MINUTES

REGULAR MEETING
OF THE
BOARD OF WATER SUPPLY

February 22, 2016

At 2:02 PM on February 22, 2016 in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, Board Chair Miyashiro called to order the Regular Meeting.

Present:	Duane R. Miyashiro, Chair Adam C. Wong, Vice Chair David C. Hulihee Kapua Sproat Ross S. Sasamura
Also Present:	Ernest Lau, Manager and Chief Engineer Ellen Kitamura, Deputy Manager and Chief Engineer Alex Ubiadas Barry Usagawa Daryl Hiromoto Erwin Kawata Henderson Nuuhiwa Jason Takaki Jennifer Elflein Joe Cooper Kalei Schoenstein Karen Tom Keoni Mattos Kevin Ihu Mike Matsuo Nancy Matsumoto Neil Oyama Robert Morita Robin Yahiku Thelma Kimura Tracy Burgo Travis Sonomura
Others Present:	Moana Yost, Deputy Corporation Counsel Jeff Lau, Deputy Corporation Counsel Commissioner Maggie Hart Stebbins, Bernalillo County, Albuquerque Bernalillo County Water Utility Authority Margaret Stebbins, Bernalillo County Lucy Stebbins, Bernalillo County Alwyn Morisako

John Sigda, INTERA
Joseph Tracy, INTERA
Tom Myers, Brown and Caldwell

Absent: Ford N. Fuchigami
Bryan P. Andaya

APPROVAL OF MINUTES	Approval of the Minutes of the Regular Meeting held on January 25, 2016
MOTION TO APPROVE	Ross Sasamura and David Hulihee motioned and seconded, respectively, to approve the Minutes of the Regular Session Meeting of January 25, 2016. The motion was unanimously carried.

ITEM FOR INFORMATION NO. 1

"February 22, 2016

COMMISSIONER MAGGIE HART STEBBINS - KIRTLAND AIR FORCE BASE FUEL LEAK

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

Chair and Members:

Subject: A Discussion with Commissioner Maggie Hart Stebbins on the Kirtland Air Force Base Fuel Leak in Albuquerque, New Mexico

We are honored to have Commissioner Maggie Hart Stebbins as our guest, to share her experiences and insights on the Kirtland Air Force Base fuel leak and its similarities with our Red Hill Fuel Facility experiences.

Commissioner Hart Stebbins is Chair of the Bernalillo County Commission and member of the Albuquerque Bernalillo County Water Utility Authority Board. She also serves on the Bernalillo County Metropolitan Court Judicial Selection Commission and the New Mexico Children's Foundation among others. She is a graduate of Harvard University, an all-American athlete, and a recipient of the prestigious Radcliffe Alumni Association Award for athletic excellence and leadership.

Commissioner Hart Stebbins has over 30 years of experience in public service. Her background includes work in the United States Congress, the New Mexico House of Representatives, and the Mid-Region Council of Governments, where she focused on air quality, water conservation, and regional transportation.

Protecting the subsurface drinking water supply has been, and continues to remain, a major priority for Commissioner Hart Stebbins. Over the past six years, she has worked to build a powerful coalition with other decision-makers, community leaders, and the public to encourage officials at all levels of government to protect the region's groundwater by aggressively remediating a decades-old fuel spill from Kirtland Air Force Base.

Please join me in welcoming Commissioner Hart Stebbins.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION

Ms. Stebbins stated that she was honored to be here to share how they handled their fuel leak spill on Kirtland Air Force Base (KAFB) in New Mexico. Her presentation described the KAFB fuel spill including information about the Albuquerque Bernalillo County Water Utility, their groundwater aquifers, use of non-potable water, the area's population, rainfall, utility customer accounts, and conservation campaign. She discussed the cultural importance of water to the community and their passion and responsibility to protect their water supply by not allowing the ethylene dibromide (EDB) from the fuel spill from entering the drinking water supply. She shared details of when and how the fuel got into the groundwater, how far the plume had spread, as well as what was done to remedy the situation including the challenges to reach a solution.

Ms. Stebbins cited key elements of their situation. First, the Water Utility Authority had access to data that KAFB made available on line, and that enabled their experts to see what was occurring and helped to evaluate it. Second, the Water Utility had their own technical experts who could do the evaluations to make sure they moved in the right direction. Third, the Water Utility invited either KAFB or the New Mexico Environment Department regulator to meet and update the utility on progress, and to inform the utility about what they were holding in public forums to share information essential to the community.

Major breakthroughs in progress occurred when 1) Congresswoman Michelle Lujan Grisham discussed the problem with the Department of Defense, 2) a new Secretary of the State Environment Department was named, and 3) a new lead engineer from the Air Force Civil Engineering Center who had strong leadership, communication skills, and technical skills was assigned full time to the problem. A complete change in how KAFB dealt with the problem emerged becoming more responsive to utility and community concerns.

New Mexico now has regular stakeholder meetings and technical team meetings attended by their Water Utility staff and their contractor, and they are equal partners at the table. They have about over 120 groundwater monitoring wells around the EDB plume at about 40 locations. They have a study for remediation of the contamination source that includes wells to extract and treat contaminated groundwater and then using that treated water for irrigation on KAFB.

The Commissioner stressed the importance of transparency; communication among the stakeholders, including the public; access to data; obtaining good information; hiring their own technical experts; and taking the time to understand the science of the contamination and remediation. She also stated that failure to address the contamination could have a huge economic impact without a reliable, clean, risk free water supply to support growth. The Commissioner emphasized that their rate payers have the fundamental right to know the extent of the contamination and a right to know the risk to their water supply for the future of their community. It is important to get information so that the

community can know what the risk is, what the contamination looks like, and what it's going to take to clean it up.

Board Member Wong asked about the genealogy behind the spill itself, when it was discovered and when it was first made public. He also asked if the data was made available upon the announcement. Ms. Stebbins responded that it was evident the tanks began leaking probably not long after they were installed in the 1950s. The original fuel bulk facility had the piping underground and so one of those underground pipes was leaking consistently over a 50 year period. The leak was first publicly announced in 1999 by the KAFB. Regarding the data, KAFB was very good about making data available. Dr. Sigda from INTERA added that KAFB thought the leak had not reached the water table, so their data were limited to just the top 20-30 feet of the sediments where the pipe was buried, and it was leaking there. However in 2001, EDB was found after installing monitor wells. By the end of 2006-2007, it became clear that it was in the groundwater after installing more wells. Initially, KAFB and the State regulator were slow to mobilize.

Mr. Wong asked if any of the information that came out later turned out to be different than the information provided beforehand. Ms. Stebbins replied that when she first joined the County Commission, she took a tour of KAFB and saw two soil vapor extractors that were really underpowered and poorly located and was told that they would take care of this problem. The soil vapor extractors were to pull the vapors out of the soil and burn them off, arrest the gravity/flow heading into the groundwater, but it was a very inefficient response, so Ms. Stebbins is unsure if any of the technical data that ever came out turned out to be wrong or different than what was released.

Board Member Sproat thanked Ms. Stebbins for her willingness to share her experiences. Ms. Sproat asked if KAFB volunteered the data or did they have to use the Freedom of Information Act (FOIA) or litigation. Ms. Stebbins replied that to her knowledge, they willingly shared that information, put it on line, and recognized that it was public information. Dr. Sigda added that the Environment Department required KAFB to provide the information. In response to Mr. Wong's inquiry about New Mexico's Environment Department (NMED), Ms. Stebbins replied that NMED is equivalent to the Hawaii State Department of Health (DOH).

Ms. Sproat asked how it was determined that 140 wells were needed. Mr. Lau replied that right now BWS is planning for two wells, in addition to the 10 that the Navy has installed. Mr. Lau explained that BWS has been requesting information on the water quality test data and sent a 92F request to the DOH, and they haven't responded to the deadlines. Because of a FOIA request that Mr. Kawata submitted to the Environmental Protection Agency (EPA), the EPA has now realized that per the requirements of the Administrative Order on Consent (AOC), non-confidential information needs to be shared, so they are looking and working to encourage the Navy to post the non-confidential information on a website, perhaps like what the KAFB has done for years. Ms. Sproat

asked how it was determined how many wells would be necessary and the placement of the wells. Dr. Sigda stated that the dialog between the regulator and the responsible party was initially slow. The Water Utility Authority and their Board would ask KAFB if the number of wells were adequate. Eventually the situation improved and KAFB installed more wells. Ms. Sproat also asked what time period were the 140 wells drilled and if they were front loaded. Dr. Sigda replied, starting in 2011, they immediately began drilling with 77 wells around 28 locations, such that each location would get three different wells. Most of the well installation work was completed by the end of 2013. Questions as to whether more wells were needed continued through 2014 and even into 2015. Ms. Stebbins said there was a period where the contractor was leaving big gaps in the well locations and saying they characterized the plume when they clearly had not and they were also very resistant to characterizing the depth. That changed when the Air Force Civil Engineering Center (AFCEC) came on board recognizing the need to do better. Mr. Lau asked how deep the wells are. Dr. Sigda said you have to go 500 feet to hit the water table at the site. The plume is at least another 80 feet for the deep screens, so about 600 feet. It's expensive and each well is not too different than the depth of the wells at Red Hill. Ms. Stebbins said that the United States Geological Survey (USGS) century well was 1,500 feet. Ms. Sproat asked if they monitored the well. Ms. Stebbins replied that they screened it at multiple depths because their drinking water wells combat around 1,500 feet down and they wanted to make sure the plume was not diving under the existing monitor wells.

Ms. Sproat asked of the 400 wells, how many did the utility pay for. Ms. Stebbins replied that they didn't pay for any of the wells, they were installed by KAFB. The Water Utility paid for the one sentinel well. There was some resistance to putting wells off base, but it was very clear the plume had extended beyond the base boundaries. So it was really important that they agreed to go off base to fully characterize the extent of the contamination. Ms. Sproat asked if the wells are owned by KAFB and who maintains them. Ms. Stebbins replied, KAFB is responsible for drilling, maintaining, and sampling all of those wells.

Ms. Sproat asked who does the peer review. Dr. Sigda responded that the first to review are the regulators. The contractor samples, quarterly, all 140+ wells, sends samples to the lab, gets the results back, goes through quality assurance and quality control processes, and then releases the data to the regulator. At that point, they may release it, depending on which part of the timeline, sometimes the Water Utility asks the regulator for the data. Since 2014, with AFCEC's intervention, the staff member at the Water Utility Authority who is attending all these meetings, has access to the data and is part of their discussions.

Ms. Sproat asked Ms. Stebbins if she is aware of the Red Hill AOC, what's being proposed and if she has any words of wisdom to share. Ms. Stebbins responded that she doesn't know in detail what the AOC contains, but recommends a voice that knows exactly what is being proposed, an independent evaluation, and access to the information that

comes out both by the regulator and the responsible party. Hands are tied without that. She stated that for them, access to data and transparency is absolutely essential because if they had not had that data, they would have had to accept what KAFB and the contractor were putting out as an acceptable remedy. Ms. Sproat commented that the AOC has been a source of frustration because of lack of access to data. BWS has been cooperative and has used legal FOIA, but has been ignored. There's no information to check resources and that's a real concern. Mr. Lau stated that there is about a 25 percent response rate from the EPA, DOH, and the Navy.

Mr. Wong asked how large KAFB is. Ms. Stebbins replied they employ about 12,000 employees which is a very significant employee base, as well as a big economic driver for smaller businesses and contractors.
Mr. Wong asked what the overall strategic importance of the KAFB is.
Ms. Stebbins replied that there are more than 20 individual missions at KAFB, including a Nuclear Security Agency, Air Space Vehicle Directorate, and Directorate of Energy. Air Force members also go there to train for emergency rescue missions, and there is an Air Wing, so there's a mix of very broad missions that exists there. There's also the Sandia National Labs which does a lot of nuclear security work for the United States.

Mr. Miyashiro referred to Slide No. 6 and asked if the leak stopped because of the construction or remediation to the existing storage.
Ms. Stebbins replied that the new storage facility is all above ground and KAFB moved immediately to build a new facility, once it was recognized that those underground pipes were leaking. They are fairly confident that it is not leaking since it is above ground and all the piping and tanks are new.
Mr. Miyashiro asked INTERA what the volume of fuel is in that facility.
Dr. Sigda replied that there are two tanks of about two million each.
Mr. Miyashiro asked Mr. Lau about the Red Hill tanks. Mr. Lau replied that 15 of 20 tanks are in use, roughly over 187 million gallons. Mr. Miyashiro asked who is paying for the remediation costs. Ms. Stebbins replied that KAFB is. There was a suggestion at one point that the Environmental Protection Agency (EPA) cover it as a superfund site, but KAFB had committed to pay for the costs of remediation and moving it over to the EPA would have been a step back because funding was not available or was not committed.

Mr. Miyashiro said that it seems that resolutions began occurring when the Federal, State, and County were all on the same page and asked if Ms. Stebbins had any suggestions for BWS in regards to elected officials here. Ms. Stebbins stated that in New Mexico, water is highly valued and it's their cultural value to protect their water supply and to value their water resources. This was shared by elected officials, the Federal, the Water Utility Board, and everyone representing the State of New Mexico, and everyone shared the importance of the water resource and knew it could not be replaced. She stated that their aquifer is a resource that has been built up over millennia, and it was something that could not be easily replaced, so they focused on their mutual goals and obligations. In the end, people recognized that everyone had to work together to protect the

future of their community. Mr. Lau stated that the role of Congresswoman Grisham seemed to be the key to turning the situation around in a positive direction. Ms. Stebbins said it was absolutely essential, as well as having a strong state environmental secretary. Mr. Lau stated that that would be equivalent to the DOH, Deputy Director of Environmental Health.
Ms. Stebbins stated that the new head of their regulatory agency and a very strong member of their congressional delegation who took it on at as a priority, absolutely made all the difference in the world. Their Congresswoman made this her number one priority and got KAFB to take ownership of the situation and that made all the difference. Mr. Lau asked how many congressional delegates they have. Ms. Stebbins replied that they have five. There are two senators and three house members.
Mr. Lau asked how Congresswoman Lujan Grisham was able to convince her other congressional delegates. Ms. Stebbins stated that there was a very strong, moral argument, that this was their obligation and it was important to the future of the constituents that they served.
Congresswoman Grisham was very persuasive and did everything she could to make this happen. The Water Utility didn't really have any say over the Air Force. It really took someone at the Federal level who had influence to change the attitude. Mr. Lau stated that it is similar here where BWS has zero regulatory authority, yet are the primary stakeholders representing the public.

