

## MINUTES

### REGULAR MEETING OF THE BOARD OF WATER SUPPLY

January 26, 2015

At 2:00 PM on January 26, 2015 in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, Board Chair Miyashiro called to order the Regular Meeting.

Present: Duane R. Miyashiro, Chair  
Adam C. Wong, Vice Chair  
Theresa C. McMurdo  
David C. Hulihee  
Ross S. Sasamura

Also Present: Ernest Lau, Manager and Chief Engineer  
Alex Ubiadas  
Shawn Nakamoto  
Barry Usagawa  
Erwin Kawata  
Daryl Hiromoto  
Joe Cooper  
Karen Tom  
Robert Morita  
Leanne Matsumoto

Others Present: Krishna Jayaram, Deputy Corporation Counsel  
Dan Lawrence, Deputy Corporation Counsel  
Chris Cleveland, Brown and Caldwell  
Craig Von Barga, CDM Smith  
Gary Gill, State Department of Health  
Stuart Yamada, State Department of Health  
Steven Chang, State Department of Health  
Roxanne Kwan, State Department of Health  
Alan Yamamoto, Senator Mazie Hirono's Office  
Councilmember Carol Fukunaga  
Kess O'Halloran, Councilmember Fukunaga's Office  
Dan Purcell  
Norb Buelsing

Absent: Ford N. Fuchigami

APPROVAL  
OF MINUTES

Approval of the Minutes of the Regular Meeting held on December 15, 2014

MOTION  
TO APPROVE

Theresia McMurdo and David Hulihee motioned and seconded, respectively, to approve the Minutes of the Regular Session Meeting of December 15, 2014. The motion was unanimously carried.

"January 26, 2015

PRESENTATION  
ON THE RED HILL  
FACILITY

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

Chair and Members:

Subject: Presentation on the Red Hill Bulk Fuel Storage Facility  
by Mr. Gary Gill of the State Department of Health

On December 17, 2014, the Manager and Chief Engineer sent invitations to Rear Admiral Richard Williams Jr. of the Navy, Dr. Virginia Pressler of the State Department of Health (DOH), and Mr. Jared Blumenfeld of the United States Environmental Protection Agency (USEPA) to attend the January 26, 2015 Board meeting to provide a forum to discuss the Red Hill Bulk Fuel Storage Facility. Invitation letters were also sent to the Congressional Delegation and copies of all letters were sent to Mayor Caldwell, the City Councilmembers, and Board Chair Duane Miyashiro. Mr. Alan Yamamoto (State Director for Senator Mazie Hirono) and Councilmember Carol Fukunaga will be attending the meeting.

Presenting today will be Mr. Gary Gill of the DOH. Mr. Gill will be given 15 minutes to present opening remarks, which will include an overview of DOH's perspective on the leak and their strategy for protecting the groundwater from leaks in the future. Following Mr. Gill's opening remarks, the public will have an opportunity to testify and thereafter, the Board will discuss the presentation and the public testimony. Both the USEPA and the Navy declined the invitation to present at the January Board meeting, but are willing to attend a future Board meeting possibly in February or March. Attached is a copy of the letter received from the USEPA.

The agencies were informed that Board meetings are open to the public, include the opportunity for public testimony, and that minutes are taken for the record and posted on the Board of Water Supply website, together with all materials.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.



## DISCUSSION:

Manager Lau stated that both the Navy and the Environmental Protection Agency (EPA) declined invitations to attend today's Board meeting. The EPA and the State Department of Health (DOH) are currently negotiating with the Navy on an enforcement compliance agreement. Once the agreement is secured, it will become a public document. The Navy and EPA suggested that presenting to the Board at that time would provide for a more productive and informative presentation. Mr. Lau informed the Board that he attached a letter from Steven Linder from the Underground Storage Tanks Program for EPA Region 9 to his report.

Mr. Lau introduced and welcomed Mr. Gary Gill from DOH, Ms. Kess O'Halloran from Councilmember Carol Fukunaga's office, and Mr. Alan Yamamoto from Senator Mazie Hirono's office. Mr. Lau asked Mr. Gill to give his presentation.

Mr. Gill introduced his staff from DOH, Mr. Stuart Yamada head of the Environmental Management Division, Mr. Steve Chang from the Solid and Hazardous Waste Branch and Ms. Roxanne Kwan from the Underground Storage Tank Program. Mr. Gill introduced himself as the Deputy Director for Environmental Health for the State DOH. He explained that Friday would be his last day at DOH, as the Governor did not extend his tenure.

The theme of Mr. Gill's presentation was "Fix Them Up Or Shut Them Down." Mr. Gill explained that the Red Hill (RH) tanks are more than 70 years old and have been maintained over the years but need further upgrades. He believes that if upgrades can't be made, the way to protect the groundwater is to shut the tanks down.

There are 20 underground storage tanks (UST) in the RH storage facility. The tanks are more than 200 feet high and more than 100 feet across. More than a year ago, the Navy reported a fuel release. At first, they thought it was about 12,000 gallons and over time that number went up to 27,000 gallons. Mr. Gill stated that DOH immediately set up a unified command to respond to the leak, informed BWS, and the Navy began emptying fuel from tank number 5. Mr. Gill explained that the way the Navy measures leaks is to take the amount of fuel they put in the tank and subtract the amount that is there now. After emptying tank 5, in June or July of 2014, the Navy tested 50 spots on the tank and discovered 3 holes at first, then 15 holes, and then 17 holes. In one-third of the areas they checked, there were leaks and there are about 600 more areas to check. Mr. Gill stated that DOH is working with the Navy to determine locations and extents of the leaks.

To date, the Navy has not attempted to clean up or remove any of the fuel product that spilled into the groundwater beneath their tanks or into the bedrock. A couple of months ago, the Navy drilled through the quarter inch steel on the bottom of tank 5 to see if there was any product left there between the tank wall and the concrete behind it. Mr. Gill said that the Navy told DOH that they drilled 12 holes and no product came leaking back into the tank from the outside, but they didn't inform DOH where those holes were drilled or give them any data. He added that information from the Navy has been rather sporadic, but they hope to resolve that through the enforcement agreements.

Mr. Gill reported that testing of various drinking water wells in nearby areas of the RH facility shows that the water is still safe to drink. The BWS tested for constituents of petroleum products and none were found in the Halawa Shaft and Well, Moanalua Well or any of the Aiea Wells. There are trace elements of contamination in the RH shaft, which is directly down gradient from the 20 storage tanks, predating the spill in January. Tank leaks have been going on since the 1940s, so



contamination in the groundwater beneath these tanks has been going on for years. It is uncertain how much fuel has spilled over the years and also uncertain which direction the plume is headed. EPA only existed from 1971, so there are dozens of years prior to that for which there are virtually no good records. Evidence shows that core samples taken from the bedrock beneath 19 tanks are stained with petroleum. Core samples from one of the tanks came out untainted, however historic reports do show fuel releases. Therefore, in Mr. Gill's opinion, each one of the 20 tanks have leaked and may very well continue to leak over time.

Mr. Gill spoke about DOH's underground storage tank program, which focuses on regulating 1,200 gas stations in the state. He stated that they have had 2,000 confirmed releases of which they have cleaned up 1,900 of them so far. The rule of thumb is that if you have a tank, it will leak eventually. DOH has all kinds of rules in place for gas stations, but when it comes to RH and other field constructed tanks, some of the rules that apply to gas stations do not apply to these field constructed USTs.

Mr. Gill reported that it is very important to identify where the plume is and the extent of the plume. The Navy has put in two new sentinel wells, tested them once, and obtained preliminary data, which has not yet been verified. The Navy needs to take multiple samples to be sure there are no anomalies. These two wells are to the north and a couple hundred yards off the centerline of the tanks, so it does potentially indicate that there is migration to the north. This is BWS's largest concern, should the plume be headed towards the Halawa Shaft. The other concern for the BWS is if a catastrophic release occurred, fuel from the tanks could flood the lower access tunnel and reach their RH Shaft, which is a direct injection into the groundwater. To help in preventing this, the Navy has installed a fuel tight lid on the sump's portal so that if there were a big release, it wouldn't flow right into the groundwater.

Mr. Gill mentioned that the DOH and EPA are in negotiations with the Navy on an enforcement compliance agreement. Negotiations have been going on for about 8 months, but Mr. Gill feels that they are getting closer to securing the agreement. The agreement will establish the authorities from the DOH and EPA to do oversight regulation, will have a table of deliverables and timelines that the Navy needs to adhere to, quality assurance provisions, and monetary penalties if the Navy does not comply. They are looking at a 20-year horizon so there's considerable amount of time to upgrade these tanks and work will probably be done in phases. If an agreement cannot be reached, then the DOH and EPA will be left with a standard enforcement order, which is not unprecedented but would not be as productive.

In 2014, the Legislature requested that the DOH convene a RH Task Force (RHTF). The RHTF consisted of representatives from the DOH, the BWS, the EPA, the Navy, the State Water Commission, the Legislature, and the RH area neighborhood. The RHTF report is a collection of recommendations and thoughts from all representatives and is posted on DOH's website.

Mr. Gill showed a graphic of the industry standards for USTs. It illustrated a double-lined gasoline tank with an alarm or leak detection system that calculates the amount of the spill. This technology is required for every gas station today, but it is not required for the RH field constructed tanks. To reach this standard for the RH tanks, it will take time and money. The Navy will have to decide whether to downsize the facility in half, shut it down eventually over 20 years, or invest in it to keep it going another 100 years. Mr. Gill expressed that keeping RH status quo is not an option and stated that the only way to absolutely protect the drinking water resource is to remove the USTs. Mr. Gill concluded that it's about how valuable the drinking water resource is and how much the Navy should be pushed to invest to protect it.

Board Member McMurdo asked if the agreement, which is being negotiated upon, takes into consideration any of the costs the BWS has to expend to protect the groundwater. Mr. Gill replied that should the BWS wells become contaminated from the RH tanks and treatment to the drinking water becomes necessary, the Navy would be liable to contribute to the cost of that treatment.

Ms. McMurdo questioned if BWS is paying for the monitoring of water quality of the BWS wells. Mr. Lau replied that BWS is paying for the monitoring and not waiting for the negotiated agreement. He stated that testing the water quality is a necessity in order to reassure customers that the water is safe to drink.

Board Chair Miyashiro thanked Mr. Gill for attending the Board meeting and providing his presentation. He stated that the Board has been concerned with this issue from day one, and he can confirm that the BWS has worked very hard to understand the nature and extent of the problem and has been looking at all possible ways to correct, prevent, and/or mitigate the problem. Mr. Miyashiro asked Mr. Gill if there is anything that the Board can do, that would not conflict with what the DOH and the EPA are doing, to further the BWS's efforts. Mr. Gill thanked Mr. Miyashiro for his question and replied that the BWS, through Mr. Lau, has played a very important role in continuing to drive the Navy to provide information. Mr. Gill said that he feels that this Board will need to continue this effort. He explained that when the agreement is agreed upon and approved, it would become a public document that will state the Navy's responsibilities and timelines. The expectations of the Navy should be clear, but a lot of the details are going to depend on the analysis that evolves over time. For example, the amount of monitoring wells that will be necessary would depend on data collected, how many existing wells there are, and if any additional ones are needed. BWS's expertise will be crucial in a case if the Navy feels, for example, that one additional well is needed but DOH and EPA disagree and feel that four additional wells are needed. Mr. Gill feels that BWS will be encouraged to participate in much of the technical review and recommendations.

Mr. Lau expressed, as the Manager and Chief Engineer together with his BWS team, sincere appreciation to Deputy Director Gary Gill for his efforts on the RH issue, an issue very important to the community. Mr. Lau also acknowledged Mr. Steve Chang, Ms. Roxanne Kwan, and Mr. Stuart Yamada who were present, and also Ms. Thu Perry who assisted in assembling the task force report. Mr. Lau asked Mr. Gill, given the fact that at any given time there are 15 USTs at RH and each of them are 70 years old containing a total of over 180 million gallons of fuel, could there be a potential of a catastrophic fuel release that could occur in multiple tanks at the same time releasing large amounts of fuel into the groundwater, and if so, what would happen if that occurred. Mr. Gill responded by saying that there would be two threats. If the steel tanks rupture, then the fuel goes right into the concrete and saturates the concrete, into the bedrock and into the groundwater. The evidence has shown that all of these tanks have ongoing slow leaks and if there is a catastrophe on top of that, one threat could be that the fuel will inject directly into the bedrock and eventually into the groundwater. The other threat could be that the fuel will fill up in the tank tunnels, flow down the tunnels and potentially into the groundwater through RH's well. Mr. Lau thanked Mr. Gill and stated that this is a very serious situation and the BWS, with the help of DOH and EPA, will continue to encourage the Navy to do what is right. Mr. Lau asked Mr. Gill if he had any other suggestions for the BWS. Mr. Gill informed Mr. Lau that one of the negotiating elements is to continue with public information. He suggested that BWS insist on periodically having public meetings where the BWS could facilitate and encourage the public to participate.



Ms. McMurdo asked Mr. Alan Yamamoto if Senator Hirono's office has been doing anything about the RH situation or if they are involved in any way. Mr. Yamamoto replied that they are talking to the various parties, but he has no comment at this time.

Mr. Lau acknowledged that Councilmember Carol Fukunaga was also present in the audience.

Mr. Gill added that the Navy did a briefing before the armed service committee, but DOH was not invited. He said to check to see if it is on C-Span. Mr. Lau also stated that BWS was not invited.

Water Resources Program Administrator Barry Usagawa asked if there was a measure in the legislature to eliminate the exemption of field constructed field tanks from complying with the rest of the state law. Mr. Gill replied that he was unsure of what was happening with the legislature, but bills can still be introduced. He stated that he thinks Senator Gabbard was going to introduce a bill to extend the RH Task Force Committee. Mr. Chang stated that they heard of possible mention of the field constructed tanks to require secondary containment in 10 years, but they haven't seen the bill. Mr. Lau stated that BWS would be monitoring the bills and would be at the legislature to testify, if appropriate, and to offer support in measures like this. He also stated that he believes the work of the task force should be continued because a resolution to the RH situation will take many, many years to complete and it's important for the public and the stakeholders to stay involved until the very end.

Mr. Miyashiro thanked Mr. Gill for his presentation, thanked Senator Hirono's office for sending a representative, and thanked Councilmember Fukunaga for attending. He stated that it's important that government officials in all levels are aware of the Board's and Department's efforts to try to mitigate this issue. Mr. Miyashiro asked if there were any members of the public who wished to testify or comment.

