

MINUTES

REGULAR MEETING OF THE BOARD OF WATER SUPPLY

June 22, 2015

At 2:00 PM on June 22, 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
Theresia C. McMurdo
David C. Hulihee
Ross S. Sasamura
Ford N. Fuchigami
Kapua Sproat

Also Present: Ernest Lau, Manager and Chief Engineer
Ellen Kitamura, Deputy Manager and Chief Engineer
Alex Ubiadas
Shawn Nakamoto
Barry Usagawa
Daryl Hiromoto
Erwin Kawata
Joe Cooper
Karen Tom
Robert Morita
Henderson Nuuhiwa
Jonathan Suzuki
Mike Matsuo
Kevin Ihu
Paul Kikuchi
Jennifer Elflein
Thelma Kimura
Leanne Matsumoto
John Gibo
Travis Sonomura

Others Present: Krishna Jayaram, Deputy Corporation Counsel
Dan Lawrence, Deputy Corporation Counsel
Cliff Lum, SSFM International
Margarita Ayala, Ward Research
Judi Suzuki
Susan Werner
Eddie Rothman

Absent: Adam C. Wong, Vice Chair

APPROVAL
OF MINUTES

Approval of the Minutes of the Public Hearing and the Regular Meeting held on May 26, 2015

MOTION
TO APPROVE

David Hulihee and Ross Sasamura motioned and seconded, respectively, to approve the Minutes of the Public Hearing and the Regular Session Meeting of May 26, 2015. The motion was unanimously carried, with the exception of Kapua Sproat who abstained.

"June 22, 2015

**ELECTION OF
CHAIR AND
VICE CHAIR**

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

Chair and Members:

Subject: Election of Chair and Vice Chair of the Board of Water Supply
Beginning July 1, 2015

The Bylaws of the Board of Water Supply provides that the Chair and Vice Chair of the Board shall be elected annually from among and by the appointed members of the Board at the first regular meeting in June.

Accordingly, election of the Chair and Vice Chair of the Board for the ensuing year commencing July 1, 2015, is now in order.

Respectfully submitted,

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

**NOMINATION
AND MOTION**

David Hulihee nominated Duane Miyashiro for Board Chair and was seconded by Theresia McMurdo. David Hulihee nominated Adam Wong for Board Vice Chair and was seconded by Theresia McMurdo. Both Duane Miyashiro and Adam Wong were unanimously elected to serve as Chair and Vice Chair, respectively, of the Board of Water Supply for the ensuing year commencing July 1, 2015.

DUANE MIYASHIRO ELECTED AS CHAIR AND ADAM WONG ELECTED AS VICE CHAIR OF THE BOARD OF WATER SUPPLY FOR THE ENSUING YEAR COMMENCING JULY 1, 2015, AT THE JUNE 22, 2015 BOARD MEETING			
	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG			ABSENT
THERESIA C. MCMURDO	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		

"June 22, 2015

APPROVAL OF
PROCEDURES
FOR THE SALE,
TRANSFER OR
EXCHANGE OF
PROPERTY

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96834

Chair and Members:

Subject: Review and Approval of Procedures for the Sale,
Transfer or Exchange of Board of Water Supply Real
Property and Any Interests Therein

We request your review and approval of the attached procedures for the disposal of Board of Water Supply (BWS) real properties and any interests therein.

The procedures were developed in response to a recommendation in Report No. 14-03, *Audit of Select Management and Operational Practices at the Board of Water Supply*, by the City Auditor, City and County of Honolulu, dated September 2014. The subject report recommended that BWS should "establish written policies or procedures in accordance with Section 7-105 (f), Revised Charter of Honolulu (RCH), related to real property transactions."

Respectfully submitted,

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

Attachments"

DISCUSSION

Mike Matsuo of the Land Division gave the report. He informed the Board that one of the recommendations in the City Auditor's Report No. 14-03, *Select Management and Operational Practices at BWS* done in September 2014, was to establish written procedures in accordance with Section 7-105(f) of the Revised Charter of the City and County of Honolulu related to real property transactions by the BWS. Mr. Matsuo explained the process.

Board Member Fuchigami asked how land qualifies to become surplus land. Mr. Matsuo explained that if BWS no longer needs a well site or a reservoir for the water system, then the property would become surplus.

Board Member McMurdo suggested that all Councilmembers should be notified about the disposal, instead of just notifying the Councilmember in whose district the surplus real property is located. Chair Miyashiro inquired if BWS is required to notify City Council or if this is just a courtesy. Mr. Matsuo replied that the Revised Charter states that the City Council's approval is

required to dispose of any real property, and Mr. Lau added that it's a better practice to notify them in advance. Board Member Hulihee inquired if the Mayor needs to be notified. Manager Lau replied that the Mayor would be notified when the City agencies are notified. Deputy Manager Kitamura added that whenever BWS has a need to prepare a City Council resolution, BWS would meet with City Administration first to inform them of the resolution.

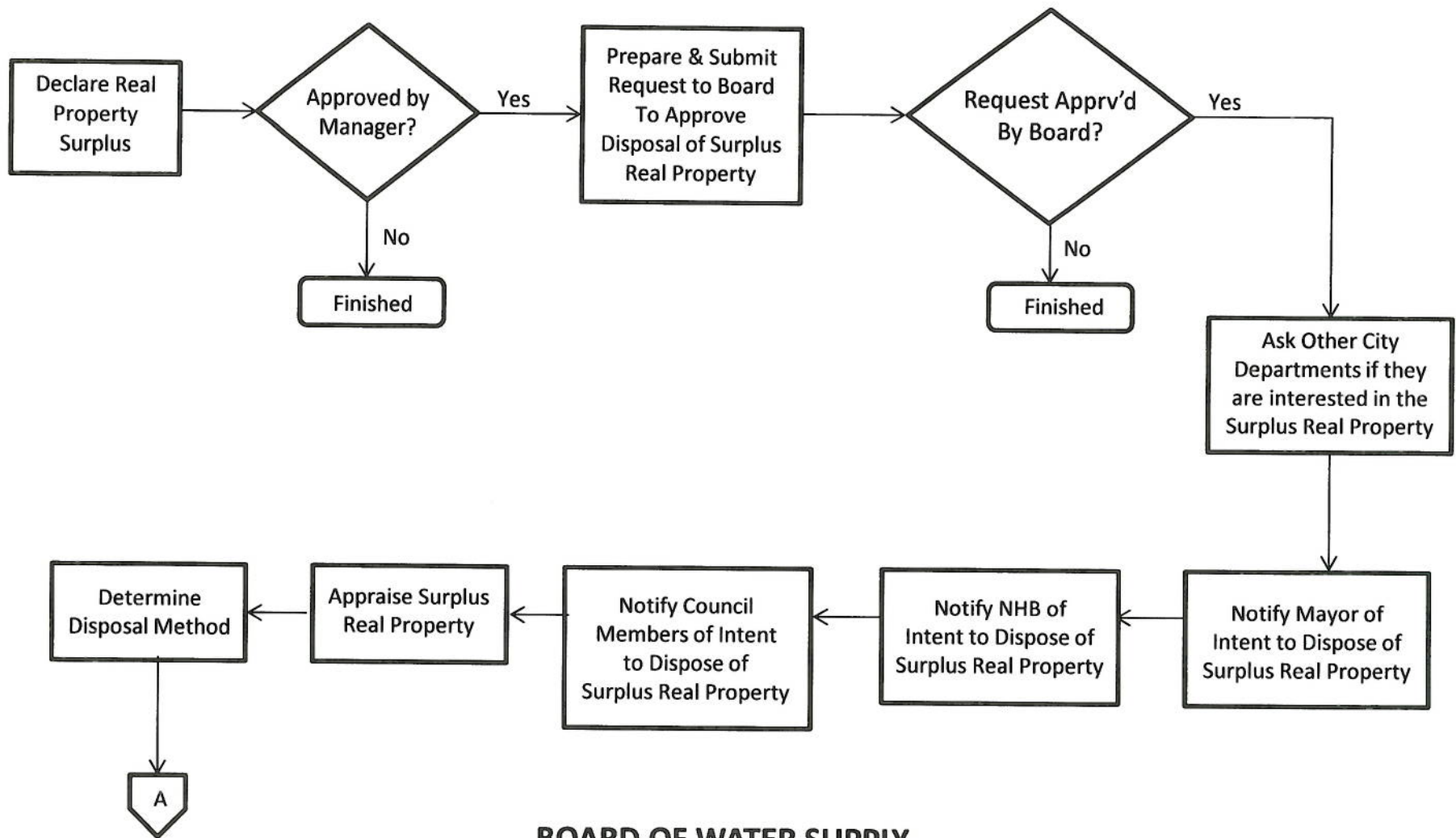
Mr. Miyashiro asked if there are factors to consider in determining the various disposal methods. Mr. Matsuo stated that BWS does not fall under the Revised Ordinance of Honolulu, which has specific guidelines on disposal of property; however, they follow the guidelines as closely as possible. Mr. Matsuo stated that public auction is the cleanest method because it would be based on fair market value as opposed to negotiating a sale. Mr. Lau added that the Department wanted their guidelines to be flexible since certain methods are more conducive depending on the circumstance.

Mr. Lau and Mr. Matsuo discussed the revisions suggested by the Board and agreed that on the first slide, after asking other City Departments if they are interested in the surplus real property, they would notify the Mayor, notify the Neighborhood Boards, then notify all nine Councilmembers.

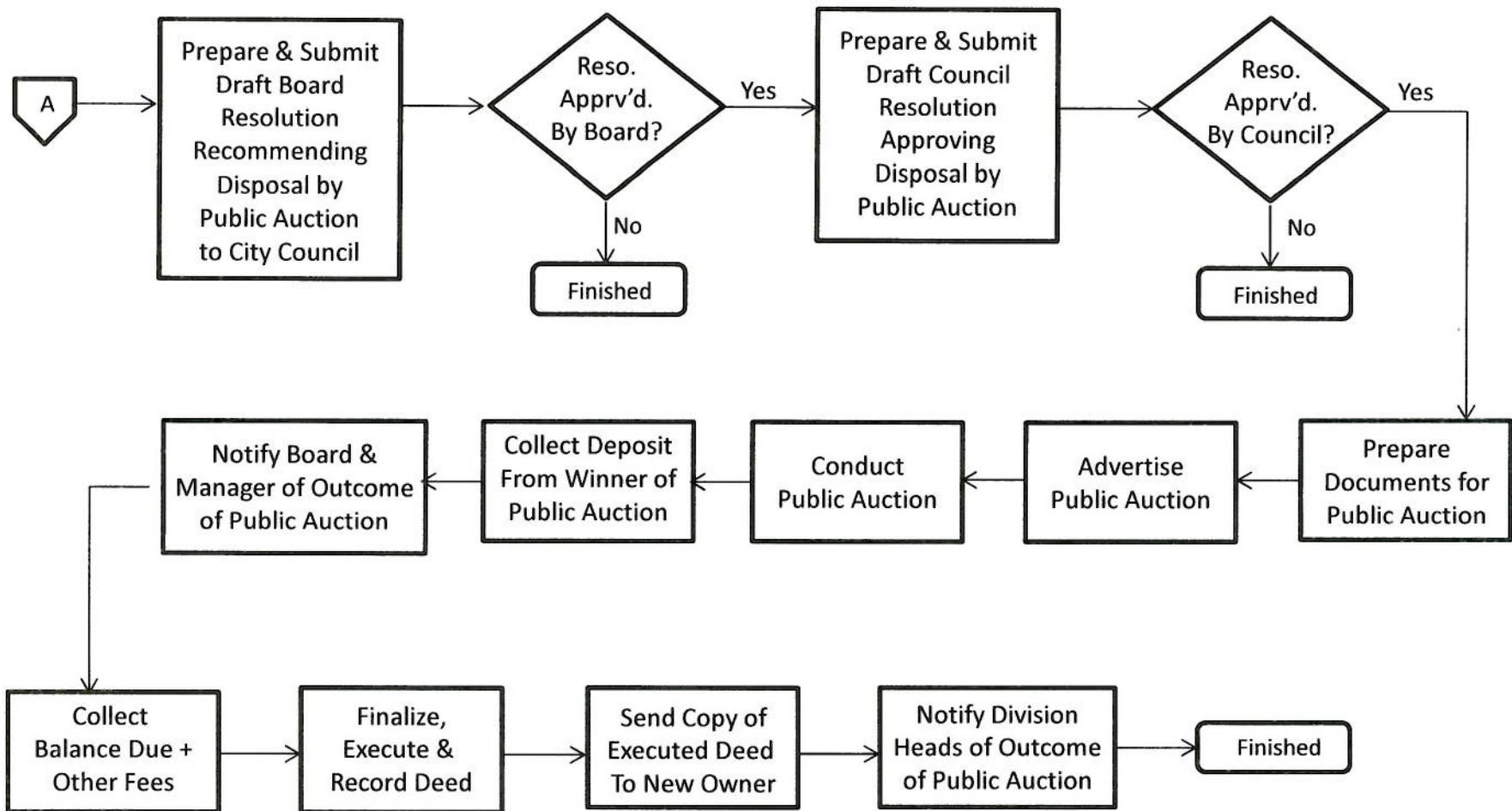
MOTION TO
APPROVE
PROCEDURES
FOR THE SALE,
TRANSFER OR
EXCHANGE OF
PROPERTY

Chair Miyashiro called for a motion to approve the Procedures for the Sale, Transfer or Exchange of Board of Water Supply Real Property and Any Interests Therein, with modifications. David Hulihee and Theresia McMurdo motioned and seconded, respectively, and the motion was unanimously carried.

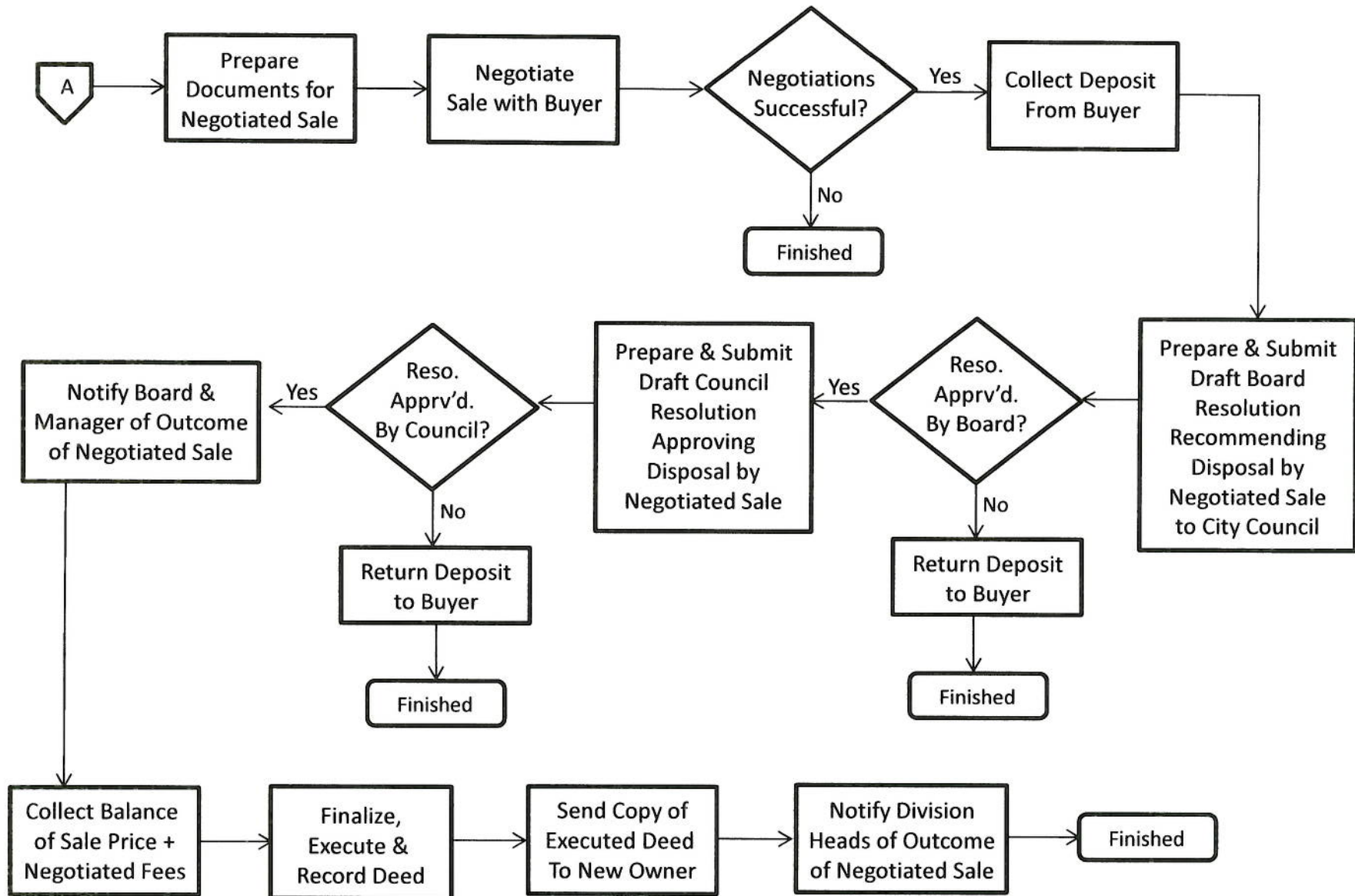
PROCEDURES FOR THE SALE, TRANSFER OR EXCHANGE OF BOARD OF WATER SUPPLY REAL PROPERTY AND ANY INTERESTS THEREIN WAS APPROVED, WITH MODIFICATIONS, ON JUNE 22, 2015			
	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG			ABSENT
THERESIA C. MCMURDO	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		



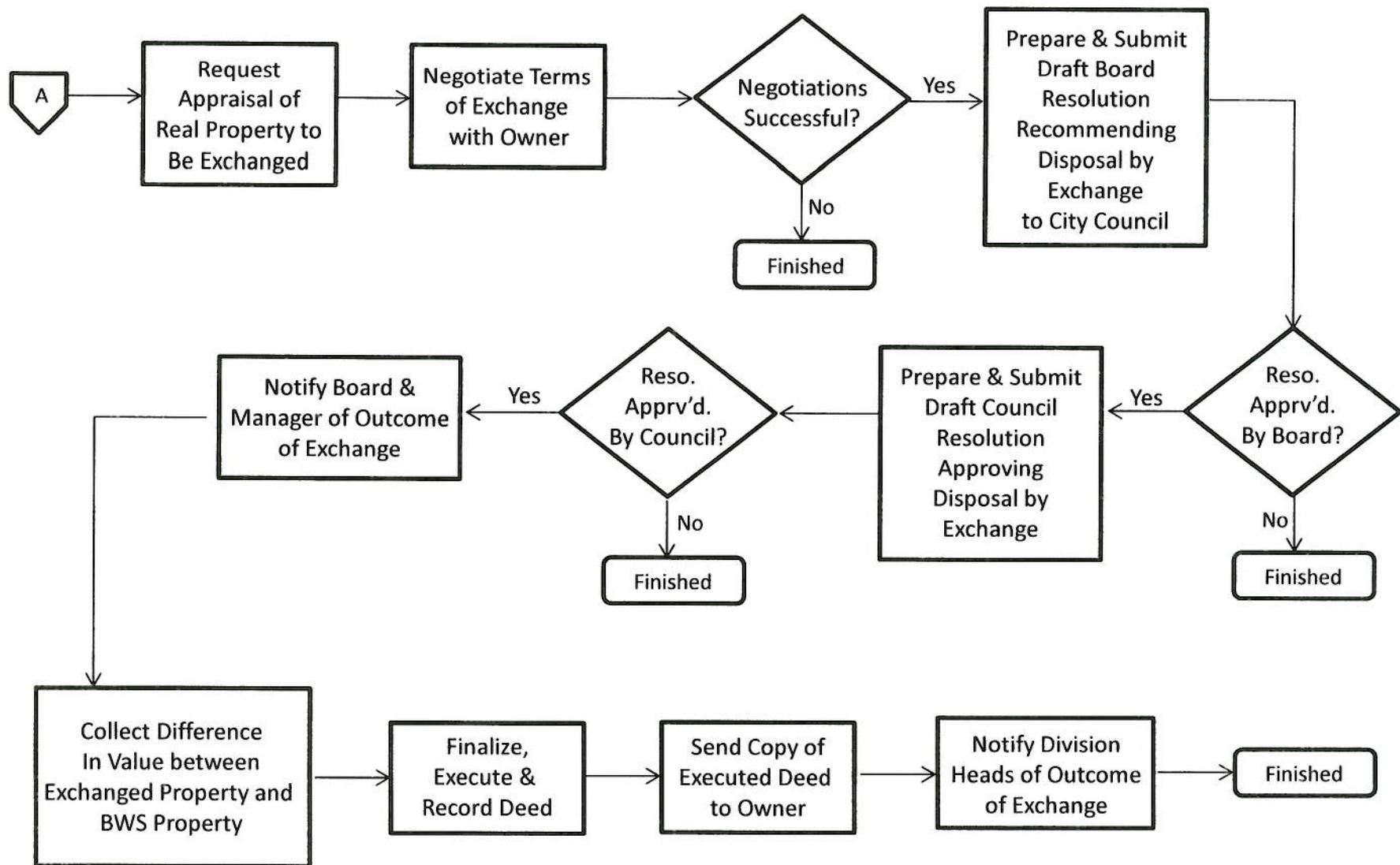
**BOARD OF WATER SUPPLY
DISPOSAL OF SURPLUS REAL PROPERTY
INITIAL PROCESS
FINAL 6/22/15**



