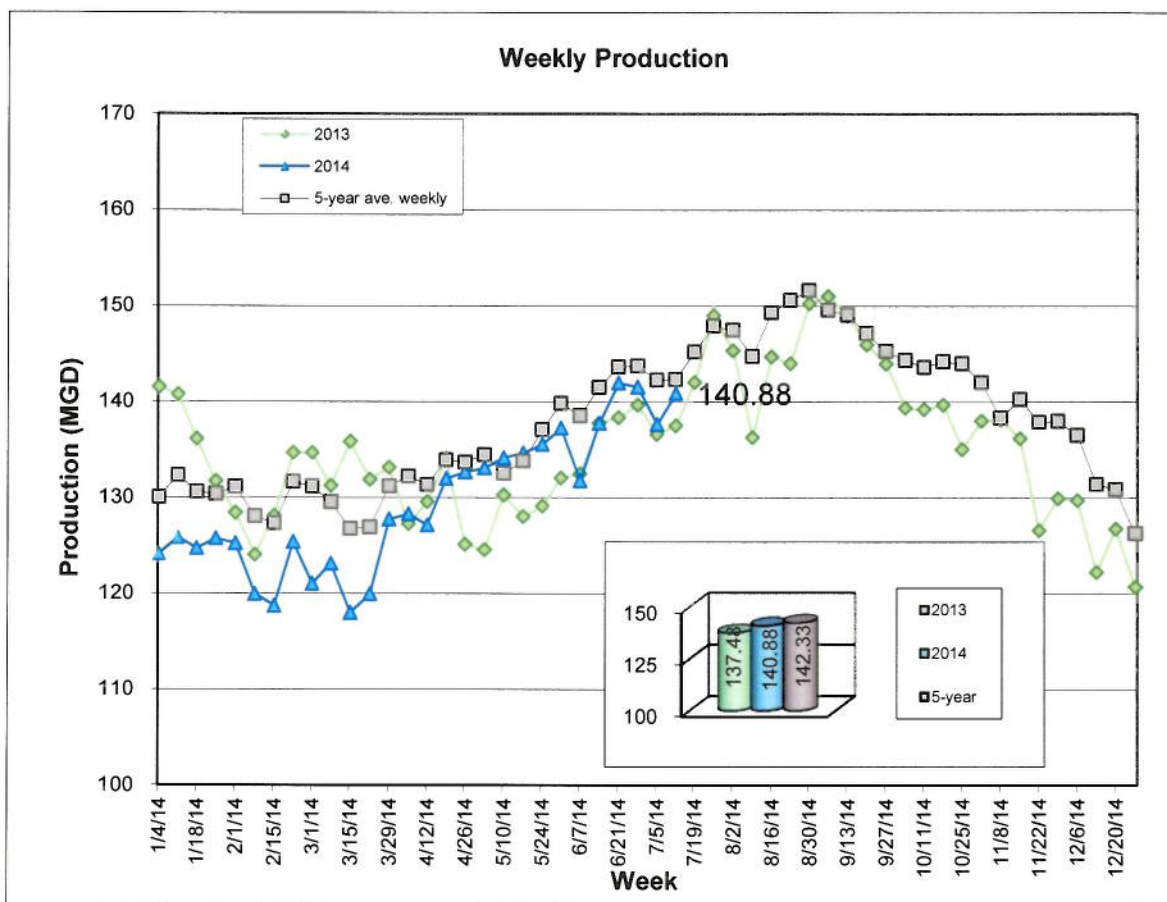
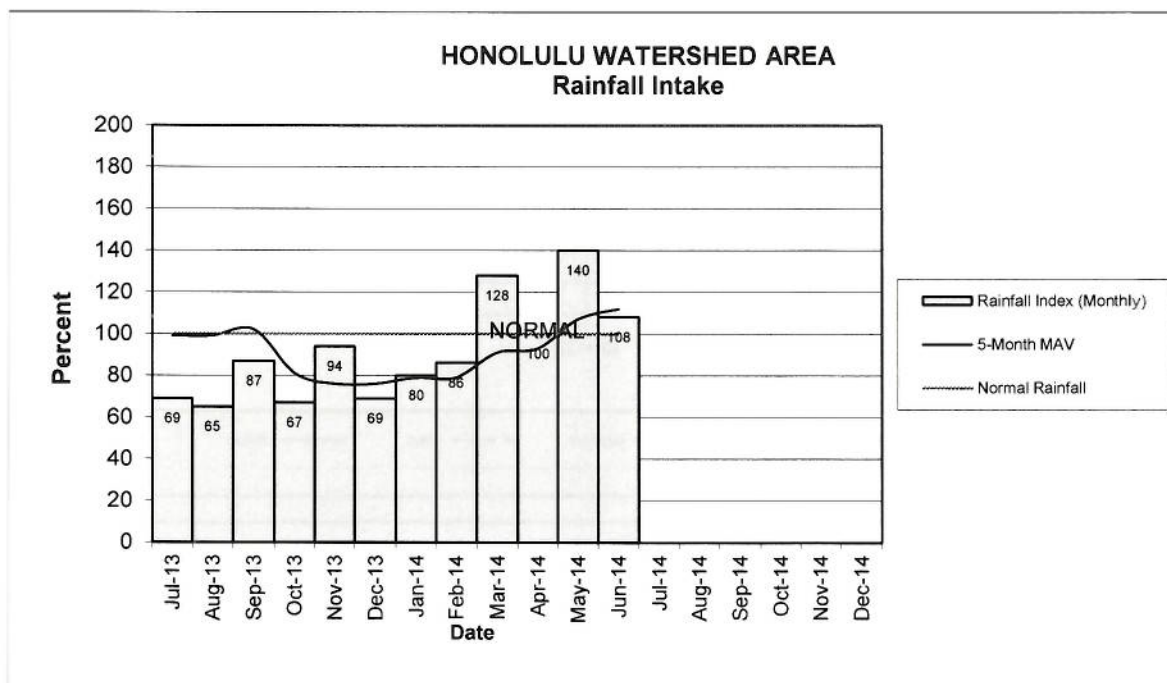


Waihee Tunnel



Waialua





ITEM FOR INFORMATION NO. 5

"July 28, 2014

BOND
REFUNDING
PROPOSAL

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

Chair and Members:

Subject: Bond Refunding Proposal

We intend to pursue refunding some of our previously issued Water System Revenue Bonds by refinancing approximately \$24 million of 2006A Revenue Bonds with State Revolving Fund (SRF) funds made available from the State Department of Health's Safe Drinking Water Program and the federal Environmental Protection Agency.

We also plan to refinance up to \$81 million of 2006A Revenue Bonds with new revenue bonds at a lower interest rate. At current market conditions, there would be a combined net present value savings of up to \$18.4 million over the remaining term of the refunded bond series, averaging over \$839,000 in debt service savings per year. These transactions would be structured to avoid adding to our total debt and operating expenses and would not extend the term for the refunded bonds. We expect the transactions to close during November 2014.

At the August 25, 2014 Board Meeting, we will provide an update on our progress.

Respectfully submitted,

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

The foregoing was for information only.

DISCUSSION: There were no comments or discussion.