Ms. Stebbins said that she was honored to have been invited to speak, offered her assistance in any way, and thanked the Board for the lei.
Mr. Lau and the Board thanked Ms. Stebbins.

Albuquerque Bernalillo County
Water Utility Authority

The Water Authority and the KAFB Jet Fuel Spill: Lessons Learned

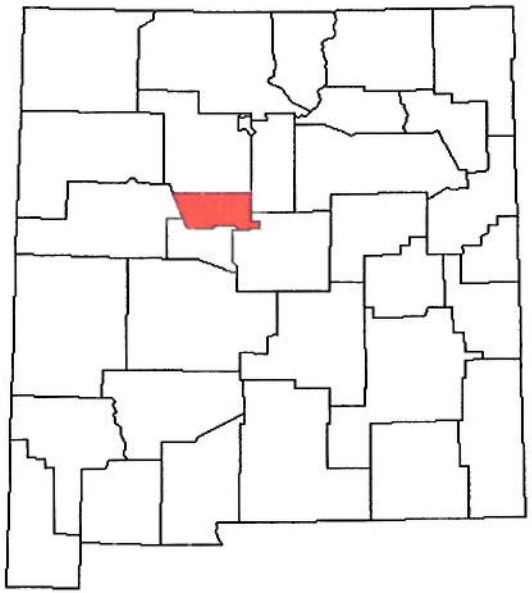
Maggie Hart Stebbins

Bernalillo County Commissioner and Immediate Past Chair,
Albuquerque Bernalillo County Water Utility Authority

Presentation to the BWS Board
22 February 2016

Albuquerque Bernalillo County Water Utility Authority

Bernalillo County, NM



- Population of 675,551 (most populous county and home to largest city in state)
- Economic center of New Mexico
- Located in a high-desert environment; ~ 9" of rainfall per year on average
- Attractions: Sandia Mountains, International Balloon Fiesta
- Major employers include University of New Mexico, Intel, Sandia National Labs and Kirtland Air Force Base

International Balloon Fiesta

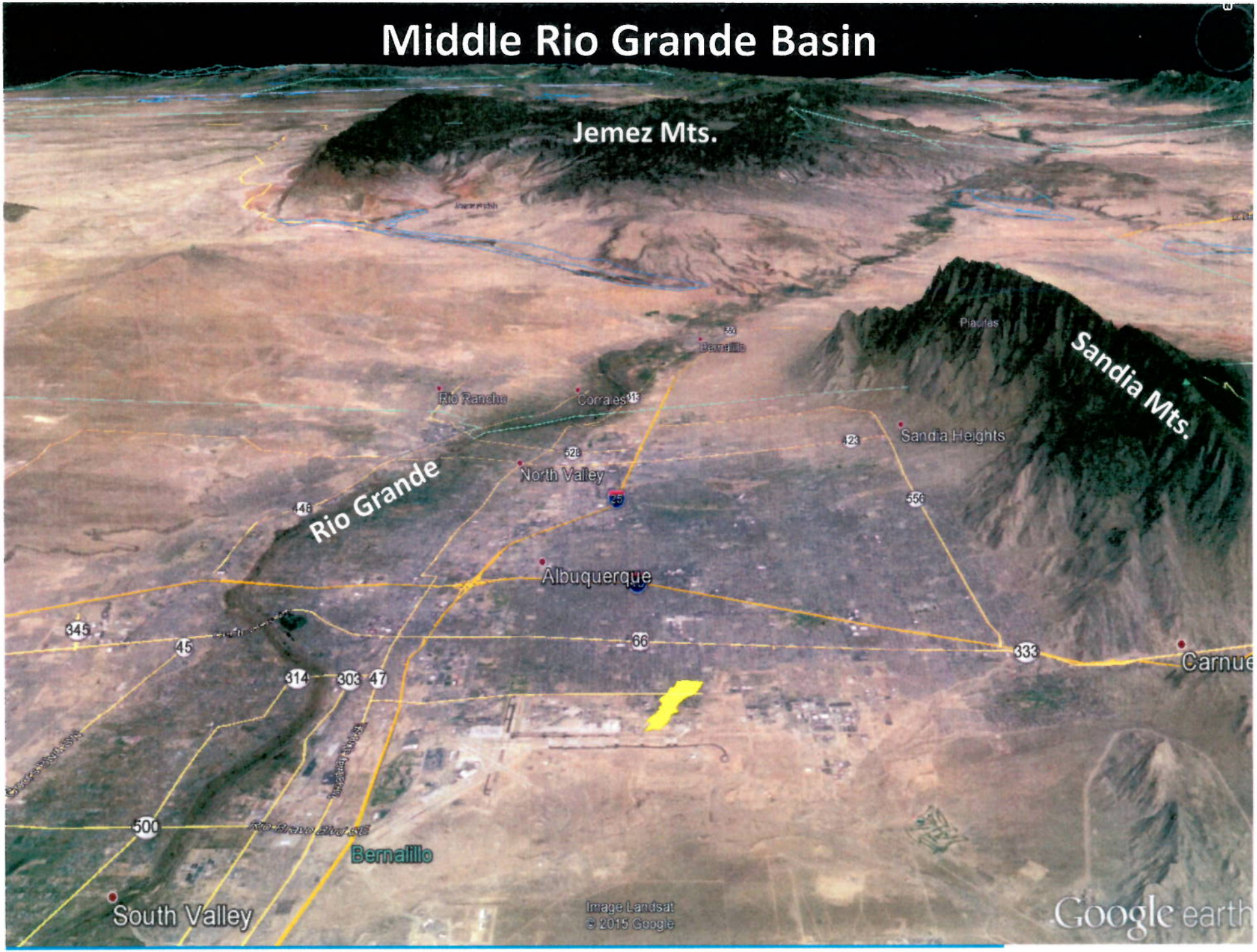
Sandia Mountains

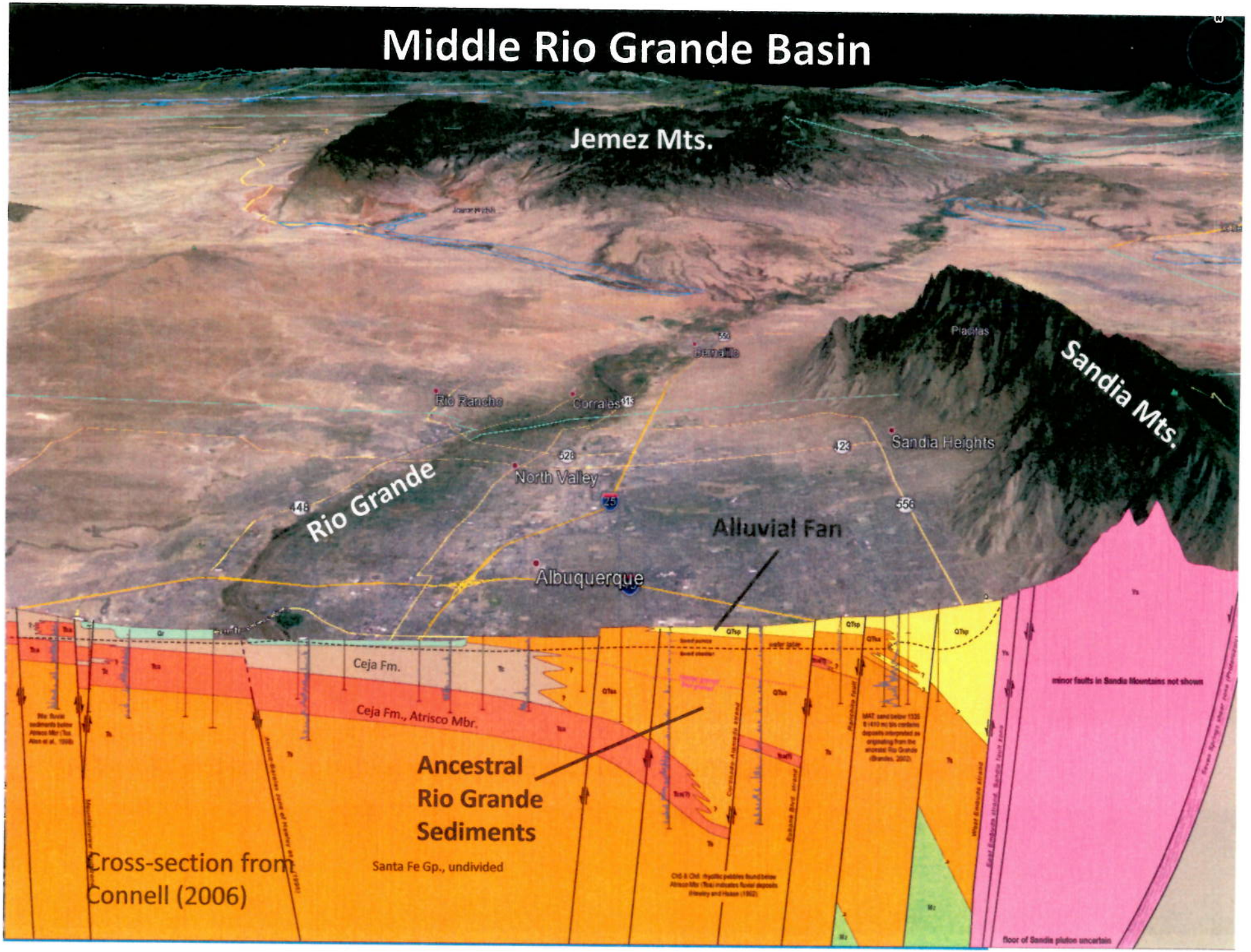
Albuquerque Bernalillo County Water Utility Authority

Water Authority

- Independent utility with 207,000 customer accounts, serving more than 600,000 people
- 621 employees
- Sources include surface, ground, recovered, and reuse (nonpotable) waters
- Drinking water, wastewater, nonpotable reuse, and (limited) stormwater services
- Invested well over $500 million in Water Resources Management Strategy activities since 2003
- Per capita usage = 127 gallons per capita day (gpcd)*

  *Down from 255 gpcd in mid-1990's

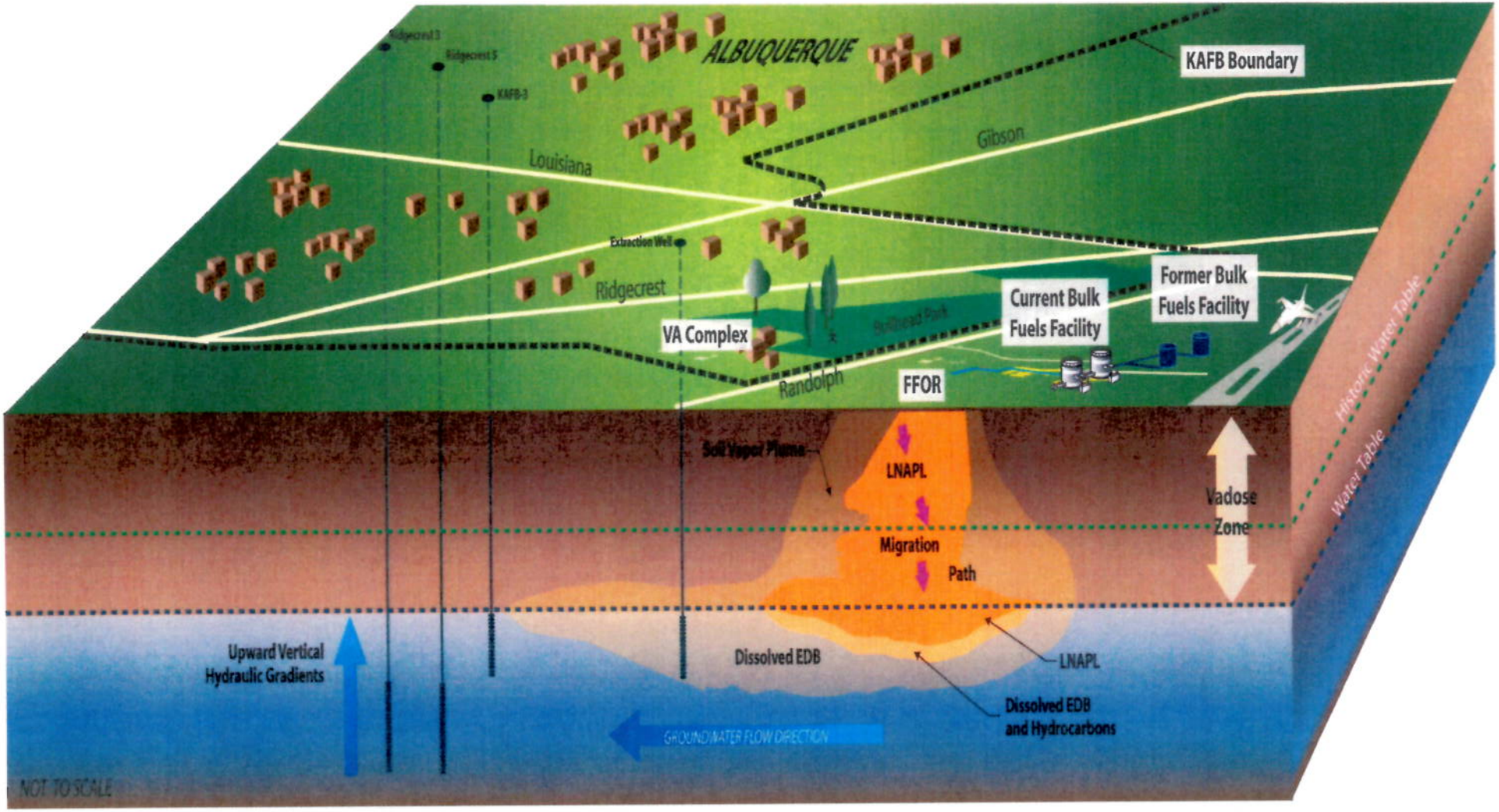

Middle Rio Grande Basin
Jemez Mts.
Sandia Mts.
Rio Grande
Rio Rancho
Corrales
Bernalillo
Placitas
Sandia Heights
North Valley
Albuquerque
Carnue
Bernalillo
South Valley
Image Landsat
© 2015 Google
Google earth