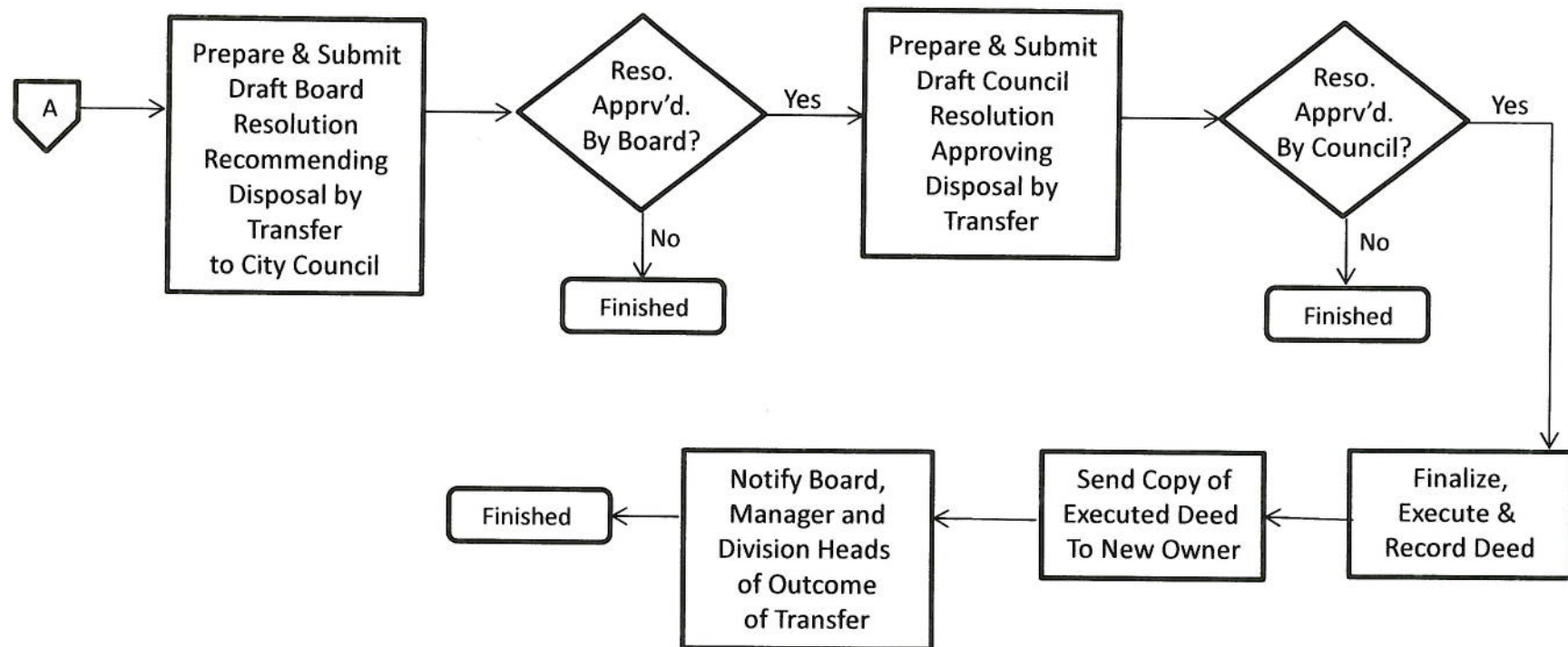
**BOARD OF WATER SUPPLY
DISPOSAL OF SURPLUS REAL PROPERTY
BY PUBLIC AUCTION
FINAL 6/22/15**



**BOARD OF WATER SUPPLY
DISPOSAL OF SURPLUS REAL PROPERTY
BY NEGOTIATED SALE, FINAL 6/22/15**



**BOARD OF WATER SUPPLY
DISPOSAL OF SURPLUS REAL PROPERTY
BY EXCHANGE
FINAL 6/22/15**



**BOARD OF WATER SUPPLY
DISPOSAL OF SURPLUS REAL PROPERTY
BY TRANSFER
FINAL 6/22/15**

APPROVAL
FOR THE
DISPOSAL OF
SUNSET BEACH
WELL AND
RESERVOIR

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96834

Chair and Members:

Subject: Approval for the Disposal of Surplus Sunset Beach Well and
Sunset Beach 206' Reservoir Real Property and Real
Property Interests

We recommend that the Board approve the disposal of two properties, the Sunset Beach Well and Sunset Beach 206' Reservoir, which are surplus because the facilities are no longer needed and have been abandoned.

Sunset Beach Well was developed in 1948 and had a yield of approximately 0.06 million gallons per day (mgd). The well was intended to supplement the Waialeale I and II Wells, to adequately serve the area from Waialeale to Kawela. In 1960, Board of Water Supply (BWS) acquired the title to two parcels – a 0.124-acre lot (Lot 2) and a 0.689 acre lot (Lot 3) from Hawaiian Pineapple Company, Limited, together with four pipeline and road easements, labeled A, C, D and E, varying in size from 15 feet to 44 feet wide. Lot 2 was for the Sunset Beach Well and Lot 3 was for a 300,000 gallon storage reservoir with a spillway elevation of 206 feet. Easements A and E are for access to the reservoir, Easement D is for the pipeline and access between the well and reservoir, and Easement C is for access from Kamehameha Highway to the well site and for the pipeline connecting the well site to the water system along Kamehameha Highway. A map showing the lots and easements is attached for your reference.

In 1984, Sunset Beach Well was shut-down due to water quality issues. In 1990, a capital improvement project was implemented to replace the existing pump and renovate the existing pump station. Unfortunately, after several months of flushing and water quality testing, the well was never placed back in service due to on-going bacterial presence (possibly due to the many cesspools in the area) and possible surface water influence. At around the same time, it was decided to pursue the development of the Opana Wells.

In 2012, the Opana Wells were completed and conveyed to BWS by Turtle Bay Resorts LLC. Opana Wells provide BWS with approximately 0.35 mgd of potable water. At approximately the same time, Water Systems Operations Division was able to bring the 2 million gallon Kawela 228' Reservoir back on-line. It should be noted that the Waialeale to Kawela system operates at a spillway elevation of 228 feet. With a spillway of 206 feet, the Sunset Beach reservoir is incompatible with the Waialeale-Kawela 228' system. Thus, the disposal of both facilities will not affect our operations or ability to provide adequate water service to the community.

The owner of the property surrounding the subject facilities has expressed an interest in acquiring both facilities for agricultural use. The City and State have already been contacted and indicated they have no interest in acquiring the properties and facilities. Because there are some land issues that need to be resolved, especially in regards to Easement C, we are considering a negotiated sale with the owner of the surrounding property.

Respectfully submitted,

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

Attachment"

DISCUSSION

Mike Matsuo of the Land Division gave the report. He referred to the attached map and explained that it's an older map that doesn't show a subdivision along Kamehameha Highway that has since been built. He explained how Easement C goes into the subdivision area; therefore, they are considering a negotiated sale with the owner of the surrounding property. Board Member Sproat asked who the owner of the surrounding property is. Mr. Matsuo replied that the owner is Mr. Eddie Rothman. Mr. Lau and Ms. Kitamura informed the Board that they met with all of the Councilmembers to brief them about this issue, and there were no objections from any of them.

Ms. McMurdo inquired about the value of the properties. Mr. Matsuo replied that the total value for both properties is about \$73,000, not including the easements. After selling Sunset Beach Well and Reservoir, the easements would revert back to the owners.

Ms. Sproat inquired if these are land court properties and if they were formerly kuleana land. Mr. Matsuo replied that they are land court properties, but he was not sure if they were formerly kuleana land.

Ms. McMurdo asked if the equipment and materials in the property would be left or removed. Mr. Matsuo replied that they would leave everything in place, so the \$73,000 includes the depreciated cost of the equipment and materials. Mr. Lau mentioned that doing a negotiated sale would avoid the need to remove or demolish structures.

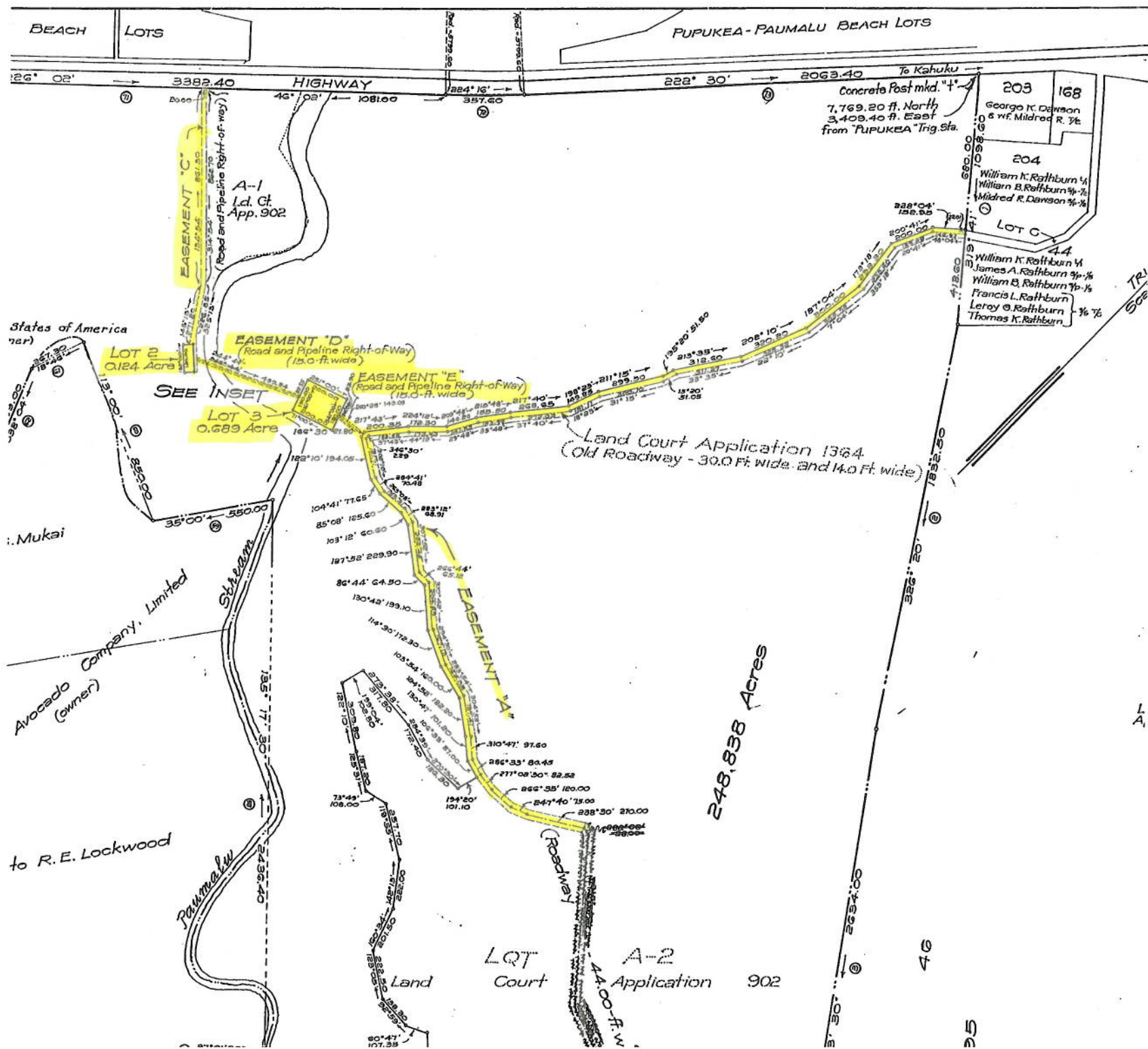
Ms. Sproat asked if BWS formally abandoned the well with the Water Commission. Mr. Matsuo replied no, the well is still listed with the Water Commission, and if the surrounding property owner decides to use the well, BWS would have to do a transfer. Ms. Sproat asked if it would be a transfer of the water permit. Water Resources Program Administrator Barry Usagawa replied that there is no water use permit, and Mr. Lau added that the well was not in use at the time of the passage of the water code.

Ms. McMurdo asked if the new owner would be able to use the well. Mr. Lau responded that they may use it for non-potable uses and would need to apply for a water use permit with the Water Commission because it falls within the groundwater management area. Ms. McMurdo asked if it could be used for agricultural purposes. Mr. Matsuo replied that the water in this area is used for agricultural, commercial and residential purposes, but the majority portion of the lower area is usable for agriculture. Mr. Matsuo believes that the surrounding property owner is looking into subdividing his property into agricultural parcels.

MOTION TO
APPROVE THE
DISPOSAL OF
SUNSET BEACH
WELL AND
RESERVOIR

Chair Miyashiro called for a motion to approve the Disposal of Surplus Sunset Beach Well and Sunset Beach 206' Reservoir Real Property and Real Property Interests. David Hulihee and Ross Sasamura motioned and seconded, respectively, and the motion was unanimously carried.

DISPOSAL OF SURPLUS SUNSET BEACH WELL AND SUNSET BEACH 206' RESERVOIR REAL PROPERTY AND REAL PROPERTY INTERESTS WAS APPROVED ON JUNE 22, 2015			
	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG			ABSENT
THERESIA C. MCMURDO	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		



ITEM FOR INFORMATION NO. 1

"June 22, 2015

UNDERSTANDING
RESIDENT
PERCEPTIONS
OF THE BWS

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

Chair and Members:

Subject: Understanding Resident Perceptions of the Board
of Water Supply

Information Officer Shawn Nakamoto and Customer Care Program Administrator Jennifer Elflein, with assistance from Margarita Ayala of Ward Research, will present a summary of the customer service telephone survey and focus groups that Ward Research conducted on behalf of the Board of Water Supply.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION

Mr. Lau stated that through the development of the Water Master Plan, one of the tasks was to take a survey of BWS's customers and also to conduct focus groups. He introduced Information Officer Shawn Nakamoto, Customer Care Program Administrator Jennifer Elflein, and Margarita Ayala of Ward Research who will give the presentation.

Ms. Nakamoto and Ms. Elflein gave the presentation. Following the presentation Ms. Sproat inquired about the telephone survey and asked if calls were made just to landline phones or were they made to cell phones also. Ms. Ayala replied that calls were made to both.

Ms. Sproat asked how the focus groups were selected. Ms. Ayala explained that Ward Research has a participant referral base that they used to choose a cross section of Oahu residents to represent different categories such as age, gender, etc.

Ms. McMurdo referred to Page 17 of the PowerPoint presentation (About a Bill) and noted that reasons were listed for the satisfaction rating. She asked if the same was done for the dissatisfaction ratings. Ms. Ayala replied that of the 43 people who were surveyed, all 43 of them were asked, "Why do you

say that?" Some of the negative responses shown on Page 17 were long wait times and situations were handled poorly.

Board Member Sasamura referred to Page 19 (Awareness of Billing), and asked if BWS had thoughts about separating the water and sewer bill into two bills instead of one because of the public's perception that the charges are only from BWS. Mr. Lau replied that he has had some discussions with the Director and Deputy of the Department of Environmental Services (ENV) about the possibility of doing two separate mailings instead of combining BWS and ENV into one. ENV understands BWS's concerns, and this survey validates the negative perception that the water and sewer charges are not from two different agencies, but from BWS only. Mr. Sasamura asked if a line could be drawn on the bill to separate BWS and ENV. Ms. Nakamoto replied that there is a vertical line drawn between the two Departments. Mr. Lau stated that BWS collects unpaid bills for both water and sewer, so the separate mailings would require ENV to hire more customer service staff to deal with the credit and collections issues.

Mr. Miyashiro commented that these were very good responses. He commended the Manager, Deputy Manager, Department Heads, and the Department for the good work. Mr. Miyashiro stated that if the survey was done a couple years ago with the estimated billing problems, the results would have been different, so the Board and Department really appreciate the confidence of the rate payers, and even the non-rate payers.

Mr. Miyashiro asked if the survey results would be shared with the public.

Mr. Lau thanked Mr. Miyashiro for the compliment and informed the Board that it is a team effort of all of the BWS employees. Mr. Lau stated that this survey gives BWS a baseline and perhaps in five years another survey could be done, and hopefully it will show progression and improvement.

Ms. Nakamoto added that they are always looking for opportunities and ways to improve on customer outreach to keep them informed about the BWS.



WARD RESEARCH
INCORPORATED

Understanding Resident Perceptions of the Board of Water Supply

Prepared for:

Board of Water Supply
May 2015

Part I: Telephone Survey among Oahu Residents

Objective

To establish baseline measures of satisfaction and other key metrics related to perceptions of the Board of Water Supply and the fulfillment of its mission.