ITEM FOR INFORMATION NO. 6

"July 28, 2014

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 June 30, 2014

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
- 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:

Waterworks Controller Joe Cooper gave the presentation on the financial update.

Ms. McMurdo questioned why revenues are down when Mr. Usagawa stated that demand was up. Mr. Usagawa replied that the overall trend shows that demand has been decreasing. Ms. McMurdo asked if revenues will be where it should be by the end of the year. Mr. Cooper replied that the Department's conservation efforts have been keeping demand down. Mr. Lau added that demand is also weather driven and this year has been wetter than prior years, causing people to irrigate less. Mr. Cooper stated that it was only about a three percent decrease in revenues, so it wasn't significantly lower.

Budget vs. Actual
Revenue and Expense Totals
As of June 30, 2014

	YTD Actuals	YTD Budget	Favorable/ (Unfavorable) Variance
Revenues	197,014,000	203,518,000	(6,504,000)
Operating Expenses	(141,502,000)	(169,785,000)	28,283,000
Net Revenues (expenditures)	<u>55,512,000</u>	<u>33,733,000</u>	<u>21,779,000</u>

Board Of Water Supply
Statement of Revenues, Expenses And Change In Net Assets
As of June 30, 2014

Current Month	%	Last Year	%	Description	Year to Date	%	Last Year to Date	%	%
Actual	Revenue	Actual	Revenue		Actual	Revenue	Actual	Revenue	Change
				REVENUE					
17,347,050.53	100.00	12,218,554.57	100.00	OPERATING REVENUE	195,949,226.49	100.00	180,505,337.38	100.00	8.56
17,347,050.53	100.00	12,218,554.57	100.00	REVENUE	195,949,226.49	100.00	180,505,337.38	100.00	8.56
				OPERATING EXPENSES					
2,571,453.48-	14.82	3,058,211.46-	25.03	LABOR COSTS	30,729,051.02-	15.68	27,733,872.64-	15.36	10.80
1,080,133.75-	6.23	1,506,025.34-	12.33	SERVICES	12,123,001.50-	6.19	13,884,362.23-	7.69	12.69-
33,595.57	.19	354,090.31	2.90	SUPPLIES	4,704,943.98-	2.40	2,450,770.38-	1.36	91.98
14,734.84-	.08	1,675.22-	.01	EDUCATION & TRAINING	57,399.09-	.03	69,658.97-	.04	17.60-
43,333.68-	.25	5,232,973.47-	42.83	UTILITIES	24,742,186.51-	12.63	32,478,621.69-	17.99	23.82-
237,656.67-	1.37	206,697.22-	1.69	REPAIR AND MAINTENANCE	2,708,913.67-	1.38	3,703,225.41-	2.05	26.85-
1,900,521.65-	10.96	1,093,557.87-	8.95	MISC	17,102,920.84-	8.73	16,444,884.12-	9.11	4.00
587,091.79-	3.38	2,600,924.68-	21.29	RETIREMENT SYSTEM CONTRIBUTIO	24,944,036.12-	12.73	17,416,460.25-	9.65	43.22
41,294.67-	.24	184,708.79-	1.51	MISC EMPLOYEES' BENEFITS	127,417.93	.07	233,177.29-	.13	154.64-
6,442,624.96-	37.14	13,530,683.74-	110.74	OPERATING EXPENSES	116,985,034.80-	59.70	114,415,032.98-	63.39	2.25
979,074.12-	5.64	2,606,424.74-	21.33	NON OPERATING REVENUE AND EXPE	8,633,114.62-	4.41	10,667,795.70-	5.91	19.07-
1,287,325.35	7.42	3,948,446.24	32.32	CONTRIBUTION IN AID	12,377,273.60	6.32	23,527,156.45	13.03	47.39-
3,641,979.98-	20.99	7,437,527.64-	60.87	OTHER EXPENSES	49,195,266.64-	25.11	59,076,425.61-	32.73	16.73-
7,570,696.82	43.64	7,407,635.31-	60.63	Change In Net Assets	33,513,084.03	17.10	19,873,239.54	11.01	68.63

Board Of Water Supply
Balance Sheet
As of June 30, 2014

Description	***** Amounts *****			***** Change *****	
	Current	Last Month End	Last Year End	This Month	This Year
ASSETS					
CURRENT ASSETS	37,488,150.94	35,988,997.72	39,231,152.60	3,628,424.39	2,341,191.45
RESTRICTED ASSETS	15,871,158.29	1,927,116.63	15,820,173.22	807,494.06	50,985.07
INVESTMENTS	220,305,587.35	232,702,326.11	194,327,978.98	2,016,533.95	25,977,608.37
OTHER ASSETS	7,796,667.71	4,904,859.42	8,861,200.38	-1,192,424.81	-1,064,532.67
PROPERTY / PLANT	1,129,878,746.12	1,129,951,477.62	1,138,464,175.73	386,645.85	-8,585,429.61
TOTAL ASSETS	<u>1,411,340,310.41</u>	<u>1,405,474,777.50</u>	<u>1,396,704,680.91</u>	<u>5,646,673.44</u>	<u>18,719,822.61</u>
LIABILITIES					
CURRENT LIABILITIES	18,993,765.35	18,949,989.04	29,685,255.92	43,776.31	-10,691,490.57
OTHER LIABILITIES	26,424,717.83	27,534,949.79	28,874,707.12	-1,110,231.96	-2,449,989.29
BONDS PAYABLE, NONCURRENT	283,615,045.58	284,253,378.84	289,351,020.25	-638,333.26	-5,735,974.67
LIABILITIES	<u>329,033,528.76</u>	<u>330,738,317.67</u>	<u>347,910,983.29</u>	<u>-1,704,788.91</u>	<u>-18,877,454.53</u>
NET ASSETS					
RETAINED EARNINGS	290,334,780.85	379,683,907.32	453,551,529.49	-89,349,126.47	-163,216,748.64
FUND BALANCE	594,633,831.66	594,633,831.66	594,633,831.66		
RESERVE FOR ENCUMBRANCES	163,825,085.11	74,475,958.64		89,349,126.47	163,825,085.11
CURRENT YEAR CHANGES TO FU	33,513,084.03	25,942,762.21	608,336.47	7,570,321.82	32,904,747.56
NET ASSETS	<u>1,082,306,781.65</u>	<u>1,074,736,459.83</u>	<u>1,048,793,697.62</u>	<u>7,570,321.82</u>	<u>33,513,084.03</u>
TOTAL LIABILITIES AND NET ASSETS	<u>1,411,340,310.41</u>	<u>1,405,474,777.50</u>	<u>1,396,704,680.91</u>	<u>5,865,532.91</u>	<u>14,635,629.50</u>