Testimony of Mr. Dan Purcell, Member of the Public:

"Yes, good afternoon, Dan Purcell member of the public. I attended most of the meetings. I missed the last two, and they were absolutely excellent. And, I'm one who, I'm not shy about criticizing someone if I'm concerned about their job performance. In this case, I'd like to commend, as I have in the past, Ernie Lau and Gary Gill on their performance on Red Hill. They did not back down, and they were facing the U.S. Navy and National Security and every other thing that can be levied at you. One thing I was concerned about that didn't come up in the discussions, I'm sure it's discussed behind closed doors that sabotage; this is an incredibly old facility. It's certainly not state of the art. There was never any discussion whatsoever in any public form about risk of mischief. Another thing I asked the Captain about deformation. These are gigantic and relatively thin just steel tanks, as you've seen, and the ground is slowly, it's liquid of sorts and it's slowly sinking, not necessarily about seismic activity, just slowly leveling of the ground. He said the tanks were designed to deform, so that makes you feel good. These double-lined tanks really aren't designed to deform necessarily, they're rigid. They might expand and contract a little bit, so these things are expected to just be deforming around in there. They don't really have good ways of measuring them from what I understand. And also it came to light in the hearings or in the briefings of the task force meetings that they've lost all of their design plans, the construction documents, the materials, everything that went into the project. They couldn't find any of that stuff, which is a concern. You can't go back and look and find where there could be failures, flawed designs, problems in materials, problems you know other things, design inherent that could cause major problems. So none of that was available, at least not forthcoming. So those are just some concerns. Thank you very much for addressing this."



Mr. Miyashiro thanked Mr. Purcell for his testimony and asked if anyone else from the public wished to testify or comment. There was no other testimony from any member of the public.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 9**

75 Hawthorne Street

San Francisco, CA 94105

Ernest Y. W. Lau, P.E.  
Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, HI 96843

2015 JAN 16 P 4:24  
BO OF WATER SUPPLY  
ADMINISTRATION

Dear Mr. Lau:

Subject: Response to Invitation to Board of Water Supply Directors Meeting to Discuss Red Hill Fuel Storage Dated December 17, 2014

The U.S. Environmental Protection Agency (EPA) appreciates the invitation to discuss our actions to date in response to the Navy's Red Hill Bulk Fuel Storage Facility (Facility) at your Board meeting on January 26, 2015.

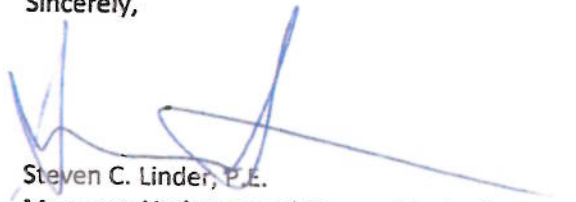
As you are aware, the EPA and the Hawaii Department of Health (DOH) are negotiating with the Navy to obtain a long-term commitment from the Navy to conduct studies and implement the appropriate upgrades to better protect the groundwater beneath and downgradient from the Facility. We anticipate that an agreement may be secured within the next several weeks.

Therefore, EPA believes our participation in the upcoming February or March Board meetings would allow for a much more productive and informative presentation. At that point in time, it is likely that the EPA will be in the process of seeking public input on our proposed agreement with the Navy.

EPA is committed to working in partnership with the DOH and the Board of Water Supply to ensure that actions are taken by the Navy to reduce the threat of future releases from the Facility, and to remediate the past releases.

If you have any questions, please contact me at 415-972-3369.

Sincerely,



Steven C. Linder, P.E.  
Manager, Underground Storage Tanks Program  
US EPA Region 9

cc: Stuart Yamada, DOH

ITEM FOR INFORMATION NO. 2

"January 26, 2015

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

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

Respectfully submitted,

/s/ 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. He spoke about the current activities of the Water Master Plan project and said that they are completing fact sheets and frequently asked question sheets on the water master plan, main breaks, condition assessment, and how BWS enhances the value of water.

Ms. McMurdo inquired if the fact sheets are shared at the neighborhood board (NB) meetings. Mr. Usagawa replied that they haven't been distributed at the NB meetings yet, but once the material gets finalized, they will be taking and distributing them at the NB meetings to help with their outreach program.



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Board of Water Supply  
City and County of Honolulu

# **Water Master Plan**

## ***Board Quarterly Update No. 6***



***January 26, 2015***





## Previous Water Master Plan Updates

- Water Master Plan Components
  - Goals and Objectives
  - Schedule
  - Tasks and Status
- Main Break Causal Factors
- Pipeline Condition Assessments
- Pilot Pipeline Condition Assessment Tools
- 3-Year Public Engagement Strategy
- **Leak Detection & Special Design Projects** Today's Topic







## BWS Water Master Plan

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

Water Service  
Adequacy & Dependability

Infrastructure Costs  
Rate Affordability



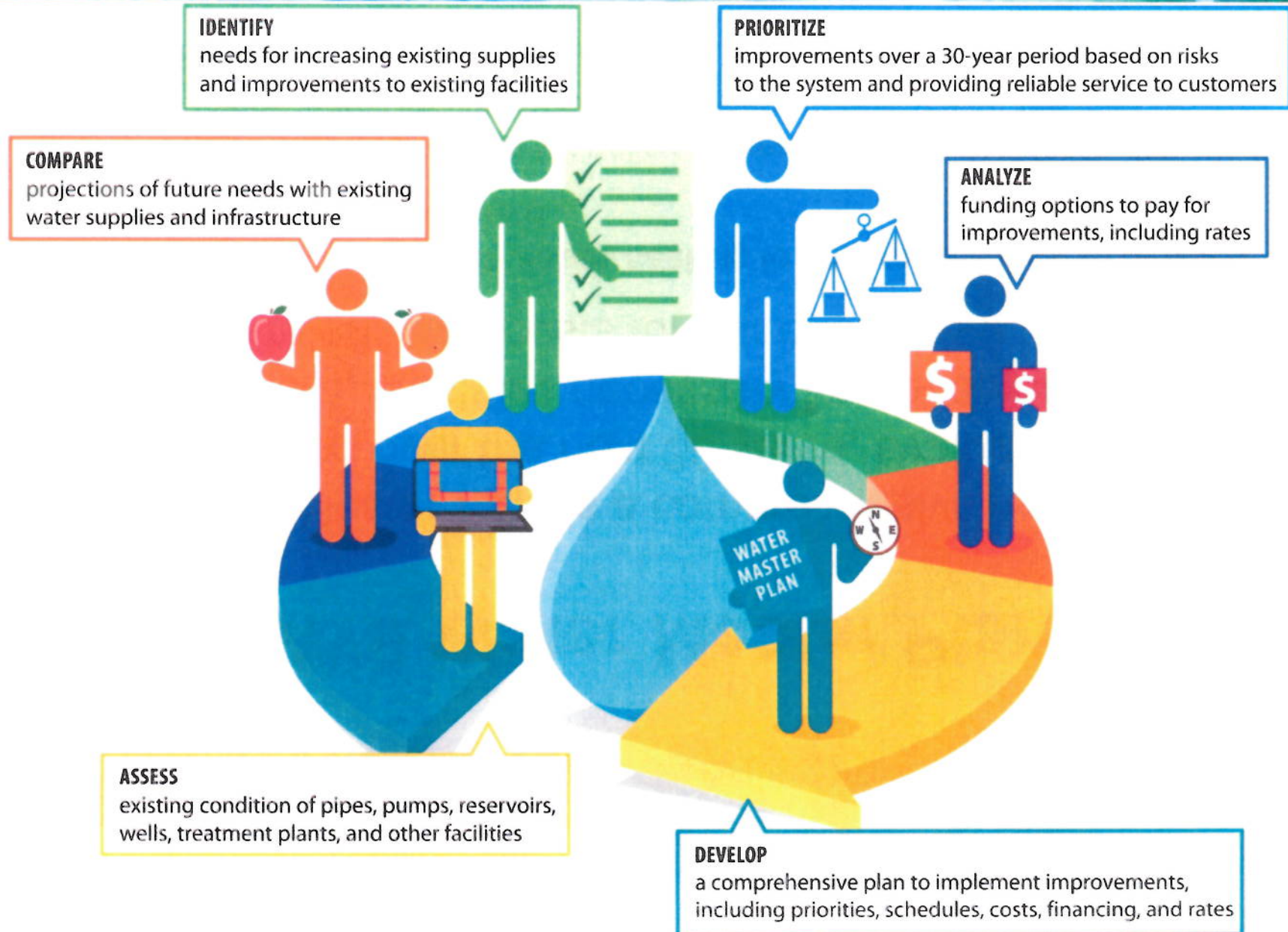


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## Water Master Plan Schedule



Note: Condition Assessments extending into 2015





## Water Master Plan Tasks

- Task 1: Causal Factors Analysis for Pipelines
- 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
- Task 7: Water Quality Treatment Evaluation
- Task 8: Water System Evaluation
- Task 9: Operation and Maintenance Evaluation
- Task 10: Recommended Capital Improvement Plan
- Task 11: Financial Plan and Rate Study (rescheduled to 2016)
- Task 12: Communications Plan
- 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







## Early Detection of Leaks Can Greatly Reduce Costs

- Reduces water loss
- May prevent catastrophic failure because leaks become main breaks
- Eliminates unplanned service disruptions from main breaks
- Provides location for proactive repair
- Can extend pipe life before full replacement is warranted

Scoured, smooth edges indicate long-term leakage preceded failure





## Echologics Leak Detection

- Acoustic, hydrophones
- **Non-intrusive**
- Long range (2000' to 3000', Ideal is 800'-1000')
- Low cost/ft
- Not as accurate as intrusive tools but no taps needed
- Logistical support
  - Traffic safety, Clean manhole, night work
- Applications to cross-country pipelines and under freeways, streams and waterways



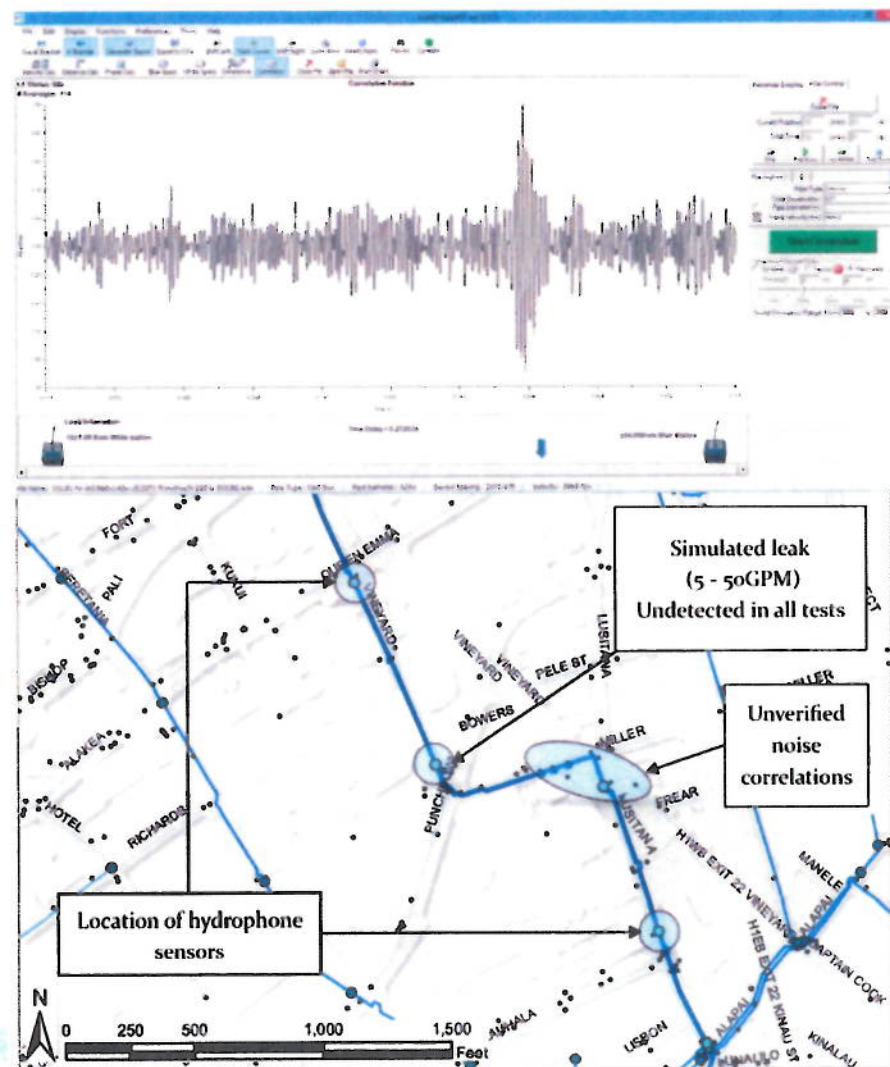
**Use: Screening tool for water loss control and detection of some imminent failures**