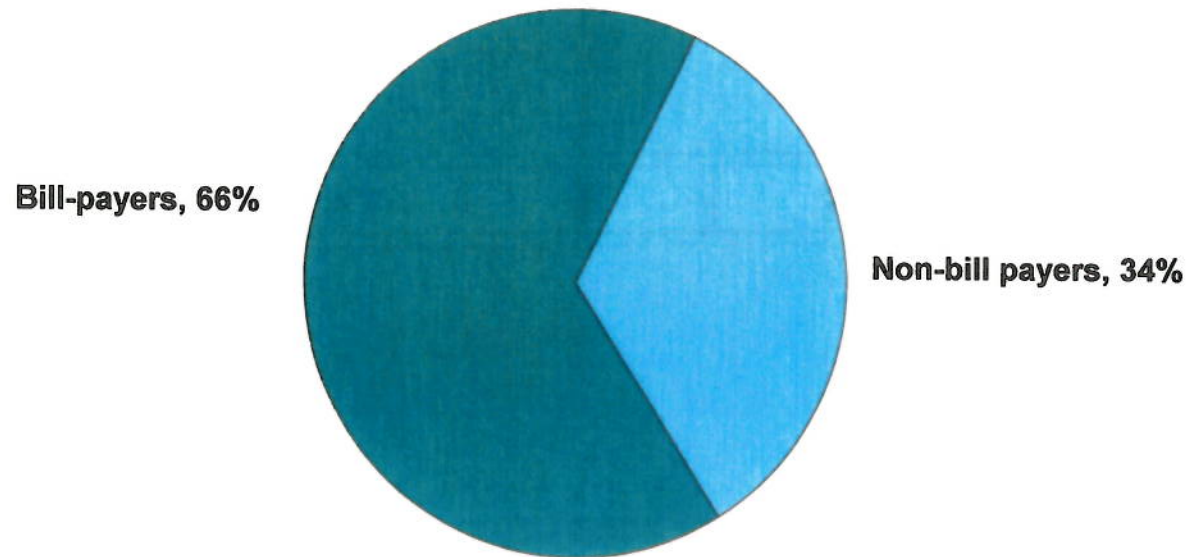
Methodology

- Telephone survey among n=685 Oahu residents
- Conducted February 5 to February 19, 2015
- Maximum sampling error is +/-3.6%
- Survey instrument developed by Ward Research with review and approval by Board of Water Supply
- Quotas set so total sample was divided among nine Council districts
- Sample demographically representative of Oahu population

Council District	# of Interviews
Council District 1	n=83
Council District 2	n=79
Council District 3	n=75
Council District 4	n=75
Council District 5	n=84
Council District 6	n=73
Council District 7	n=67
Council District 8	n=72
Council District 9	n=76
Total	n=685

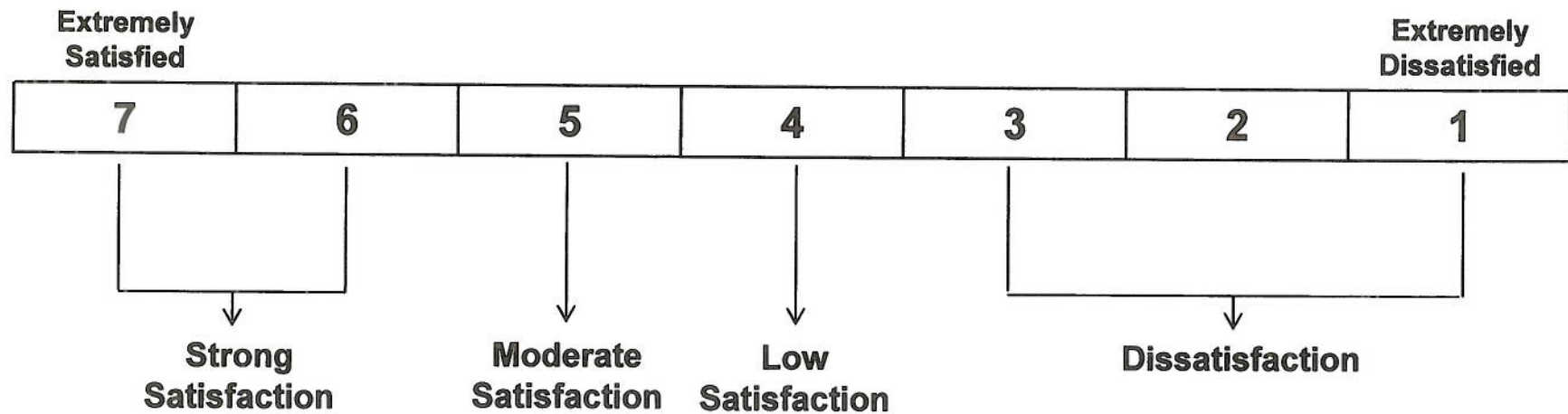
Profile of Respondents

Does your household pay a water bill directly to the Board of Water Supply?



Base=685

Rating Scale

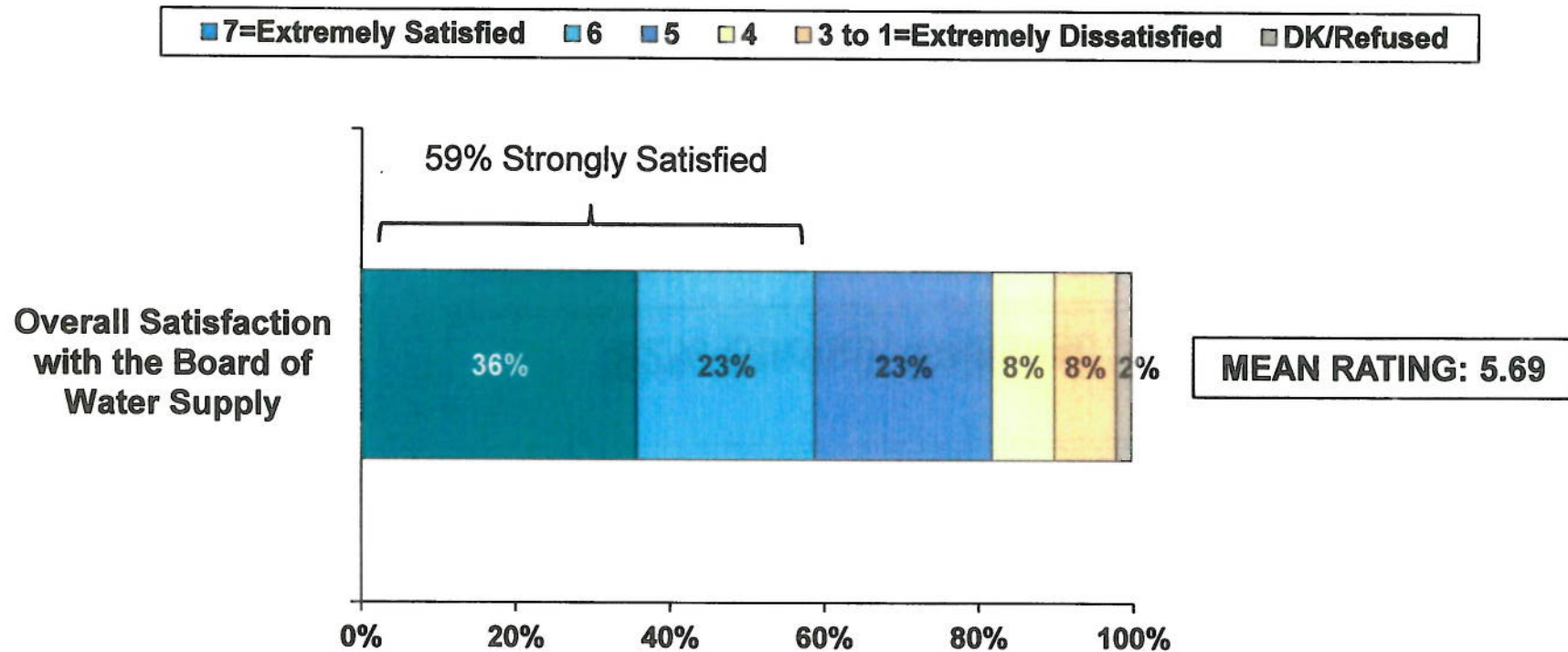


Satisfaction with the Board of Water Supply

Summary

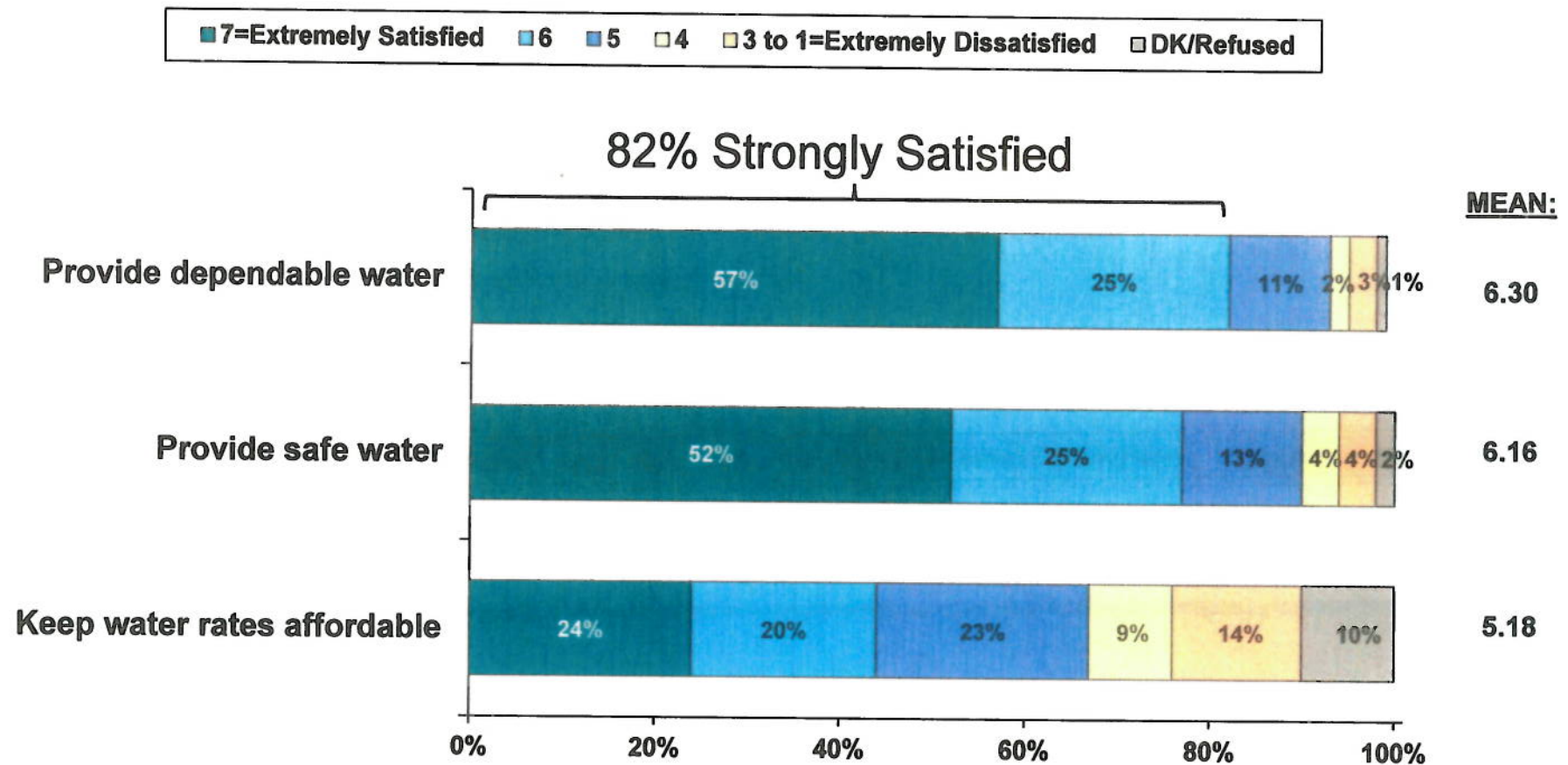
- Majority of residents strongly satisfied with Board of Water Supply overall
- Non-bill payers, renters, residents with lower household income more satisfied with Board of Water Supply than bill payers, homeowners, residents with higher household income
- Satisfaction highest for attributes relating to service, lowest for attributes relating to rates

Overall Satisfaction



Q1: Considering everything, and using a scale of 1 to 7, with 1 meaning "extremely dissatisfied" and 7 meaning "extremely satisfied," how would you rate your overall satisfaction with the Board of Water Supply? (n=685)

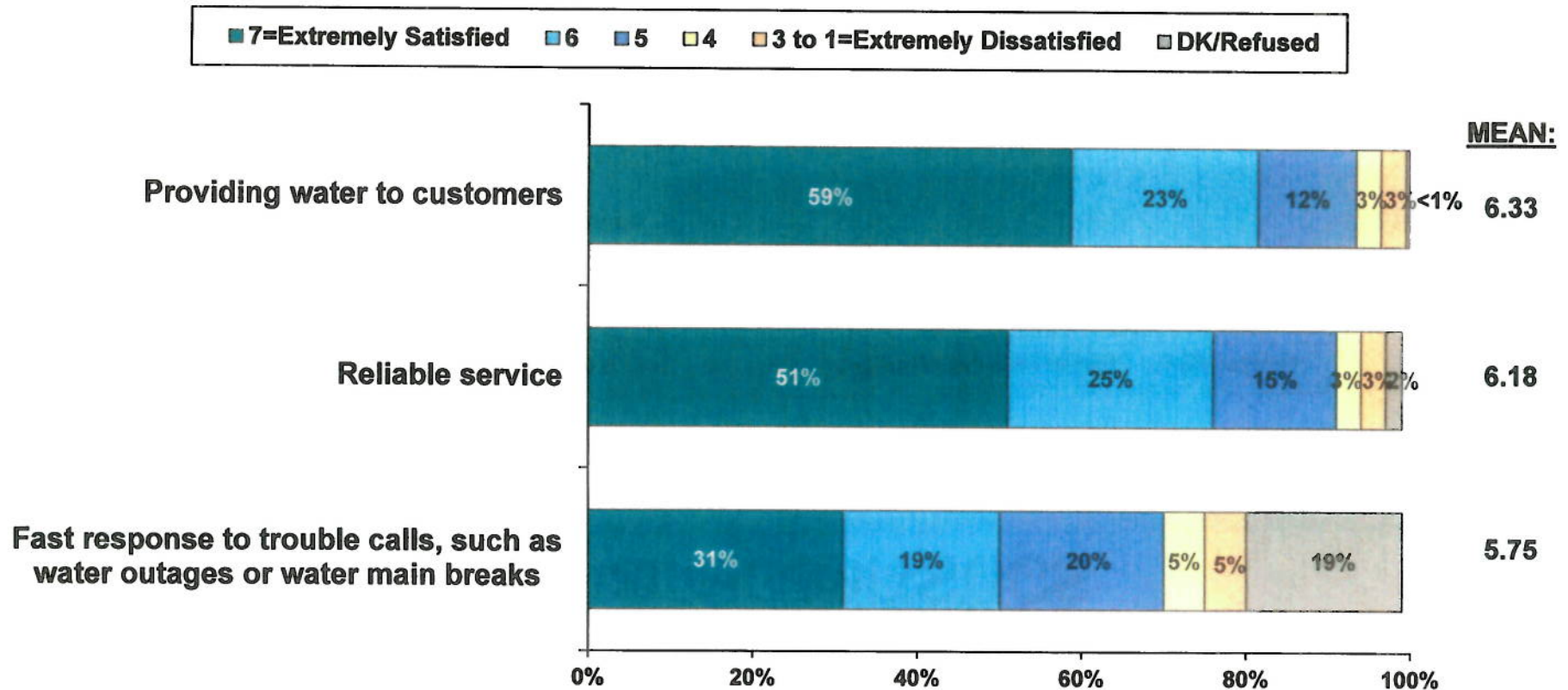
Satisfaction with Board of Water Supply's Ability to Fulfill its Mission "to provide safe, dependable, and affordable water now and into the future"



Q3: And, using a scale of 1 to 7, with 1 meaning "extremely dissatisfied" and 7 meaning "extremely satisfied," please tell me how satisfied you are with the Board of Water Supply's ability to:

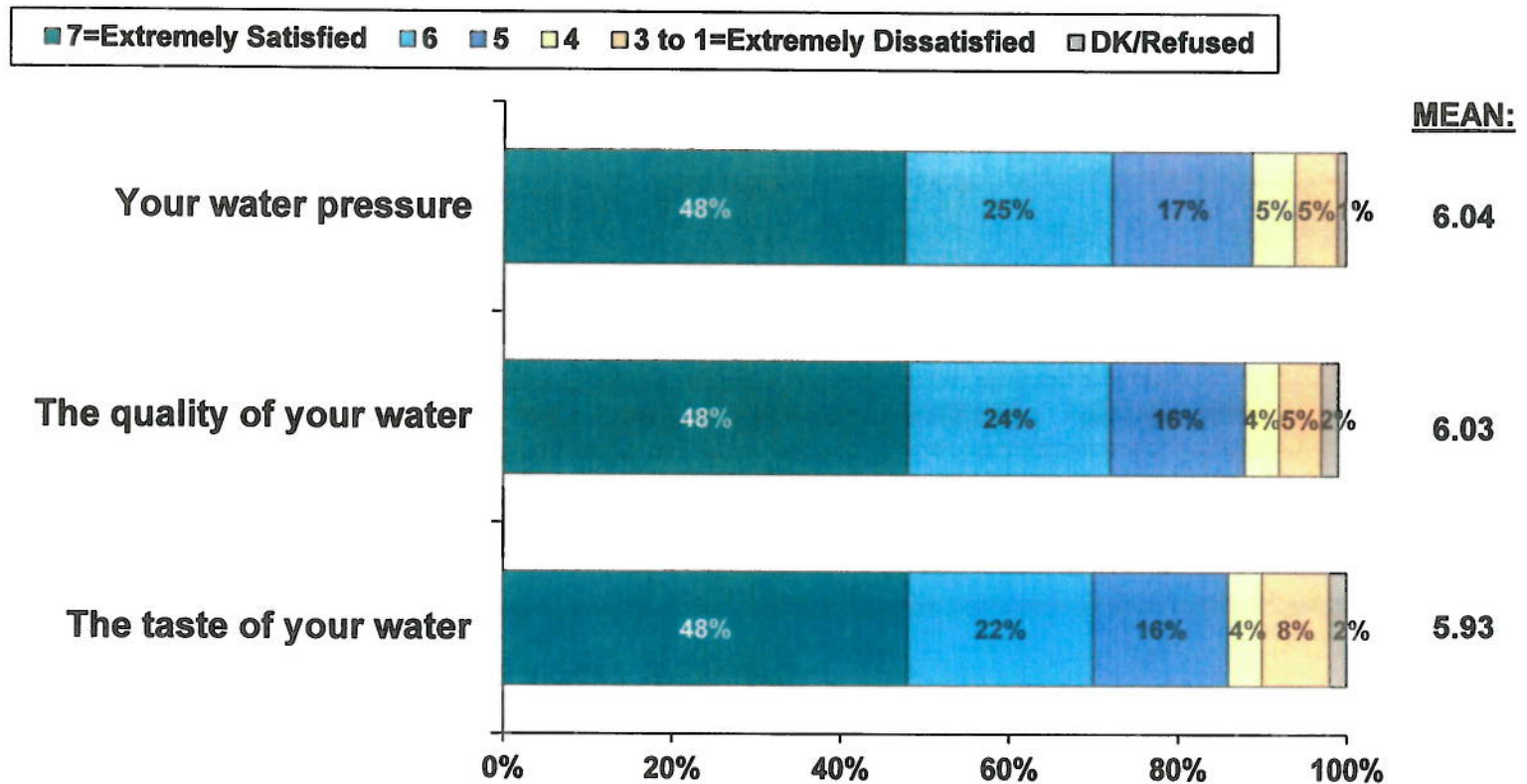
(n=685)

Satisfaction with Water Delivery Service



Q2: Using a scale of 1 to 7, with 1 meaning "extremely dissatisfied" and 7 meaning "extremely satisfied," how would you rate your satisfaction with the Board of Water Supply in terms of: (n=685)