Middle Rio Grande Basin
Jemez Mts.
Sandia Mts.
Rio Rancho
Corrales
Sandia Heights
North Valley
Rio Grande
Alluvial Fan
Albuquerque
Ceja Fm.
Ceja Fm., Atrisco Mbr.
Ancestral
Rio Grande
Sediments
Santa Fe Gp., undivided
minor faults in Sandia Mountains not shown
floor of Sandia pluton uncertain
Cross-section from
Connell (2006)

Albuquerque Bernalillo County Water Utility Authority

Understanding KAFB Fuel Release

Unknown quantity of aviation fuels leaked into subsurface over ~50 years



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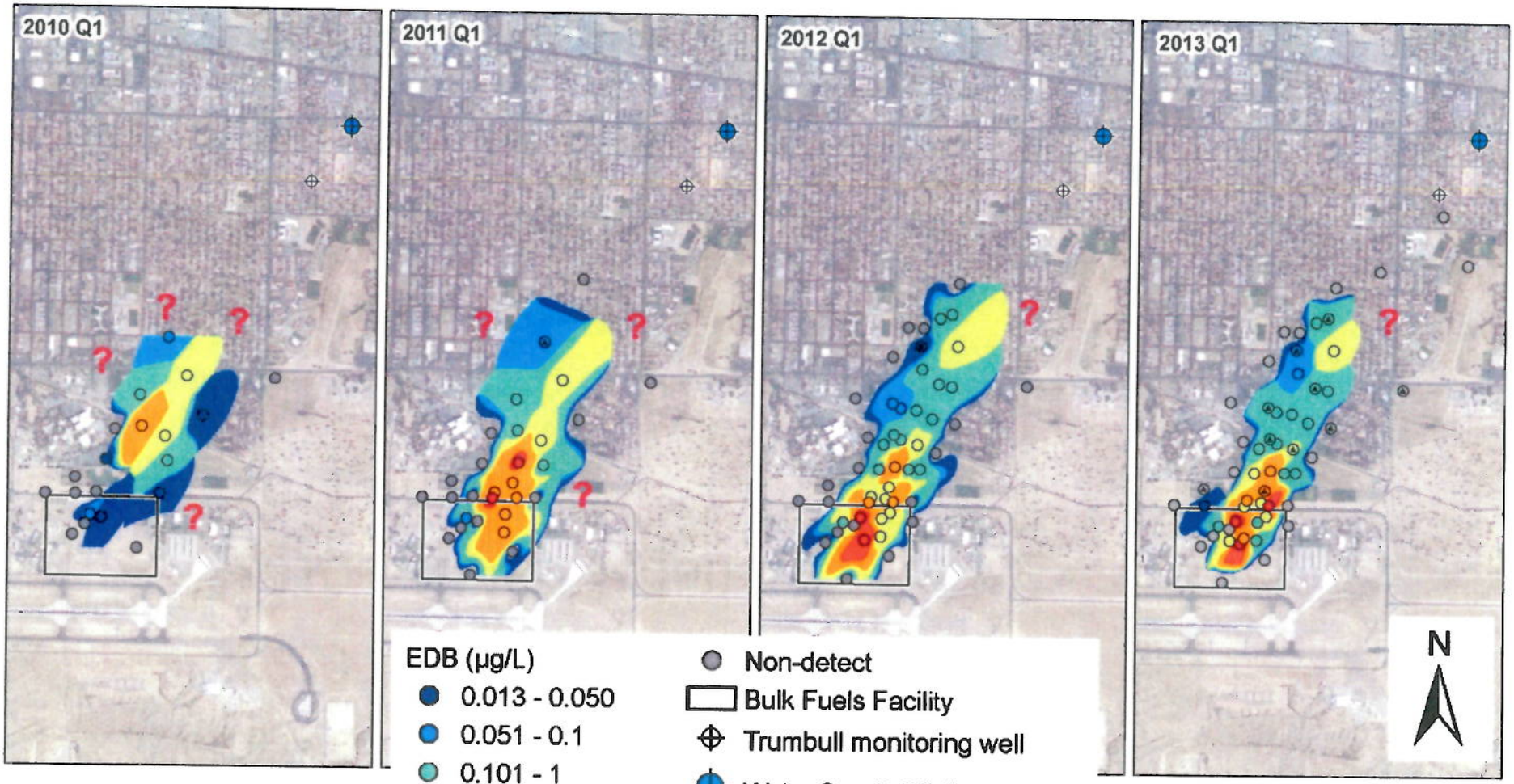
Albuquerque Bernalillo County
Water Utility Authority

Defining the EDB Plume



INTERA

Albuquerque Bernalillo County Water Utility Authority

Water Authority Response

- History
  - 1999
  - 2010 – NMED action
  - 2011-2013
  - 2014-2016
- Water Authority actions
- KAFB/NMED response
- Community engagement
- NM federal delegation engagement

Albuquerque Bernalillo County Water Utility Authority

Current Activities

- Regular stakeholder meetings and technical team meetings attended by Water Authority staff and contractor
- Over 100 monitoring wells around the EDB plume
- Pilot study for LNAPL remediation to begin soon
- Soil vapor extraction has removed ~ 700,000 gallons and improvements are under evaluation
- Active capture and remediation of EDB plume underway

Lessons Learned

What Worked?

- Transparency
- Access to all data
- Good information
- Independent technical expertise to evaluate/challenge plans
- Board members understand the fundamental science of contamination and remediation
- Communication among stakeholders, including the public
- Focus on common interests: protect water supply and economy

Albuquerque Bernalillo County Water Utility Authority

Going Forward

- Prepare for resistance and criticism from both sides – adversarial v. collaborative
- Prompt action protects water supply and saves money
  - Prevention is more cost effective than remediation
- BWS obligation to protect water supply and ratepayers
- Cooperative effort among federal, state, local government, and community

ITEM FOR INFORMATION NO. 2

"February 22, 2016

CHARTER COMMISSION PROPOSALS UPDATE

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

Chair and Members:

Subject: Update on Charter Commission Proposals Pertaining to the Board of Water Supply

The Honolulu Charter Commission is appointed after November 1 of every year ending in "4," but before the immediate following February 1 in accordance to Article XV (Charter Amendment or Revision) Section 15-105. In effect, the Commission is convened every 10 years. The Commission may propose amendments to the existing charter or a draft of a revised charter, which shall be submitted to the City Clerk at any time prior to September 1 of the year ending in "6" that immediately follows the appointment of the Commission. They have been meeting since last fall on a weekly or bi-weekly basis. Over 150 proposals have been received on their web site (www.honoluluchartercommission.org). There are some proposals that may affect the Board of Water Supply (BWS).

The following are brief summaries on various Charter Commission Proposals of concern that have been scheduled for hearings, and the BWS's positions on the proposals:

1. Charter Proposal 40: Friday, February 19, 2016
   Requires the City Council to review the necessity of the BWS, along with all other boards and commissions of the City and County of Honolulu, at least every five years, and allows the Oahu electorate to decide which ones should be retained. If majority electorate support is not obtained, the board or commission would be eliminated by January of the year following the General Election held in November.

   BWS position: Oppose
   - A Board of Water Supply is required by State Law (HRS 54).
   - The BWS's semi-autonomous governance provides stability and allows long-term planning to meet Oahu's water needs now and into the future. Placing the destiny of the BWS on the ballot every five years threatens these important advantages;
   - The BWS does not place any financial burden on the City and County of Honolulu; and
   - The BWS is one of the most trusted City and County agencies. There is no need for this proposed examination of the value of BWS.

2. Charter Proposal 6: Thursday, February 25, 2016
Suggests greater oversight of the BWS in order to save taxpayers money and incorrectly suggests that the BWS is neither proactive nor efficient in addressing water main breaks.

BWS position: Oppose

- Contrary to the claims in the proposed amendment, the BWS is very proactively addressing water main breaks, prioritizing repair and replacement projects island-wide, and preparing a Water Master Plan and 30-year Capital Improvements Plan;
- Because the BWS is proactive, the rate of water main breaks on Oahu is substantially better than the national average for similarly sized systems, based on data from the American Water Works Association;
- The BWS's rate of water main breaks has been on a steady downward trend for the past decade;
- The BWS's dedicated leak-detection team uses acoustic technology to pinpoint small cracks or holes so they can be repaired before they grow into breaks. In 2014, our leak detection team found leaks that saved an estimated 326 million gallons of water;
- The BWS actively coordinates with the City Department of Design and Construction, who is responsible for street paving, to minimize disturbance to recently paved streets from required water system activities. Unfortunately, it is not always possible to avoid these situations, and the BWS understands the frustrations it can cause;
- The proposed amendment recommends repairing or replacing longer sections of pipelines on a planned basis to avoid having to tear up and repave streets for individual emergency responses. The Water Master Plan will enable the BWS to do this more efficiently, while retaining a primary focus on water system reliability and affordability. Because water main replacement is so expensive, street repaving is only one of the many factors to be considered in this equation;
- The BWS is entirely financially self-sufficient, receiving no tax revenue to maintain water services and systems; and
- The BWS knows that individual water main breaks can be highly visible and inconvenient to the public. It does everything possible to minimize impacts to residents and businesses near any break. Crews work continuously until the main break is repaired and water service is restored.

3. Charter Proposal 20: Thursday, February 25, 2016
Proposes to end 85 years of BWS semi-autonomous governance by transferring a major part of its authority to the City Council who would have direct control over the BWS Capital Improvement Program, Operating Budget, and other responsibilities, including the

authority to delete, add, or change projects and budget line-items. Additionally, the City Council would have final approval or disapproval authority over BWS eminent domain proceedings prior to BWS commencing with such an action.

BWS position: Oppose
Water is a serious business, involving our community's public health and safety, sustainability, and economic viability. The BWS was created to keep politics out of water supply management.

- In 1929, the Territorial Government established the BWS as a semi-autonomous agency to minimize politics in decision-making about O'ahu's precious water supply and providing this vital service to the people of O'ahu;
- Desirability of semi-autonomous governance was reaffirmed by another Charter Commission in 1958, which found that politics and political expedience do not have a place in operations of a water department;
- Since 2013 when similar governance changes were being proposed, at the request of the City Council, the City Auditor completed a Management and Performance Audit of the BWS, with special attention to "*whether the status and powers of the BWS as a semi-autonomous agency should be maintained*";
- The auditor concluded: "*while there are areas for BWS improvement, citizens are unlikely to realize a significant benefit with a transfer to city management...A charter amendment to place BWS under the city's direct authority is unlikely to improve BWS's effectiveness or efficiency*";
- Politics and water supply management are a volatile mix. The water quality problems in Flint, Michigan are perhaps the most recent and tragic demonstration of this;
- Responsibility for the BWS's budget is established under State law;
- State law requires that "The board of water supply shall locate and determine the character and type of all construction and additions, extensions, increases, betterments, and improvements to the waterworks, and shall determine the policy for construction or the making of additions, extensions, increases, betterments and improvements out of any public funds under its jurisdiction." [HRS 54-19]; and
- The policy vehicle for the BWS's disbursement of public funds is its budget. This responsibility for these policy decisions is vested with the BWS under State law. [HRS 54-19]

There are important advantages to maintaining semi-autonomous governance: financial strength, stability, and ability to serve.

- The BWS's budget process focuses on the needs of the water system and is not subject to lobbying by special interests;

- Credit rating agencies prefer autonomous governance because it "insulates the utility from exposure to political interference." This reduces costs to BWS's customers;
- Water-related funds cannot be used for non-water purposes;
- Supports long-term resource and financial planning which are critical to sustaining water quality and reliability. This is why the BWS is doing a 30-year Water Master Plan; and
- Longer, overlapping Board terms provide necessary stability and foster the ability to build familiarity with the complexity and challenges of water services.

There is NO compelling reason to change how water is governed on O'ahu. In 2014, the Hawaii Government Employees Associations voiced its position: "*Changing the existing governance of the BWS is a decision that needs to be made with extreme caution and consideration. The existing model has served the people residing on O'ahu since 1929.*"

- The BWS is taking broad actions and making significant strides in continuous improvement for the organization, its management and operations;
- The BWS is nearing completion of a comprehensive assessment of our water system, as part of a long-range Water Master Plan. This plan will lay out a 30-year strategy for repair, renewal and replacement of the BWS's vast water infrastructure; and
- Last year, the BWS also completed a comprehensive Strategic Plan, engaging all divisions to develop a roadmap for managing water services over the next three years.

The BWS has committed to enhance its presence and ties with the community.

- It established a Stakeholder Advisory Group to increase transparency of management and operations, listen to community perspectives and ideas, and more actively engage constituents in long-range planning;
- It created a regularly published customer newsletter;
- It has developed multiple publications that explain BWS's services and operations;
- Last year, the BWS completed a survey and focus groups, to capture a snapshot of customers' satisfaction, values, and perceptions, and they found that;
- The BWS is the second most trusted source for information about fresh water in Hawaii. Scientists were most trusted; and
- Over ¾ of respondents have high confidence in the BWS's ability to provide safe and dependable water.