## Echologics Leak Detection in Spring 2015

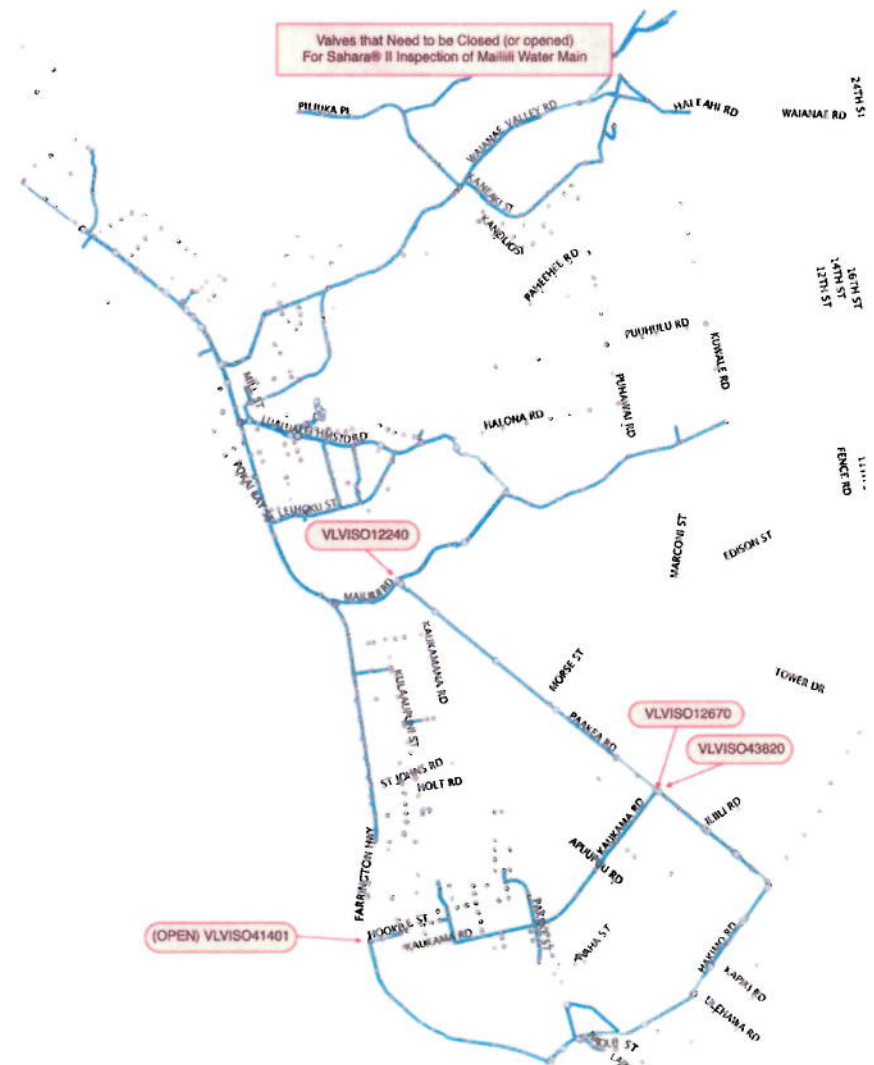
- Vineyard 42" Queen Emma St. to Lauhala St.
- Kilihau Dillingham 42" Puuloa Rd. to Laumaka St.
- Punanani 36" wells to Moanalua Rd.
- Alapai St. W20" & W18"
- Nuuanu Ave. W18"





# Mailiilii W20" Sahara 2 Pilot

- Piloted Sahara 2 internal pipeline CA tool for video and acoustic leak detection.
- Maililili W20”
  - Pin-point known leak under drainage culvert
  - Provide pipe condition info



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## Maliilili W20" Sahara 2 Pilot Results

- Mauka Inspection

123.1ft  
0.0ft/s



- Very large leak located under channel
  - > 50 gpm
- Drogue chute challenged to travel past the leak
  - Turned 2-2.5 mgd pumps on to increase pipe velocity
- Allows BWS to design leak repairs
- Video showed very few internal pipe distress. Pipe lining mostly intact.





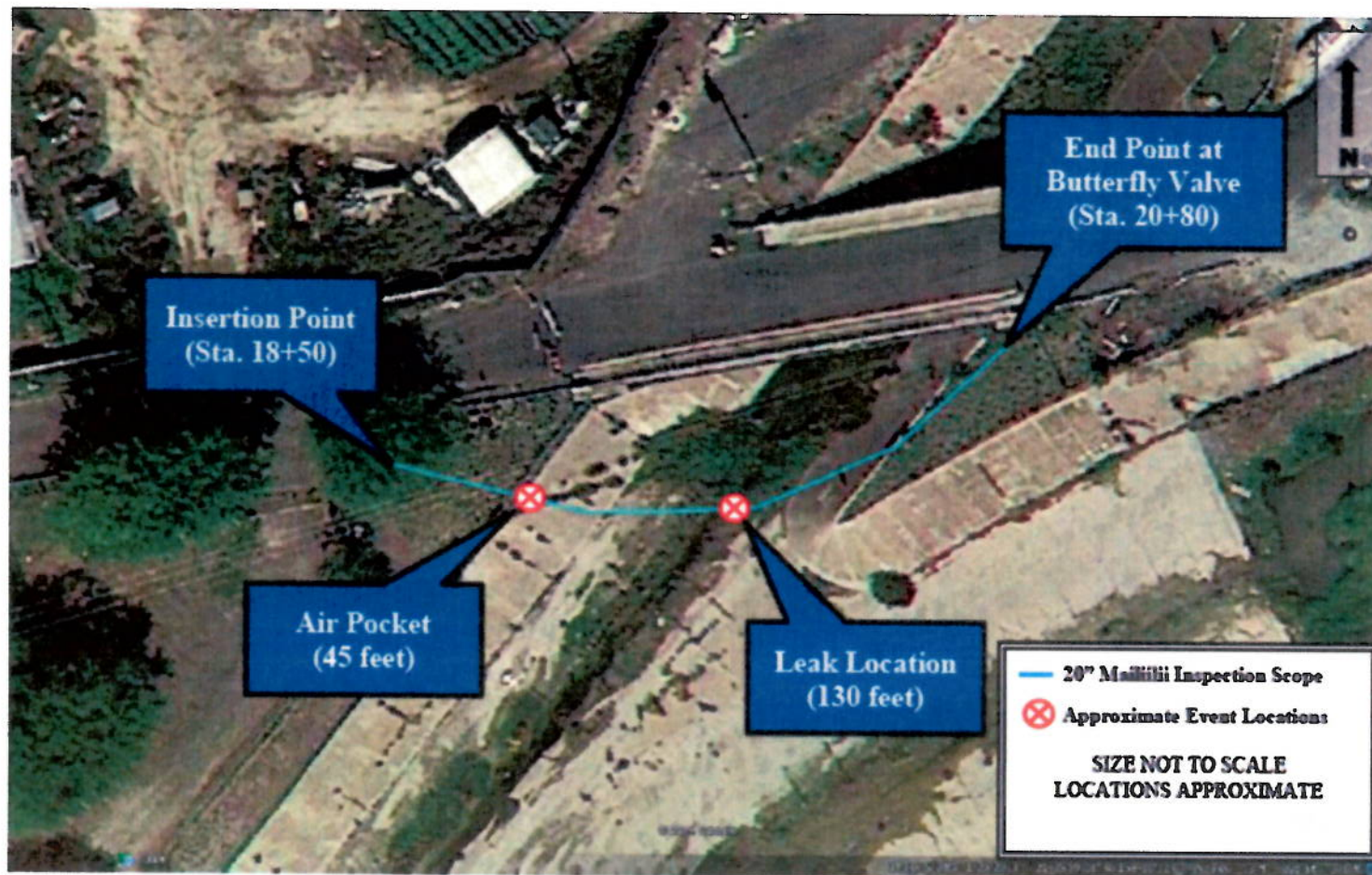
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## Mailiilii W20" Leak Repair Project



BWS & consultants are developing a scope & cost to re-line W20" with cured in-place pipe technology

Design funding in FY 2015

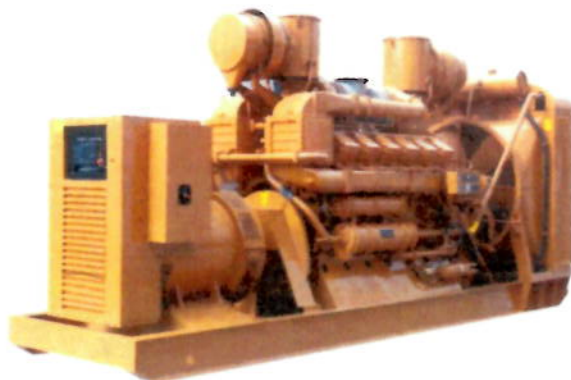
Figure 3.7: Map of Insertion A – Mailiilii Mauka





## Emergency Generator Project

- 3 Emergency generators with hurricane proof hardening are planned at:
  - Kalihi Yard and Kalihi Shaft
  - Halawa Shaft
  - Kunia Wells I
- CDM designing in FY 2016

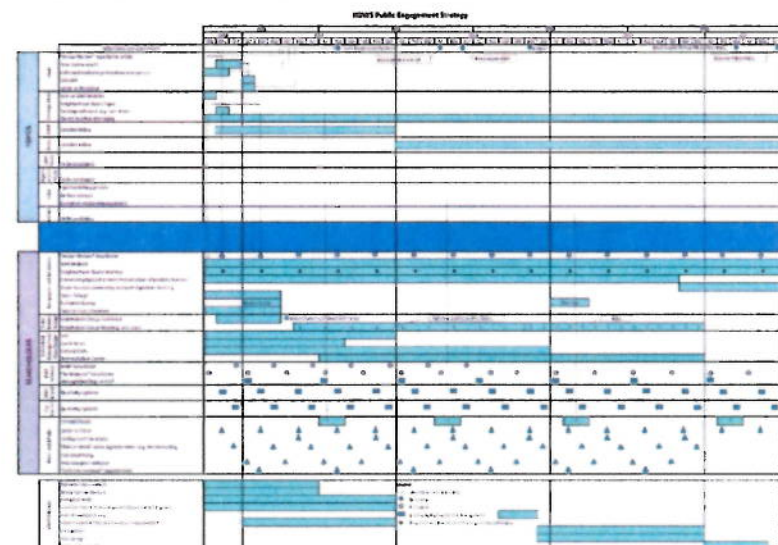






## 3-Year Public Engagement Strategy

- Key Topic Areas include:
  - City Audit Report to City Council August 2015
  - BWS Water Master Plan (Water Supply, Demand Forecasts, Systems, CIP)
  - AMR, BWS Organizational Study, CC&B and Customer Service
  - Alignment of initiatives with Strategic Plan
  - Revised Water Rates Justification & Design (2016-18)
- Primary Stakeholder Groups
  - Ratepayers and Residents
  - Stakeholder Advisory Group
  - BWS Employees and Retirees
  - Elected Officials
  - Press and Media





## Current Activities

- Completing fact sheets & FAQs
  - Water Master Plan (pre-final)
  - Main Breaks (pre-final)
  - Condition Assessment (pre-final)
  - How BWS enhances the Value of Water
- Continuing “Face-to-face” interviews with key stakeholders
- Initiated Customer Satisfaction Survey and Focus Groups
  - Conducting a baseline customer survey (Feb 2015)
  - Conduct Focus groups (March 2015)
- Develop a stakeholder advisory group (April 2015)





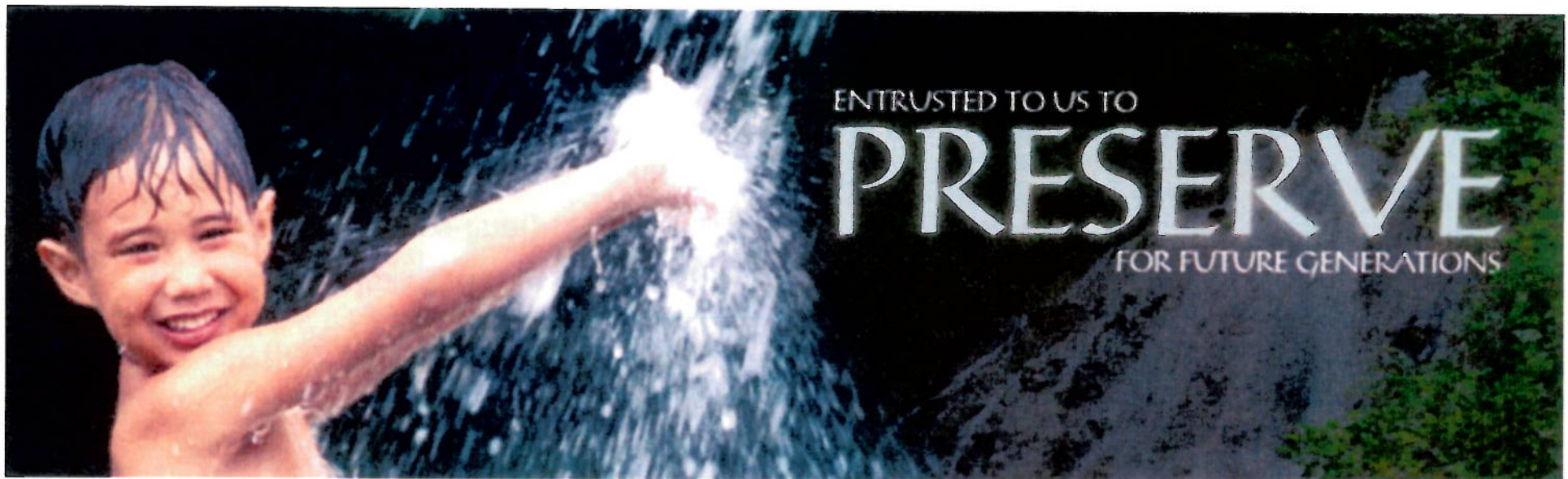


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Board of Water Supply  
City and County of Honolulu



ITEM FOR INFORMATION NO. 2

"January 26, 2015

FINANCIAL  
UPDATE

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

Chair and Members:

Subject: Financial Update for the Quarter Ended December 31, 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 announced that Leanne Matsumoto is the new Assistant Waterworks Controller.

Mr. Cooper gave the presentation. There were no comments or discussion.

Mr. Lau congratulated Ms. Matsumoto on her promotion.