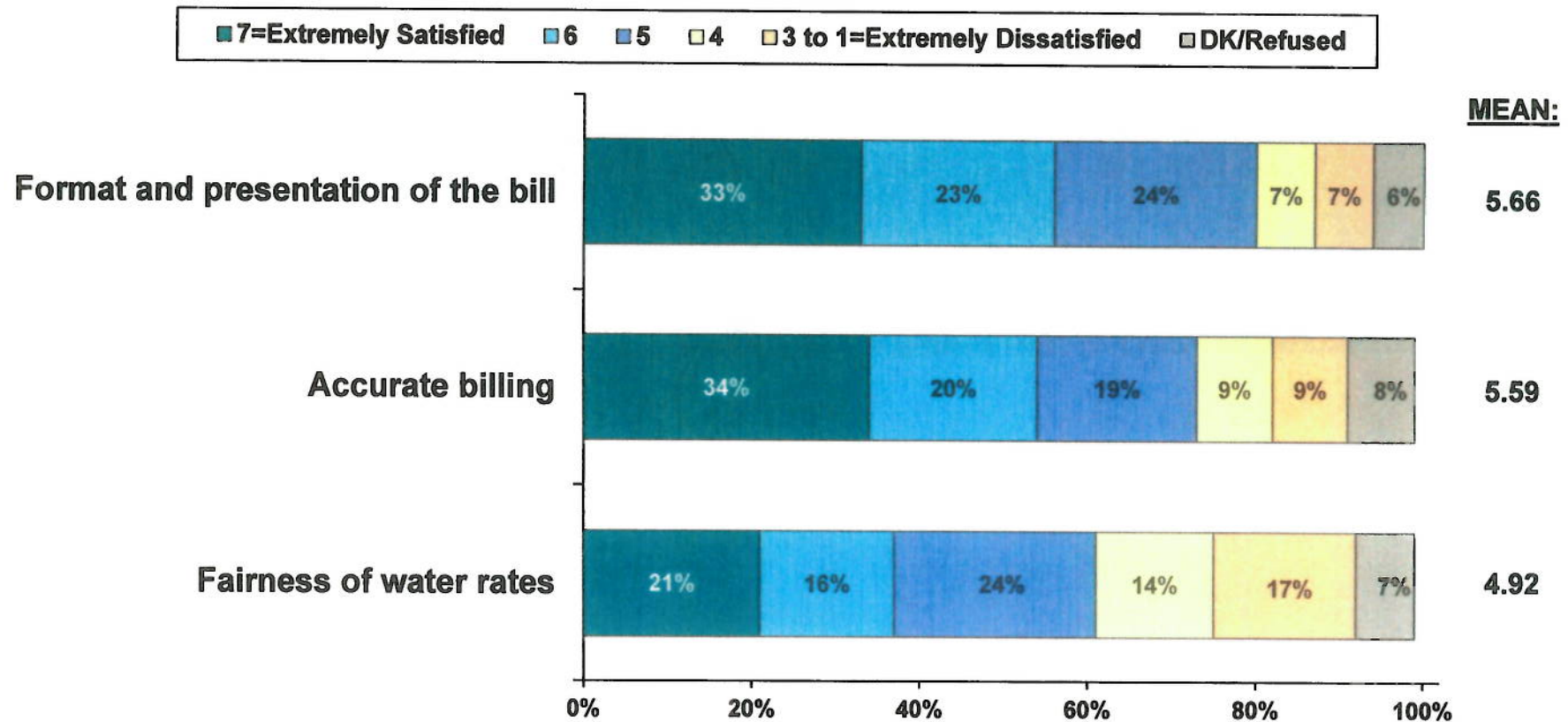
Satisfaction with Water Characteristics



Q18: And, on a scale of 1 to 7, with 1 meaning "extremely dissatisfied" and 7 meaning "extremely satisfied," how satisfied are you with:

(n=685)

Satisfaction with Rates and Billing: Bill Payers Only



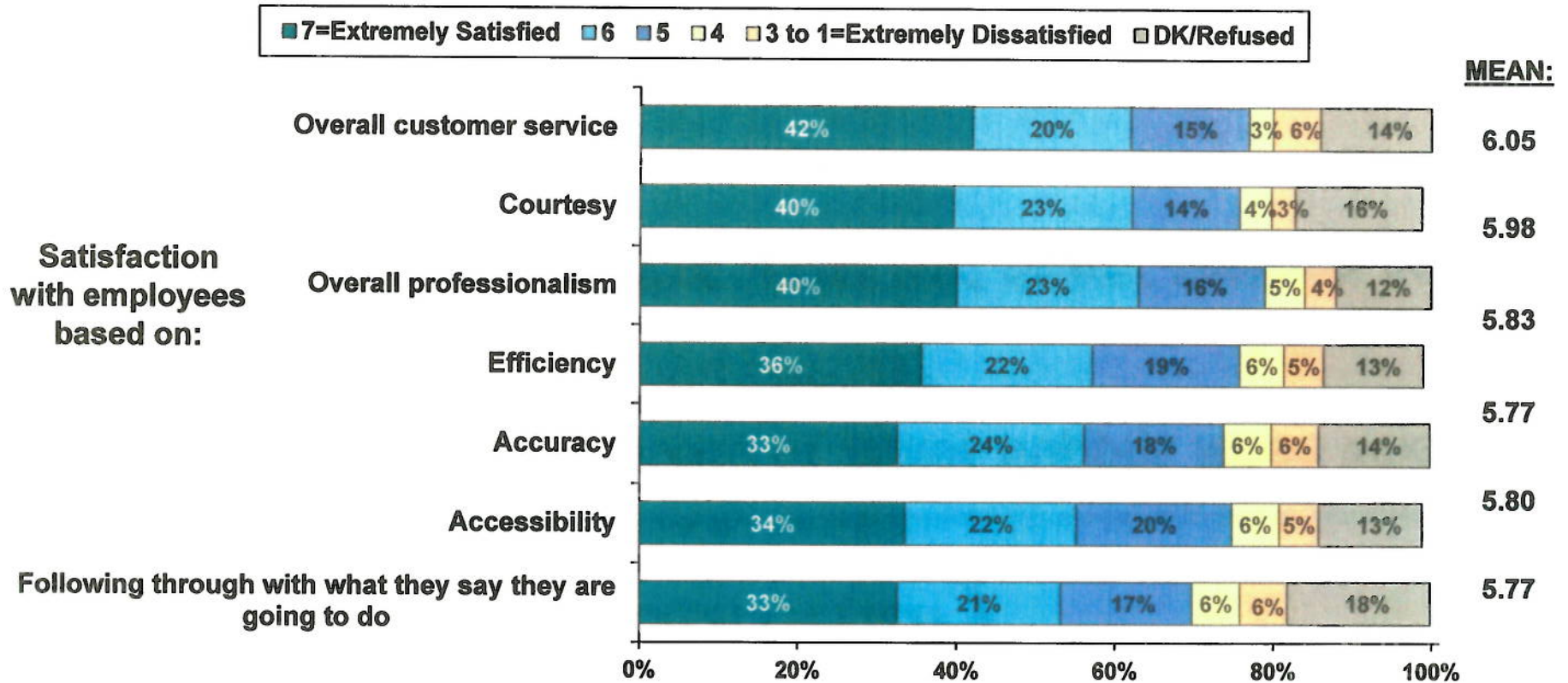
Q2: Using a scale of 1 to 7, with 1 meaning "extremely dissatisfied" and 7 meaning "extremely satisfied," how would you rate your satisfaction with the Board of Water Supply in terms of:
 Q14: And now, some questions about your monthly bill from the Board of Water Supply. On a scale of 1 to 7, with 1 meaning "extremely dissatisfied" and 7 meaning "extremely satisfied," how satisfied are you with: (n=454)

Contact with the Board of Water
Supply and Awareness of Billing

Summary

- Few contacted the Board of Water Supply; those who did generally satisfied with response
- Lack of awareness that water and sewer charges set by different agencies
- Telephone response issues from a few years ago seem to have been forgotten

Satisfaction with Customer Service

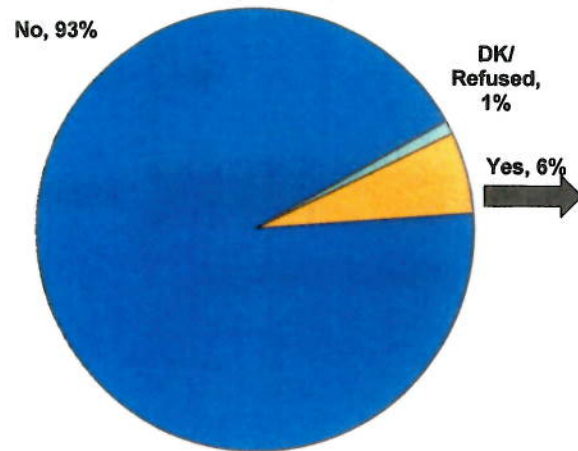


Q2: Using a scale of 1 to 7, with 1 meaning "extremely dissatisfied" and 7 meaning "extremely satisfied," how would you rate your satisfaction with the Board of Water Supply in terms of: (n=685)

Q13: Based on your own experiences or anything you may have seen or heard, how satisfied are you with Board of Water Supply employees based on the following attributes: Use a scale of 1 to 7, where 1 means "extremely dissatisfied" and 7 means "extremely satisfied." (n=685)

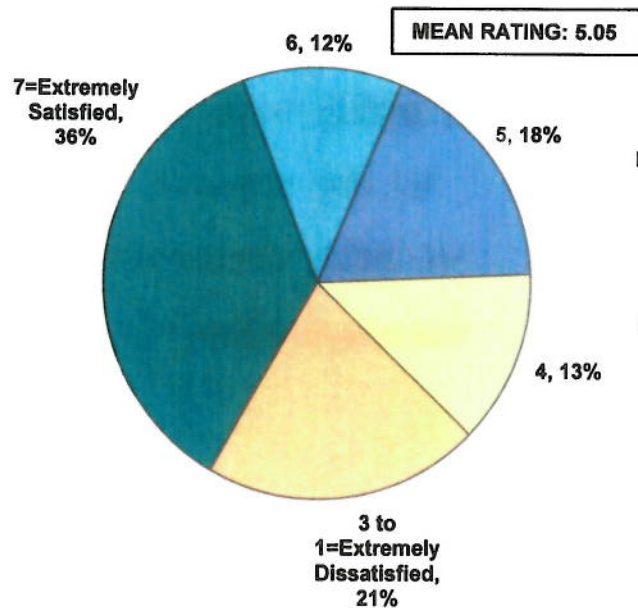
About a Bill

Contacted the Board of Water Supply ABOUT A BILL in the Past Six Months



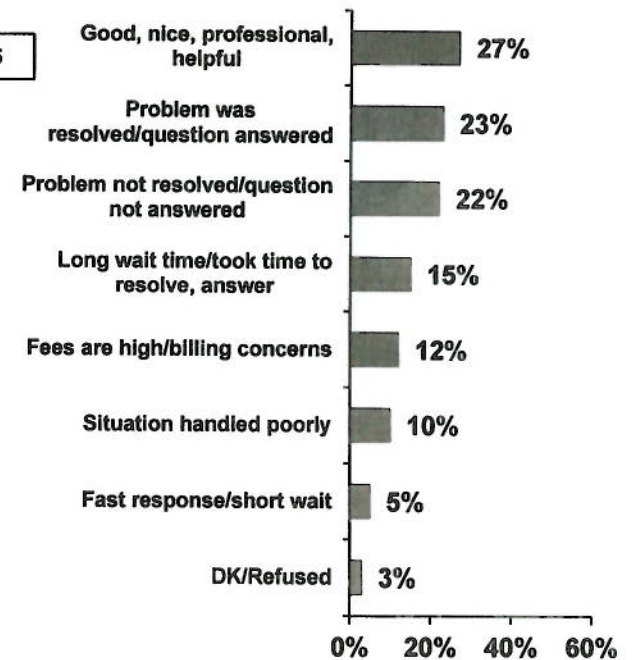
Q4: Did you contact the Board of Water Supply about a bill in the past six months? (n=685)

Satisfaction with How Communication was Handled



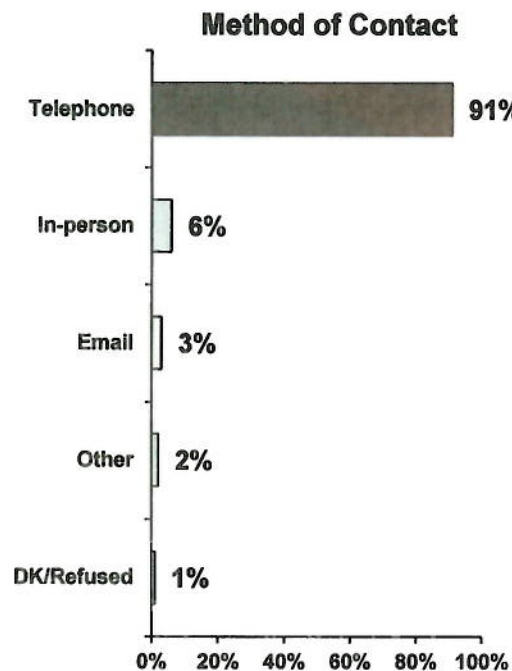
Q5: (IF YES in Q4) How satisfied were you with how the communication was handled? (n=43)

Reason for Satisfaction Rating

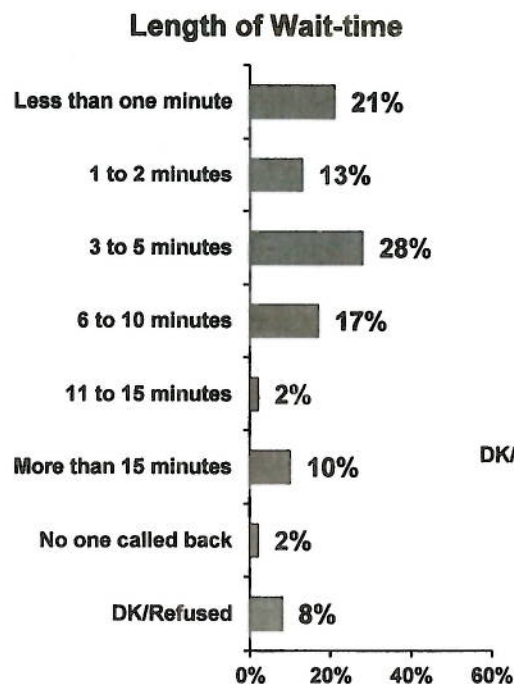


Q6: Why do you say that? (n=43)

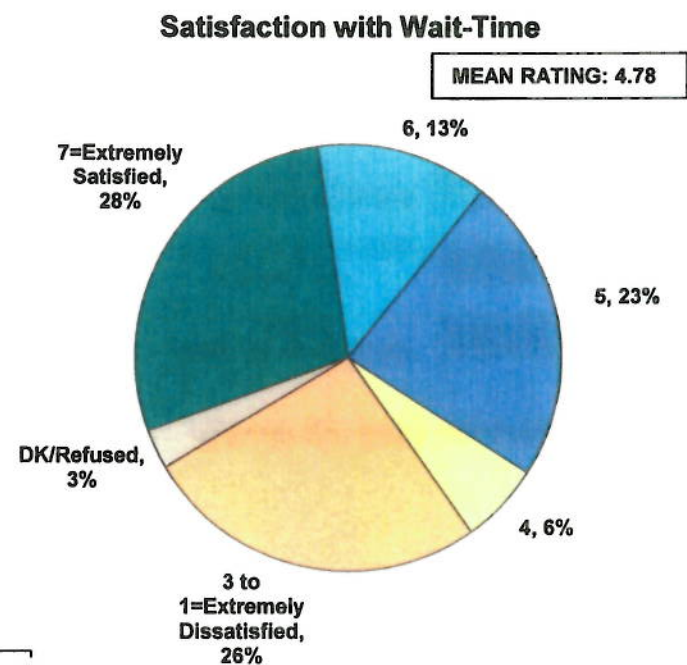
Telephone Contact



Q10: (IF YES in Q4 or Q7) You said that you contacted the Board of Water Supply about a bill or for some other reason in the past six months. Was the contact via telephone, email, or some other method? (n=81)



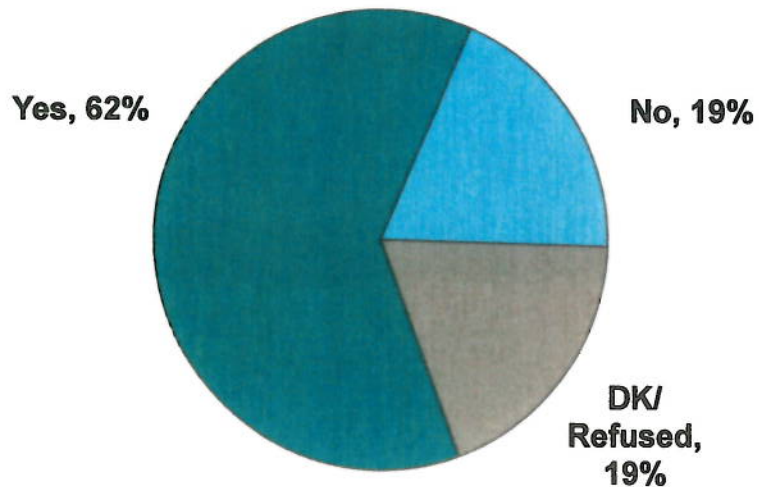
Q11: (IF TELEPHONE IN Q10) Thinking about the telephone contact, how long did it take before you were able to talk to someone? (n=74)



Q12: How satisfied were you with that wait time? (n=74)

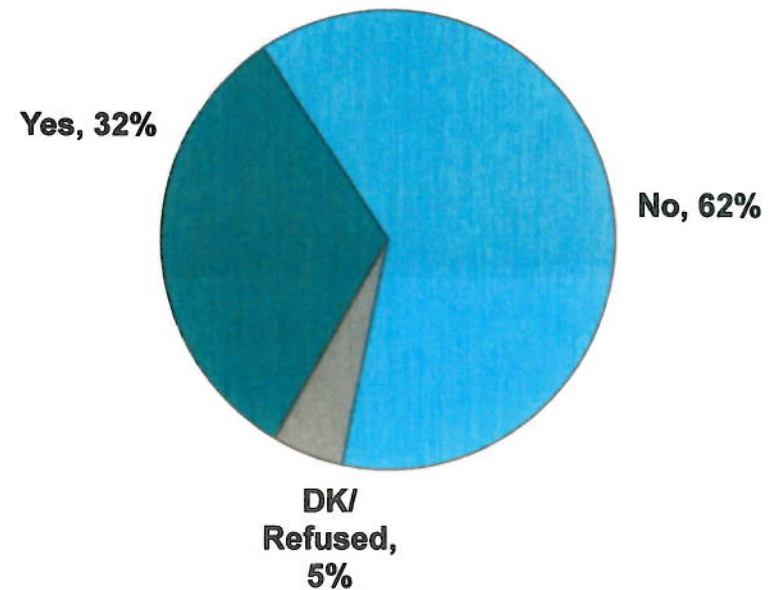
Awareness of Billing

Is your water bill combined with a sewer bill?



Q15: Is your water bill combined with a sewer bill? (n=685)

And did you know that these charges are from two different agencies?