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

7/14/2014

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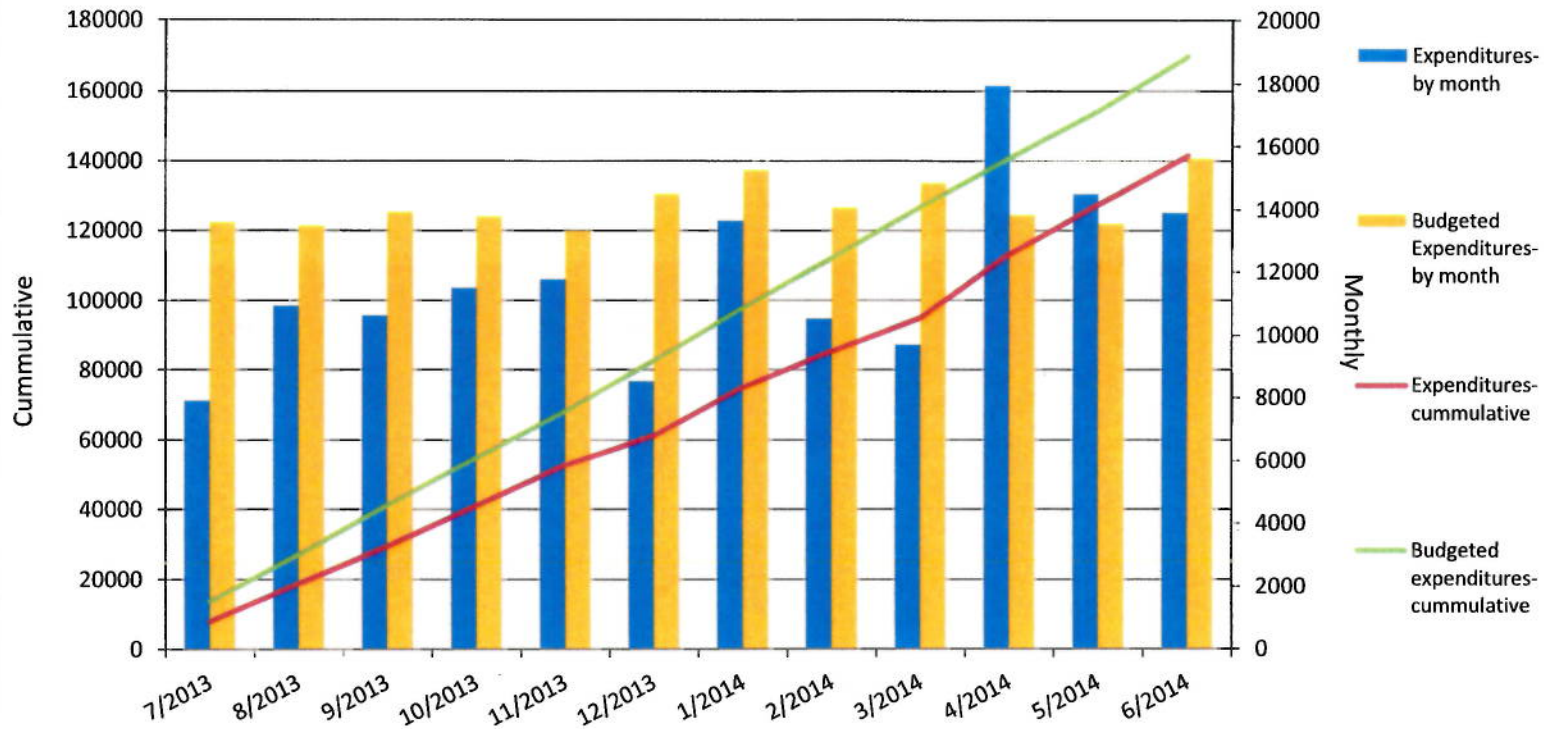
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BUSINESS UNIT ALL

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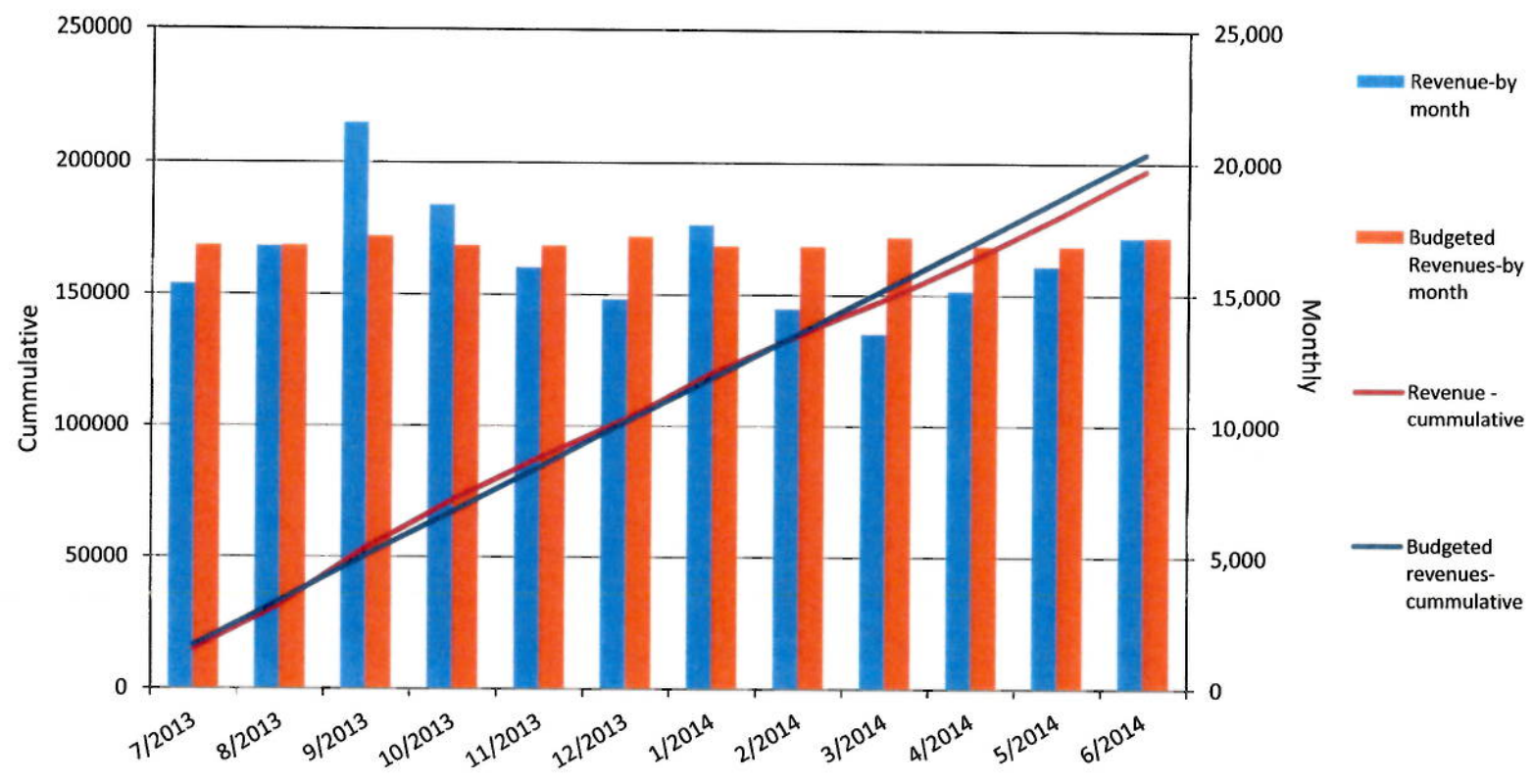
AS OF 6/30/2014