4. Charter Proposal 88: February 25, 2016
   Provides clarity in identifying which sources of revenues could be considered when setting water rates. Currently, the Charter is

unclear as to whether or not the BWS can include any offsets from revenues derived from other sources or activities, in addition to monthly water charges, when setting water rates.

BWS Position: Support. BWS initiated proposal.

- By Charter requirement, water rates must be set at a level that can be sustained by revenues collected by the BWS;
- Those revenues must be sufficient to meet all necessary expenditures, including for operations and maintenance; repairs, replacements, additions and extensions; accident reserve, pension charges, and compensation insurance; payment of principal and interest on all bonds, including reserves, and reserve funds under section 7-112 of the City and County of Honolulu Charter;
- The requirements listed above are established in section 7-109 of the City Charter; and
- The BWS should explore generating revenues from other sources such as land development and property redevelopment in addition to its main revenue source of water rates and fees. This will pay for the operation, maintenance and improvement of our water infrastructure while helping to keep customers' water rates affordable.

Respectfully submitted,

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

The foregoing was for information only.

DISCUSSION

Ernest Lau, Manager and Chief Engineer, gave the report. He mentioned that they have until September 1, 2016 to change proposals off the ballot. The Charter Commission has made it clear that they can bring something back and put it on the table at any time. Ms. Sproat commented that because proposals can be changed at any time, BWS should always be monitoring. Mr. Lau stated that the Charter Commission could still propose new amendments until July 31 with the votes of nine members. Mr. Lau stated that the Charter Commission process is confusing, unlike the City Council process. The City Council process goes through three readings so it's clear if resolutions get deferred, amended, etc. It is unclear with the Charter Commission process. BWS will attend every Charter Commission and public meetings that they have. The Charter Commission has indicated that they may be advocating for their own proposals.
Mr. Miyashiro requested that Mr. Lau keeps the Board members posted on this issue.

ITEM FOR INFORMATION NO. 3

Quarterly Capital Improvement Program Status Report
All Divisions

Quarter Awarded	JUL - SEP		OCT - DEC		JAN - MAR		APR - JUN		Awarded to Date	Total Budgeted
Design Contracts Awarded (#/$)	0	$0.00	6	$2,308,115.00		$0.00		$0.00	$2,308,115.00	$17,805,000.00
Construction Contracts Awarded (#/$)	0	$0.00	6	$4,504,486.91		$0.00		$0.00	$4,504,486.91	$51,875,000.00
Project Totals	0	$0.00	12	$6,812,601.91	0	$0.00	0	$0.00	$6,812,601.91	$69,680,000.00

Quarter Completed	JUL - SEP		OCT - DEC		JAN - MAR		APR - JUN		Totals
Design Contracts Completed (#/$)	3	$748,430.04	2	$559,034.89		$0.00		$0.00	$60,250.00
Construction Contracts Completed (#/$)	1	$684,648.68	2	$1,527,397.00		$0.00		$0.00	$1,527,397.00
Totals	4	$1,433,078.72	4	$2,086,431.89	0	$0.00	0	$0.00	$1,587,647.00

Ongoing Projects	
Ongoing Design Projects (#)	190
Ongoing Design Projects ($)	$61,032,906.24
Ongoing Construction Projects (#)	101
Ongoing Construction Projects ($)	$208,897,900.47

CAPITAL IMPROVEMENT PROGRAM QUARTERLY UPDATE
ALL DIVISIONS

DESIGN AND CONSTRUCTION PROJECTS AWARDED - SECOND QUARTER FY 2016

Item #	Project Title	Expend Type	Budget Amount	Awarded
2016-005	Haiku Stairs Removal	P & E	$500,000.00	$561,405.00
16-006D	Pump Renewal and Replacement: Nuuanu Water System Hydro-pneumatic Tank Replacement (IDIQ)	CONST	$442,996.40	$442,996.40
16-006E	Pump Renewal and Replacement: Makaha Wells VI pump replacement	CONST	$2,722.51	$2,722.51
16-006G	Pump Renewal and Replacement: Waipio Heights Wells III Pump Replacement	CONST	$275,000.00	$275,000.00
2016-011B	Pump Renewal and Replacement: Kamaile Wells Renovation	P & E	$174,205.00	$174,205.00
2016-026	Fire Hydrant Installations at Various Locations	P & E	$400,000.00	$318,097.00
2016-034	Computerized Maintenance Management System	P & E	$2,375,000.00	$353,000.00
2016-044	Security Fencing at Various Locations - Diamond Head 180 Reservoir and Hoaeae, Mililani I, and Waiau Wells	P & E	$200,000.00	$401,408.00
16-049	Honouliuli Water Recycling Facility Improvements	CONST	$7,000,000.00	$2,546,134.00
16-050	Security Camera Systems	CONST	$375,000.00	$245,000.00
16-052	Wireless & Security Camera Systems	CONST	$1,200,000.00	$992,634.00
2016-053	Security Camera Management System	P & E	$500,000.00	$500,000.00
	2nd Quarter totals		**$13,444,923.91**	**$6,812,601.91**

DESIGN AND CONSTRUCTION PROJECTS COMPLETED - SECOND QUARTER FY 2016

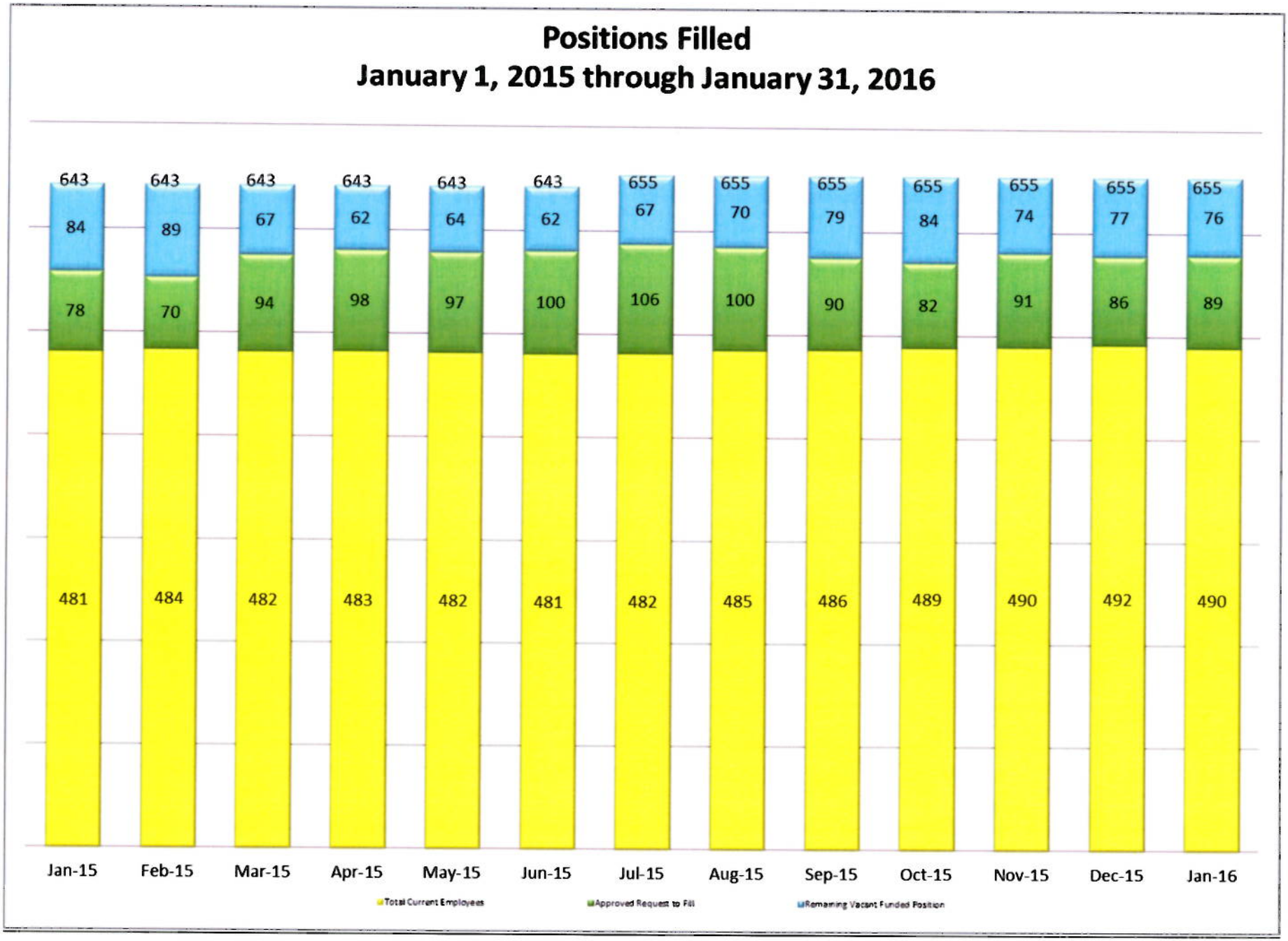
Job #	Project Title	Completion Date	Contract Amount
2005-041C	Ewa Beach Water System Improvements, Part II	8/17/2015	60,250.00
2010-032	East Honolulu Baseyard Study	12/15/2015	498,784.89
14-026	Ewa Beach Water System Improvements, Part II	10/27/2015	1,283,702.00
14-044	Kailua Pressure Reducing Valve Replacement	12/4/2015	243,695.00
	2nd Quarter totals		**$2,086,431.89**

DISCUSSION

Jason Takaki, Capital Projects Program Administrator, gave the report. There were no comments or discussion.

ITEM FOR INFORMATION NO. 4

For the Quarter Nov 15-Jan 16 Actions: 12 New Hires, 4 Promotions, 1 Demotion, 11 Separations, 28 New Approvals to Fill, 4 Cancelled Requests



Cumulative Totals
January 1, 2015 through January 31, 2016

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

ITEM FOR INFORMATION NO. 5

"February 22, 2016

BWS PERFORMANCE METRICS UPDATE

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

Chair and Members:

Subject: Board of Water Supply Performance Metrics Update

Jennifer Elflein, Program Manager for the Customer Care Division and Joseph Cooper, Waterworks Controller will present a brief update on the Board of Water Supply performance metrics to measure progress in meeting the three sustainability goals set in the strategic plan.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION

Neil Oyama, Customer Care Assistant Program Administrator and Joseph Cooper, Waterworks Controller, gave the report. There were no comments or discussion.

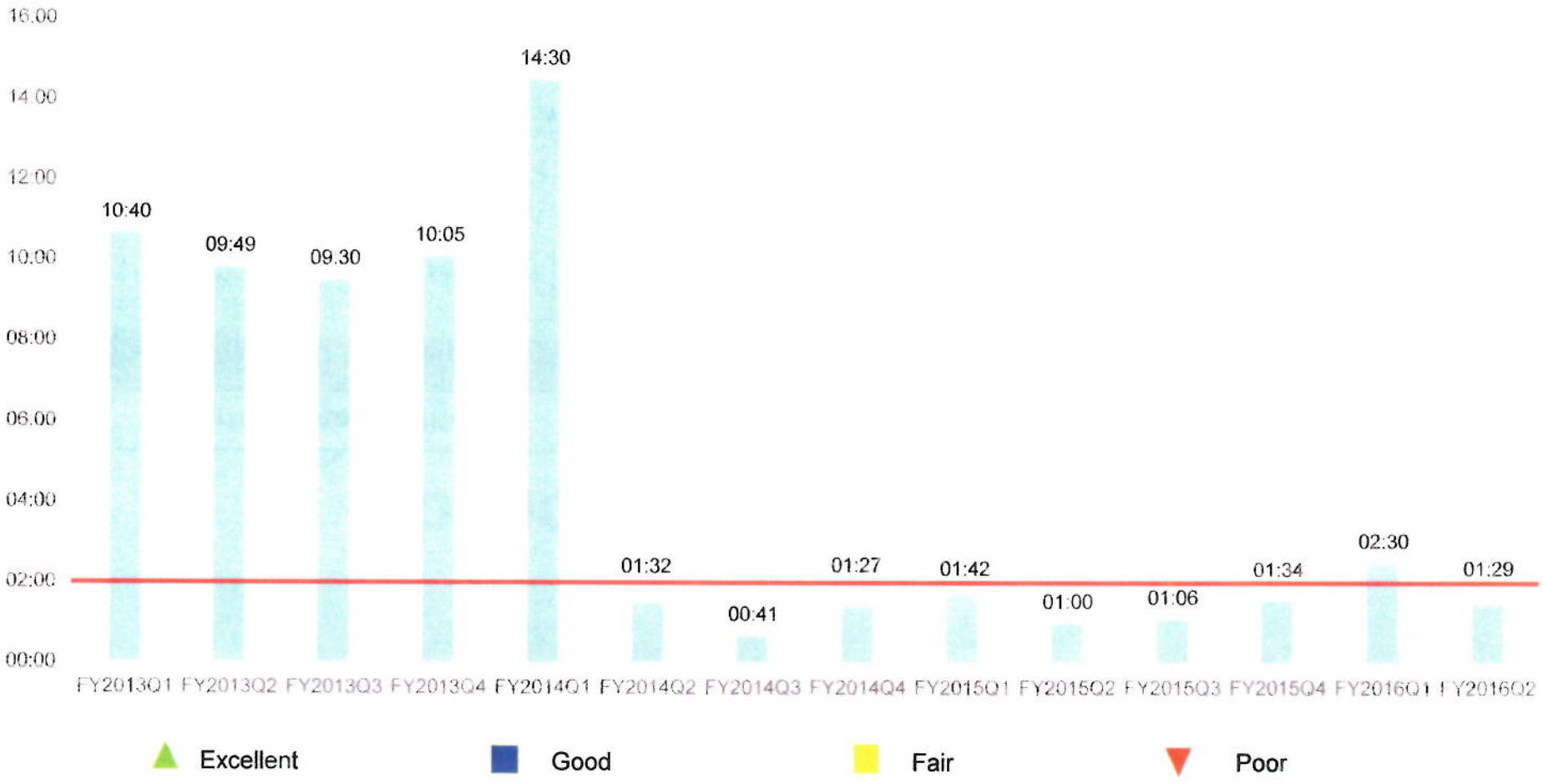
WATER FOR LIFE

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

Board of Water Supply
City and County of Honolulu

Average Wait Time (min)