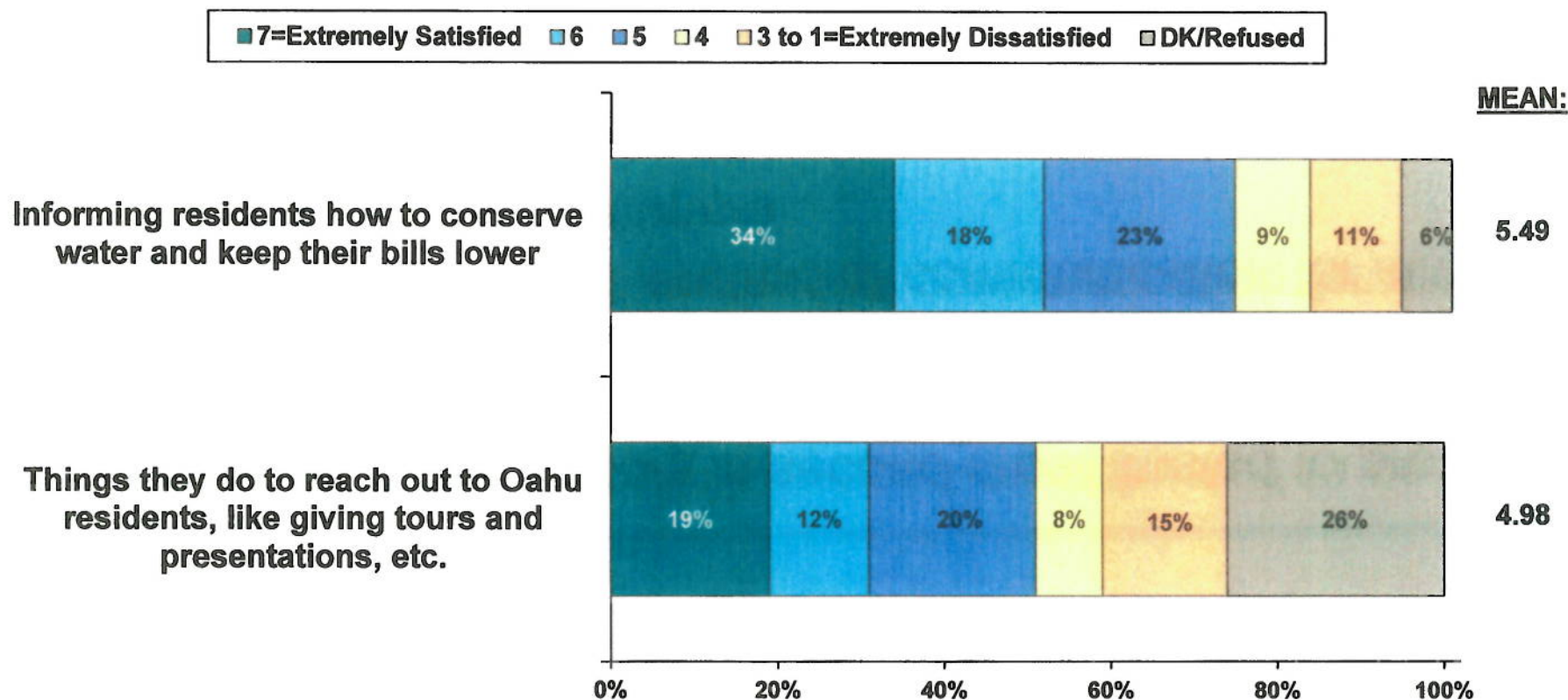
Q16: And did you know that these charges are from two different agencies? (n=685)

Communications and Trust in the Board of Water Supply

Summary

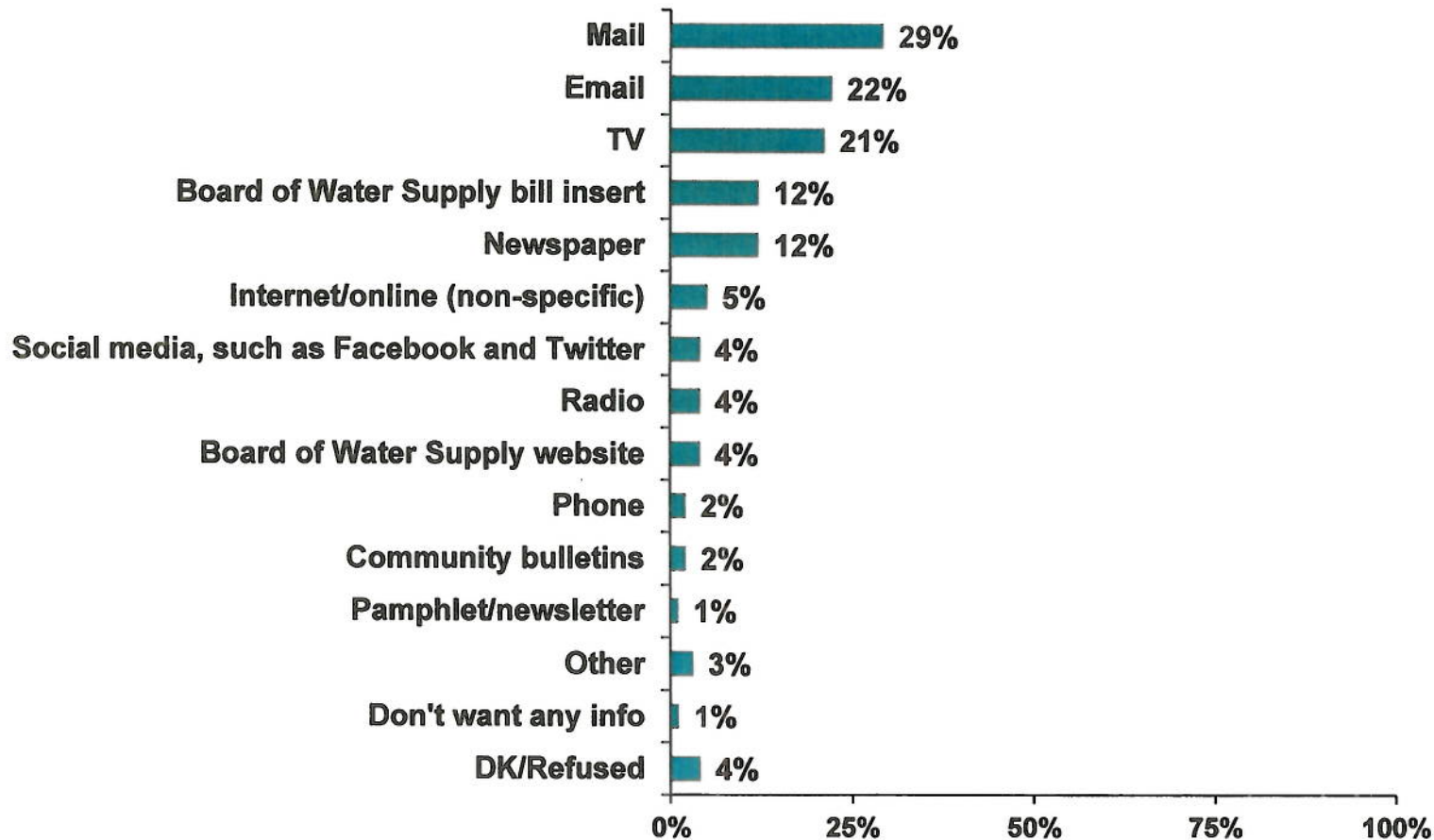
- Board of Water Supply is second-most trusted to provide information about water issues in Hawaii (after scientists)
- Mail is the preferred method of communication for almost one-third of our customers.

Satisfaction with Board of Water Supply's Communications



Q2: Using a scale of 1 to 7, with 1 meaning "extremely dissatisfied" and 7 meaning "extremely satisfied," how would you rate your satisfaction with the Board of Water Supply in terms of: (n=685)

Preferred Method of Communications from the Board of Water Supply

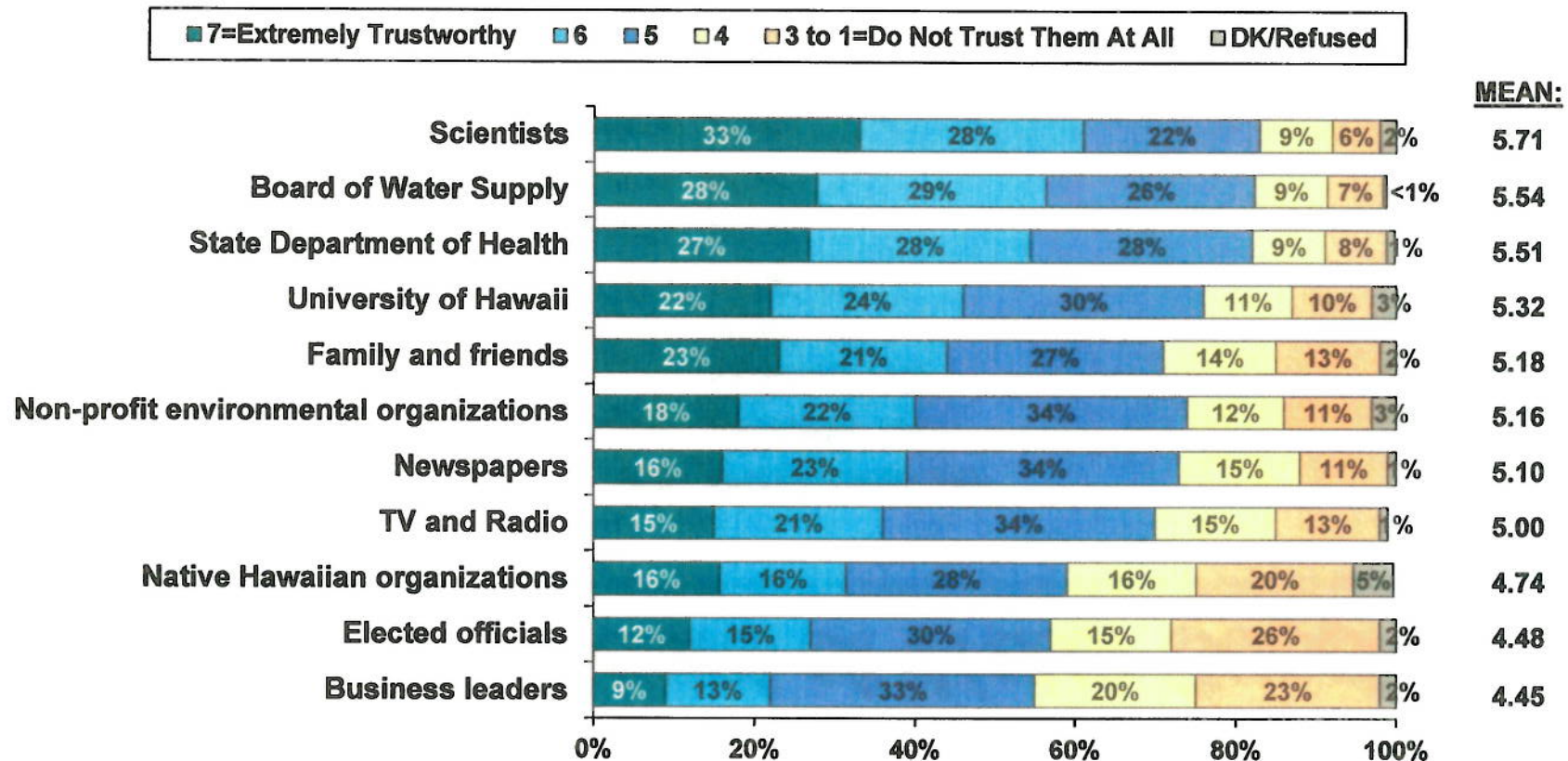


Q26: How do you prefer to get information about Board of Water Supply programs and services??

(n=685)

Most Trusted Sources of Information about Fresh Water Issues in Hawaii

How much do you trust:



Q27: Finally, which sources do you trust to provide honest, accurate information about fresh water issues in Hawaii? Using a scale where 1 means you "do not trust them at all" and 7 means you find them to be "extremely trustworthy", how much do you trust: (n=685)

Part II: Focus Groups among Oahu Residents

Objective

To assist the Board of Water Supply in understanding customer satisfaction, with an eye toward developing plans for addressing any areas of needed improvement.

Methodology

- 4 focus groups among n=32 Oahu residents

Description	Total Number of Groups Conducted	Total Number of Participants
Bill Payers (pay a bill directly to Board of Water Supply)	2	16
Non-Bill Payers (pay a water bill as part of rent or maintenance)	2	16

- Conducted March 17 to March 18, 2015; 90 minutes each
- Discussion outline created by Ward Research and submitted to Board of Water Supply for review and input

Summary

- Perceptions of the Board of Water Supply very positive --- “quietly” doing their job every day to provide safe, “good tasting” water reliably flowing to homes
- Sewer charges (negatively) influence satisfaction with Board of Water Supply
- Residents generally do not think about the Board of Water Supply unless there is a water main break
- There is an opportunity to talk more with residents about the Board of Water Supply’s plans to replace aging infrastructure and provide for future demand

Perceptions and Awareness of the Board of Water Supply

- **“A quiet utility”**

“It is a pretty quiet utility. I think it’s a good thing. It means they’re providing the service.”

“I think it’s good that you don’t hear much about them. They are kind of just there, providing water.”

“I really only hear about them when a pipe breaks down and they have to close the road. Traffic gets backed up.”

- **Low awareness of Board of Water Supply’s programs and activities, especially among non-bill payers**

“I honestly don’t know what else they do. I know that they have their Christmas lights at Christmas but that’s basically it.”

“I don’t pay water. It’s included in my rent, so as long as my water is working, I don’t really pay attention. I can’t really tell you anything else about what they do.”

- **News about water main breaks/repairs recalled most often**

“I really only hear about them when a pipe breaks down and they have to close the road. Traffic gets backed up.”

“It’s water cooler conversation when there are water main breaks or when it’s on the news or when it comes up randomly from neighbors.”

Sources of Satisfaction with the Board of Water Supply

- **Reliability of water service**

"When I turn on the faucet, water comes out. That's basically the only thing I considered for my satisfaction rating."

"As long as I can take a shower and wash dishes, I'm good. There's never been a time when I didn't have water, not even if there is a big storm."

- **Quality of water (taste, cleanliness; unaided mentions of Water Quality Report)**

"Compared to a lot of other states where there are droughts, like California, we have an abundance of water and the water tastes a lot better here than other places."

"Our water is very good. I don't know why people even buy bottled water. I am comfortable drinking tap water."

- **Customer service**

"Whenever there is a water main break, they're out there right away. They stay there until it's fixed. They also bring out their water wagons, so people can get their water. They have a pretty darn impressive response."

"They get there right away and you can see them actually working instead of just standing around. It seems like they do the best they can to limit the inconvenience."

Sources of Dissatisfaction with the Board of Water Supply

- **Rising cost of water bill → includes cost of sewer, but still “water bill”**

“It’s gotten expensive. It wasn’t that expensive before. I remember having to pay only every other month and then they changed it to every month and it’s higher than what I used to pay because of the sewer.”

“They raised our user fees so much. We used to get statements every two months. Now we’re getting them every month and it’s more than what we used to pay because of the increase in sewer fees, I believe.”

- **Aging infrastructure**

“They keep talking about doing something about the pipe systems and fixing it, and they’ve been talking about it since I moved here in 2000, but I haven’t seen anything done. You just keep hearing about the pipes breaking. It’s patchwork.”

“There’s a lot of aging pipes, that’s for sure. I think they’re behind in replacing the aging pipes, but maybe they can’t afford to change it at all. I’m hoping they’re getting enough funds to keep up with it.”

Testing Messages

- ***The Board of Water Supply is a steward of this precious resource → most preferred***

"I think putting 'precious' in there is a really good idea, because water is not just another resource. It really is a precious resource. We need it."

"I think 'steward' is an important word. It's pretty much the soul of the sentence, if you will. And it's obvious for the Board of Water Supply because they are the stewards of the resource."

- ***Water for Life/Ka Wai Ola***

"I like it. You need water to live and it says right there, 'Water for Life.' And it looks like something we already see on the back one of their trucks."

- ***Safe, Dependable, Affordable***

"I like the words, but it sounds like you're buying a car. It doesn't sound like words I would use for water. I don't have a connection with those words for water."

- ***Sustain, Capture, Treat, Move, Store, Deliver → least preferred***

"It makes me tired. It sounds like a job description. It makes me think, 'My gosh, that sounds like a lot of work'."

Questions

ITEM FOR INFORMATION NO. 2

"June 22, 2015

RED HILL
FUEL FACILITY
ADMINISTRATIVE
ORDER ON
CONSENT

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

Chair and Members:

Subject: Red Hill Fuel Facility Administrative Order on Consent (AOC)

Erwin Kawata, Water Quality Division Program Administrator, will present a brief summary of the Red Hill Bulk Fuel Storage Facility Administrative Order on Consent (AOC) that was released on June 1, 2015, by the United States Environmental Protection Agency and the Hawaii State Department of Health.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION

Water Quality Program Administrator Erwin Kawata gave the presentation. Mr. Kawata informed the Board that at the Red Hill AOC public meeting on June 18, there were about 34 people that provided comments. Generally, all of the comments indicated some amount of dissatisfaction with the contents of the AOC. BWS provided testimony that indicated non-support of the contents of the AOC and the Statement of Work because they lack public transparency, they are not specific enough in terms of the kinds of corrective actions that need to take place, and they do not apply or require any kind of improvements to take place immediately. The idea is to protect the groundwater, which is already contaminated; therefore, the situation cannot stay that way for any extended period of time. Mr. Kawata distributed copies of BWS's testimony to the Board.

Mr. Kawata also noted that on the day before the public hearing, the City Council Public Works, Infrastructure and Sustainability Committee held a meeting and heard Resolution 15-162, Urging the United States Environmental Protection Agency and the Hawaii State Department of Health to Require the Immediate Implementation of Corrective Actions as Part of the Administrative Order on Consent in the Matter of the Red Hill Bulk Fuel Storage Facility. BWS provided testimony in support of this resolution.

The Committee passed the resolution out of committee and the resolution will go before the full City Council.

Mr. Lau stated that BWS mailed a letter to all of their customers informing them of the Red Hill situation and the AOC public meeting. The idea was to inform the public of this very important issue and to encourage them to stay educated and informed, and also to provide their "mana'o." Mr. Lau was glad to see about 200 to 300 people at the public meeting and thanked all of them for taking time out of their busy schedules to attend.

Mr. Lau reminded the Board that in September 2014, BWS wrote to The President and the Congressional Delegation to request their assistance to urge the Office of Management and Budget to approve U.S. Environmental Protection Agency's (EPA) proposal to regulate currently deferred underground storage tank (UST) systems with field constructed tanks. Mr. Lau informed the Board that just a few minutes ago, Mr. Kawata handed him a press release issued today by the U.S. EPA announcing this regulation. Mr. Kawata stated that this regulation is going to remove field constructed tank deferral from installing leak detection, spill prevention, and corrosion protection, so it will have some kind of impact on the Red Hill facility. Mr. Kawata stated that BWS does not want the AOC to override any kind of regulatory requirement, and that the stricter requirement should prevail in any kind of agreement. BWS will include these statements as part of their comments to the AOC. Mr. Lau read the following statements from EPA's press release: The U.S. Environmental Protection (EPA) is strengthening the federal underground storage tank (UST) requirements to improve prevention and detection of petroleum releases from USTs which are one of the leading sources of groundwater contamination. EPA's action will strengthen existing requirements and help ensure all USTs in the United States meet the same release protection standards. "These changes will better protect people's health and benefit the environment in communities across the country by improving prevention and detection of underground storage tank releases," said Mathy Stanislaus, assistant administrator of EPA's Office of Solid Waste and Emergency Response.

Mr. Lau stated that BWS has a dedicated Red Hill page on their website, which includes all of the administrative record documents that are not copyright protected, and links to EPA's and the State Department of Health's (DOH) websites. They will include this latest press release issued by EPA.

Ms. Sproat asked if BWS received all 403 documents that were listed in the administrative record. Mr. Kawata replied that he received all but five. The five documents are American Petroleum Institute standards that cannot be copied and made available online because they are copyrighted. The five documents are at DOH and must be viewed there, and are not posted on BWS's website. Mr. Kawata also informed the Board that they still have not received a response to their request for an extension to the comment deadline.

Ms. Sproat asked if BWS will be putting their comments online so customers can reference it when writing their comments, and also suggested summarizing in simpler terms, the revised UST rules announced in the press release by EPA. Mr. Lau responded that after finalizing BWS's AOC comments, BWS will post it online, and Mr. Kawata said that he has already started summarizing the revised UST rules and press release.

In reference to the revised UST regulatory requirement, there is a three year timeframe to implement all of the requirements. Mr. Kawata stated that just from a leak detection point of view, Red Hill is going to have to improve their leak detection because their measurement limit is seven-tenths of a gallon per hour and the new rule requires five-tenths of a gallon per hour.

Ms. Sproat asked if BWS was going to do another mail out to customers informing them of EPA's press release before the July 1st deadline for comments. Mr. Lau said that they will look into that.

Mr. Lau commented that he was so blessed on Thursday at the public meeting when so many people came up to him and said thank you, which was unexpected.

WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Waimalu – Moanalua Aquifer Update

Red Hill Bulk Fuel Storage Facility Administrative Order on Consent (AOC)

Board Meeting

June 22, 2015





Red Hill Fuel Facility

- Administrative Order on Consent (AOC)
- Statement of Work (SOW)
- Administrative Record





AOC

- June 1, 2015 EPA and DOH released for public comment a proposed AOC agreement with the U.S. Navy and the Defense Logistics Agency (DLA)
- Includes Statement of Work (SOW) and Administrative Record of Documents
- Measures to minimize the threat of future leaks at Red Hill
- Public comment accepted until July 1, 2015





AOC – cont.

- Parties: EPA, DOH, Navy Region Hawaii (Navy) and Defense Logistic Agency (DLA)
- Navy and DLA are operators of the Red Hill Facility
 - Navy
 - Oversees operations and maintenance of Red Hill
 - DLA
 - DOD combat logistics support agency.
 - Manages the fuel owned by DOD from source of supply to customer acceptance.