YTD-TO-DATE				Object Description	FOR THE FISCAL YEAR				
YTD Actuals	YTD Budget	Avail/ (Over)	%		Revenues/ Expend	Open Encumb	Annual Budget	Avail/ (Over)	%
<u>197,014</u>	<u>203,518</u>	<u>6,504</u>	<u>3.20</u>	REVENUE	<u>197,014</u>		<u>203,518</u>	<u>6,504</u>	<u>3.20</u>
OPERATING EXPENSES:									
33,040	43,021	9,981	23.20	Personnel Services	33,040		43,021	9,981	23.20
MATERIALS AND SUPPLIES									
13,685	18,213	4,528	24.86	Services	8,408	5,277	18,213	4,528	24.86
8,071	10,057	1,986	19.75	Supplies	6,542	1,529	10,057	1,986	19.75
145	478	333	69.67	Education & Training	124	21	478	333	69.67
	14	14	100.00	Utilities			14	14	100.00
2,800	4,207	1,407	33.44	Repairs & Maint	1,946	854	4,207	1,407	33.44
9,918	10,095	177	1.75	Misc	8,632	1,286	10,095	177	1.75
2,090	2,950	860	29.15	Equipment	217	1,873	2,950	860	29.15
20,510	22,479	1,969	8.76	Debt Service	20,510		22,479	1,969	8.76
FIXED CHARGES:									
25,374	31,813	6,439	20.24	Utilities	25,374		31,813	6,439	20.24
3,300	3,300			Case Fees	3,300		3,300		
7,467	7,560	93	1.23	Retirement System Contribution	7,467		7,560	93	1.23
15,102	15,598	496	3.18	Misc Employees' Benefits	15,095	7	15,598	496	3.18
<u>141,502</u>	<u>169,785</u>	<u>28,283</u>	<u>16.66</u>	TOTAL OPERATING EXPENDITURES	<u>130,655</u>	<u>10,847</u>	<u>169,785</u>	<u>28,283</u>	<u>16.66</u>
<u>55,512</u>	<u>33,733</u>	<u>(21,779)</u>		NET REVENUES (EXPENDITURES)	<u>66,359</u>	<u>(10,847)</u>	<u>33,733</u>	<u>(21,779)</u>	

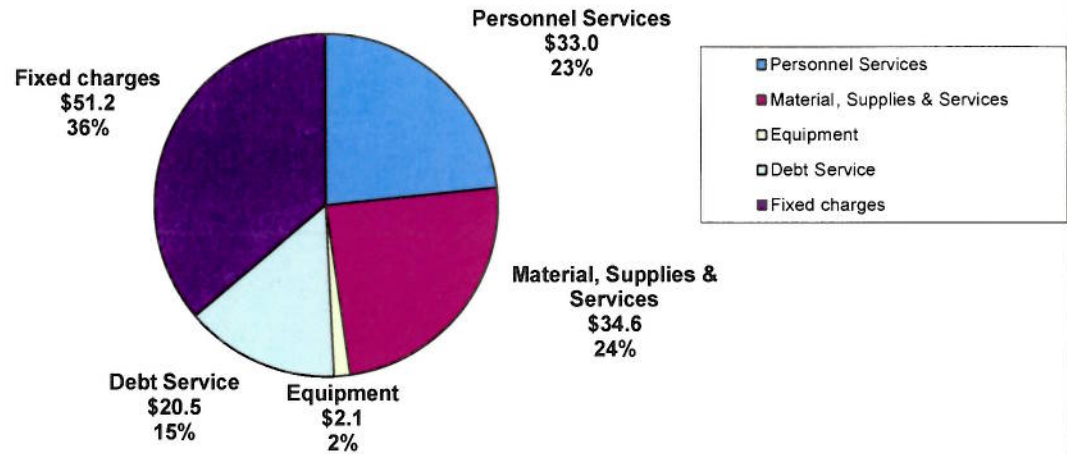
BUDGETED OPERATING EXPENDITURES FY 2014



BUDGETED OPERATING REVENUES FY 2014



Total Operating Expenditures - \$141.4
As of June 30, 2014
(millions of dollars)



WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Financial Performance

July 2013 – June 2014

July 28, 2014



Budget to Actual July 2013 – June 2014

- Actual Revenue \$197 million vs. Budgeted Revenue \$204 million
- Operating costs are \$141 million
- Actual Net Revenue \$56 million vs. Budgeted Net Revenue \$34 million



Cost Drivers

Year to Date June 2014

	Actual (millions)	Budget (millions)
• Personnel	\$33	\$43
• Services	\$14	\$18
• Repairs & Maint.	\$ 3	\$ 4
• Equipment	\$ 2	\$ 3
• Utilities	\$25	\$32

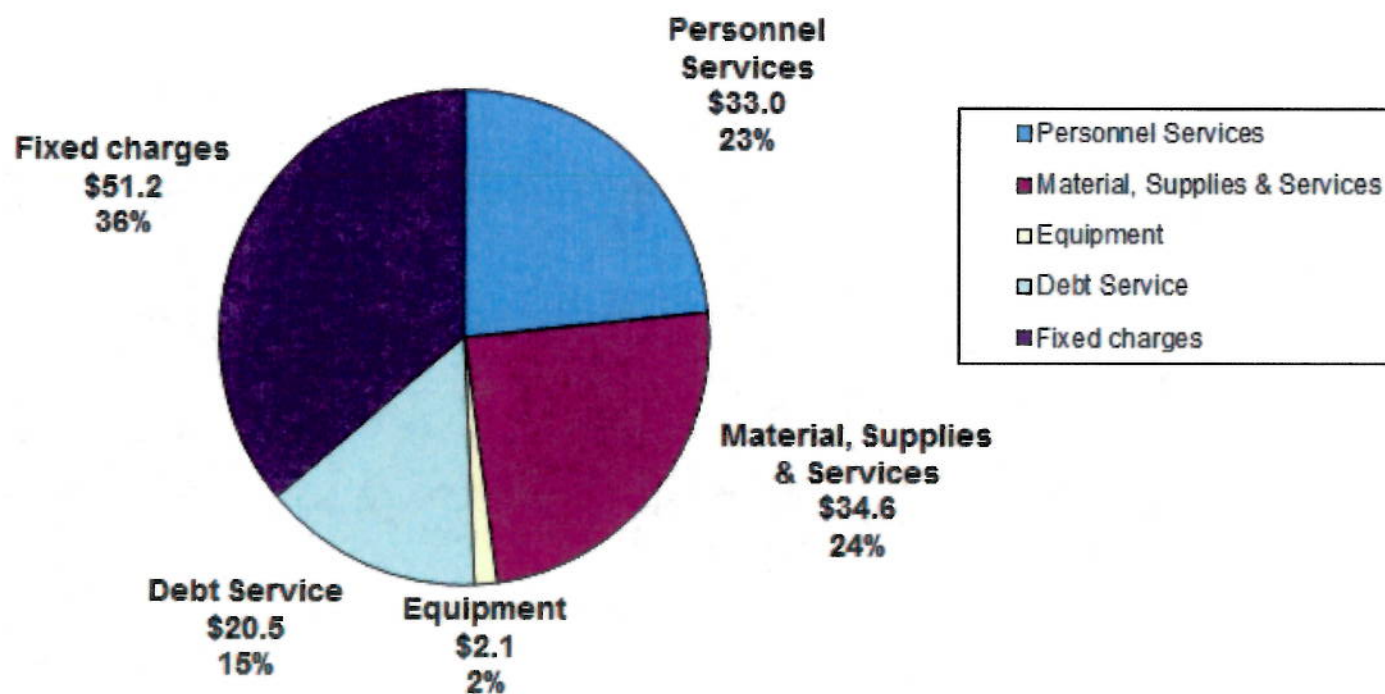
WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Total Operating Expenditures - \$141.4 As of June 30, 2014 (millions of dollars)