Budget vs. Actual  
Revenue and Expense Totals  
As of December 31, 2014

	YTD Actuals	YTD Budget	Favorable/ (Unfavorable) Variance
Revenues	109,644,000	112,340,000	(2,696,000)
Operating Expenses	(74,623,000)	(89,030,000)	14,407,000
Net Revenues (expenditures)	<u>35,021,000</u>	<u>23,310,000</u>	<u>11,711,000</u>

Board Of Water Supply  
Statement of Revenues, Expenses And Change In Net Assets  
As of December 31, 2014

Current Month Actual	% Revenue	Last Year Actual	% Revenue	Description	Year to Date Actual	% Revenue	Last Year to Date Actual	% Revenue	% Change
REVENUE									
17,434,858.42	100.00	15,409,267.39	100.00	OPERATING REVENUE	108,215,734.04	100.00	102,249,112.04	100.00	5.84
17,434,858.42	100.00	15,409,267.39	100.00	REVENUE	108,215,734.04	100.00	102,249,112.04	100.00	5.84
OPERATING EXPENSES									
2,646,543.29-	15.18	2,404,105.66-	15.60	LABOR COSTS	16,036,863.84-	14.82	15,125,085.14-	14.79	6.03
1,447,780.06-	8.30	935,187.60-	6.07	SERVICES	4,768,935.11-	4.41	5,591,207.72-	5.47	14.71-
235,875.36-	1.35	426,474.05-	2.77	SUPPLIES	2,721,942.37-	2.52	2,203,753.71-	2.16	23.51
7,104.68-	.04	2,813.00-	.02	EDUCATION & TRAINING	45,870.54-	.04	16,197.89-	.02	183.19
3,070,818.93-	17.61	1,661,489.16-	10.78	UTILITIES	11,325,353.33-	10.47	12,194,944.80-	11.93	7.13-
190,381.52-	1.09	91,209.07-	.59	REPAIR AND MAINTENANCE	774,912.37-	.72	1,146,674.23-	1.12	32.42-
1,394,464.55-	8.00	1,061,121.59-	6.89	MISC	8,075,936.34-	7.46	8,882,237.39-	8.69	9.08-
3,425,900.50-	19.65	1,257,925.66-	8.16	RETIREMENT SYSTEM CONTRIBUTIO	10,285,907.70-	9.51	6,455,258.70-	6.31	59.34
42,777.37	.25	3,284.19-	.02	MISC EMPLOYEES' BENEFITS	217,680.39	.20	86,184.69	.08	152.57
12,376,091.52-	70.98	7,843,609.98-	50.90	OPERATING EXPENSES	53,818,041.21-	49.73	51,529,174.89-	50.40	4.44
112,869.31-	.65	238,892.40-	1.55	NON OPERATING REVENUE AND EXPE	2,617,271.86-	2.42	1,981,883.05-	1.94	32.06
1,166,159.46	6.69	329,649.20	2.14	CONTRIBUTION IN AID	7,204,121.41	6.66	4,643,503.51	4.54	55.14
4,034,477.76-	23.14	3,707,303.98-	24.06	OTHER EXPENSES	21,891,371.74-	20.23	24,427,541.86-	23.89	10.38-
2,077,579.29	11.92	3,949,110.23	25.63	Change In Net Assets	37,093,170.64	34.28	28,954,015.75	28.32	28.11



Board Of Water Supply  
Balance Sheet  
As of December 31, 2014

Description	Amounts			Change	
	Current	Last Month End	Last Year End	This Month	This Year
ASSETS					
CURRENT ASSETS	47,503,569.30	64,421,816.11	43,583,832.83	-16,918,246.81	3,919,736.47
RESTRICTED ASSETS	32,280,624.78	26,916,427.74	15,871,669.73	5,364,197.04	16,408,955.05
INVESTMENTS	249,503,749.86	234,521,109.04	220,305,587.35	14,982,640.82	29,198,162.51
OTHER ASSETS	6,775,194.52	7,079,901.31	8,972,982.66	-304,706.79	-2,197,788.14
PROPERTY / PLANT	1,122,829,042.35	1,123,314,259.57	1,120,477,820.67	-485,217.22	2,351,221.68
TOTAL ASSETS	<u>1,458,892,180.81</u>	<u>1,456,253,513.77</u>	<u>1,409,211,893.24</u>	<u>2,638,667.04</u>	<u>49,680,287.57</u>
LIABILITIES					
CURRENT LIABILITIES	12,395,502.60	15,220,890.85	31,259,856.70	-2,825,388.25	-18,864,354.10
OTHER LIABILITIES	25,950,684.20	25,935,909.93	26,731,427.57	14,774.27	-780,743.37
BONDS PAYABLE, NONCURRENT	315,847,259.98	312,475,558.25	283,615,045.58	3,371,701.73	32,232,214.40
LIABILITIES	<u>354,193,446.78</u>	<u>353,632,359.03</u>	<u>341,606,329.85</u>	<u>561,087.75</u>	<u>12,587,116.93</u>
NET ASSETS					
RETAINED EARNINGS	331,291,604.27	325,844,155.34	312,613,914.46	5,447,448.93	18,677,689.81
FUND BALANCE	594,633,831.66	594,633,831.66	594,633,831.66	0.00	0.00
RESERVE FOR ENCUMBRANCES	141,680,127.46	147,127,576.39	163,825,085.11	-5,447,448.93	-22,144,957.65
CURRENT YEAR CHANGES TO FU	37,093,170.64	35,015,591.35	-3,467,267.84	2,077,579.29	40,560,438.48
NET ASSETS	<u>1,104,698,734.03</u>	<u>1,102,621,154.74</u>	<u>1,067,605,563.39</u>	<u>2,077,579.29</u>	<u>37,093,170.64</u>
TOTAL LIABILITIES AND NET ASSETS	<u>1,458,892,180.81</u>	<u>1,456,253,513.77</u>	<u>1,409,211,893.24</u>	<u>2,638,667.04</u>	<u>49,680,287.57</u>

## Budget vs Actual Appropriation Budget - Total BWS Summary

Page -

1

(\$000's)

CIFIS 15820-3021

AS OF 12/31/2014

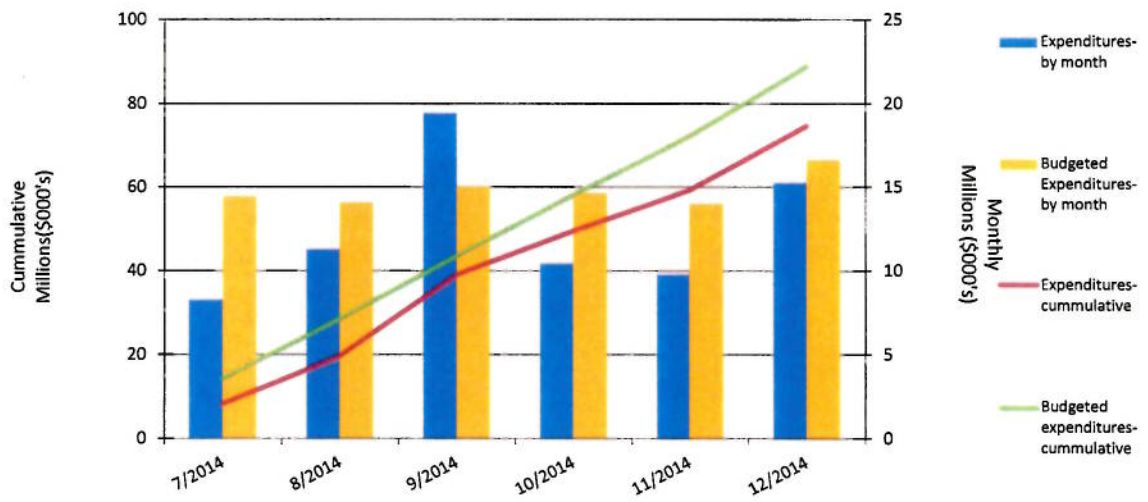
OPER UNIT ALL

BUSINESS UNIT ALL

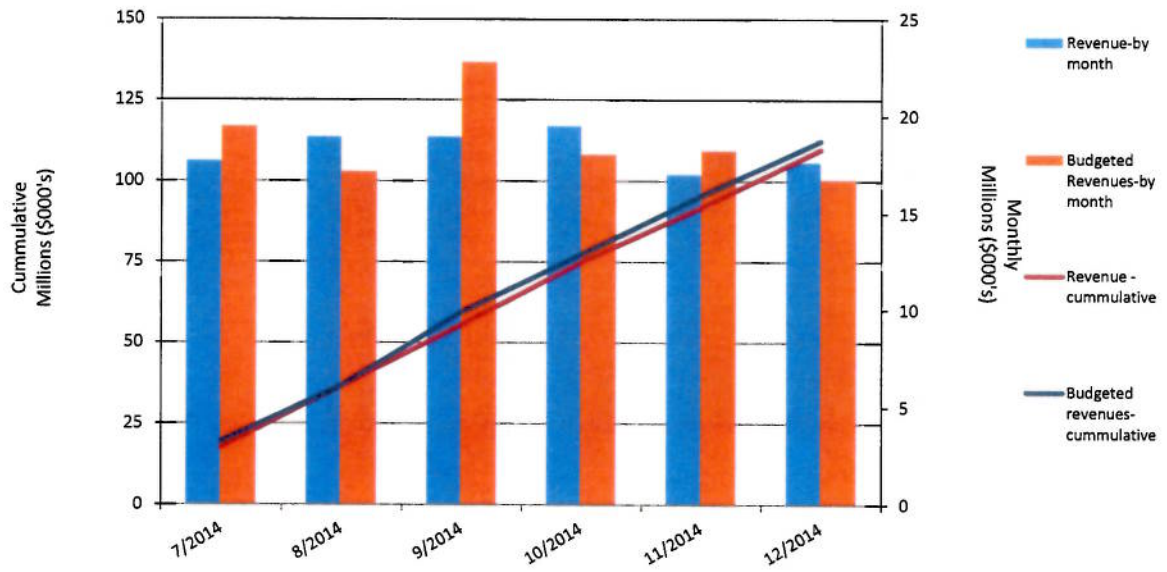
YTD-TO-DATE				FOR THE FISCAL YEAR					
YTD Actuals	YTD Budget	Avail/ (Over)	%	Object Description	Revenues/ Expend	Open Encumb	Annual Budget	Avail/ (Over)	%
109,644	112,340	2,696	2.40	REVENUE	109,644		217,633	107,989	49.62
OPERATING EXPENSES:									
17,229	21,918	4,689	21.39	Personnel Services	17,229		43,931	26,702	60.78
MATERIALS AND SUPPLIES									
6,685	9,698	3,013	31.07	Services	3,553	3,132	19,645	12,960	65.97
6,464	6,413	(51)	.80	Supplies	4,444	2,020	13,015	6,551	50.33
127	315	188	59.68	Education & Training	99	28	566	439	77.56
	6	6	100.00	Utilities			12	12	100.00
774	3,608	2,834	78.55	Repairs & Maint	608	166	5,133	4,359	84.92
5,251	5,146	(105)	2.04	Misc	4,734	517	11,921	6,670	55.95
768	1,174	406	34.58	Equipment	266	502	3,557	2,789	78.41
8,556	11,602	3,046	26.25	Debt Service	8,556		23,205	14,649	63.13
FIXED CHARGES:									
13,368	16,406	3,038	18.52	Utilities	13,368		32,813	19,445	59.26
1,650	1,650			Case Fees	1,650		3,300	1,650	50.00
3,959	3,804	(155)	4.07	Retirement System Contribution	3,959		7,608	3,649	47.96
9,792	7,290	(2,502)	34.32	Misc Employees' Benefits	9,567	225	14,579	4,787	32.83
74,623	89,030	14,407	16.18	TOTAL OPERATING EXPENDITURES	68,033	6,590	179,285	104,662	58.38
35,021	23,310	(11,711)		NET REVENUES (EXPENDITURES)	41,611	(6,590)	38,348	3,327	



# BUDGETED OPERATING EXPENDITURES FY 2015

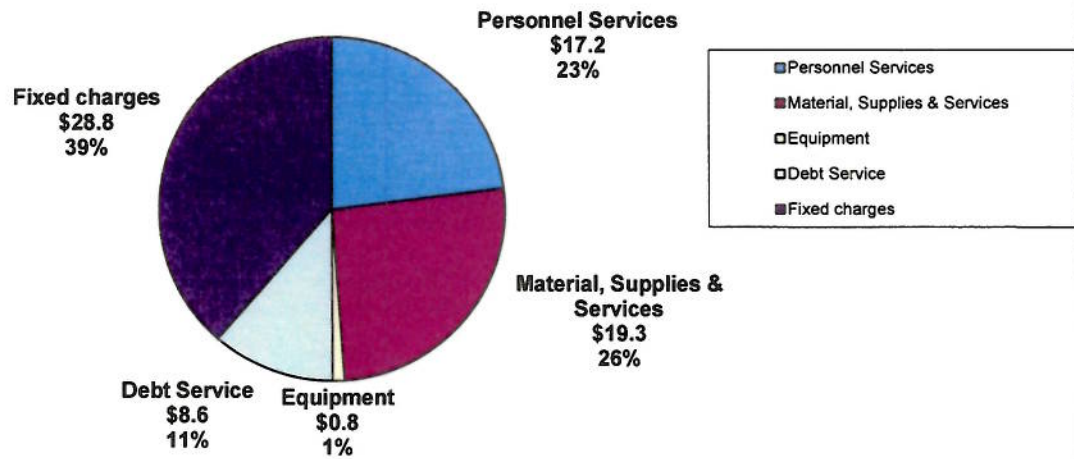


### BUDGETED OPERATING REVENUES FY 2015

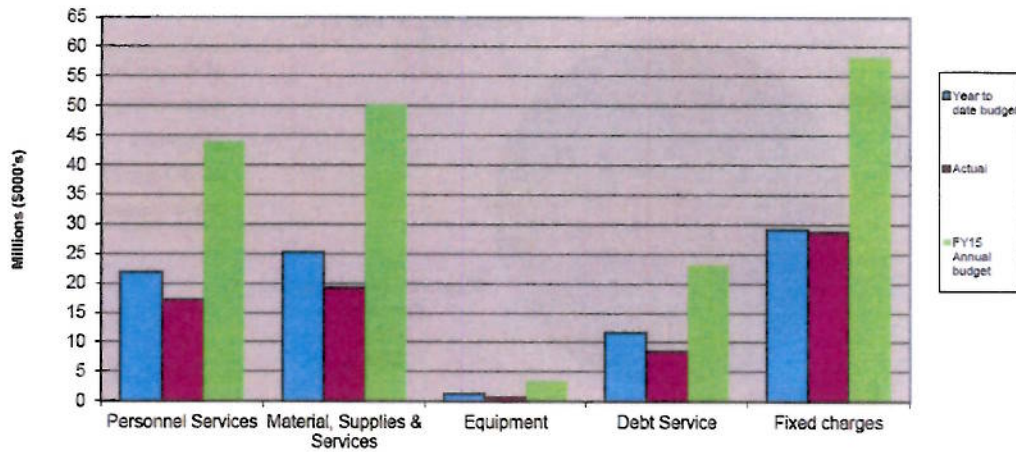




**Total Operating Expenditures -\$74.7**  
**As of December 31, 2014**  
(millions of dollars)



**Operating Expenditures by Category (Budget vs. Actual Expenditures and Encumbrances)**  
as of December 31, 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 2014 – Dec. 2014**







## Budget to Actual July 2014 – Dec. 2014

- Actual Revenue \$109.6 million vs.  
Budgeted Revenue \$112.3 million
- Operating costs are \$74.6 million vs.  
Budgeted costs of \$89.0 million
- Actual Net Revenue \$35.0 million vs.  
Budgeted Net Revenue \$23.3 million