AOC – cont.

- AOC is a non-judicial, consensual, negotiated, legal agreement issued by EPA, that obligate parties to perform specific actions in response to an incident or refrain from an activity. The actions to be taken, may be subject to a comment period, applies to civil actions, and can be enforced in court.





Red Hill AOC – Basic Contents

- Regulatory agency jurisdiction
- Parties involved
- Findings of Fact
- Conclusions of Law (U.S.C and HRS)
- Regulatory Agency Approval of Deliverables
- Modification of statement of work and AOC
- Document Certification
- Sampling, access and document availability





Red Hill AOC contents – cont.

- Compliance with other laws
- Funding of work and Reimbursement of costs
- Dispute Resolution
- Penalties and Enforceability
- Force Majeure and Reservation of Rights
- Record Retention
- Public comment
- Effective date





Statement of Work (SOW)

- Tasks and requirements to be undertaken by Navy and DLA in compliance with AOC
- SOW elements
 - Improve existing tank inspection and repair process
 - Evaluate existing practices and report on opportunities for improvement
 - Investigate feasibility of upgrading the tanks (double-lining, etc.)
 - Identify alternatives, select and implement BAPT (best available practicable technology) for all tanks within 22 years of AOC effective date





SOW – cont.

- SOW elements – cont.
 - Tank upgrade work – cont.
 - Initial assessment and report completed within 2 years
 - Pilot programs may be proposed
 - Tank upgrades re-evaluated every five years
 - Increase tank tightness testing from biennial to annual
 - Continue using existing practices - inventory control and vapor monitoring
 - Evaluate existing release monitoring system
 - Examine new release detection alternatives





SOW – cont.

- SOW elements – cont.
 - Tank tightness – cont.
 - Evaluate extent of corrosion and metal fatigue
 - Determine need for modifications
 - Investigation and remediation of releases
 - Determine alternatives for improving investigation and mitigation of releases
 - Risk/vulnerability/impacts of fuel releases on Oahu's drinking and groundwater supplies
 - Refine existing GW flow models
 - Improve understanding of contaminant fate and transport



WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Administrative Record

- 403 documents
- Records EPA and DOH used to develop AOC



WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Public Meeting and Comment

- June 18, 2015 at Moanalua Middle School
- EPA and DOH
 - Presentation of AOC
- Public comment period closes July 1, 2015



WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Questions



BOARD OF WATER SUPPLY

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



June 18, 2015

KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chair
ADAM C. WONG, Vice Chair
THERESIA C. McMURDO
DAVID C. HULIHEE
KAPUA SPROAT

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

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

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

Board of Water Supply
Testimony on the Red Hill Bulk Fuel Facility
Proposed Administrative Order on Consent (AOC)
And Statement of Work (SOW)

Public Meeting
Moanalua Middle School

Members of the State Legislature and Honolulu City Council;
U.S. Environmental Protection Agency (EPA);
Hawaii Department of Health (DOH); U.S. Navy;
Defense Logistics Agency (DLA) and Oahu's Residents

The Board of Water Supply (BWS) does not support the proposed Red Hill AOC and SOW as written. The documents lack public transparency, corrective action specificity, and the immediate implementation of improvements that will protect our groundwater and environment.

The BWS appreciates the long and hard work of the EPA, DOH, Navy and DLA to develop the proposed AOC and SOW. Unfortunately, the contents do not adequately address our concerns about the facility storing 187 million gallons of fuel located 100 feet above a State designated drinking water aquifer; mitigate fuel contaminants already in the groundwater underneath that facility; arrest the corroding condition of the tanks' thin 1/4 inch steel wall and their fortification to minimize the risks of a large fuel release contaminating the aquifer.

This aquifer is the only one of its kind and there are no cost effective alternatives that can replace it. BWS does not want its wells that presently show no contamination to become contaminated in the future. At what point do the studies, required under the AOC and SOW to determine the best practicable available technology, become actions for implementation? Studies could potentially continue for years in the name of practicality, while the existing situation remains unchanged. The Tank 5 leak which occurred, even after completing a multi-year clean-inspect-repair and modernization process, does not demonstrate that the status quo approach is protective of the environment and our drinking water.

The AOC needs to require clean-up of the contamination that is presently in the groundwater and rocks underneath the tanks to reduce the amount available for migration to those parts of the aquifer that are still uncontaminated. The absence of free product does not preclude the finding of petroleum constituents already dissolved in the water.


Members of the State Legislature and Honolulu City Council;
U.S. Environmental Protection Agency;
Hawaii Department of Health; U.S. Navy;
Defense Logistics Agency and Oahu's Residents
June 18, 2015
Page 2

Also, the AOC and SOW need to include stakeholders and the public in an open process that requires the immediate installation of improvements that will protect the groundwater and environment. The AOC administrative record indicates past studies identified potential improvements that interestingly have not yet been acted upon. Further delays in taking action places our drinking water and environment at risk and defers improvement opportunities vital to the protection and future sustainability of our underground sources of drinking water.

The BWS will be submitting formal written comments on the proposed AOC and SOW by the July 1st deadline, which will be made available on our website. We also requested an extension of the July 1st comment deadline to allow us to review documents that cannot be copied and disseminated because of copyright laws but were listed in the administrative record and not available until now, mid-way through the comment period. The extension will give us the full thirty day review period originally established on the first day the AOC and SOW were announced, which was June 1st. We are making the remaining administrative record documents that can be disseminated available at <http://data.hawaiiopendata.org/>.

Thank you for the opportunity to testify this evening and share our perspective on this very important matter.

Very truly yours,


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

"June 22, 2015

2015 ANNUAL
HALAWA
XERISCAPE
OPEN HOUSE
AND PLANT
SALE

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

Chair and Members:

Subject: 2015 Annual Halawa Xeriscape Garden Open House and
Unthirsty Plant Sale

I am pleased to invite you to the 2015 Annual Halawa Xeriscape Garden (HXG) Open House and Unthirsty Plant Sale on Saturday, August 1, 2015, 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 maintain an attractive yard, while reducing outdoor water use and helping to preserve our precious water resources.

For the first time, the Board of Water Supply (BWS) will host an Instagram photo contest with prizes given away every hour. Our goal is to increase attendance and attract a younger demographic by integrating social media activities into the event.

The event is co-sponsored by the Friends of HXG (FOHXG), a non-profit organization, who has organized more than a dozen local nurseries to participate in the plant sale, offering a variety of drought-tolerant and less-thirsty plants at reasonable prices. Proceeds from the plant sale support educational programs and classes at the HXG.

Free educational workshops and classes on earth friendly home gardening techniques and fun activities for the keiki will be offered throughout the day. The Cactus and Succulent Society of Hawaii will feature a cactus display, and free compost will be given to participants, courtesy of Hawaiian Earth Products.

Food will be available for purchase, with proceeds benefitting the American Water Works Association's Water for People Project. This project's mission is to improve the quality of life in less developed countries with issues related to water, sanitation, health and hygiene.

In 2014, the BWS and the FOHXG celebrated the 25th anniversary of the HXG Open House and Unthirsty Plant Sale. The event was heavily marketed via event calendar listings, TheBus ads, flyers, posters, and also received coverage in MidWeek, the Honolulu Star-Advertiser, KITV and Hawaii News Now. It was also promoted via social media and through print and radio advertising. BWS distributed 1,500 seed packets and 25 cubic yards of

mulch to the public. With a 30 percent increase in plant sales and a 52 percent increase in food booth sales, the event raised nearly \$5,000.00.

Our annual Open House and Unthirsty Plant Sale helps to remind everyone of the need to be responsible stewards of our precious drinking water supply. We look forward to seeing you at our event on August 1st!

Respectfully submitted,

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

The foregoing was for information only.

DISCUSSION

Information Officer Shawn Nakamoto gave the report. There were no comments or discussion.

ITEM FOR INFORMATION NO. 4

"June 22, 2015

WATER
SYSTEM
REVENUE
BONDS -
COMPLIANCE
WITH RATE
COVENANT

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

Chair and Members:

Subject: Water System Revenue Bonds – Compliance with
Rate Covenant

In accordance with Article VIII, Section 8.02, Rates and Charges, of the Water System Revenue Bonds, Resolution No. 717, 2001, we have completed a review of the financial condition of the Board of Water Supply for the purpose of estimating whether the Net Revenues for the current fiscal year and the next succeeding fiscal year will be sufficient to comply with the rate covenant in Section 8.02.

Our review included an examination of the financial and accounting records which we considered necessary to express an opinion on the adequacy of the department's rates and other charges such that Net Revenues shall not be less than the Net Revenue Requirement in each fiscal year.

In our opinion, Net Revenues for fiscal years 2015 and 2016 will not be less than the Net Revenue Requirement for such fiscal years.

The attached schedules present the actual and estimated revenues and expenditures in compliance with the above rate covenant.

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 report. There were no comments or discussion.

**Board of Water Supply
City and County of Honolulu
SUPPLEMENTAL SCHEDULE OF NET REVENUE REQUIREMENT
As of June 30, 2015**

	<u>Actual July 1, 2014 - April 30, 2015</u>	<u>Projected May 1, 2015 - June 30, 2015</u>	<u>Total</u>
REVENUES:			
Water sales	\$ 172,793,971	\$ 34,558,794	207,352,765
Interest	2,498,849	499,770	2,998,619
Other	<u>3,424,168</u>	<u>684,834</u>	<u>4,109,002</u>
Total revenues	<u>178,716,988</u>	<u>35,743,398</u>	<u>214,460,386</u>
DEDUCTIONS:			
Operating expenses	135,402,067	27,080,413	162,482,481
Less depreciation expense	<u>(38,235,350)</u>	<u>(7,647,070)</u>	<u>(45,882,420)</u>
Total deductions	<u>97,166,717</u>	<u>19,433,343</u>	<u>116,600,061</u>
Net revenues	<u>\$ 81,550,271</u>	<u>\$ 16,310,054</u>	<u>97,860,325</u>
NET REVENUE REQUIREMENT:			
Greater of:			
1) Aggregate debt service			15,399,942
Required deposits - subordinate obligation fund			<u>15,399,942</u>
2) Aggregate debt service			15,399,942
			<u>1.20</u>
			<u>18,479,930</u>
Net revenue requirement			<u>18,479,930</u>
Target Net Requirement of 1.6			24,639,907
Current ratio			6.35

Note: Subject to change after year end adjustments

BOARD OF WATER SUPPLY

CALCULATIONS OF NET REVENUES AND NET REVENUE REQUIREMENT
FISCAL YEAR ENDING JUNE 30, 2016

	PROJECTED FY 2016
REVENUES	
Water sales	\$ 212,145,360
Other charges & services	4,056,359
Interest revenue	<u>3,000,000</u>
Total revenues	\$ <u><u>219,201,719</u></u>
DEDUCTIONS	
Operating expenses	\$ <u>163,668,296</u>
Net revenues	\$ <u><u>55,533,423</u></u>
NET REVENUE REQUIREMENT	
Greater of:	
1) Aggregate debt service for FY 16	\$ 17,893,000
Est payments - SRF loans	<u>5,418,000</u>
	\$ <u><u>23,311,000</u></u>
2) Aggregate debt service for FY 16	\$ 17,893,000
	<u>x 1.20</u>
	\$ 21,471,600
	\$ <u><u>23,311,000</u></u>
Target Net Requirement of 1.6	\$ 28,628,800
Current Ratio	<u><u>3.10</u></u>

ITEM FOR INFORMATION NO. 5

"June 22, 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

There are two aquifer index wells within low groundwater status for the production week that ended on June 6, 2015. Punaluu is under a Caution status, while Kaimuki is under an Alert status. The weekly production average for the period was 148.68 million gallons per day.

The Board of Water Supply rainfall index for the month of May 2015 was 103 percent of normal, with a 5-month moving average of 65 percent. As of June 9, 2015, the Hawaii Drought Monitor shows abnormally dry to moderate drought conditions across West Oahu through Pearl Harbor.

The National Weather Service is forecasting above-normal rainfall through October 2015 (primarily associated with a heavy storm season). Climate models indicate El Niño conditions may continue through the winter season, yielding below-normal rainfall from November 2015 through April 2016.

Most index monitor wells continue to exhibit decreasing trends, reflecting the influences of limited rainfall from previous months and the increases in pumpage typical for this time of year.

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. There were no comments or discussion.

PUMPAGE, HEAD, AND RAINFALL REPORT

Week of 5/31/15 to 6/06/15

STATION		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	1.10	
WAILUPE	0.00		WAIMANALO II	0.42		MAKAHA V	0.00		PEARL CITY III	0.48	
WAIALAE-IKI	0.00		WAIMANALO III	0.36		MAKAHA VI	0.00		WAIU	0.48	
AINA KOA	0.48		KUOU I	1.00		MAKAHA SHAFT	0.00	16.78	NEWTOWN	2.12	
AINA KOA II	0.98		KUOU II	0.08		KAMAILE	0.12		KAONOHI I	0.94	
WAIALAE SHAFT	0.00		KUOU III	0.57		WAIAANAE I	0.00		WAIMALU I	0.17	
MANOA II	1.66		LULUKU	1.00		WAIAANAE II	0.77		AIEA	0.23	
PALOLO	1.14		HAIKU	0.34		WAIAANAE III	0.51		AIEA GULCH 497	0.49	
KAIMUKI HIGH	3.66	21.69	IOLEKAA	0.06		MAKAKILO	0.72		AIEA GULCH 550	0.26	
KAIMUKI LOW	1.95		KAHALUU	0.90		HONOULIULI I	4.33		HALAWA 277	0.93	
WILDER	7.43		WAIHEE	0.00		HONOULIULI II	6.45		HALAWA 550	0.00	
BERETANIA HIGH	4.19	22.38	KAHANA	0.82		SUBTOTAL:	15.22		KAAHUMANU MTR(-)	0.00	
BERETANIA LOW	2.16		PUNALUU I	0.00	16.61	IMPORT FROM PH			KAAMILO FLO MTR (-)	0.00	
KALIH I HIGH	2.41	21.74	PUNALUU II	0.91		KAPOLEI LINE BSTR	16.40		KUNIA I	5.31	18.20
KALIH I LOW	3.30		PUNALUU III	1.16		HONOULIULI LB FLOW	16.69		KUNIA II	2.12	
KAPALAMA	0.47		KALUANUI	1.09		EWA BEACH FLOW	4.34		KUNIA III	1.38	
KALIH I SHAFT	8.52		MAAKUA	0.22		HONOULIULI I (-)	-4.33		HOAEAE	6.93	
MOANALUA	1.27	18.68	HAUULA	0.00		HONOULIULI II (-)	-6.45		EWA SHAFT	0.00	
SUBTOTAL:	39.62					SUBTOTAL:	26.65		WAIPAHU INTCON. (-)	-4.00	
			KAHUKU	0.18					EWA-WAIAANAE (-)	-26.65	
IMPORT FROM PH			OPANA	1.03		PEARL HARBOR			PH LOCAL USE:	14.79	
HALAWA SHAFT	6.34	16.21	WAIALEE I	0.99		WAIHAWA	1.41		TOTAL SUBURBAN:	70.20	
KAAMILO	0.00		WAIALEE II	0.00		WAIHAWA II	2.28				
KALAUAO	9.16	16.59	SUNSET BEACH	0.00		MILILANI I	3.94		KALAUAO SPRINGS	0.85	
PUNANANI	11.35		SUBTOTAL:	11.13		MILILANI II	0.00		BARBERS POINT (NP)	1.21	
KAONOHI II	0.00					MILILANI III	0.85		GLOVER TUNNEL (NP)	0.48	
WAIMALU II	0.00	14.65	WIND. EXPORT	0.14		MILILANI IV	0.74				
KAAHUMANU	1.23					WAIPIO HTS.	0.51		HEAD CONDITION		
HECO WAIU	2.73		HALEIWA-WAIALUA			WAIPIO HTS. I	0.27		CAUTION	ALERT	CRITICAL
MANANA	0.48		HALEIWA	0.00		WAIPIO HTS. II	0.30		PUNALUU	KAIMUKI	
KAHUMANU FLOW MT	0.00		WAIALUA	2.55		WAIPIO HTS. III	1.06				
KAAMILO FLOW MTR	0.00		SUBTOTAL:	2.55		WAIPAHU	4.00	17.88			
TOTAL IMP/EXP WAI. INT:	0.00					WAIPAHU II	0.97				
IMPORT FRM WIND:	0.14		EWA-WAIAANAE			WAIPAHU III	1.49				
SUBTOTAL:	31.43		MAKAHA I	0.86		WAIPAHU IV	2.90				
			MAKAHA II	0.37		PEARL CITY SHAFT	1.05	14.32			
TOTAL METRO:	71.05		MAKAHA III	1.09		PEARL CITY I	0.73				

CWRM PERMITTED USE FOR BWS POTABLE SOURCES						PUMPAGE	2015	2014	GRAVITY	2015	2014
	A	B	C	D	E	SUBURB.	70.20	62.19	SUBURB.	7.13	8.01
WATER DISTRICTS	PERMITTED USE		DIFF. B-A	YEAR/ DATE	DIFF. D-A	METRO	71.05	67.13	METRO	0.42	0.42
HONOLULU	45.27	40.04	-5.23			TOTAL:	141.25	129.32	TOTAL:	7.55	8.43
WINDWARD	25.21	14.50	-10.71						Manoa	0.17	
NORTH SHORE	4.08	4.75	0.67			NUUANU #5			Palo	0.25	
WAIHAWA	4.27	3.69	-0.58			(rainfall)	0.60"	1.65"	Waim. I&II	0.08	
WAIAANAE	4.34	4.19	-0.15						Waim. III&IV	0.19	
EWA-KUNIA	15.88	11.50	-4.38						Waihee incl.	0.96	
PEARL HARBOR	92.66	73.04	-19.62						Waihee tun.	1.78	
TOTAL:	191.71	151.71	-40.00						Luluku	0.09	
									Haiku	0.79	
									Kahaluu	1.68	
									Waia. C&C	1.40	
									Waia plant.	0.16	

DROUGHT STATUS REPORT
DRAFT IN MGD

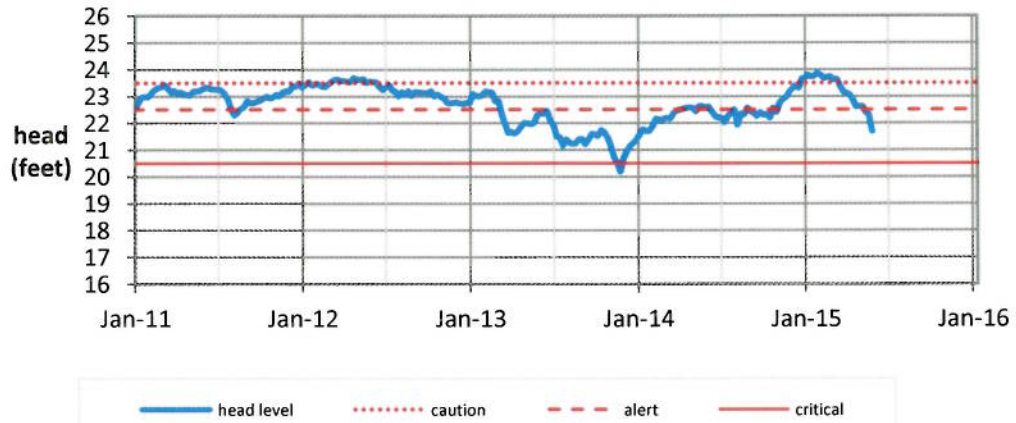
WATER USE DISTRICT	AUTHORIZED USE	2014	5/17-5/23 2015	2014	5/24-5/30 2015	2014	5/31-6/06 2015		
HONOLULU	45.27	34.50	36.39	32.27	38.68	34.82	40.18		
WINDWARD	25.21	12.75	16.53	12.78	15.22	12.94	14.36		
NORTH SHORE	4.08	3.79	4.87	3.45	4.80	3.73	4.75		
WAHIAWA	4.27	3.58	3.61	3.56	3.66	3.54	3.69		
EWA-WAIANAE	20.22	19.38	44.16	18.41	43.83	19.16	43.43		
PEARL HARBOR	92.66	63.32	44.60	61.27	42.49	63.56	42.39		
TOTAL	191.71	137.22	150.16	131.74	148.68	137.75	148.80		