Goals	Performance Metric	Base	Current	Target	AWWA	Status	Report	Lead
Operational	Call Center Average Wait Time (min)	6:54	1:29	<2.00	1:54	▲	Q	CC



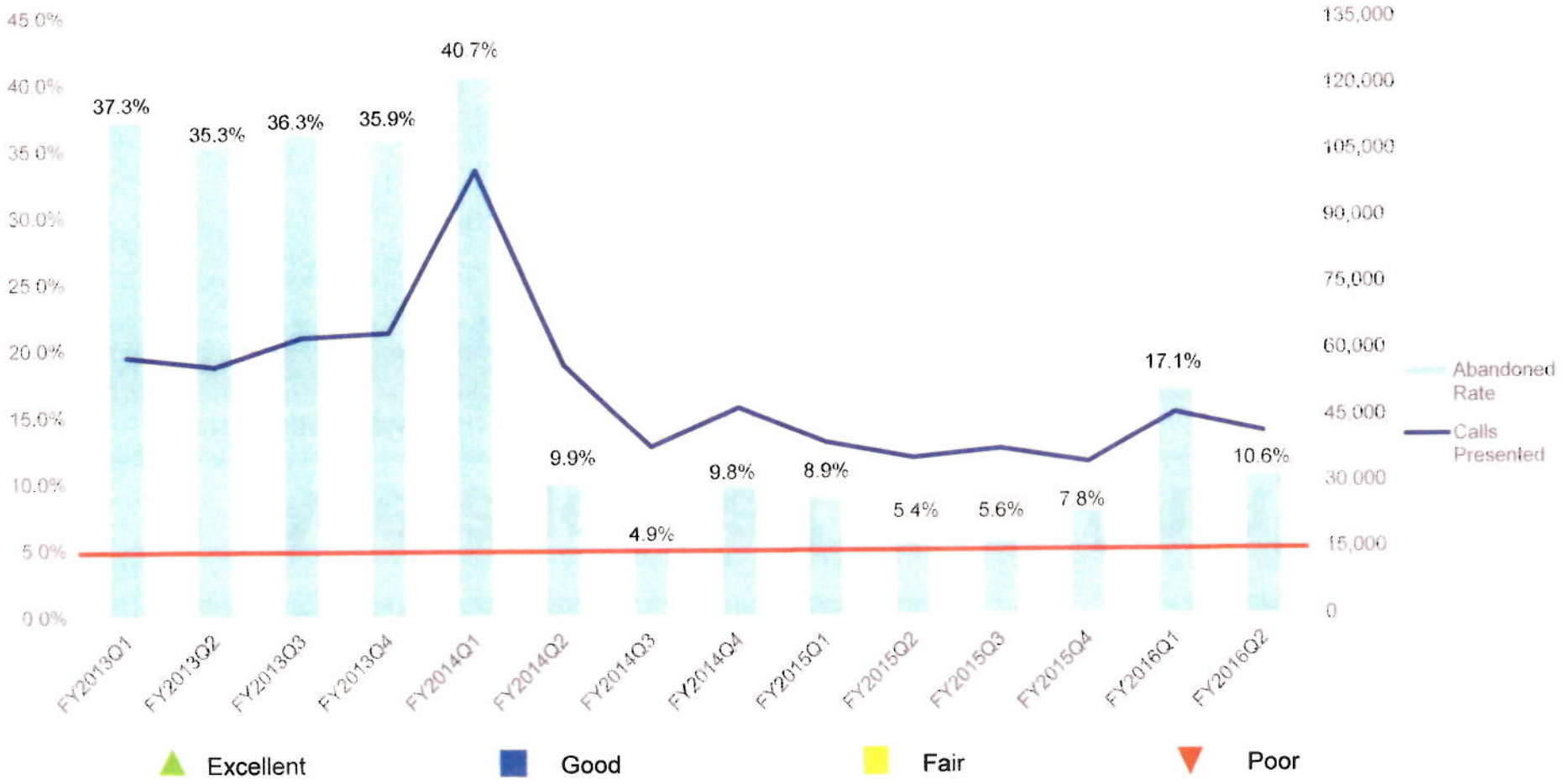
WATER FOR LIFE

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

Board of Water Supply
City and County of Honolulu

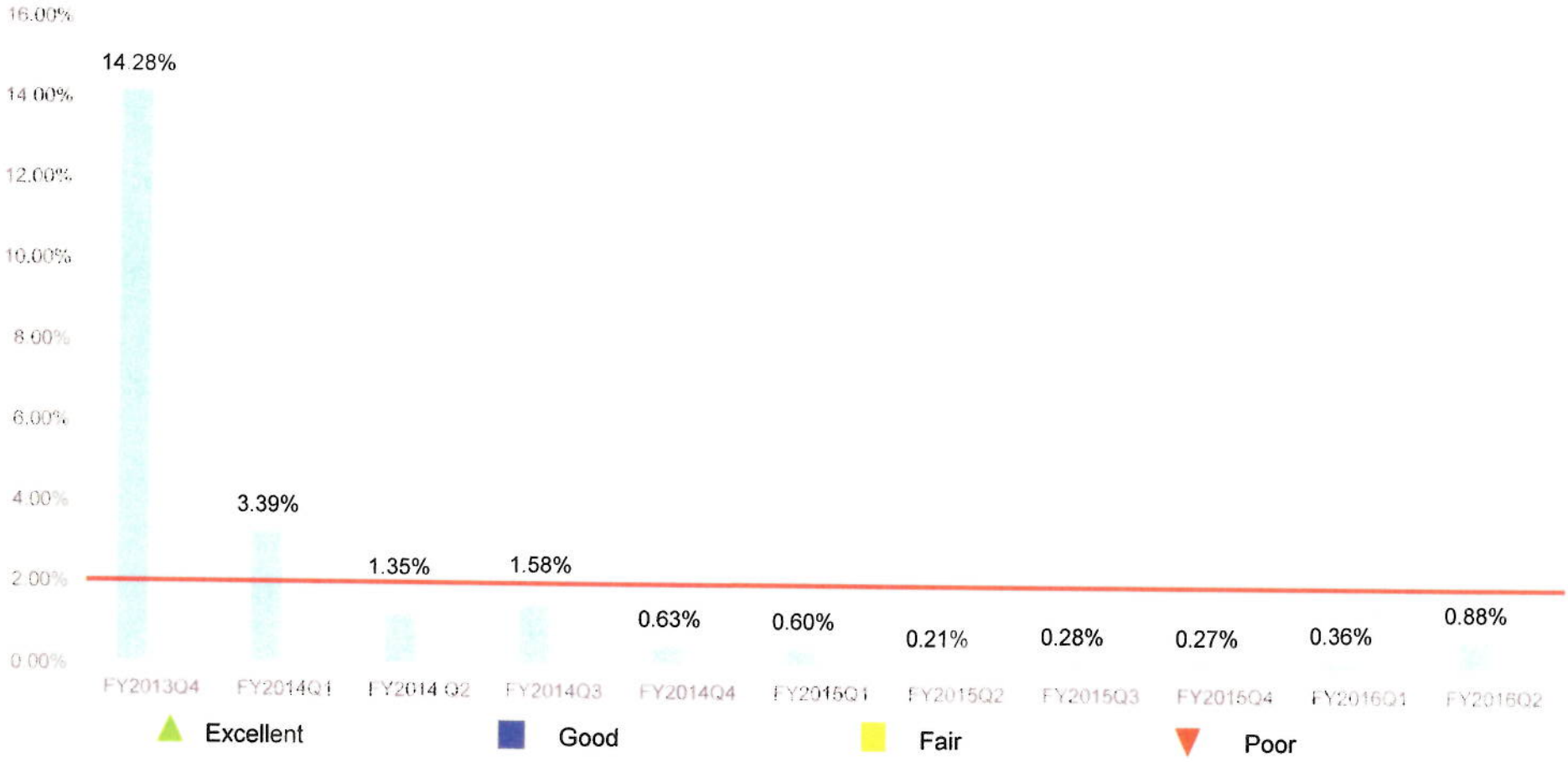
Abandoned Call Rate (%)

Goals	Performance Metric	Base	Current	Target	AWWA	Status	Report	Lead
Operational	Call Center Abandon Rate	22%	10.6%	5%	8%		Q	CC



Estimated Bills (%)

Goals	Performance Metric	Base	Current	Target	AWWA	Status	Report	Lead
Financial	Estimated Bills Rate	7%	0.88%	<2%	NA	▲	Q	FN



ITEM FOR INFORMATION NO. 6

"February 22, 2016

GROUNDWATER LEVELS

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

Chair and Members:

Subject: Status Update of Groundwater Levels at All Index Stations

There were no aquifer index wells within low groundwater status for the production week that ended on February 6, 2016. The weekly production average for the period was 131.99 million gallons per day.

The Board of Water Supply rainfall index for the month of January 2016 was 25 percent of normal; with a 5-month moving average of 141 percent. As of February 9, 2016, the Hawaii Drought Monitor shows abnormally dry conditions for all of Oahu.

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

Most index monitor wells continue to exhibit relatively level or slightly increasing trends, except for the windward area wells of Punaluu and Kaluanui which show slightly decreasing trends. This trend may possibly be related to relatively lower total pumpage which is common in the winter season.

Respectfully submitted,

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

Attachments"

The foregoing was for information only.

DISCUSSION:

Barry Usagawa, Water Resources Division Program Administrator, gave the report. Ms. Sproat asked if BWS should put out water conservation ads even if there is a prediction of below normal rainfall until June. Mr. Usagawa replied that intense rainfall from late August to December helped the current water levels remain high, but BWS will continue to monitor. Normal winters are good because it recharges the aquifer going into the dry summer season. If there are two or three consecutive dry winters, water levels will drop into low groundwater levels.

Mr. Miyashiro asked how long it takes for water to charge the aquifer. Mr. Usagawa said about six months on average. Although it's said that tap water is 25 years old, the vertical movement of water takes about six months, and the horizontal movement toward the wells, take many years. For example, rainfall in Wahiawa in the upper Koolaus has to go 8-10 miles horizontally before it gets into the Kunia wells. It takes a long time because the aquifer is so thick and the rainfall moves very slowly towards the coast, percolating vertically through unsaturated rock.

Mr. Sasamura asked for an explanation of the "y" axis of the rainfall intake graph, where it lists the September rainfall as 280 percent. Mr. Usagawa said the hundred line is normal rainfall for all of the rain gauges in the Honolulu watershed averaged over the last 10 year period. So if the monthly rainfall exceeds that amount, the percentage is above normal and if below the line, the percentage is below normal rainfall.

PUMPAGE, HEAD, AND RAINFALL REPORT

Week of 1/31/16 to 2/06/16

STATION		HEAD	STATION	MGD	HEAD	STATION	MGD	HEAD		MGD	HEAD
METRO			WINDWARD			EWA-WAIANAE (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	0.45	
WAIALAE-IKI	0.00		WAIMANALO III	0.38		MAKAHA VI	0.00		WAIAU	0.78	
AINA KOA	0.39		KUOU I	0.00		MAKAHA SHAFT	0.00	nodata	NEWTOWN	2.20	
AINA KOA II	1.20		KUOU II	0.10		KAMAILE	0.00		KAONOHI I	1.24	
WAIALAE SHAFT	0.00		KUOU III	0.57		WAIANAE I	0.18		WAIMALU I	0.00	
MANOA II	0.00		LULUKU	1.05		WAIANAE II	0.55		AIEA	0.23	
PALOLO	1.04		HAIKU	0.35		WAIANAE III	0.67		AIEA GULCH 497	0.50	
KAIMUKI HIGH	2.58	23.86	IOLEKAA	0.00		MAKAKILO	0.50		AIEA GULCH 550	0.23	
KAIMUKI LOW	0.95		KAHALUU	0.78		HONOULIULI I	0.46		HALAWA 277	0.00	
WILDER	7.09		WAIHEE	0.00		HONOULIULI II	5.74		HALAWA 550	0.00	
BERETANIA HIGH	4.25	23.16	KAHANA	0.88		SUBTOTAL:	10.04		KAAHUMANU MTR(-)	0.00	
BERETANIA LOW	1.36		PUNALUU I	0.00	18.64	IMPORT FROM PH			KAAMILO FLO MTR (-)	0.00	
KALIHI HIGH	2.15	22.69	PUNALUU II	0.67		KAPOLEI LINE BSTR	14.25		KUNIA I	5.12	19.14
KALIHI LOW	1.88		PUNALUU III	1.51		HONOULIULI LB FLOW	0.00		KUNIA II	2.00	
KAPALAMA	0.49		KALUANUI	0.00		EWA BEACH FLOW	0.00		KUNIA III	1.33	
KALIHI SHAFT	8.27		MAAKUA	0.38		HONOULIULI I (-)	-0.46		HOAEAE	5.76	
MOANALUA	1.27	19.56	HAUULA	0.00		HONOULIULI II (-)	-5.74		EWA SHAFT	0.00	
SUBTOTAL:	32.92					SUBTOTAL:	8.05		WAIPAHU INTCON. (-)	-2.65	
			KAHUKU	0.30					EWA-WAIANAE (-)	-8.05	
IMPORT FROM PH			OPANA	1.03		PEARL HARBOR			PH LOCAL USE:	31.21	
HALAWA SHAFT	6.62	17.14	WAIALEE I	0.00		WAHIAWA	2.40		TOTAL SUBURBAN:	59.62	
KAAMILO	0.00		WAIALEE II	0.00		WAHIAWA II	1.21				
KALAUAO	9.01	17.74	SUNSET BEACH	0.00		MILILANI I	3.12		KALAUAO SPRINGS	0.56	
PUNANANI	12.03		SUBTOTAL:	8.33		MILILANI II	0.00		BARBERS POINT (NP)	1.46	
KAONOHI II	0.00					MILILANI III	1.69		GLOVER TUNNEL (NP)	0.44	
WAIMALU II	0.00	15.70	WIND. EXPORT	0.14		MILILANI IV	1.28				
KAAHUMANU	0.91					WAIPIO HTS.	0.17		HEAD CONDITION		
HECO WAIAU	0.00		HALEIWA-WAIALUA			WAIPIO HTS. I	0.22		CAUTION	ALERT	CRITICAL
MANANA	0.48		HALEIWA	0.00		WAIPIO HTS. II	0.20				
KAAHUMANU FLOW MT	0.00		WAIALUA	2.13		WAIPIO HTS. III	1.21				
KAAMILO FLOW MTR	0.00		SUBTOTAL:	2.13		WAIPAHU	2.65	18.85			
TOTAL IMP/EXP WAIP. INT:	0.00					WAIPAHU II	1.07				
IMPORT FRM WIND:	0.14		EWA-WAIANAE			WAIPAHU III	1.53				
SUBTOTAL:	29.19		MAKAHA I	0.88		WAIPAHU IV	2.62				
			MAKAHA II	0.31		PEARL CITY SHAFT	1.18	15.23			
TOTAL METRO:	62.11		MAKAHA III	0.75		PEARL CITY I	0.54				