## Cost Drivers

Year to Date Dec. 2014

	Actual (millions)	Budget (millions)
• Personnel	\$17.2	\$21.9
• Services	\$ 6.7	\$ 9.7
• Repairs & Maint.	\$ 0.8	\$ 3.6
• Equipment	\$ 0.8	\$ 1.2
• Utilities	\$13.4	\$16.4



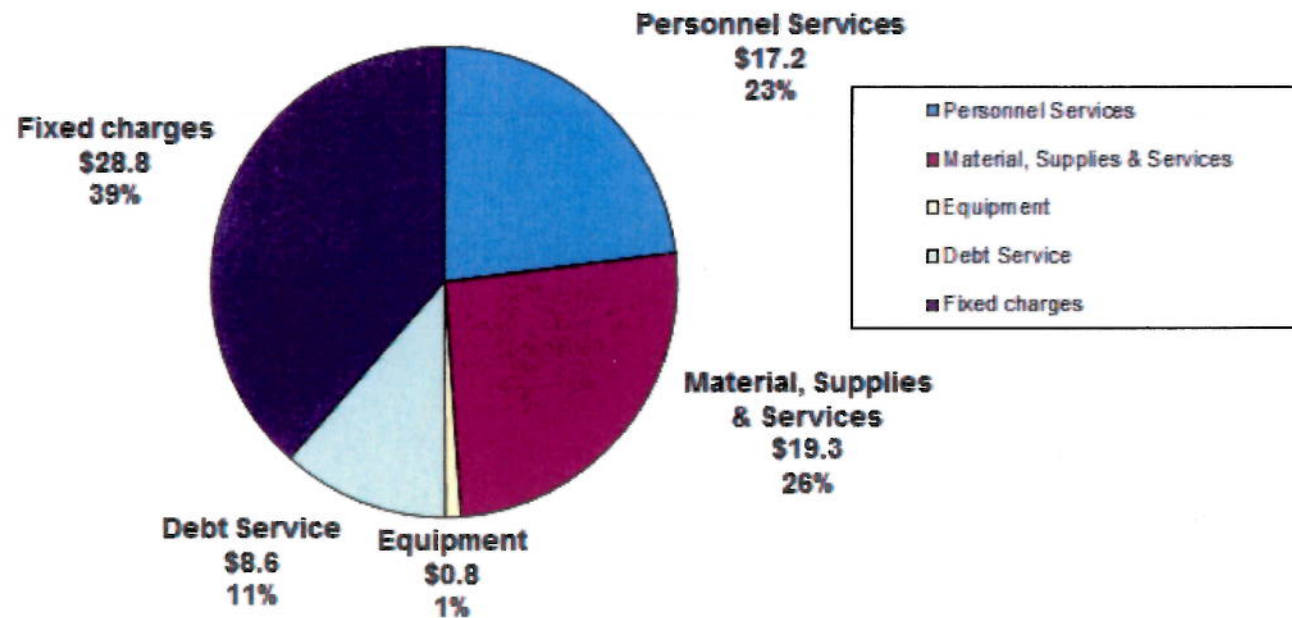
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Board of Water Supply  
City and County of Honolulu

## Total Operating Expenditures - \$74.7 As of December 31, 2014 (millions of dollars)





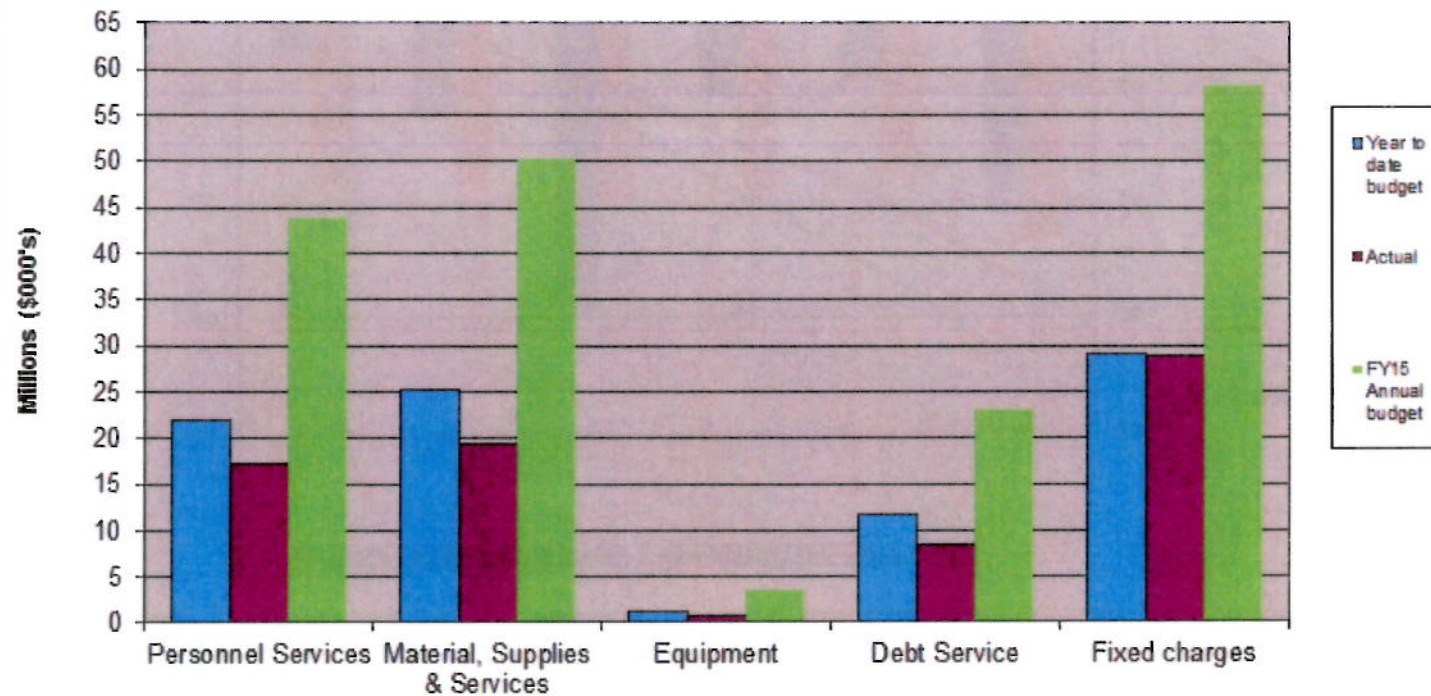
# WATER FOR LIFE

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Board of Water Supply  
City and County of Honolulu

**Operating Expenditures by Category (Budget vs. Actual Expenditures and Encumbrances)**  
as of December 31, 2014 (millions of dollars)





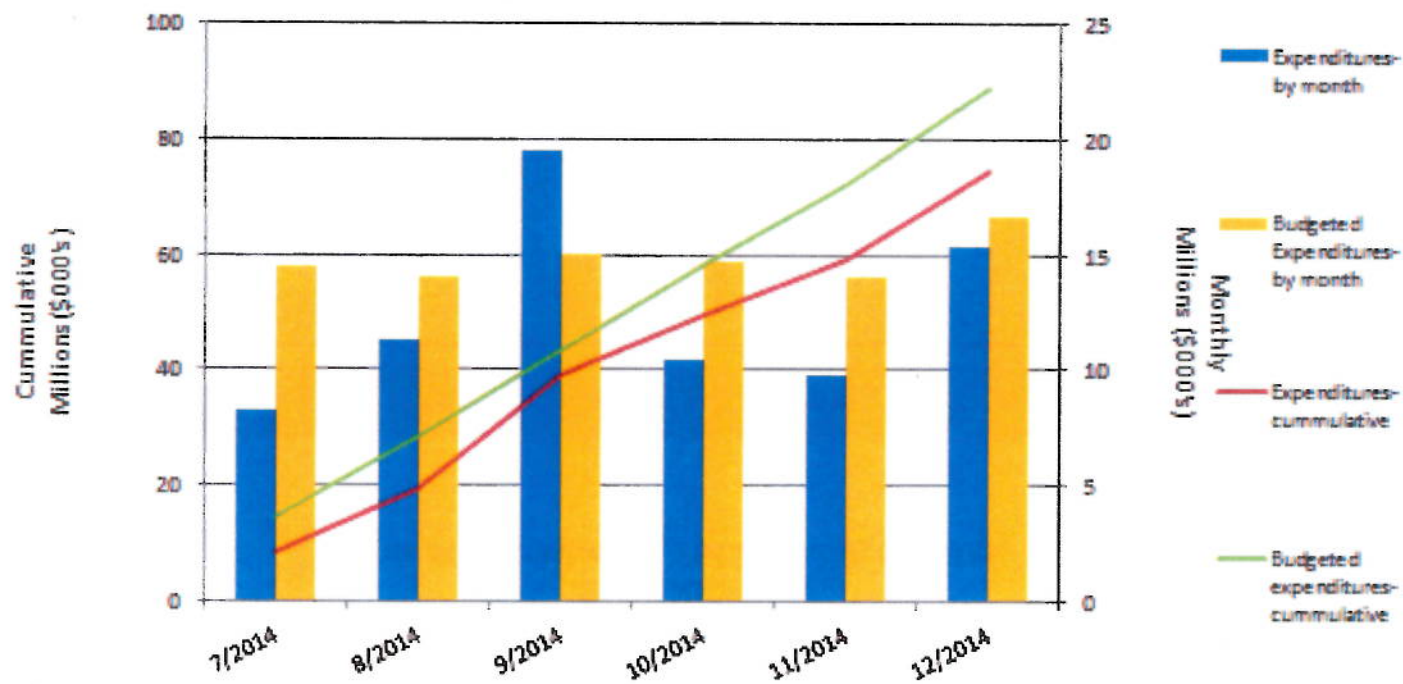
# WATER FOR LIFE

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Board of Water Supply  
City and County of Honolulu

## BUDGETED OPERATING EXPENDITURES FY 2015





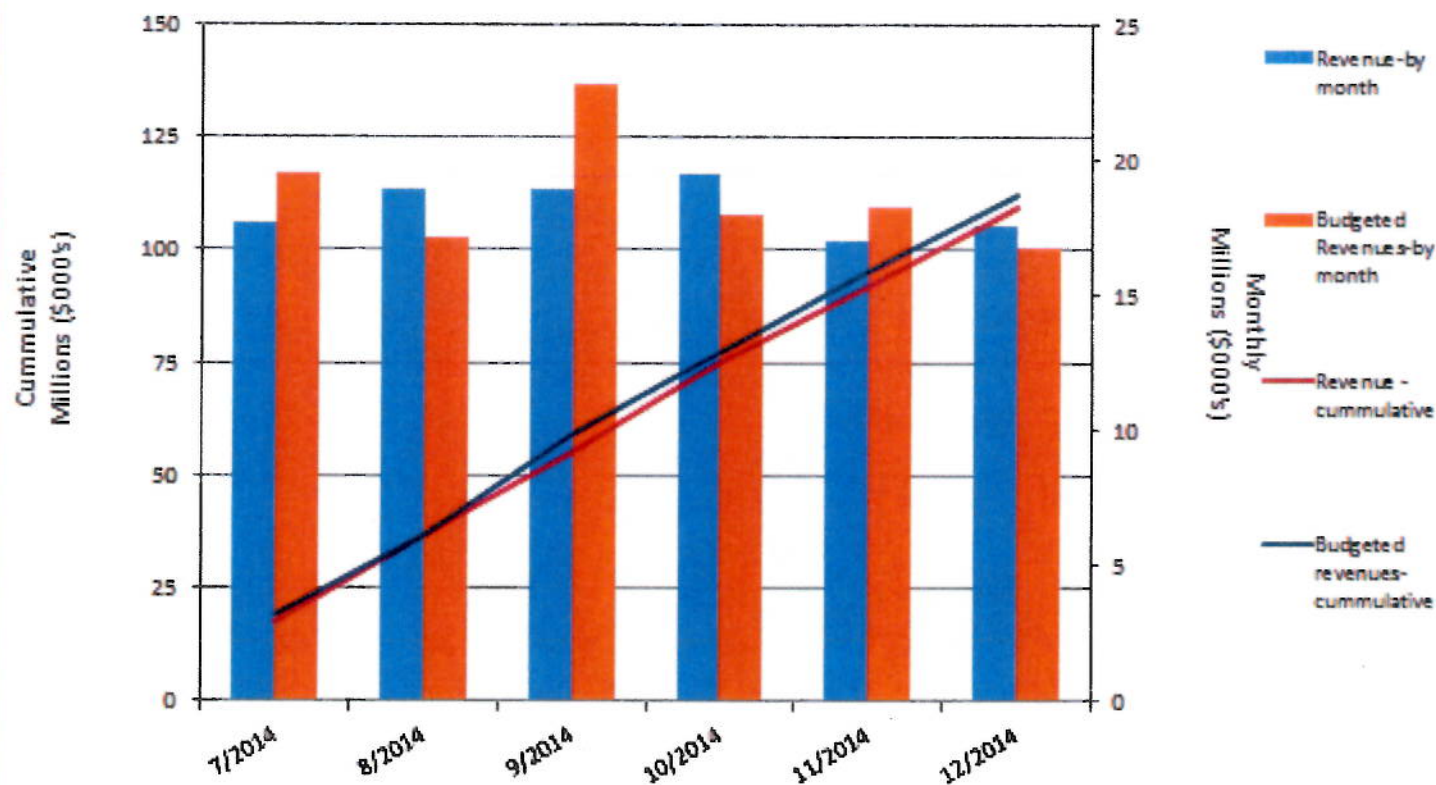
# WATER FOR LIFE

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Board of Water Supply  
City and County of Honolulu