Accounts for in-district pumpage and transfers

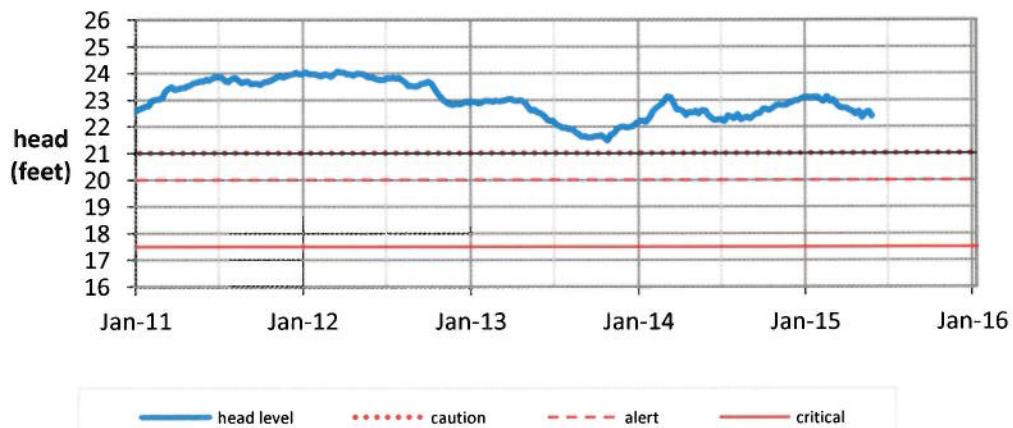
HEAD IN FEET

		2014	5/17-5/23 2015	2014	5/24-5/30 2015	2014	5/31-6/06 2015		
HONOLULU									
KAIMUKI		22.62	22.40	22.64	22.31	22.58	21.69		
BERETANIA		22.48	22.51	22.61	22.57	22.60	22.38		
KALIHI		22.00	21.91	21.94	21.90	21.99	21.74		
MOANALUA		19.00	18.70	19.08	18.77	19.12	18.68		
PEARL HARBOR									
HALAWA		16.54	16.15	16.57	16.23	16.60	16.21		
KALAUAO		17.02	16.68	16.93	16.60	16.97	16.59		
PEARL CITY		14.65	14.35	14.69	14.29	14.72	14.32		
WAIPAHU		18.31	17.92	18.38	17.89	18.40	17.88		
KUNIA		18.70	18.25	18.78	18.21	18.78	18.20		
EWA-WAIANAE									
MAKAHA		13.60	16.65	13.74	16.76	13.91	16.78		
WINDWARD									
PUNALUU		17.89	16.49	17.97	16.53	18.06	16.61		
KALUANUI		17.82	16.50	18.13	16.25	18.31	16.57		
NORTH SHORE									
WAIALUA		10.99	11.22	11.03	11.09	11.04	11.04		