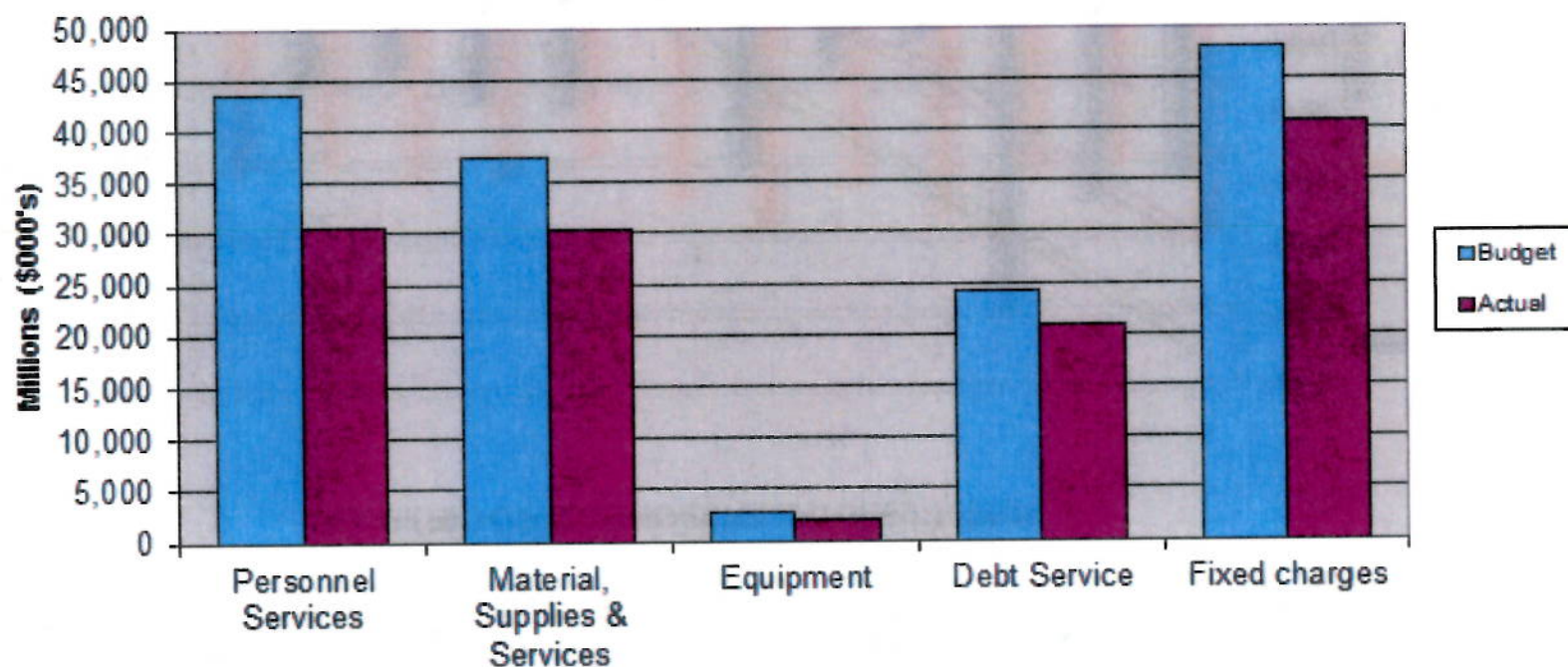
WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Operating Expenditures by Category (Budget vs. Actual) As of June 30, 2011