CWRM PERMITTED USE FOR BWS POTABLE SOURCES						PUMPAGE	2016	2015	GRAVITY	2016	2015
	A	B	C	D	E	SUBURB.	59.62	60.88	SUBURB.	9.86	7.96
WATER	PERMITTED		DIFF.	YEAR/	DIFF.	METRO	62.11	63.70	METRO	0.40	0.46
DISTRICTS	USE	2016	B-A	DATE	D-A	TOTAL:	121.73	124.58	TOTAL:	10.26	8.42
HONOLULU	45.27	33.32	-11.95						Manoa	0.17	
WINDWARD	25.21	15.30	-9.91			NUUANU #5			Palolo	0.23	
NORTH SHORE	4.08	3.46	-0.62			(rainfall)	0.10"	0.12"	Waim. I&II	0.08	
WAHIAWA	4.27	3.61	-0.66						Waim. III&IV	0.19	
WAIANAE	4.34	4.15	-0.19						Waihee incl.	0.96	
EWA-KUNIA	15.88	6.70	-9.18						Waihee tun.	5.44	
PEARL HARBOR	92.66	67.35	-25.31						Luluku	0.03	
TOTAL:	191.71	133.89	-57.82						Haiku	0.00	
									Kahaluu	1.60	
									Waia. C&C	1.40	
									Waia plant.	0.16	

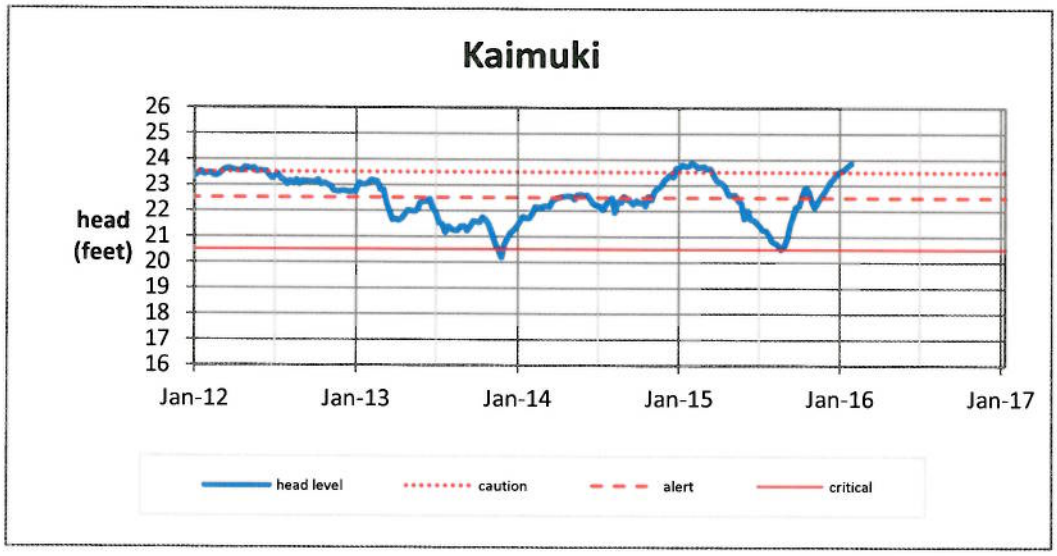
DROUGHT STATUS REPORT
DRAFT IN MGD

WATER USE DISTRICT	AUTHORIZED USE		1/24-1/30 2016		1/31-2/06 2016				
HONOLULU	45.27		33.61		33.46				
WINDWARD	25.21		15.51		15.16				
NORTH SHORE	4.08		3.30		3.46				
WAHIAWA	4.27		3.66		3.61				
EWA-WAIANAE	20.22		20.81		19.65				
PEARL HARBOR	92.66		58.71		56.65				
TOTAL	191.71		135.60		131.99				

Accounts for in-district pumpage and transfers

HEAD IN FEET

		2015	1/24-1/30 2016	2015	1/31-2/06 2016				
HONOLULU									
KAIMUKI		23.75	23.77	23.86	23.86				
BERETANIA		23.10	23.06	23.11	23.16				
KALIHI		22.43	22.63	22.46	22.69				
MOANALUA		19.23	19.53	19.42	19.56				
PEARL HARBOR									
HALAWA		16.85	17.15	16.93	17.14				
KALAUAO		17.33	17.72	17.34	17.74				
PEARL CITY		15.03	15.23	15.03	15.23				
WAIPAHU		18.71	18.81	18.69	18.85				
KUNIA		19.06	19.00	19.01	19.14				
EWA-WAIANAE									
MAKAHA		16.39	NO DATA	16.44	NO DATA				
WINDWARD									
PUNALUU		17.86	18.71	17.96	18.64				
KALUANUI		18.04	18.97	17.94	18.86				
NORTH SHORE									
WAIALUA		11.10	11.19	11.17	11.15				


Kaimuki
head (feet)
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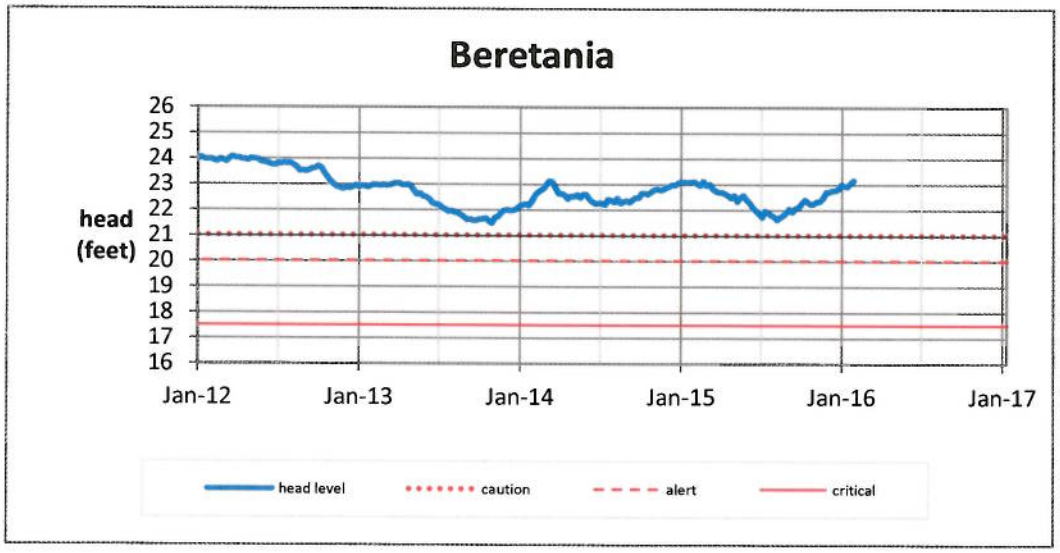
head level
caution
alert
critical


Beretania
head (feet)
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head level
caution
alert
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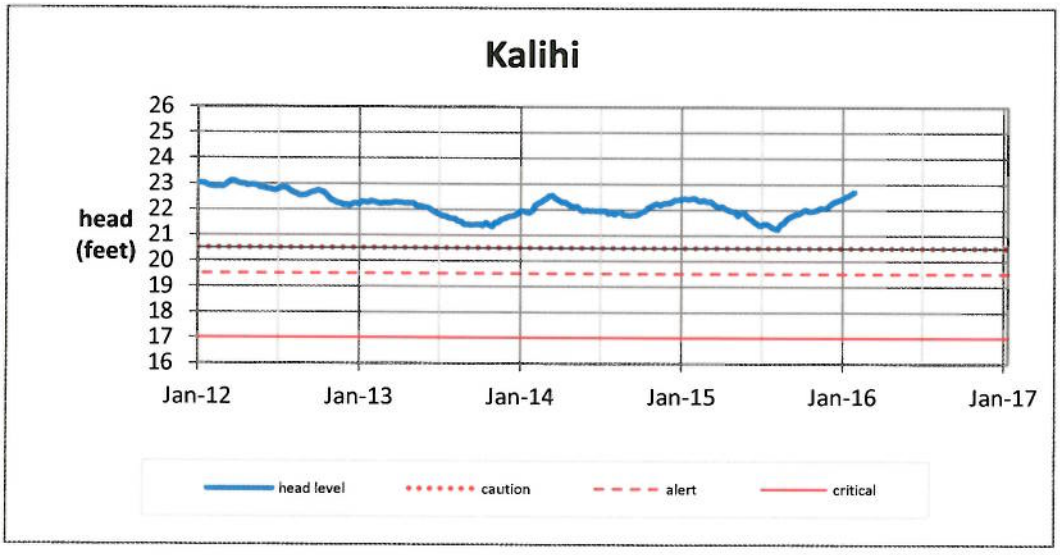
Kalihi
head (feet)
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head level
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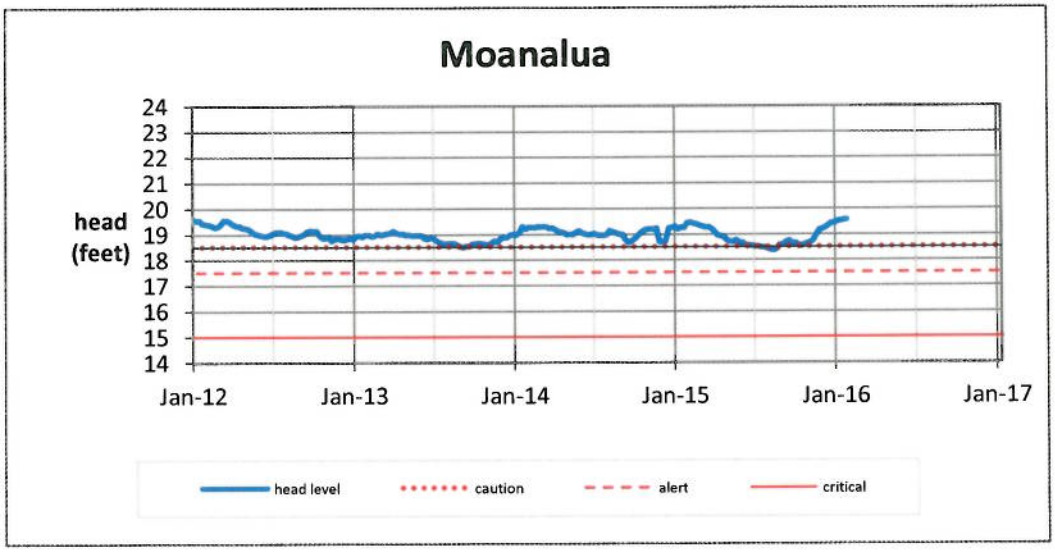
critical