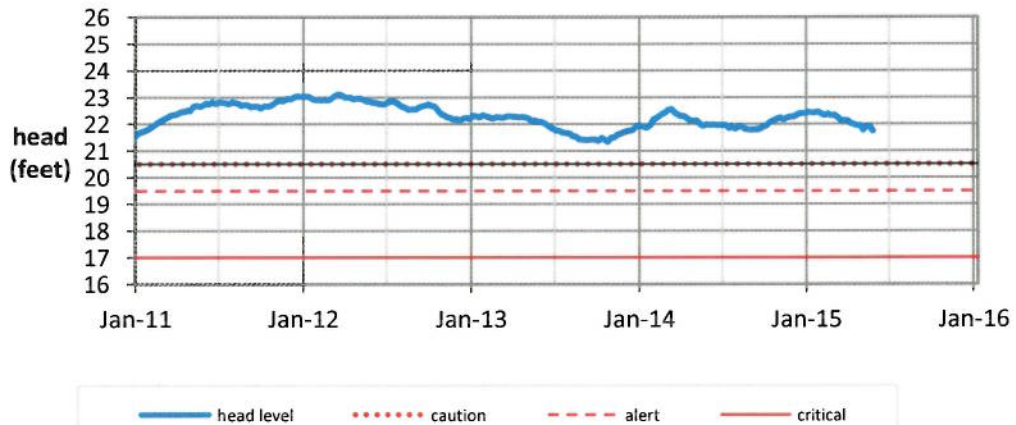
Kaimuki



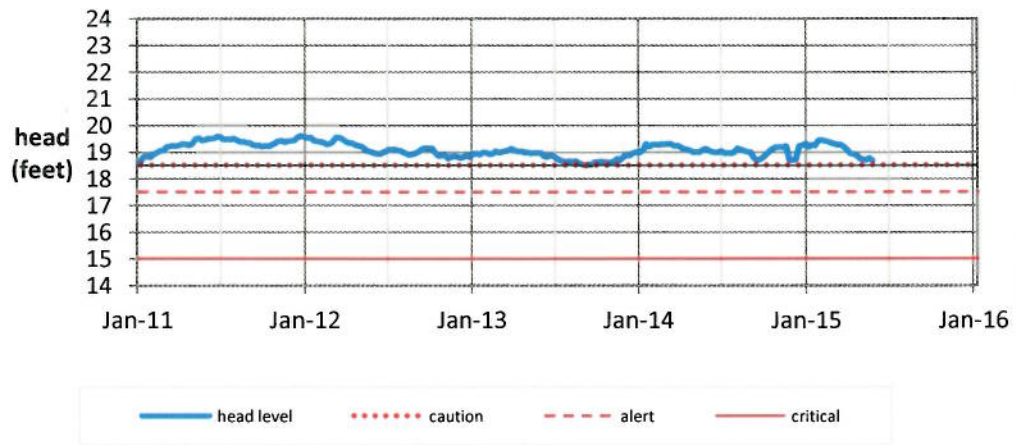
Beretania



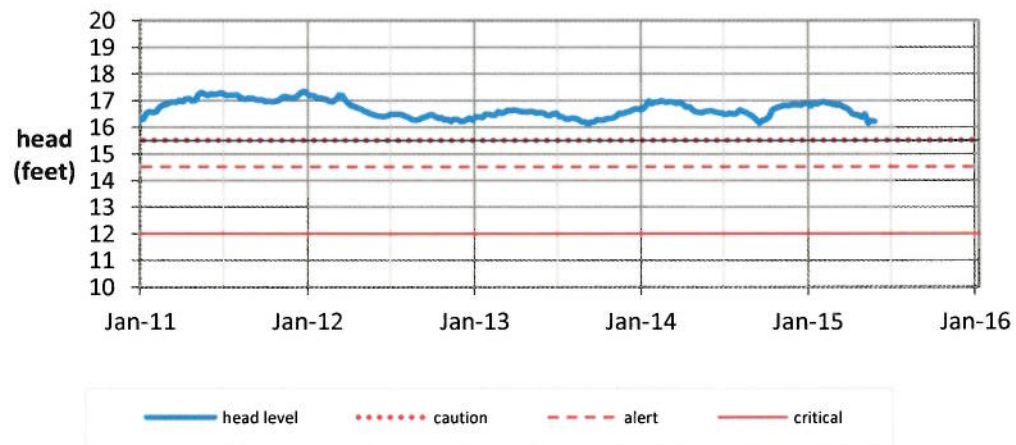
Kalihi



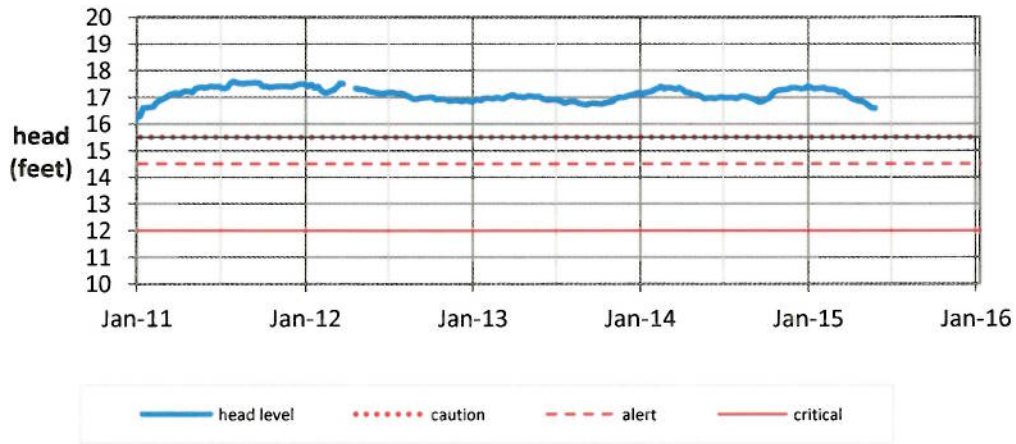
Moanalua



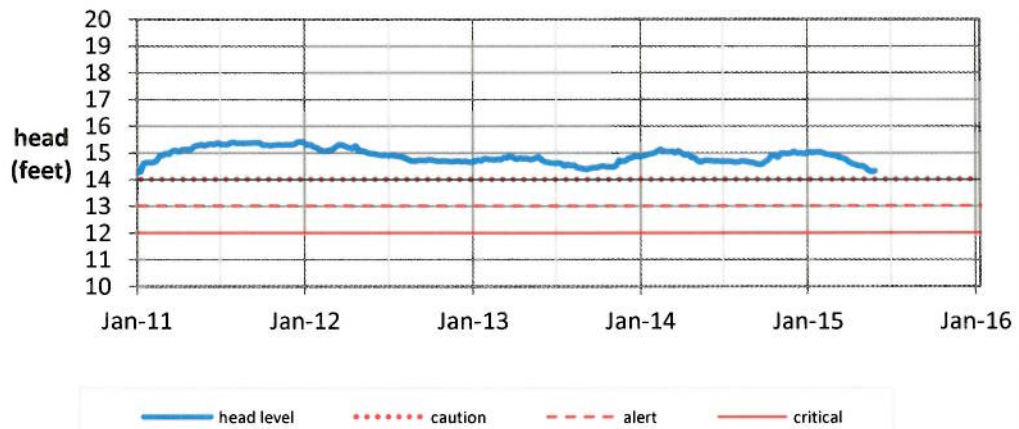
Halawa



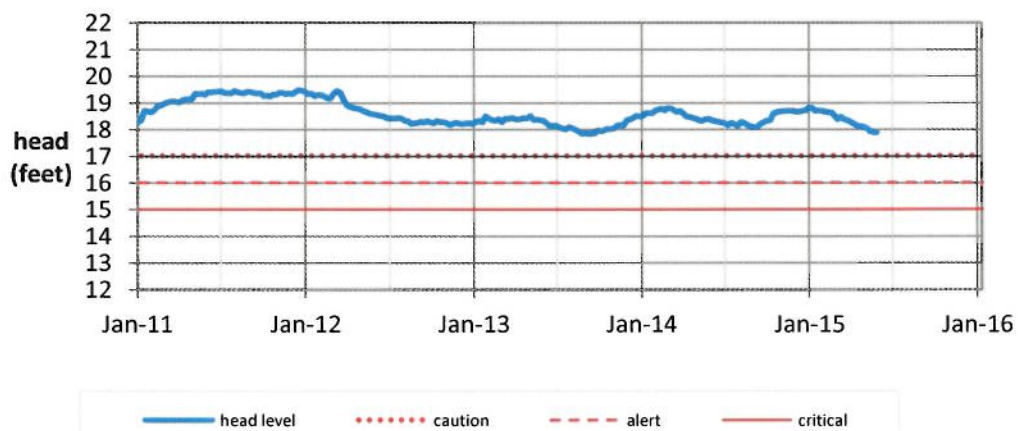
Kalauao



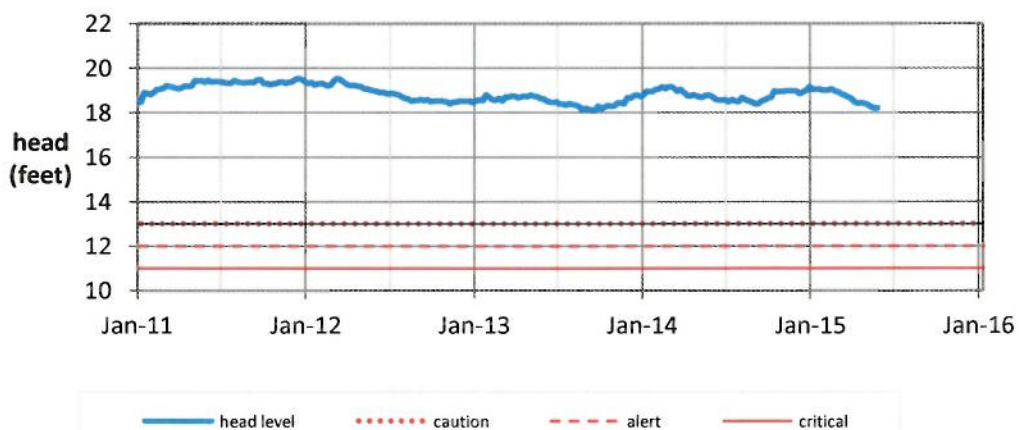
Pearl City



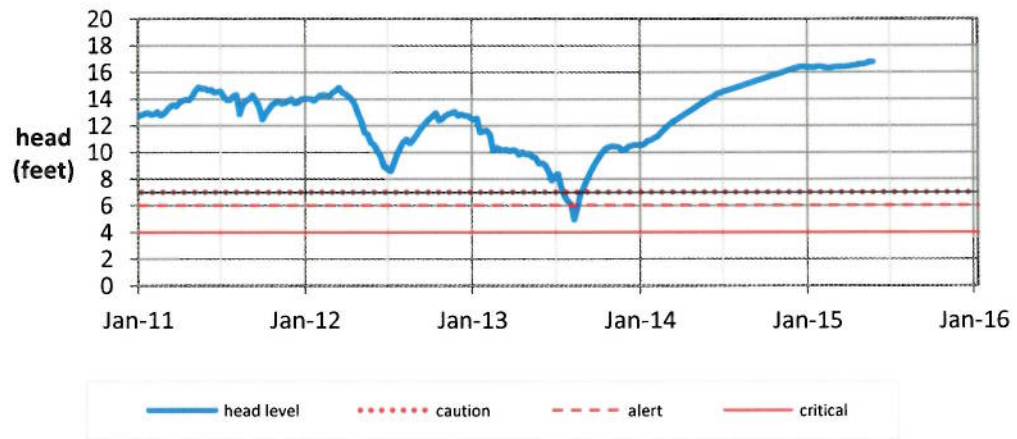
Waipahu



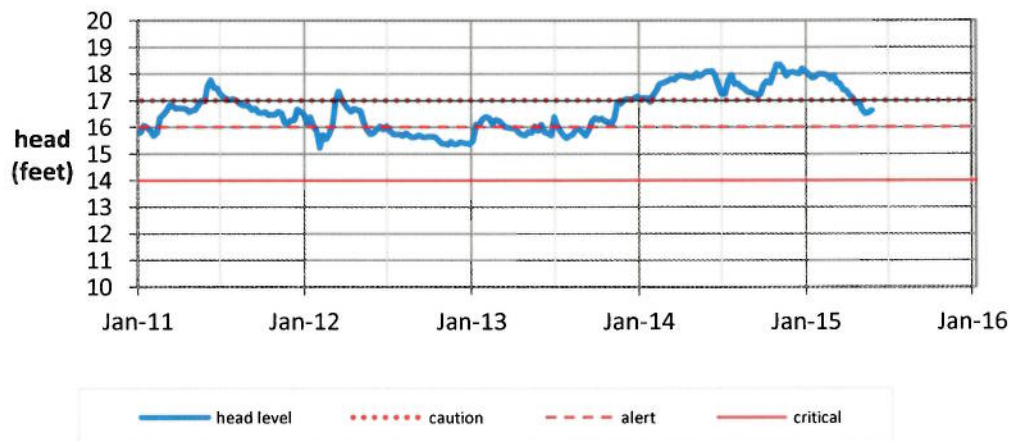
Hoeaee-Kunia



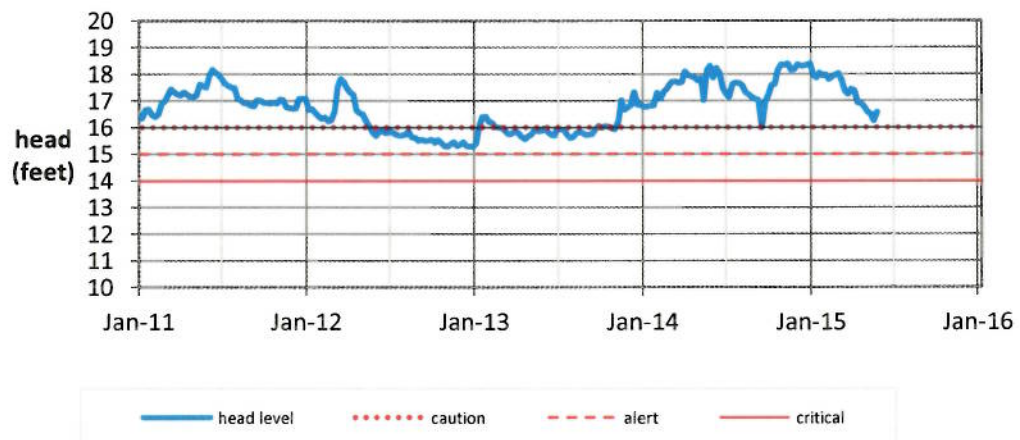
Makaha



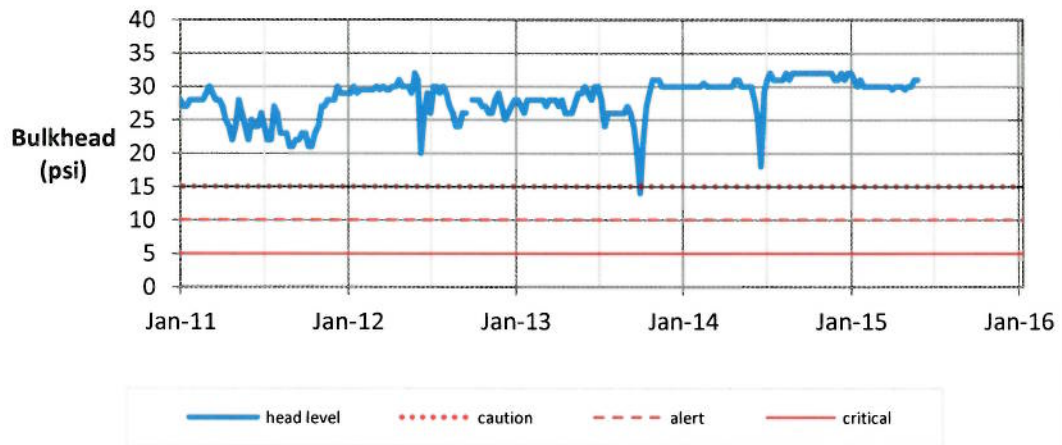
Punaluu



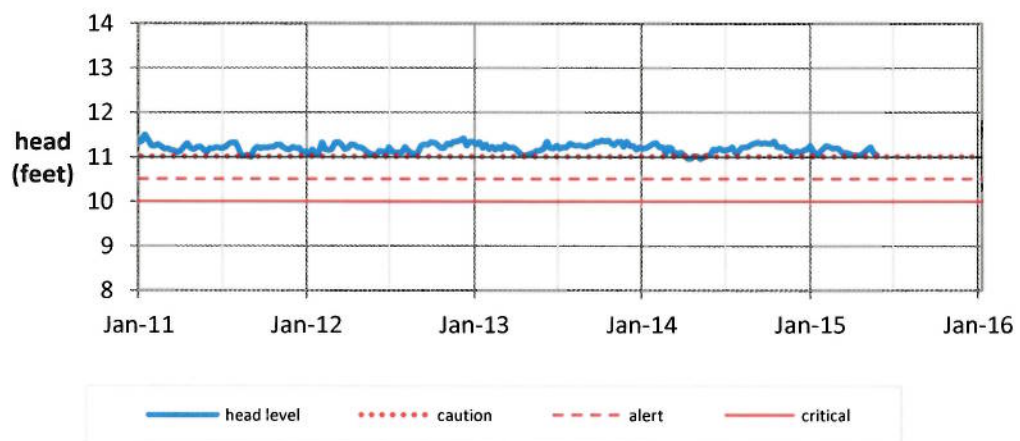
Kaluanui

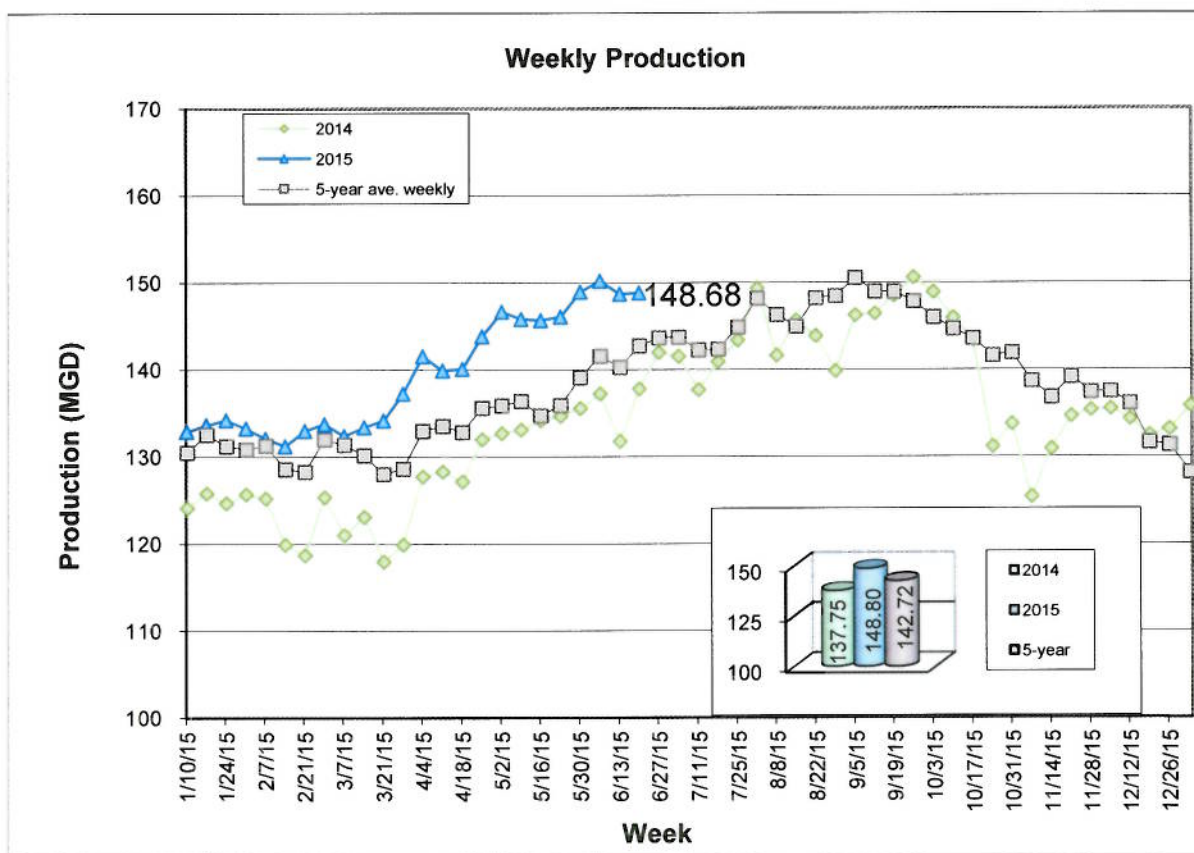
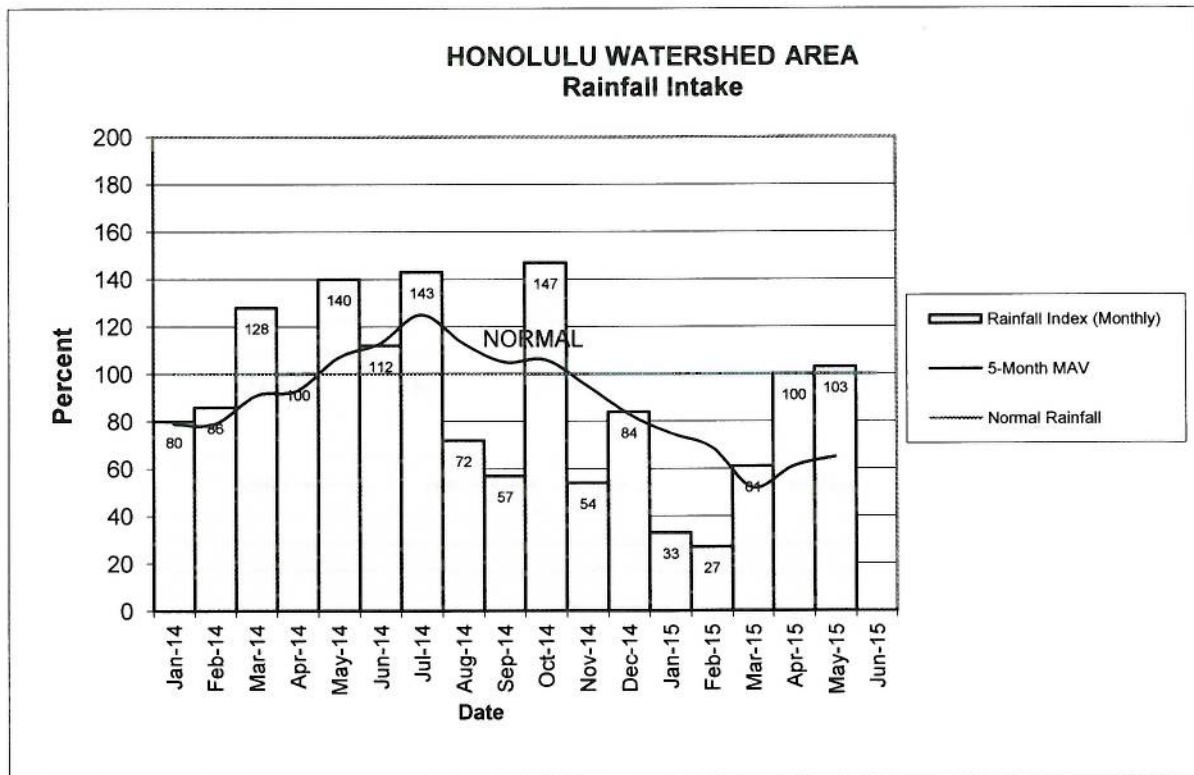


Waihee Tunnel

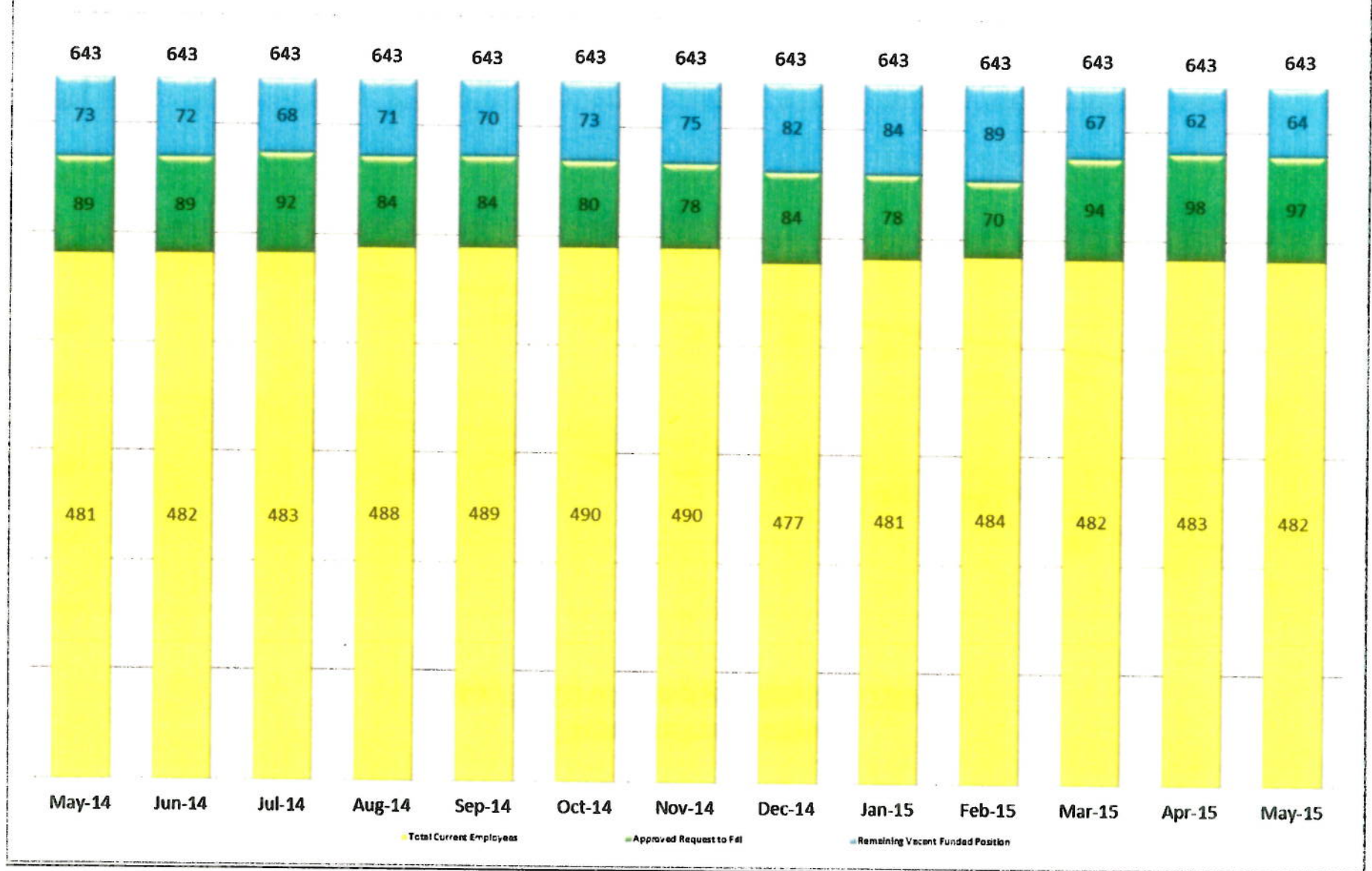


Waialua

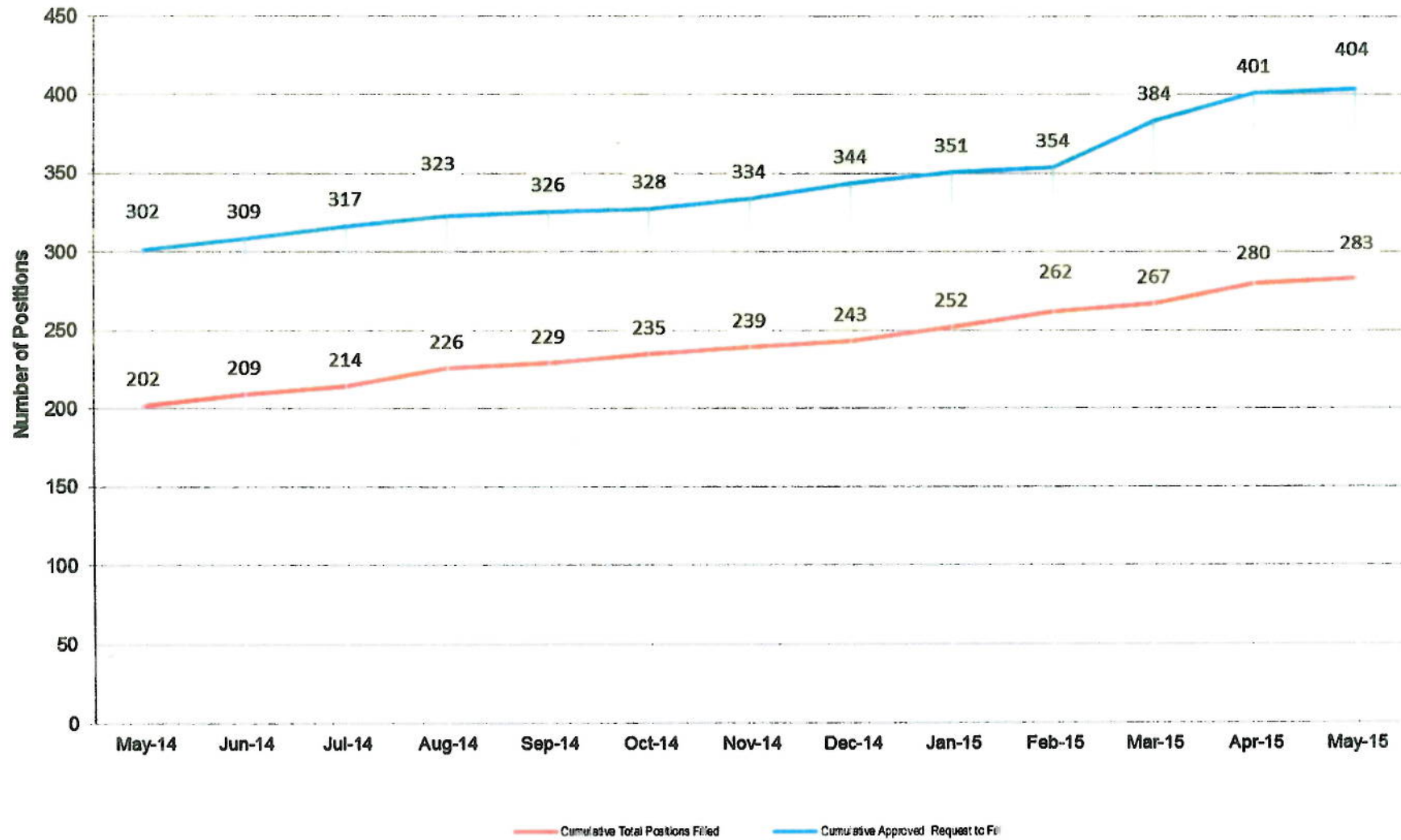




Positions Filled May 1, 2014 through May 31, 2015



Cumulative Totals May 1, 2014 through May 31, 2015



DISCUSSION

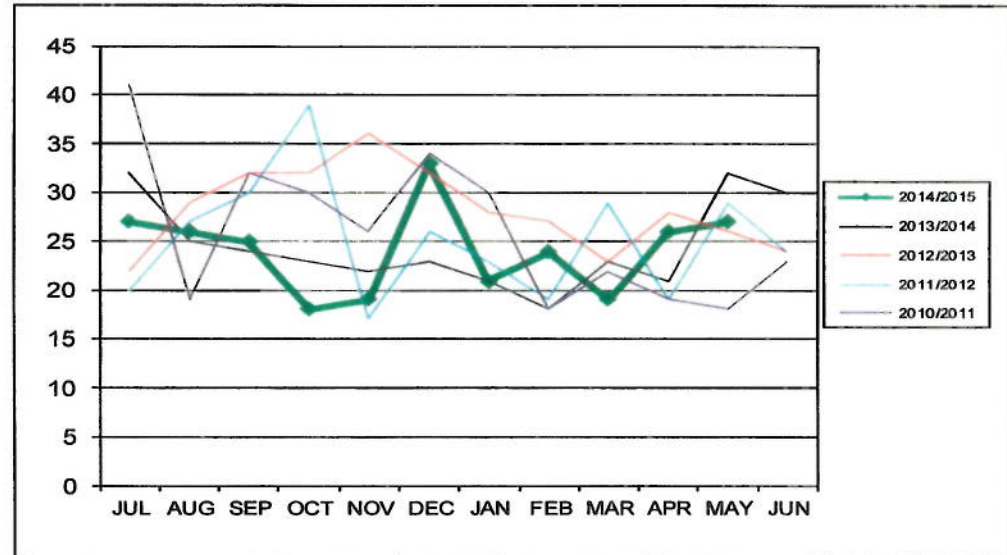
Karen Tom of the Human Resources Office gave the report. There were no comments or discussion.

ITEM FOR INFORMATION NO. 7

WATER MAIN REPAIR REPORT for May 2015

JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
27	26	25	18	19	33	21	24	19	26	27		265
32	25	24	23	22	23	21	18	23	21	32	30	294
22	29	32	32	36	32	28	27	23	28	26	24	339
20	27	30	39	17	26	23	19	29	19	29	24	302
41	19	32	30	26	34	30	18	22	19	18	23	312

Address	Size	Cause
5/9 44-690 Kaneohe Bay	8" C.I.	Pressure
5/13 1975 Alai Pl.	4" Galv.	Corrosion
5/13 98-1606 Kiawe St.	8" C.I.	Corrosion
5/14 94-910 Moloalo St.	12" C.I.	Corrosion
5/16 91-1082 Kaunolu St.	8" C.I.	Pressure
5/18 98-241 Alea Kai Pl.	8" C.I.	Corrosion
5/19 1222 Auld Ln.	6" C.I.	Corrosion
5/21 58-138 Mamao St.	6" C.I.	Corrosion
5/21 59-556 Akaohi Pl.	8" C.I.	Corrosion
5/21 1272 Hoohulu St.	8" C.I.	Settlement
5/21 1960 Makiki Hts. Dr.	8" C.I.	Unknown
5/21 59-530 Akaohi Pl.	8" C.I.	Corrosion
5/22 59-555 Akaohi Pl.	8" C.I.	Corrosion
5/22 1635 Citron St.	8" P.V.C.	Clamp
5/22 91-087 Hanua St.	12" A.C.	Joint
5/22 759 Pumeahana St.	8" D.I.	Corrosion
5/23 4025 Sierra Dr.	6" C.I.	Corrosion
5/24 94-116 Pupunohe St.	8" C.I.	Corrosion
5/24 46-312 Kauhaa Pl.	4" C.I.	Corrosion
5/27 45-729 Wainana St.	6" C.I.	Settlement
5/27 94-131 Mokukaua St.	8" C.I.	Corrosion
5/27 94-414 Hianakia St.	12" C.I.	Corrosion
5/28 68-105 Au St.	8" C.I.	Corrosion
5/28 Waialele St. & Farr Hy.	6" C.I.	Corrosion
5/28 5621 Kalanianaʻole Hy.	16" P.V.C.	Clamp
5/29 1416 Bernice St.	8" C.I.	Unknown
5/30 91-787 Makule Rd.	8" C.I.	Corrosion



Bold * - Pro-active Leak Repair

13 miles of pipelines were surveyed by the Leak Detection Team in the month of May.

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 3:08 PM to Consider Issues Pertaining to Matters Posted for Discussion at an Executive Session.

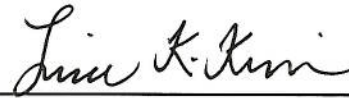
OPEN
SESSION

The Board reconvened in open session at 3:17 PM

MOTION TO
ADJOURN

There being no further business Chair Miyashiro at 3:17 PM called for a motion to adjourn the Open Session. David Hulihee so moved; seconded by Theresia McMurdo and unanimously carried.

Respectfully submitted,



LISA K. KIM

APPROVED:



DUANE R. MIYASHIRO
Chair of the Board

JUL 27 2015

Date

THE MINUTES OF THE REGULAR SESSION BOARD MEETING ON JUNE 22, 2015 WERE APPROVED AT THE JULY 27, 2015 BOARD MEETING			
	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG	X		
THERESIA C. MCMURDO	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		