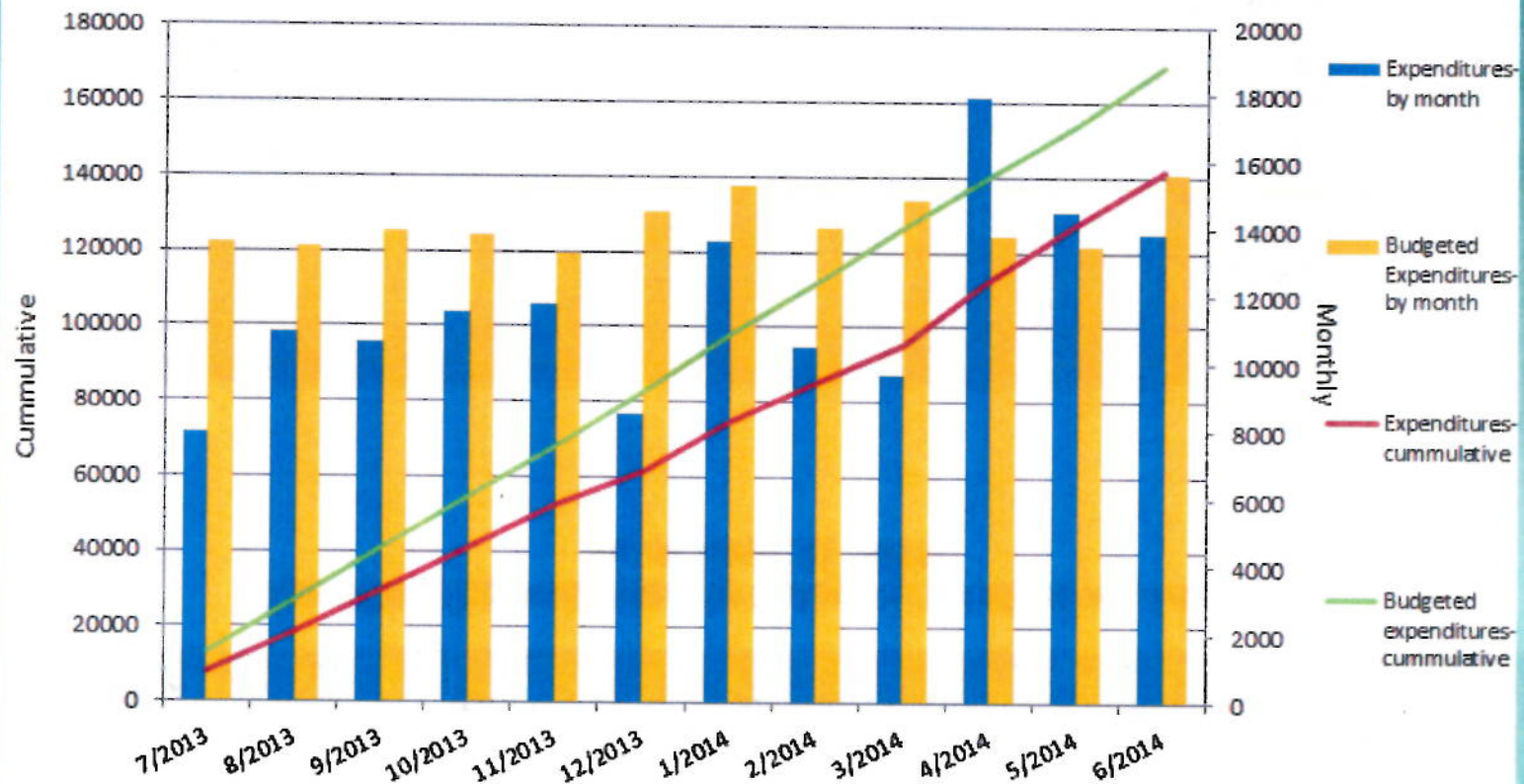
WATER FOR LIFE

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Board of Water Supply
City and County of Honolulu

BUDGETED OPERATING EXPENDITURES FY 2014



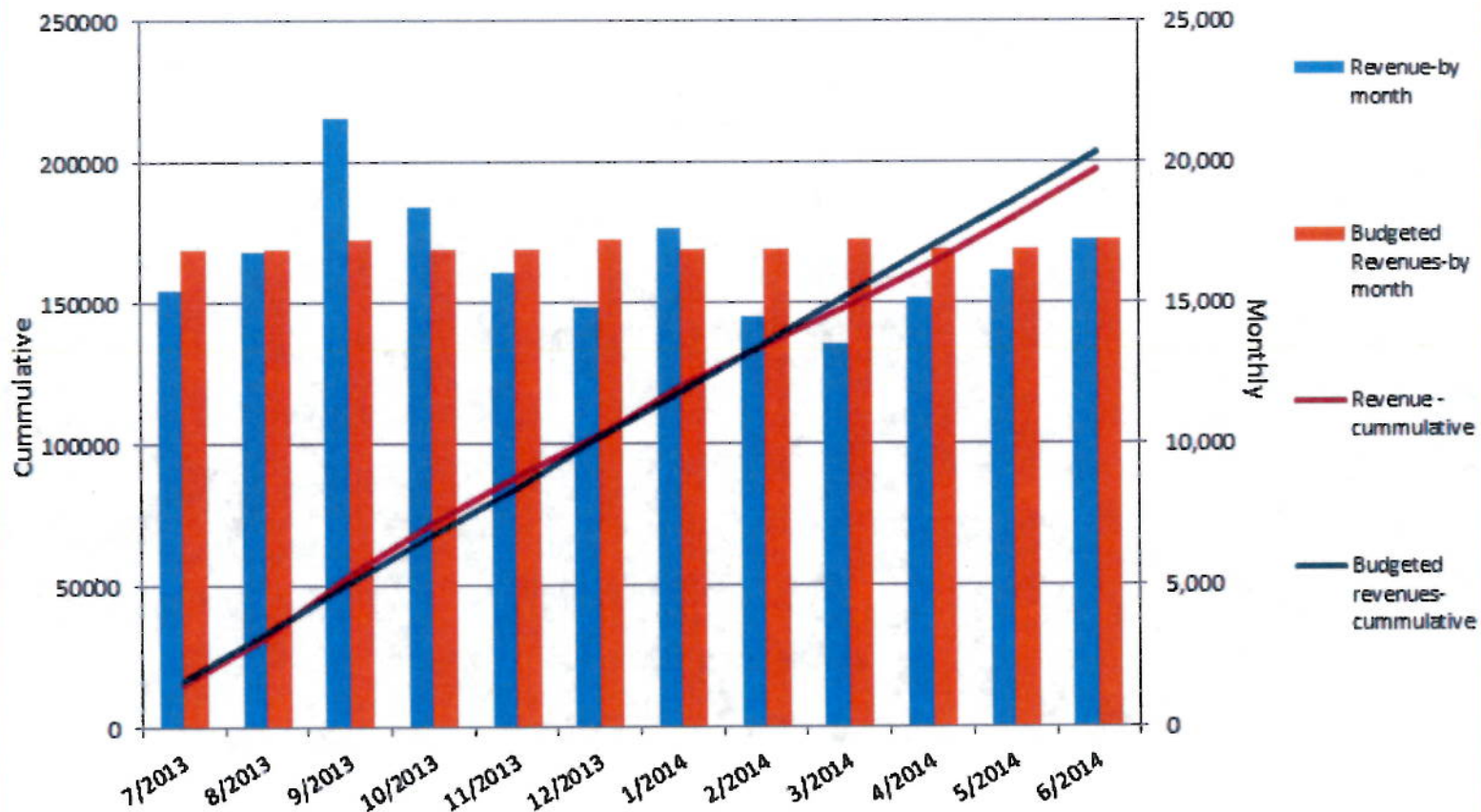
WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