## BUDGETED OPERATING REVENUES FY 2015





# WATER FOR LIFE

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

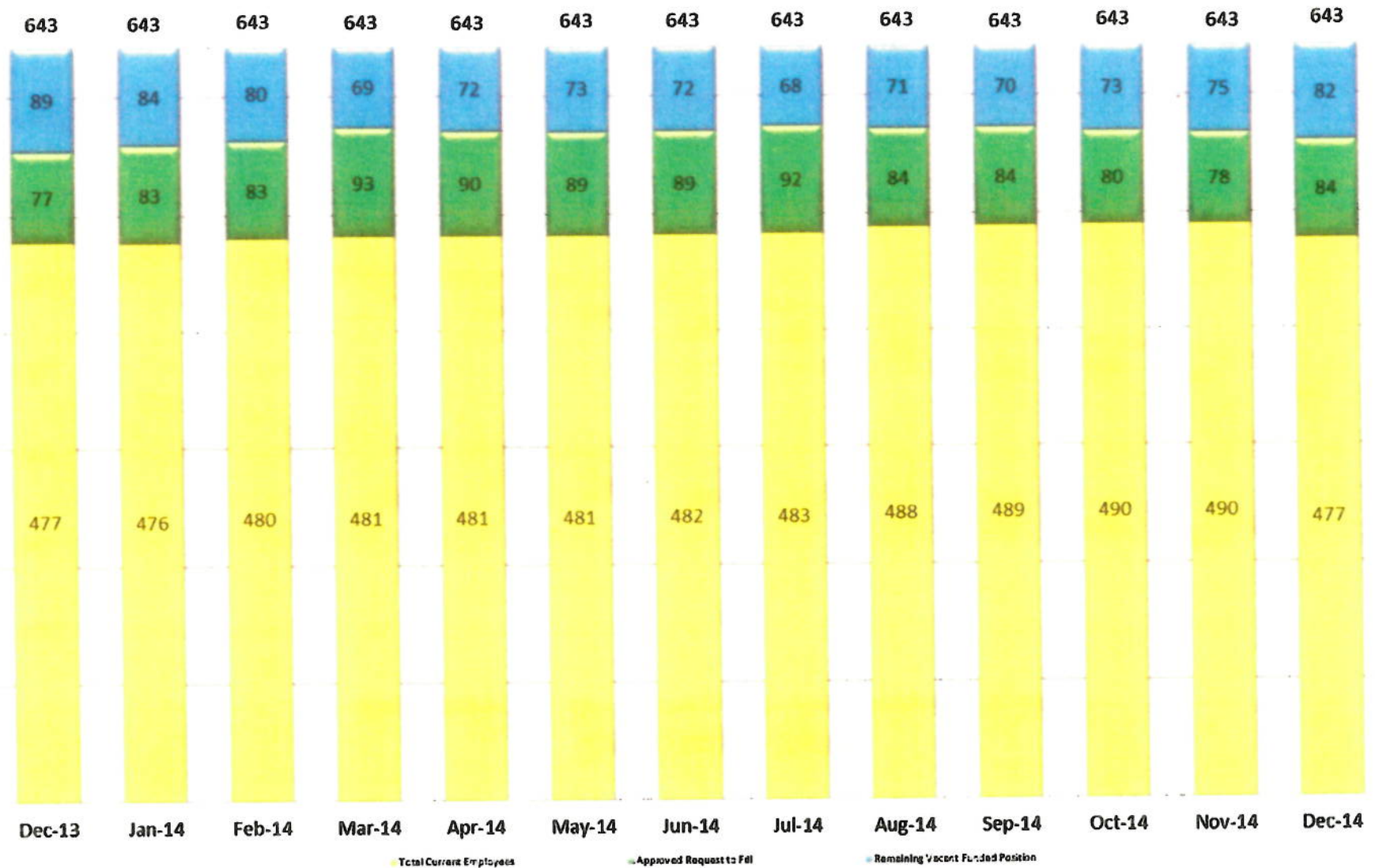


Board of Water Supply  
City and County of Honolulu

Questions  
or  
Comments



## Positions Filled December 1, 2014 through December 31, 2014





## Cumulative Totals December 1, 2013 through December 31, 2014



DISCUSSION:

Karen Tom of the Human Resources Office gave the report. She announced that there were 477 regular, civil service employees at the end of 2014. However, in December, recommendations to fill 12 positions were approved, so that number will increase when those people begin employment in January and February 2015. Most of the supervisory positions have been filled, so entry level positions can now be filled externally. During this last calendar year, 60 positions were filled, but there were 70 vacancies.

There were no comments or discussion.



ITEM FOR INFORMATION NO. 5

"January 26, 2015

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

For the production week that ended on January 10, 2015, there were no aquifer index wells within low groundwater status. The weekly production average for the period was 134.25 million gallons per day.

The Board of Water Supply rainfall index for the month of December 2014 was 83 percent of normal, with a 5-month moving average also 83 percent. The Hawaii Drought Monitor shows abnormally dry conditions for leeward Oahu, as of January 13, 2015. The National Weather Service is forecasting below normal rainfall through May 2015, associated with El Niño. However, most index monitor wells are exhibiting level to slightly increasing trends, reflecting seasonal reductions in pumpage.

Respectfully submitted,

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

Attachments"

The foregoing was for information only.

DISCUSSION:

Water Resources Program Administrator Barry Usagawa gave the report. Mr. Miyashiro stated that normally the Kaimuki station is under caution alert and asked what changed. Mr. Usagawa replied that the head levels rose so Kaimuki is slightly above. Mr. Miyashiro asked if the head level rise was due to rainfall and lack of water usage. Mr. Usagawa responded yes and explained that the pumpage is normally in the 140 million gallons per day (mgd) or high 130 mgd range, but it dropped to 130 mgd. The caution level is 23.5 feet and Kaimuki is now 23.69, so it is just two-tenths higher.

# PUMPAGE, HEAD, AND RAINFALL REPORT

Week of 1/04/15 to 1/10/15

STATION	MGD	HEAD	STATION	MGD	HEAD	STATION	MGD	HEAD	STATION	MGD	HEAD
METRO			WINDWARD			EWA-WAIAANAE (CONT)			PH (CONT)		
KULIOUOU	0.00					MAKAHA IV	0.00		PEARL CITY II	0.98	
WAILUPE	0.00		WAIMANALO II	0.33		MAKAHA V	0.00		PEARL CITY III	0.43	
WAIALAE-IKI	0.00		WAIMANALO III	0.22		MAKAHA VI	0.22		WAI AU	0.80	
AINA KOA	0.48		KUOU I	1.05		MAKAHA SHAFT	0.00	16.37	NEWTOWN	2.11	
AINA KOA II	1.02		KUOU II	0.10		KAMAILE	0.22		KAONOH I	0.78	
WAIALAE SHAFT	0.00		KUOU III	0.68		WAIAANAE I	0.18		WAIMALU I	0.00	
MANOA II	0.76		LULUKU	1.02		WAIAANAE II	0.80		AIEA	0.00	
PALOLO	0.96		HAIKU	0.36		WAIAANAE III	0.37		AIEA GULCH 497	0.45	
KAIMUKI HIGH	2.84	23.69	IOLEKAA	0.23		MAKAKILO	0.52		AIEA GULCH 550	0.23	
KAIMUKI LOW	0.16		KAHALUU	0.49		HONOULIULI I	3.69		HALAWA 277	0.85	
WILDER	4.14		WAIHEE	0.00		HONOULIULI II	6.48		HALAWA 550	0.00	
BERETANIA HIGH	4.18	23.10	KAHANA	0.79		SUBTOTAL:	14.16		KAAHUMANU MTR (-)	0.00	
BERETANIA LOW	2.93		PUNALUU I	0.00	18.08	IMPORT FROM PH			KAAMILO FLO MTR (-)	0.00	
KALIH I HIGH	1.86	22.42	PUNALUU II	0.30		KAPOLEI LINE BSTR	13.31		KUNIA I	4.60	19.15
KALIH I LOW	2.55		PUNALUU III	1.18		HONOULIULI LB FLOW	16.27		KUNIA II	0.80	
KAPALAMA	0.53		KALUANUI	0.32		EWA BEACH FLOW	4.23		KUNIA III	1.42	
KALIH I SHAFT	8.58		MAAKUA	0.17		HONOULIULI I (-)	-3.69		HOAEAE	4.35	
MOANALUA	0.53	19.30	HAUULA	0.00		HONOULIULI II (-)	-6.48		EWA SHAFT	0.00	
SUBTOTAL:	31.52					SUBTOTAL:	23.64		WAIPAHU INTCON. (-)	0.00	
			KAHUKU	0.00					EWA-WAIAANAE (-)	-23.64	
IMPORT FROM PH			OPANA	1.02		PEARL HARBOR			PH LOCAL USE:	14.37	
HALAWA SHAFT	6.88	16.87	WAIALEE I	0.99		WAIHAWA	1.78		TOTAL SUBURBAN:	63.28	
KAAMILO	0.00		WAIALEE II	0.23		WAIHAWA II	1.74				
KALAUAO	8.16	17.40	SUNSET BEACH	0.00		MILILANI I	3.33		KALAUAO SPRINGS	0.68	
PUNANANI	11.57		SUBTOTAL:	9.48		MILILANI II	0.00		BARBERS POINT (NP)	4.35	
KAONOH I II	0.00					MILILANI III	0.73		GLOVER TUNNEL (NP)	0.48	
WAIMALU II	0.00	15.35	WIND. EXPORT	0.14		MILILANI IV	0.74				
KAAHUMANU	0.90					WAIPIO HTS.	0.73		HEAD CONDITION		
HECO WAI AU	2.81		HALEIWA-WAIALUA			WAIPIO HTS. I	0.32		CAUTION	ALERT	CRITICAL
MANANA	0.49		HALEIWA	0.00		WAIPIO HTS. II	0.08				
KAHUMANU FLOW MT	0.00		WAIALUA	1.75		WAIPIO HTS. III	1.02				
KAAMILO FLOW MTR	0.00		SUBTOTAL:	1.75		WAIPAHU	3.88	18.80			
TOTAL IMP/EXP WAI P. INT:	0.00					WAIPAHU II	1.33				
IMPORT FRM WIND:	0.14		EWA-WAIAANAE			WAIPAHU III	0.78				
SUBTOTAL:	30.95		MAKAHA I	0.88		WAIPAHU IV	2.57				
			MAKAHA II	0.28		PEARL CITY SHAFT	0.95	14.99			
TOTAL METRO:	62.47		MAKAHA III	0.54		PEARL CITY I	0.27				

CWRM PERMITTED USE FOR BWS POTABLE SOURCES						PUMPAGE	2015	2014	GRAVITY	2015	2014
	A	B	C	D	E	SUBURB.	63.28	56.88	SUBURB.	8.06	6.41
WATER DISTRICTS	PERMITTED USE	2015	DIFF. B-A	YEAR/ DATE	DIFF. D-A	METRO	62.47	60.97	METRO	0.45	0.40
HONOLULU	45.27	31.97	-13.29			TOTAL:	125.75	117.85	TOTAL:	8.51	6.81
WINDWARD	25.21	13.74	-11.47						Manoa	0.17	
NORTH SHORE	4.08	3.99	-0.09			NUUANU #5			Palolo	0.28	
WAIHAWA	4.27	3.52	-0.75			(rainfall)	1.35"	0.20"	Waim. I&II	0.08	
WAIAANAE	4.34	4.50	0.16						Waim. III&IV	0.19	
EWA-KUNIA	15.88	10.68	-5.20						Waihee incl.	0.93	
PEARL HARBOR	92.66	65.31	-27.35						Waihee tun.	1.98	
TOTAL:	191.71	133.72	-57.98						Luluku	0.07	
									Haiku	1.06	
									Kahaluu	2.20	
									Waia. C&C	1.40	
									Waia plant.	0.16	



DROUGHT STATUS REPORT  
DRAFT IN MGD

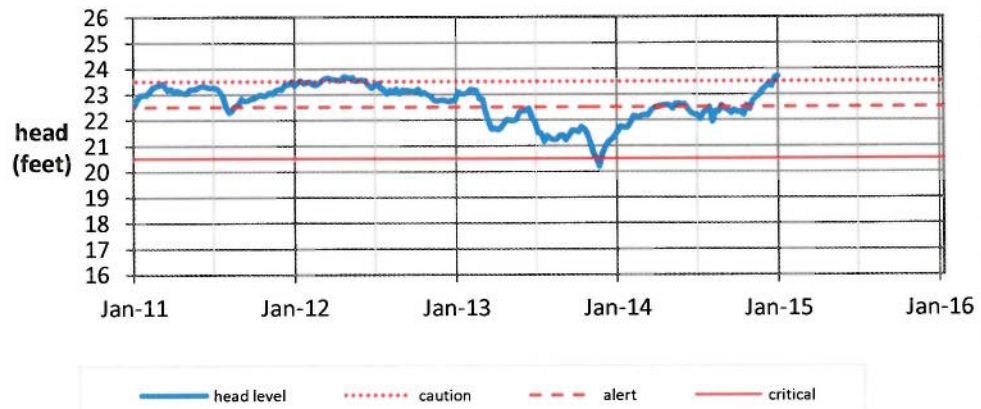
WATER USE DISTRICT	AUTHORIZED USE	2014	12/28-1/03 2015	2014	1/04-1/10 2015				
HONOLULU	45.27	33.86	32.29	32.45	32.11				
WINDWARD	25.21	11.43	13.02	12.07	13.60				
NORTH SHORE	4.08	3.80	3.95	3.79	3.99				
WAHIAWA	4.27	3.44	3.37	3.51	3.52				
EWA-WAIAANAE	20.22	23.36	39.81	20.77	39.37				
PEARL HARBOR	92.66	49.90	41.19	52.08	41.66				
TOTAL	191.71	125.80	133.63	124.67	134.25				

Accounts for in-district pumpage and transfers

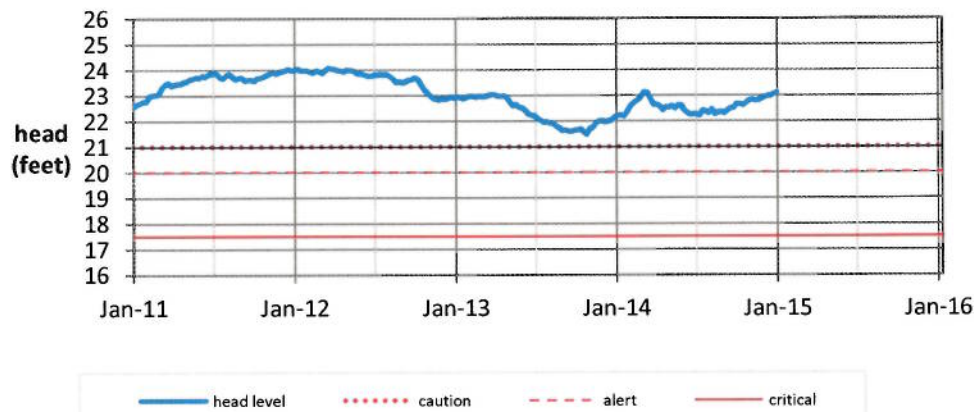
HEAD IN FEET

		2014	12/28-1/03 2015	2014	1/04-1/10 2015				
HONOLULU									
KAIMUKI		21.40	23.65	21.58	23.69				
BERETANIA		22.15	23.06	22.21	23.10				
KALIHI		21.94	22.39	21.94	22.42				
MOANALUA		18.99	19.24	18.98	19.30				
PEARL HARBOR									
HALAWA		16.66	16.89	16.66	16.87				
KALAUAO		17.16	17.33	17.12	17.40				
PEARL CITY		14.86	14.96	14.87	14.99				
WAIPAHU		18.48	18.71	18.50	18.80				
KUNIA		18.73	19.00	18.78	19.15				
EWA-WAIAANAE									
MAKAHA		10.53	16.40	10.51	16.37				
WINDWARD									
PUNALUU		17.14	18.18	17.05	18.08				
KALUANUI		16.84	18.35	16.78	18.38				
NORTH SHORE									
WAIALUA		11.21	11.17	11.21	11.25				