Moanalua
head (feet)
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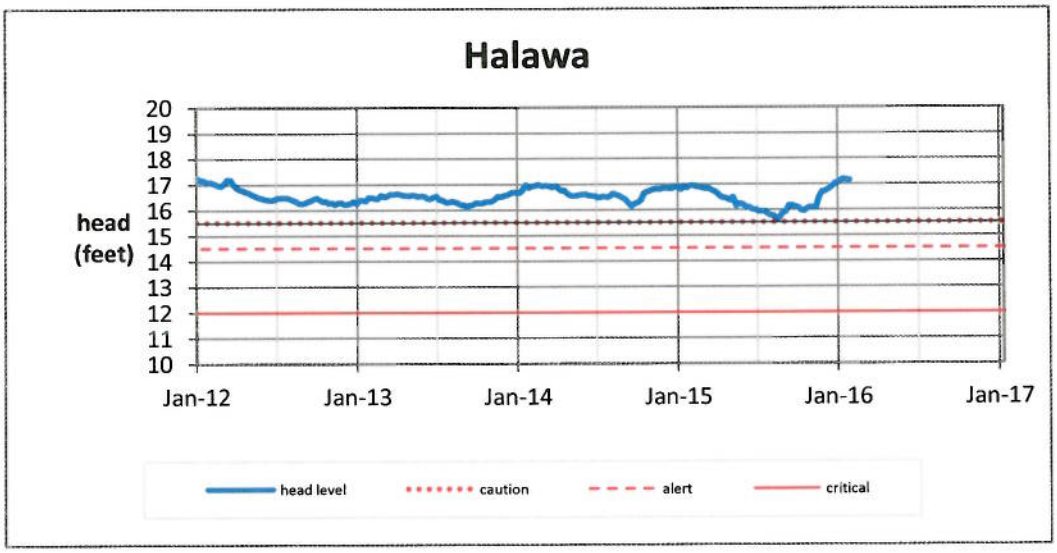
Halawa
head (feet)
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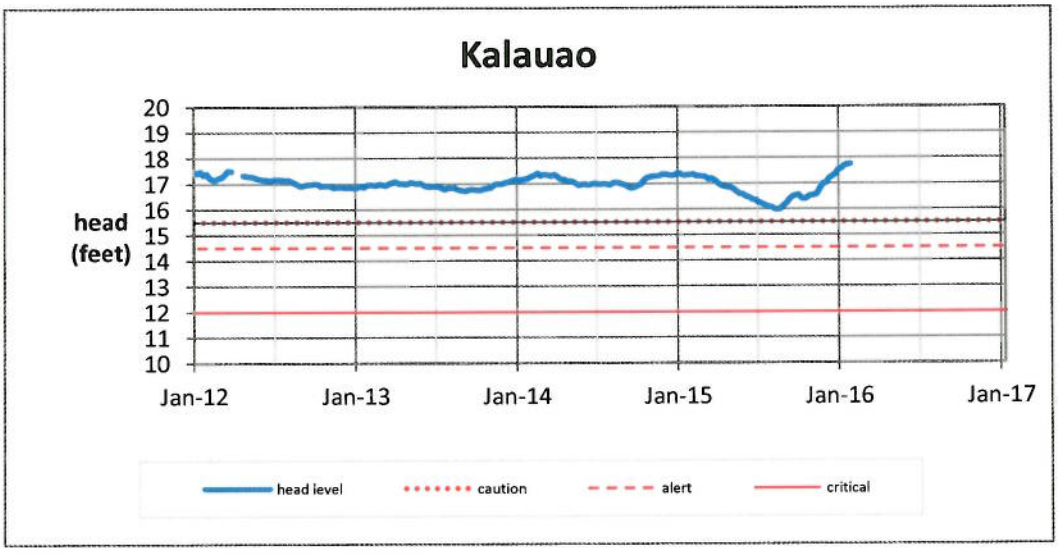
Kalauao
head (feet)
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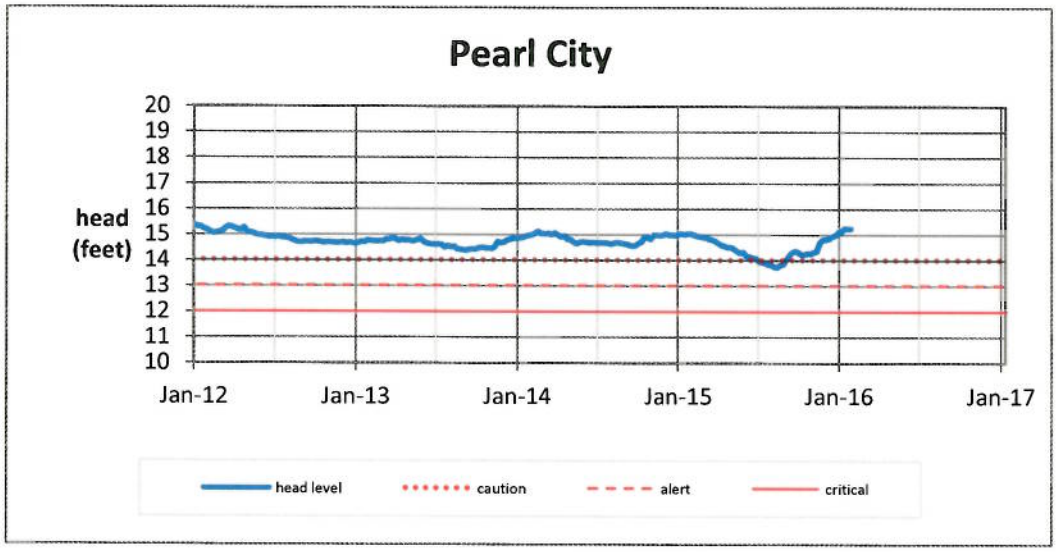
Pearl City
head (feet)
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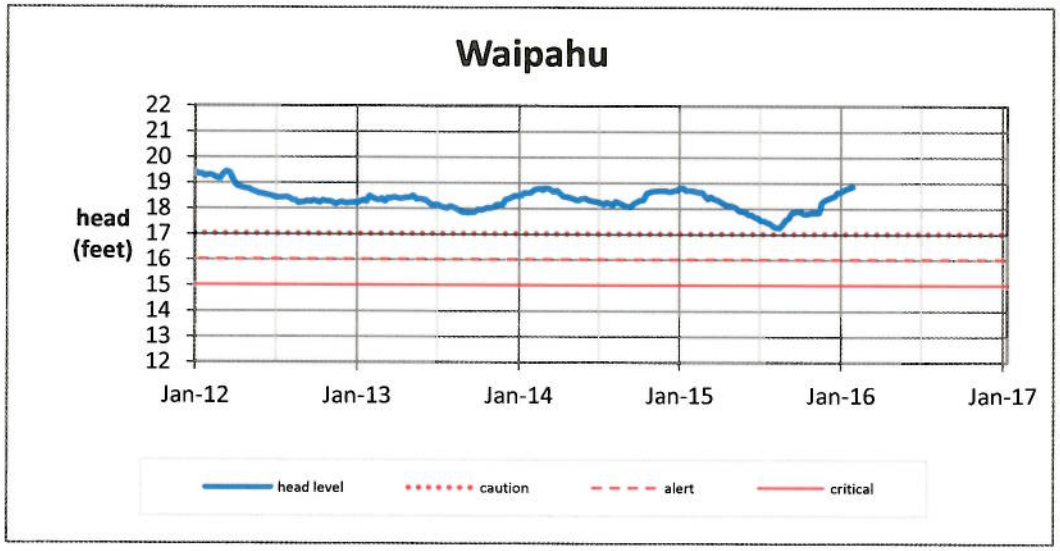
head level
caution
alert
critical


Waipahu
head (feet)
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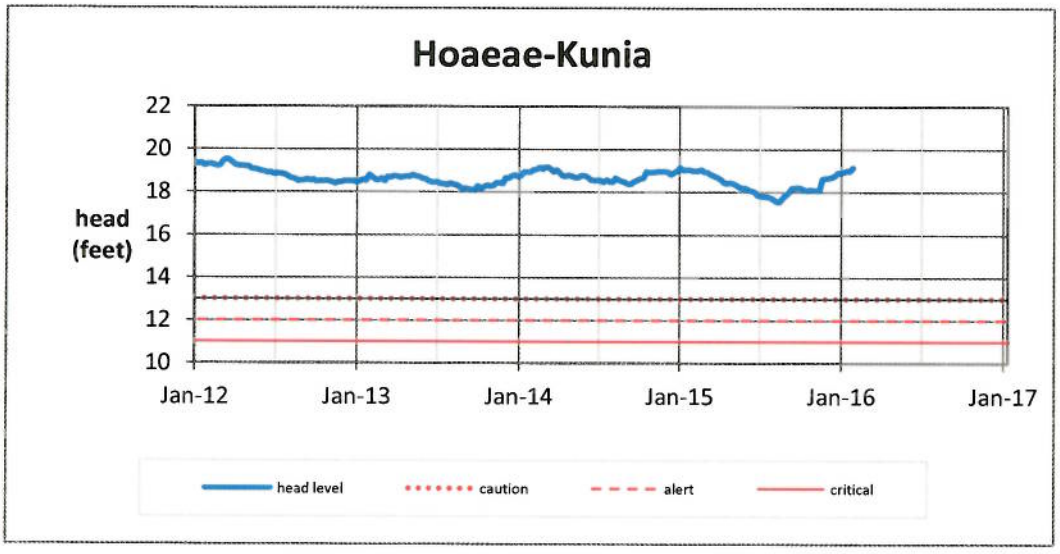
caution
alert
critical


Hoaeae-Kunia
head (feet)
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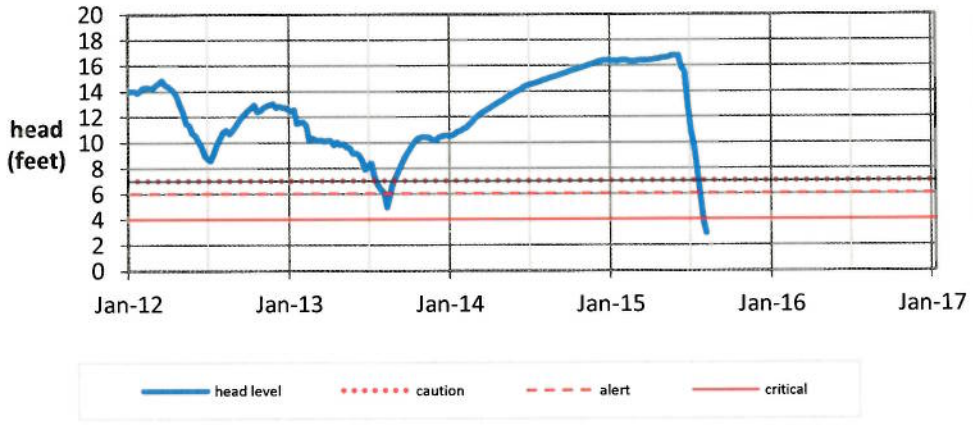
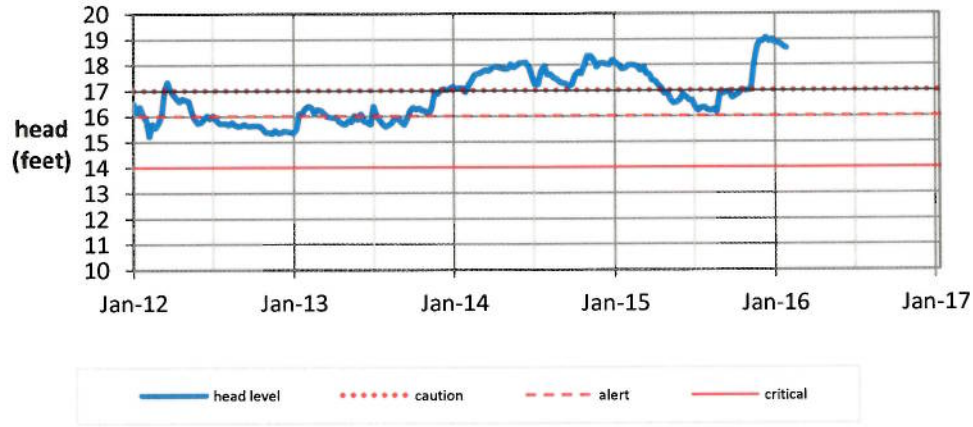
Jan-17
head level
caution
alert
critical