BUDGETED OPERATING REVENUES FY 2014



WATER FOR LIFE

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

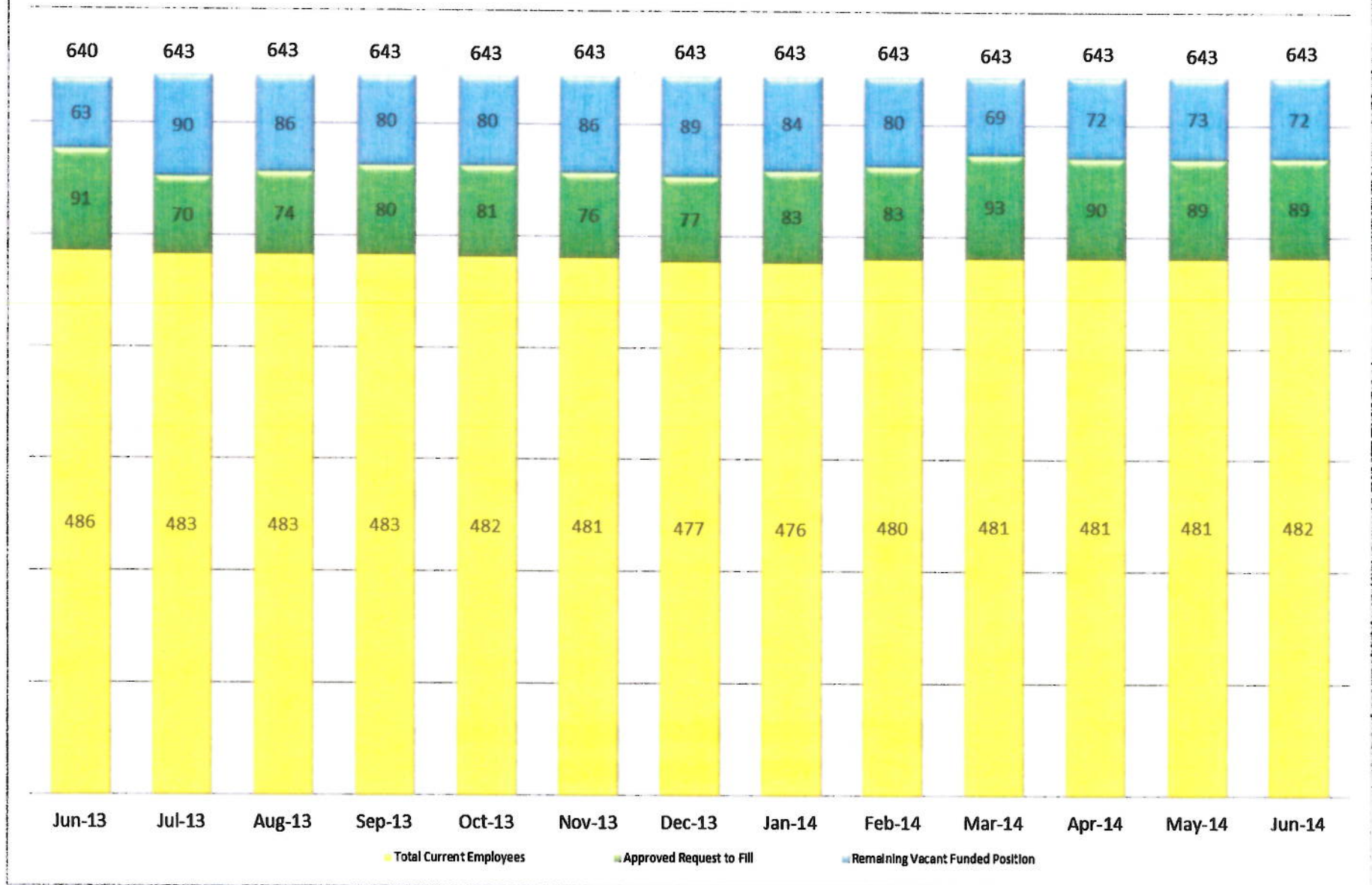


Board of Water Supply
City and County of Honolulu

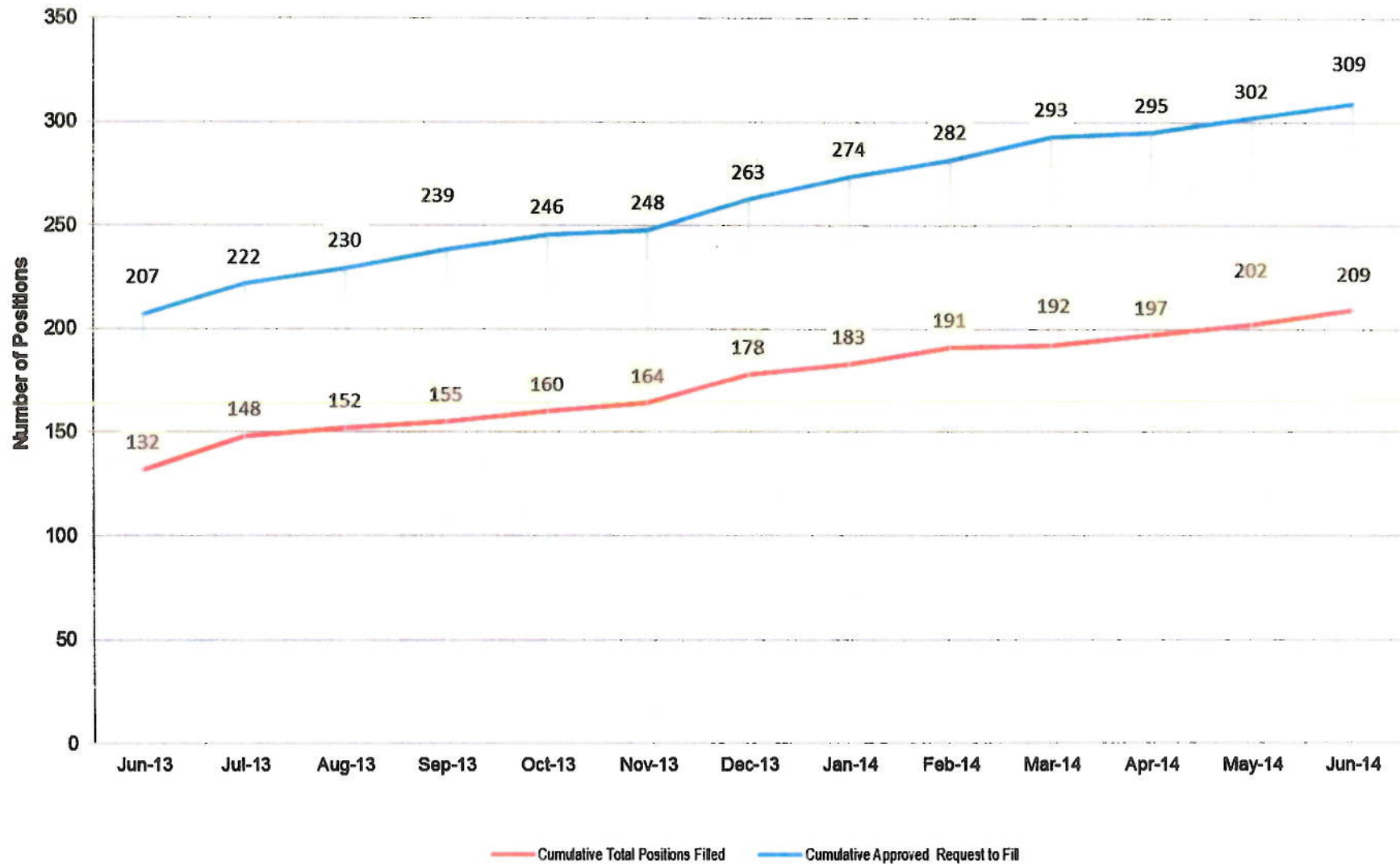
Questions
or
Comments



Positions Filled June 1, 2013 through June 30, 2014



Cumulative Totals June 1, 2013 through June 30, 2014



DISCUSSION: Karen Tom of the Human Resources Office gave a brief report on the recruitment status. There were no comments or discussion.