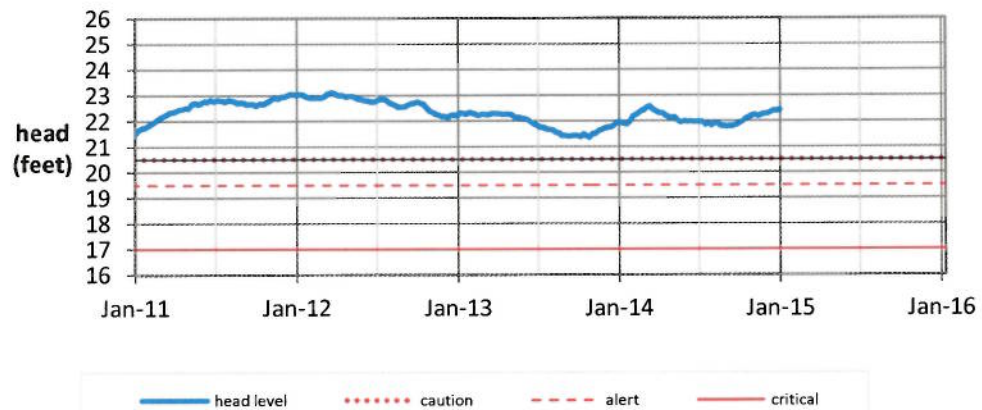
### Kaimuki



### Beretania

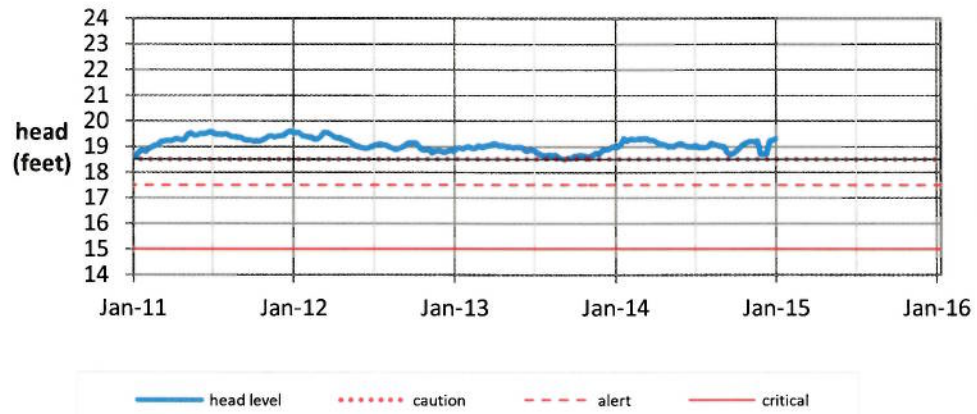


### Kalihi

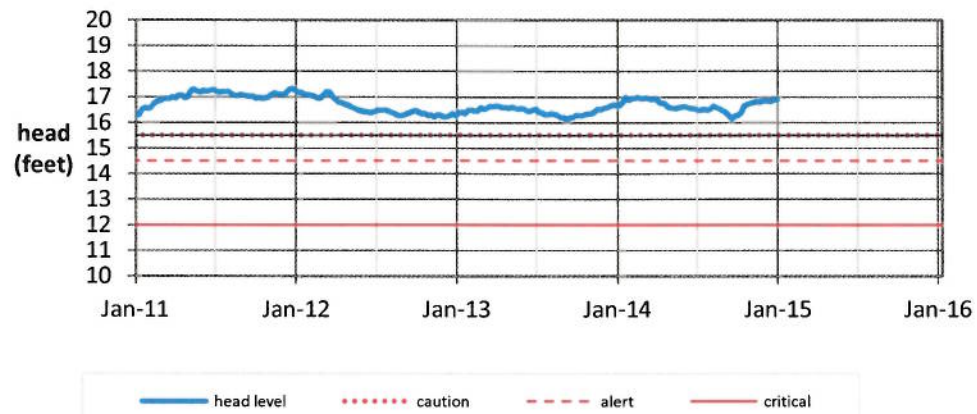




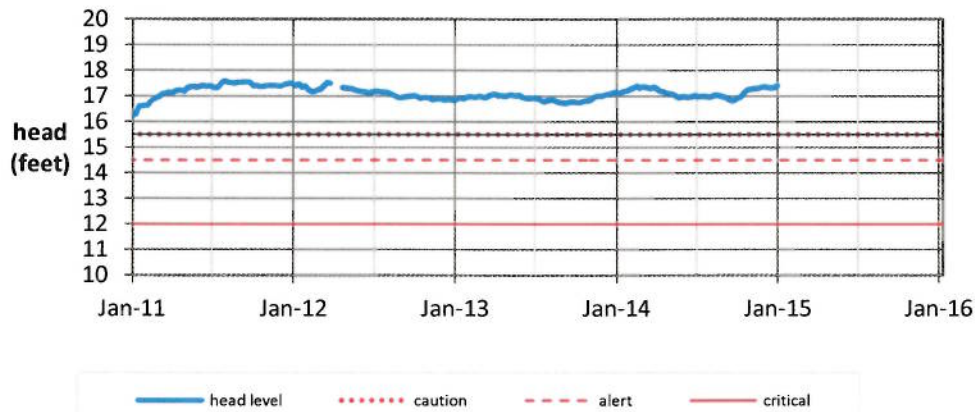
## Moanalua



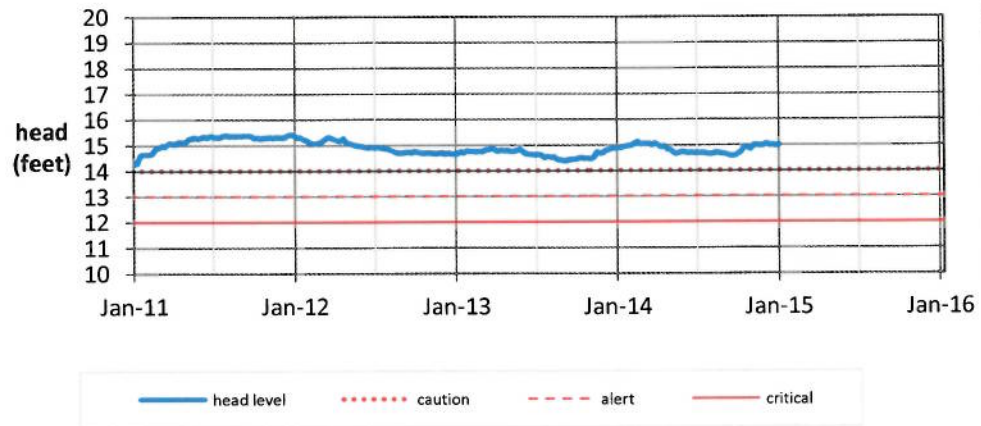
## Halawa



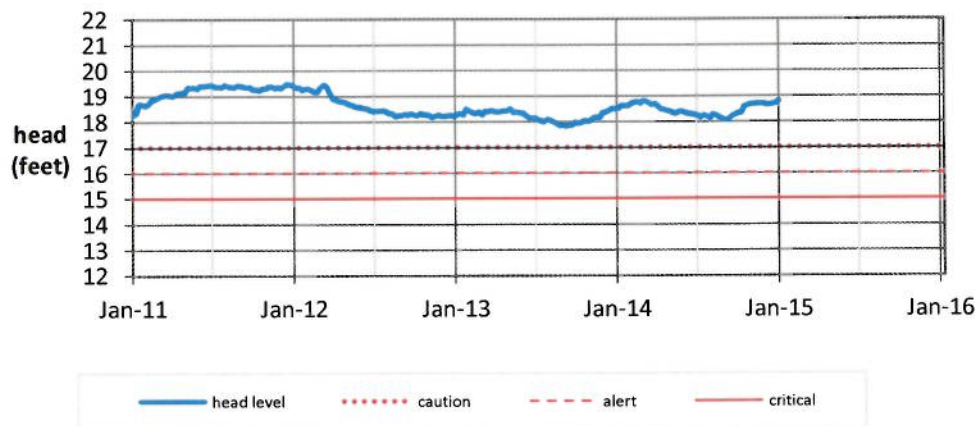
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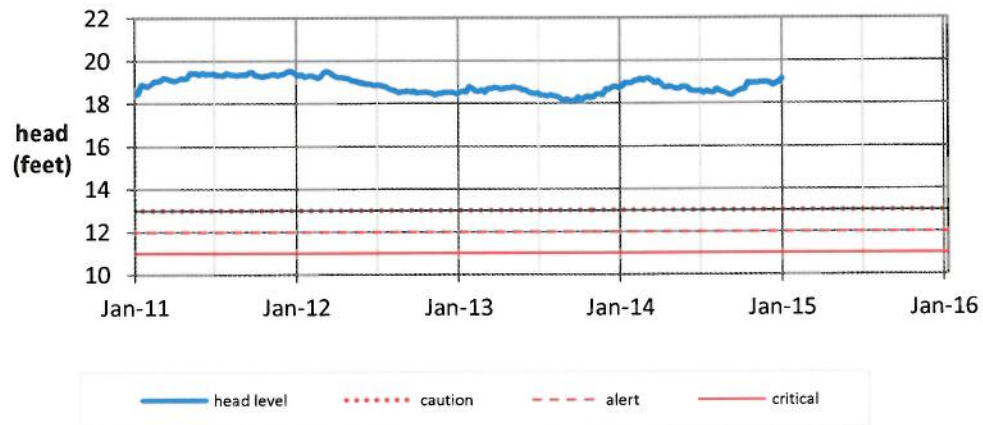
### Pearl City