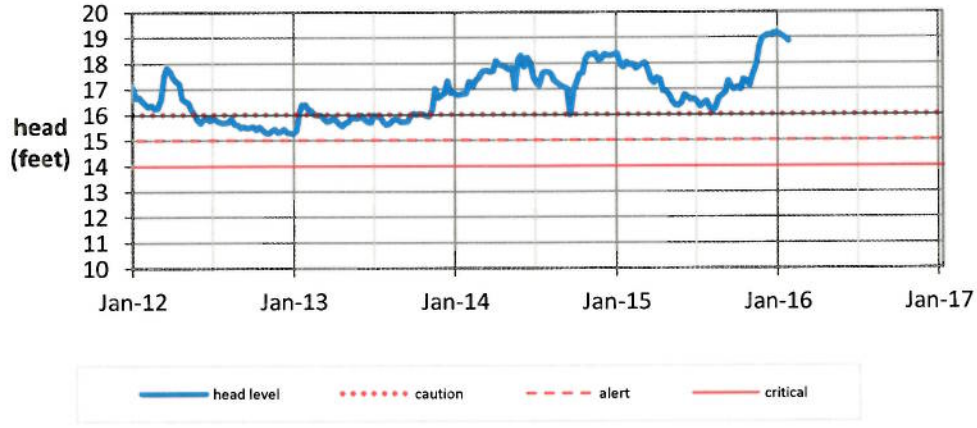
Makaha Out of Service since 8/17/15

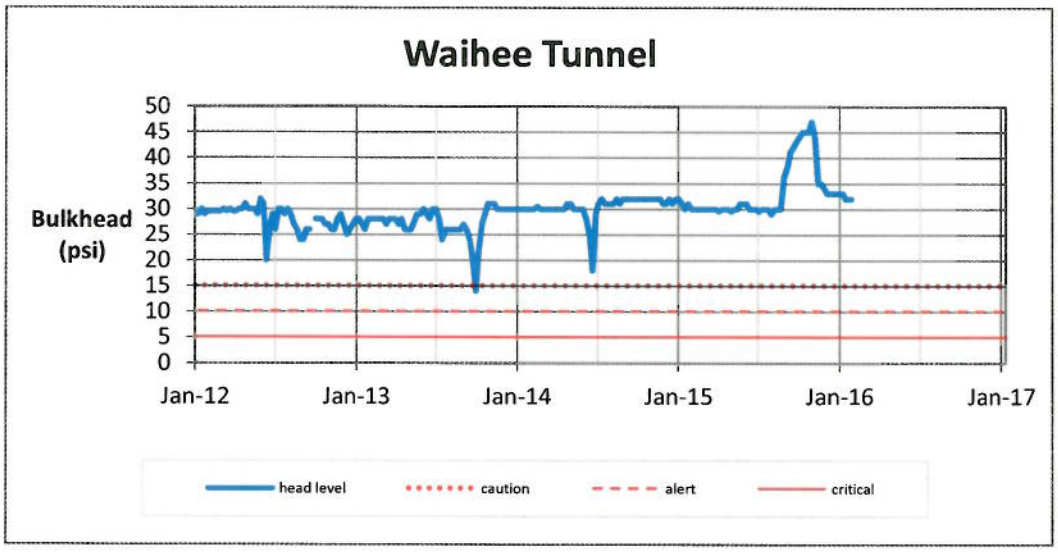


Punaluu



Kaluanui




Waihee Tunnel
Bulkhead (psi)
50
45
40
35
30
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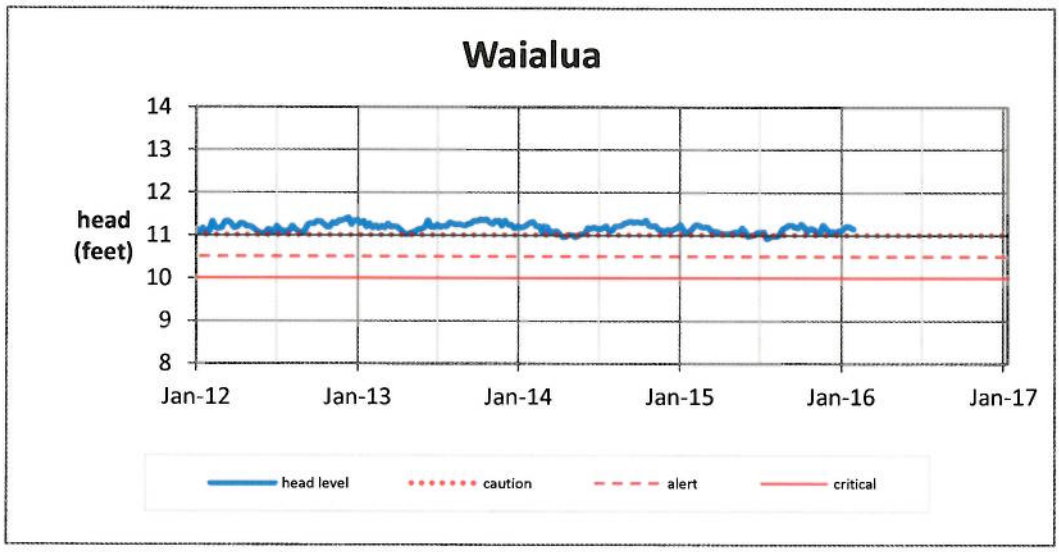
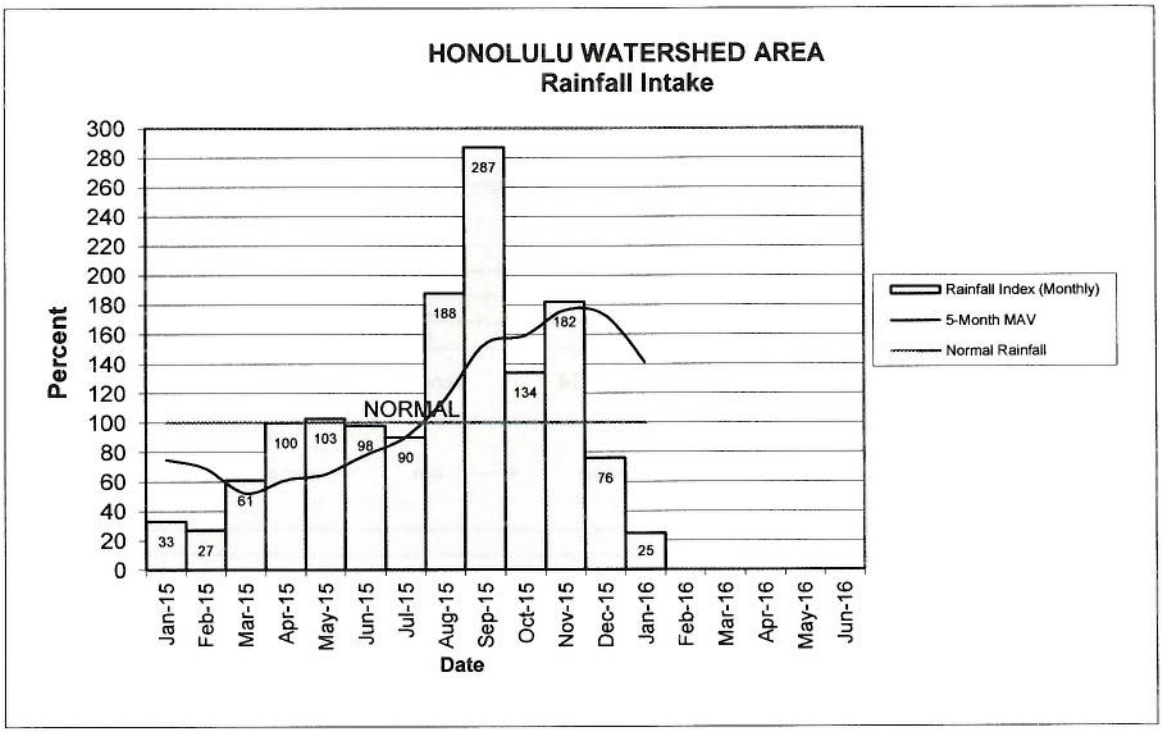
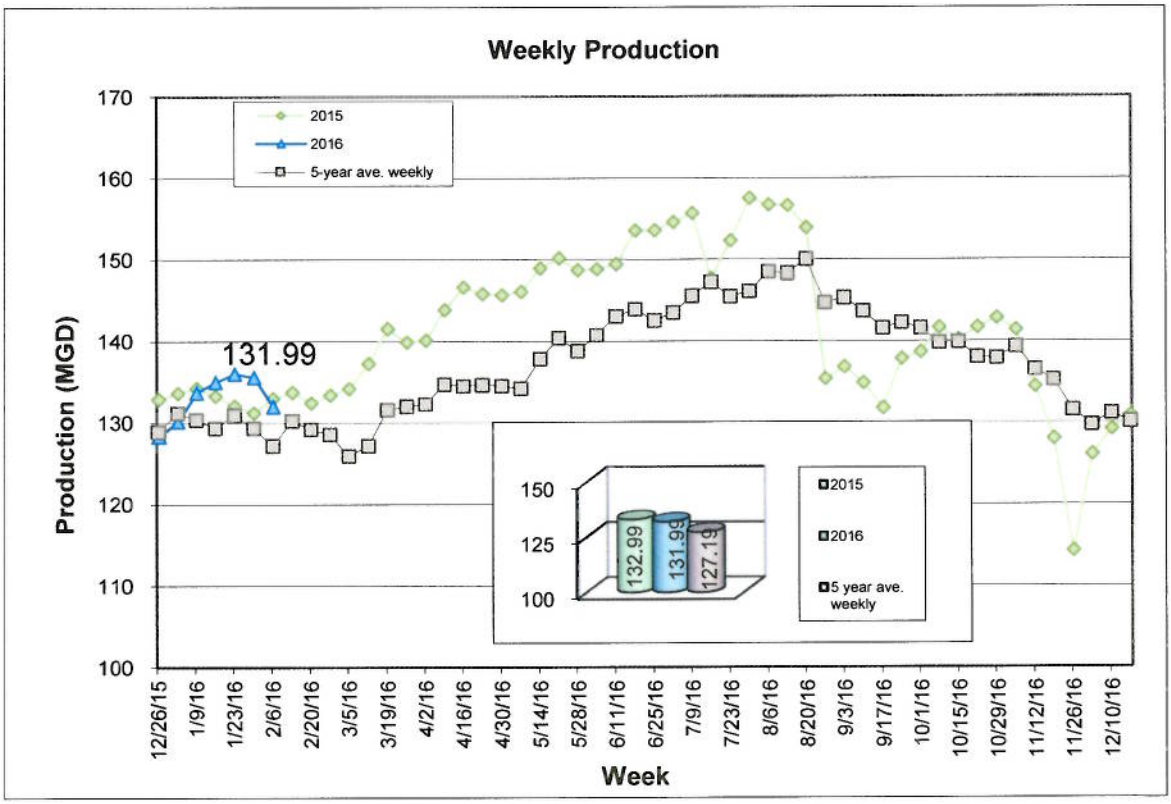
Jan-14
Jan-15
Jan-16
Jan-17
head level
caution
alert
critical


Waialua
head (feet)
14
13
12
11
10
9
8
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
head level
caution
alert
critical


HONOLULU WATERSHED AREA
Rainfall Intake
Percent
Date
NORMAL
33
27
61
100
103
98
90
188
287
134
182
76
25
Rainfall Index (Monthly)
5-Month MAV
Normal Rainfall
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16


Weekly Production
Production (MGD)
Week
2015
2016
5-year ave. weekly
131.99
132.99
131.99
127.19
2015
2016
5 year ave. weekly
12/26/15
1/9/16
1/23/16
2/6/16
2/20/16
3/5/16
3/19/16
4/2/16
4/16/16
4/30/16
5/14/16
5/28/16
6/11/16
6/25/16
7/9/16
7/23/16
8/6/16
8/20/16
9/3/16
9/17/16
10/1/16
10/15/16
10/29/16
11/12/16
11/26/16
12/10/16

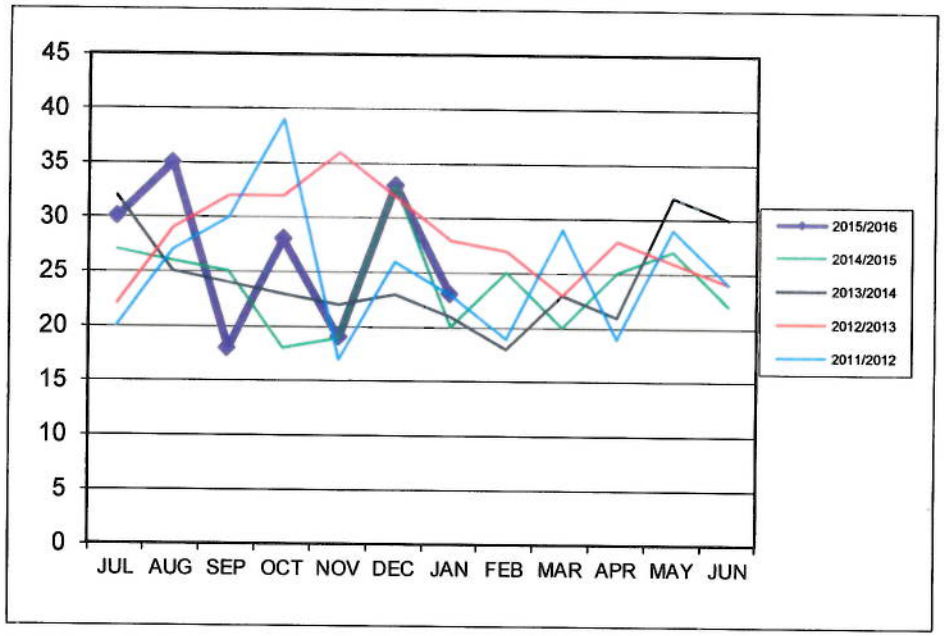
ITEM FOR INFORMATION NO. 7

WATER MAIN REPAIR REPORT

for January 2016

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2015/2016	**30**	**35**	**18**	**28**	**19**	**33**	**23**						**186**
2014/2015	27	26	25	18	19	33	20	25	20	25	27	22	287
2013/2014	32	25	24	23	22	23	21	18	23	21	32	30	294
2012/2013	22	29	32	32	36	32	28	27	23	28	26	24	339
2011/2012	20	27	30	39	17	26	23	19	29	19	29	24	302

Date	Address	Size
1/2	98-537 Kipaepae St.	6" A.C.
1/4	47-472 Apau Lp.	8" C.I.
1/4	92-480 Farrington Hwy.	24" P.V.C.
1/5	1995 Kalakaua Av./Ala Moana Bl.	8" C.I.
1/5	opp. 41 Kilea Pl.	6" C.I.
1/6	2027 Kalia Rd. 3429	8" C.I.
1/6	99-122 Heleconia Pl.	8" C.I.
1/7	47-332 Hui Koloa Pl.	24" C.C.
1/8	47-472 Apau Lp.	8" C.I.
1/12	500 University Ave./Kapiolani Bl.	8" C.I.
1/12	easement--1223 Hala Dr.	20" C.I.
1/14	1468 Onioni St.	8" C.I.
1/14	85-153 McArthur St.	8" P.V.C.
1/15	47-473 Apau Lp.	8" C.I.
1/19	833 Kulani St.	8" D.I.
1/21	Ala Moana Blvd. & Kalia Rd.	8" C.I.
1/21	85-1671 Haleahi Rd.	12" C.I.
1/22	2916 Winam Ave. 9357	6" C.I.
1/25	99-808 Meaala St. 9606	8" D.I.
1/25	247 Paiko Dr.	8" C.I.
1/26	239 Paiko Dr. 10010	8" C.I.
1/27	easement--1978 Eames St.	6" C.I.
1/28	Kalakaua Ave. & Kuhio Ave.	8" A.C.



Bold * - Pro-active Leak Repair

26.32 miles of pipelines were surveyed by the Leak Detection Team in the month of January.

DISCUSSION

Daryl Hiromoto, Field Operations Division Program Administrator, gave the report. Mr. Miyashiro noted that residents in Apau Loop suffered three breaks. Mr. Hiromoto explained that there are older 8 inch cast iron pipes in this area, and sometimes when the area gets disturbed, additional problems occur, especially with older pipes.

MOTION TO RECESS INTO EXECUTIVE SESSION	Upon unanimously approved motion, the Board recessed into Executive Session Pursuant to [HRS §92-5(a)(2)] at 3:36 PM to Consider Issues Pertaining to Matters Posted for Discussion at an Executive Session
OPEN SESSION	The Board reconvened in Open Session at 3:41 PM
MOTION TO ADJOURN	There being no further business Chair Miyashiro at 3:41 PM called for a motion to adjourn the Open Session. Adam Wong so moved; seconded by Ross Sasamura and unanimously carried.

THE MINUTES OF THE REGULAR SESSION BOARD MEETING ON FEBRUARY 22, 2016 WERE APPROVED AT THE MARCH 28, 2016 BOARD MEETING			
	AYE	NO	COMMENT
DUANE R. MIYASHIRO	X		
ADAM C. WONG			ABSENT
DAVID C. HULIHEE	X		
KAPUA SPROAT			ABSENT
BRYAN P. ANDAYA	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI			ABSENT

Respectfully submitted,

Lorraine H. Lee

LORRAINE H. LEE

APPROVED:

DUANE R. MIYASHIRO
Chair of the Board

MAR 28 2016

Date