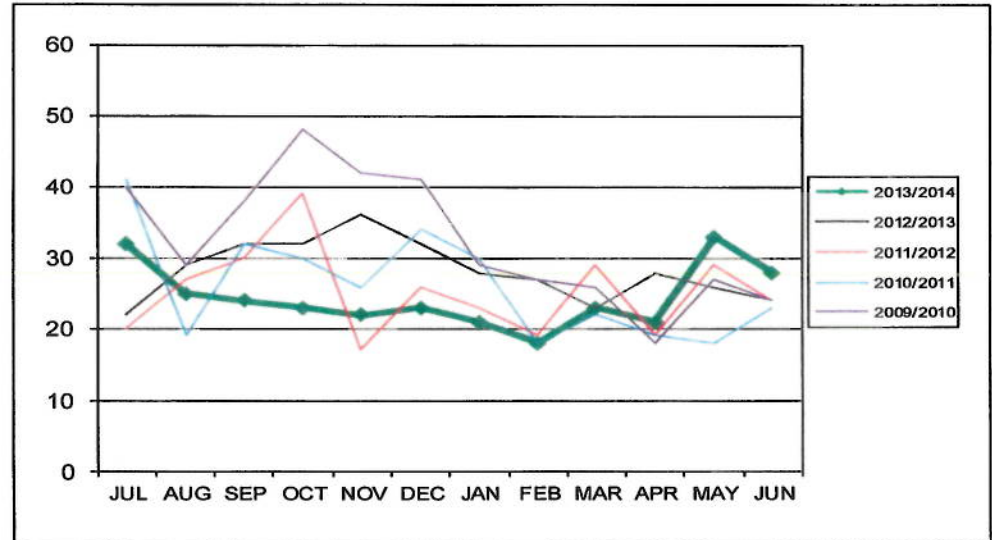
ITEM FOR INFORMATION NO. 8

WATER MAIN REPAIR REPORT

for June 2014

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2013/2014	32	25	24	23	22	23	21	18	23	21	33	28	293
2012/2013	22	29	32	32	36	32	28	27	23	28	26	24	339
2011/2012	20	27	30	39	17	26	23	19	29	19	29	24	302
2010/2011	41	19	32	30	26	34	30	18	22	19	18	23	312
2009/2010	40	29	38	48	42	41	29	27	26	18	27	24	389

Date	Address	Size	Cause
6/3	87-166 Manuulaula St.	8" C.I.	Corrosion
6/3	2061 Aamanu St.	8" C.I.	Corrosion
6/3	2336 Aumakua St.	8" C.I.	Unknown
6/4	1958 Kamehameha IV Rd.	8" C.I.	Corrosion
6/4	18th Ave. & Pahoa Ave.	4" G.I.	Corrosion
6/5	1958 Kamehameha IV Rd.	8" C.I.	Corrosion
6/6	944 Kealaolu Pl.	4" C.I.	Corrosion
6/7	1276 Kanewai St.	8" C.I.	Unknown
6/9	3405 Hinahina St.	8" P.V.C.	Joint Failure
6/9	1526 10th Ave.	16" C.I.	Corrosion
6/9	99-089 Kaamilo St.	8" P.V.C.	Pressure
6/10	2299 Auhuhu St.	8" C.I.	Corrosion
6/11	4338 Piikea Pl.	8" C.I.	Unknown
6/12	98-1682 Kiawe St.	6" C.I.	Unknown
6/12	86-038 Hoaha St.	8" A.C.	Clamp
6/12	Pukele Ave. near Maluhia St.	8" D.I.	Corrosion
6/13	94-664 Farrington Hwy.	6" C.I.	Corrosion
6/17	45-035 Holowai Pl.	6" C.I.	Corrosion
6/18	4806 Kahala Ave.	8" C.I.	Corrosion
6/19	1822 Lusitana St.	4" C.I.	Corrosion
6/19	1275 Kaluawaa St.	6" C.I.	Corrosion
6/19	91-1000 Waihua Pl.	8" D.I.	Unknown
6/21	308 Kilua Pl.	12" P.V.C.	Clamp
6/21	2147 Aoao St.	8" C.I.	Corrosion
6/26	2645 Dole St.	20" C.I.	Pressure
6/27	3507 Maunalei Ave.	6" C.I.	Unknown
6/27	1640 Waipahee Pl.	8" C.I.	Settlement
6/29	2547 Henry St.	8" C.I.	Corrosion



Bold * - Pro-active Leak Repair

38.7 miles of pipelines were surveyed by the Leak Detection Team in the month of June

DISCUSSION:

Field Operations Assistant Program Administrator Duke Chung gave the water main break report. Mr. Chung informed the Board of the good news that the total amount of main breaks last fiscal year was 293, which compares to the high of 389 in 2009-2010. It also compares favorably with the national average of 20-25 breaks per 100 miles of pipeline, which totals to about 420-525 breaks. Mr. Chung stated that hopefully the decrease in main breaks is due to the pipeline replacement program and the managing of pressures on the system.

Ms. McMurdo suggested that the Department share the good news with the public and congratulated the BWS for a great job.

ITEM FOR INFORMATION NO. 9

"July 28, 2014

2014 ANNUAL
HALAWA
XERISCAPE
GARDEN OPEN
HOUSE AND
UNTHIRSTY
PLANT SALE

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

Chair and Members:

Subject: 2014 Annual Halawa Xeriscape Garden Open House and
Unthirsty Plant Sale

I am pleased to invite you to attend the 2014 Annual Halawa Xeriscape Garden (HXG) Open House and Unthirsty Plant Sale on Saturday, August 2, 2014, from 9:00 a.m. to 3:00 p.m., at 99-1268 Iwaena Street in Halawa Valley's Central Park Industrial Area.

This free community event offers the public a chance to learn more about xeriscaping -- an ideal way to reduce outdoor water usage, maintain an attractive yard, and help preserve our precious water resources. This year, we are also holding a mid-day program to commemorate the 25th anniversary of the 1989 opening of this educational facility. The program will feature local entertainment, a rededication ceremony, and special recognition of the founders and long-time supporters of the HXG.

The Friends of Halawa Xeriscape Garden, a non-profit organization and event co-sponsor, has organized about a dozen Oahu nurseries to participate in another exceptional plant sale featuring a variety of less-thirsty plants. Proceeds from the plant sale support the education programs at the garden.

Free instructional workshops to be offered throughout the day include Xeriscape 101, Succulent Container Gardening, Bokashi (a composting method), Economical Aquaponics, and our highly popular Rain Barrel Catchment class. We are inviting various organizations such as Hawaiian Electric, Hawaii Nature Center, and the University of Hawaii's Master Gardener Program to provide family-oriented, educational activities that also promote resource and environmental conservation.

A food booth, managed by a group of dedicated Board of Water Supply and other water industry employees, will help to raise funds for American Water Works Association's Water For People Project. This project is part of a larger mission to improve quality of life in less developed countries with issues related to water, sanitation, health, and hygiene.

Our annual Open House and Unthirsty Plant Sale helps to remind us all of our personal responsibility to carefully use our precious drinking water supply. We hope you and your family will join us on August 2nd.

Respectfully submitted,

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

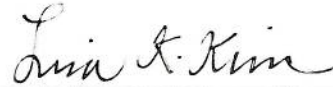
The foregoing was for information only.

DISCUSSION: There were no comments or discussion.

MOTION TO
ADJOURN

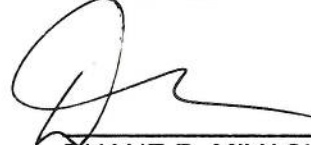
There being no further business Chair Miyashiro at 3:32 PM called for a motion to adjourn the Open Session. Theresia McMurdo so moved; seconded by Mahealani Cypher and unanimously carried.

Respectfully submitted,



LISA K. KIM

APPROVED:



DUANE R. MIYASHIRO
Chair of the Board

AUG 25 2014

Date

THE MINUTES OF THE REGULAR SESSION BOARD MEETING ON JULY 28, 2014 WERE APPROVED AT THE AUGUST 25, 2014 BOARD MEETING			
	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG			ABSENT
MAHEALANI CYPHER	X		
THERESIA C. MCMURDO			ABSENT
DAVID C. HULIHEE			ABSENT
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		