### Waipahu

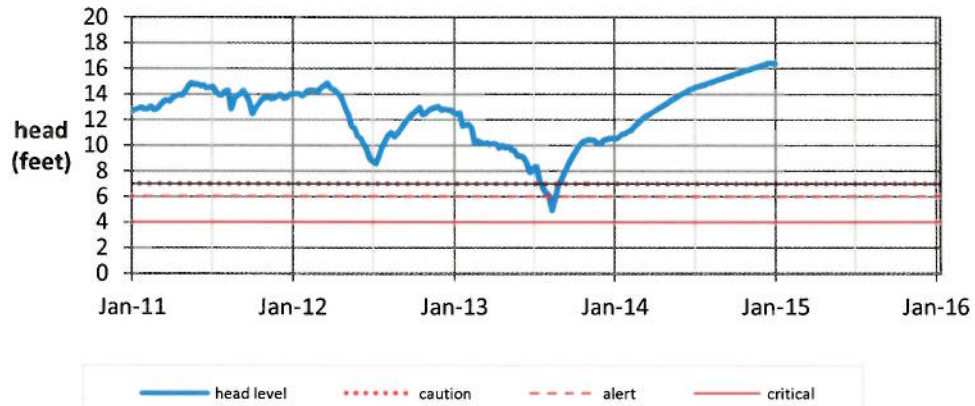


### Hoeae-Kunia

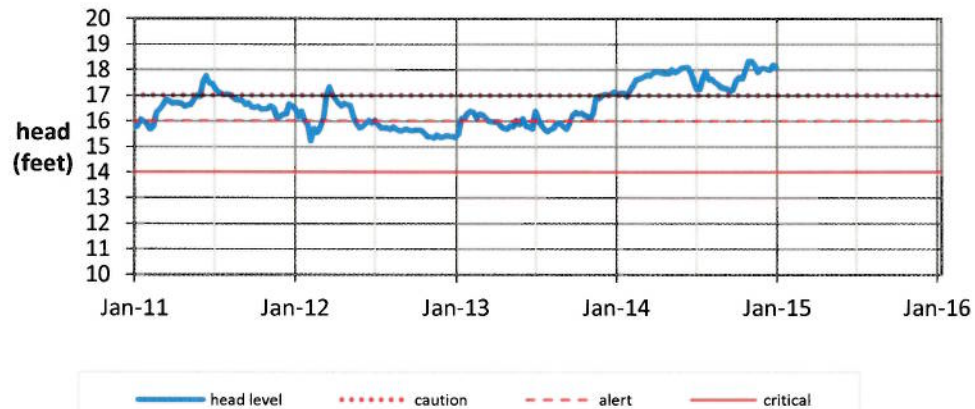




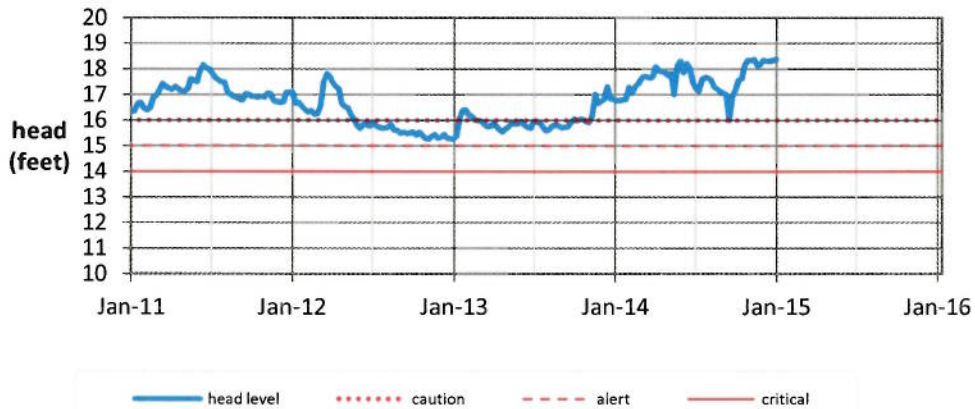
## Makaha



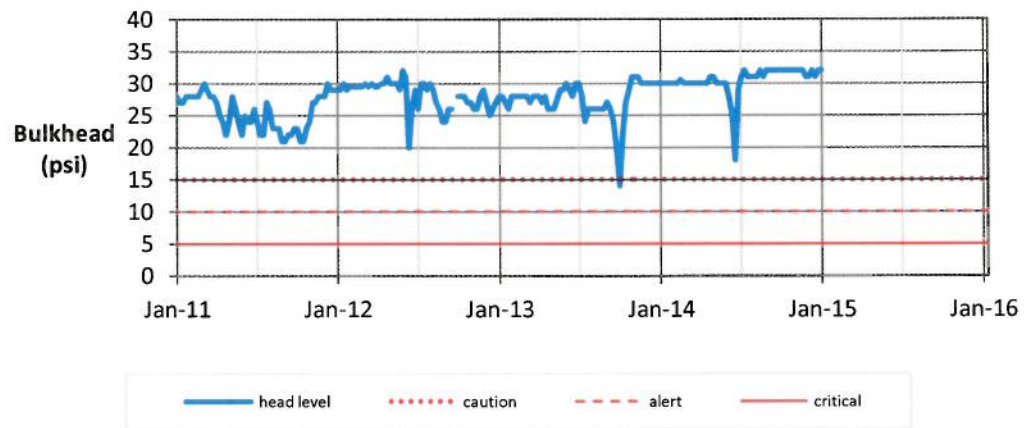
## Punaluu



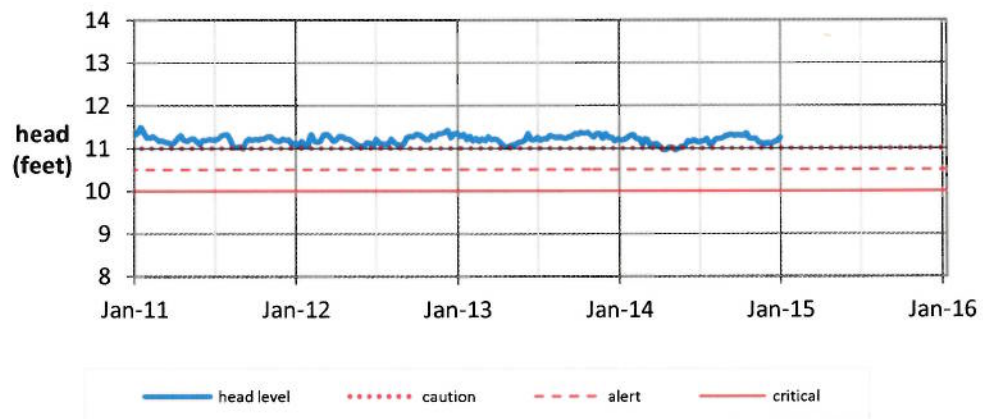
## Kaluanui



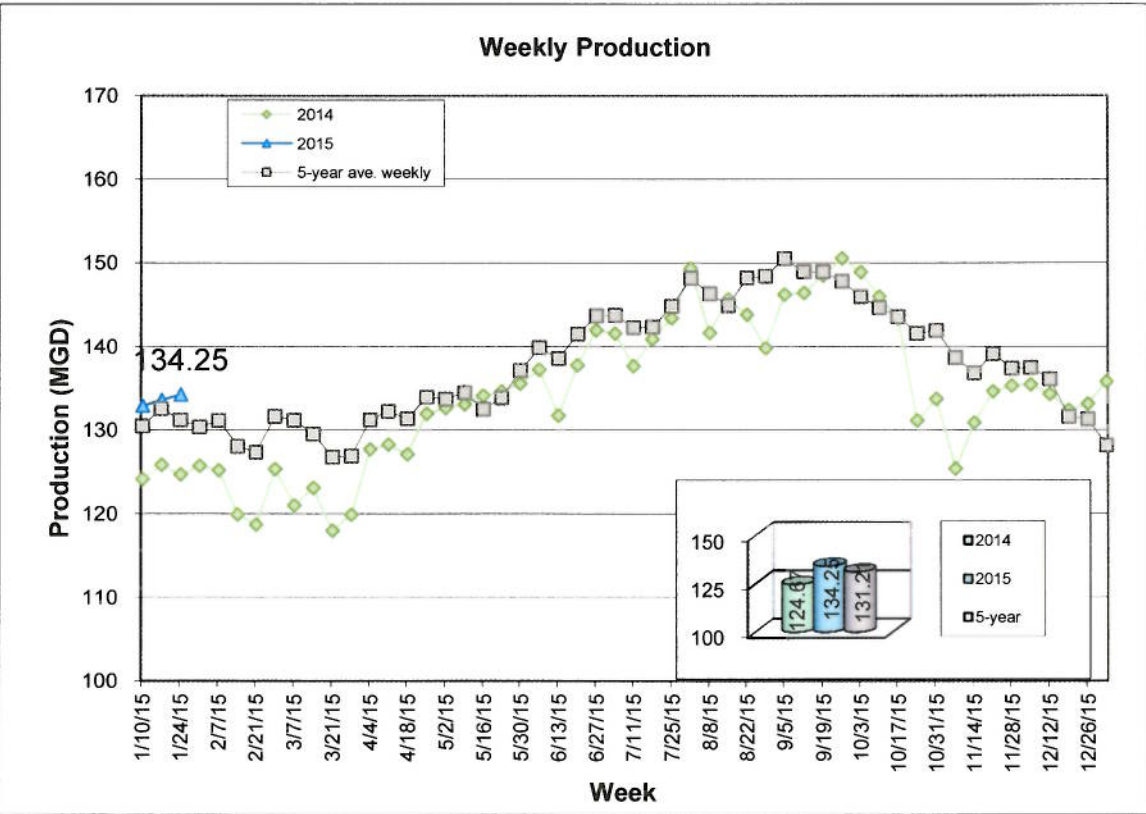
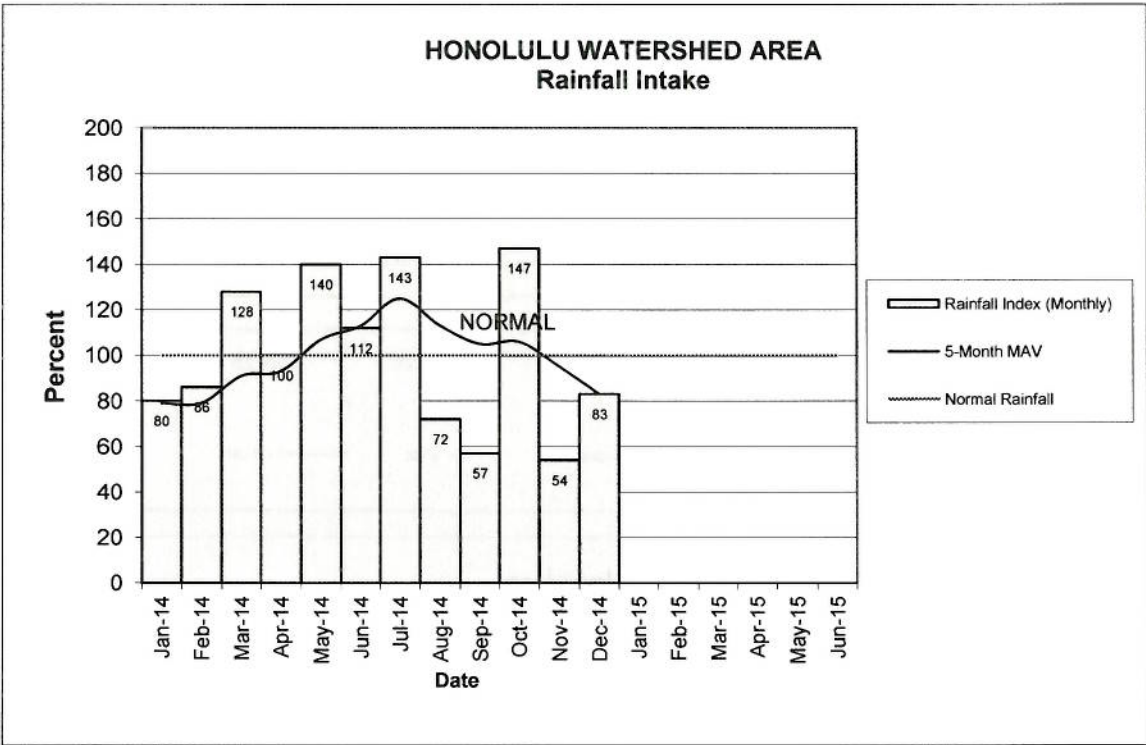
## Waihee Tunnel



## Waialua





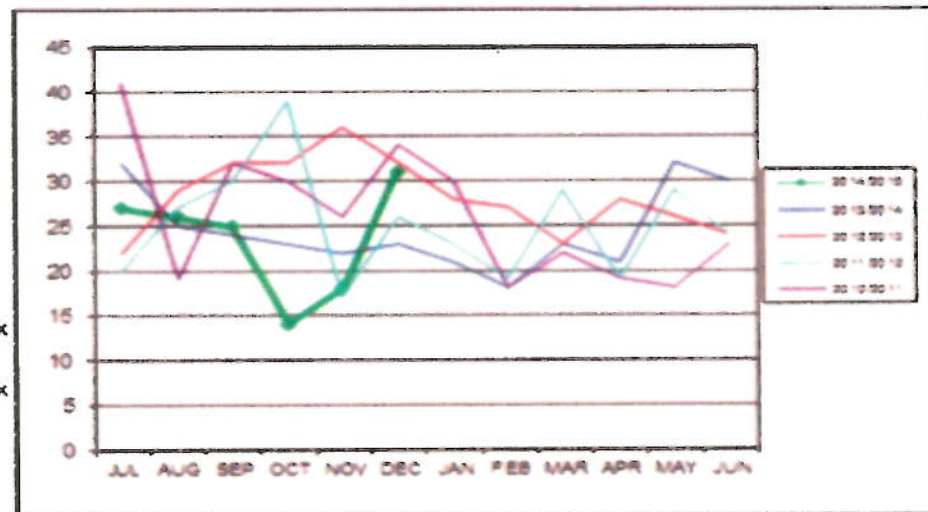


ITEM FOR INFORMATION NO. 6

# **WATER MAIN REPAIR REPORT** for December 2014

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2014/2015	27	26	25	14	18	31							141
2013/2014	32	25	24	23	22	23	21	18	23	21	32	30	294
2012/2013	22	29	32	32	36	32	28	27	23	28	26	24	339
2011/2012	20	27	30	39	17	26	23	19	29	19	29	24	302
2010/2011	41	19	32	30	26	34	30	18	22	19	18	23	312

Date	Address	Size	Cause
12/1	5152 Maunaloa Cir.	8" C.I.	Unknown
12/2	Kiolo St & Kamehameha IV Rd.	8" C.I.	Settlement
12/2	94-1014 Uluo Pl.	4" C.I.	Corrosion
12/3	94-138 Pupukahi St.	8" AC	Damage
12/4	507 Ilaina St.	8" AC	Unknown
12/5	85-231 McArthur St.	8" P.V.C.	Unknown
12/6	Kawaikui St. & Halemaumau St.	8" C.I.	Corrosion
12/6	6152 Kawaia Pl.	8" C.I.	Corrosion
12/6	45-570 Kaneke St.	8" C.I.	Settlement
12/6	54-253 Anolei Rd.	4" C.I.	Corrosion
12/7	726 Mokuks Dr.	8" P.V.C.	Bear on Rock
12/6	2270 Palolo Ave.	8" C.I.	Corrosion
12/9	98-1259 Akaaka St.	8" P.V.C.	Bear on Rock
12/9	99-054 Nalopaka Pl.	8" C.I.	Corrosion
12/11	mountain line-702 Alewa Dr.	6" Galv	Corrosion
12/11	547 Halekauwila St.	8" C.I.	Corrosion
12/11	55-1333 Lehiwa Dr.	20" C.I.	Joint
12/11	1027 Wainiha St.	12" C.I.	Unknown
12/12	45-224 Hilowale St.	8" C.I.	Unknown
12/13	2120 Puna St.	8" C.I.	Corrosion
12/14	41-1631 Humupaa St.	8" C.I.	Unknown
12/16	2129 Okoa St.	8" D.I.	Unknown
12/16	1047 Hanohano Wy.	4" D.I.	Corrosion
12/18	98-1656 Apala Ln.	8" C.I.	Corrosion
12/19	1716 Kalakaua Ave.	8" C.I.	Clamp
12/27	3907 Kaimuk Ave.	4" Galv	Corrosion
12/27	Kaawe St near Ala Moana Bl.	8" D.I.	Corrosion
12/28	1047 Hanohano Wy.	4" D.I.	Corrosion
12/28	99-646 Halewa Heights Rd.	8" C.I.	Corrosion
12/29	2605 Booth Rd.	6" C.I.	Corrosion
12/30	42 Pulwa Rd.	12" P.V.C.	Pressure



**Bold \* - Pro-active Leak Repair**

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



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

MOTION TO  
RECESS INTO  
EXECUTIVE  
SESSION

Upon unanimously approved motion, the Board Recessed into Executive Session Pursuant to [HRS § 92-5(a)(2)] at 3:15 PM to Consider Issues Pertaining to Matters Posted for Discussion at an Executive Session.

OPEN  
SESSION

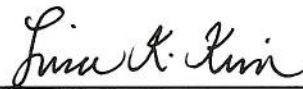
The Board reconvened in open session at 3:30 PM

MOTION TO  
ADJOURN

There being no further business Chair Miyashiro at 3:30 PM called for a motion to adjourn the Open Session. David Hulihee so moved; seconded by Theresia McMurdo and unanimously carried.

THE MINUTES OF THE REGULAR SESSION BOARD MEETING ON JANUARY 26, 2015 WERE APPROVED AT THE FEBRUARY 23, 2015 BOARD MEETING			
	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG	X		
THERESIA C. MCMURDO			ABSENT
DAVID C. HULIHEE	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI			ABSENT

Respectfully submitted,



LISA K. KIM

APPROVED:



DUANE R. MIYASHIRO  
Chair of the Board

FEB 23 2015

Date