

Honolulu Board of Water Supply Stakeholder Advisory Group

Meeting 24 Wednesday, February 21, 2018 4:00 – 6:30 pm Honolulu Club, Hawaiian Electric Co. Training Rooms 932 Ward Ave., Honolulu HI 96814

Meeting Notes

PURPOSE AND ORGANIZATION OF MEETING NOTES

The purpose of these notes is to provide an overview of the Board of Water Supply (BWS) Stakeholder Advisory Group meeting. They are not intended as a transcript or as minutes. Major points of the presentations are summarized herein, primarily for context. Copies of presentation materials were provided to all participants and are available on the BWS website. Participants made many comments and asked many questions during the meeting. These are paraphrased to be more concise.

ATTENDEES

There were 14 stakeholders and 4 members of the public present, in addition to BWS and CDM Smith staff. The stakeholders represent diverse interests and communities island-wide.

The following Stakeholders Advisory Group members attended:

Matt Bailey	Aqua-Aston Hospitality	
Jackie Boland	AARP Hawaii	
Bill Clark	Resident of Council District 6	
Mark Fox	The Nature Conservancy of Hawaii	
Bob Leinau	Resident of Council District 2	
Helen Nakano	Resident of Council District 5	
Dean Okimoto	Nalo Farms	
Alison Omura	Coca-Cola Bottling Co.	
Dick Poirer	Resident of Council District 9	
Elizabeth Reilly	Resident of Council District 4	
Cynthia Rezentes	Resident of Council District 1	
Cruz J. Vina Jr.	Resident of Council District 8	
Guy Yamamoto	YHB Hawaii	
Suzanne Young	Honolulu Board of Realtors	

MEETING AGENDA

- Welcome
- Public Comment on Agenda Items
- BWS Update
- Accept Notes from Meeting 23
- Results of BWS On-Line Rates-Related Survey
- Iterative Results of the Water Rates Modeling
- Summary and Next Steps

WELCOME

Dave Ebersold, meeting facilitator and Vice President of CDM Smith, welcomed the group and outlined the meeting objectives.

PUBLIC COMMENT ON AGENDA ITEMS

None.

BWS UPDATES

Ernest Lau, BWS Manager and Chief Engineer started by calling attention to an article in the *Journal* of the American Water Works Association, which is distributed to 54,000 members worldwide. BWS is cited in the February issue in an article about water sustainability practices. A quote from the article was shared with the group:

"Honolulu has risen to these challenges [of water sustainability] by preparing a comprehensive Water Master Plan, a strategic plan, as well as eight regional watershed management plans providing greater detail for each land use district on the island. The Water Master Plan provides a comprehensive understanding of Oahu's water supplies and needs as well as the water storage and distribution system, giving BWS a road map to meet future needs, establish priorities, and adopt sustainable financing strategies."

When asked why the article didn't acknowledge that BWS formed an innovative stakeholder group, Ernest said that the article actually did recognize the efforts of the group. The article stated,

"In addition to a seven-member board appointed by the Honolulu mayor, development of the Water Master Plan included formation and active engagement of a Stakeholder Advisory Group composed of 28 residents and community leaders with expertise in many disciplines."

Ernest next mentioned that BWS is ramping up outreach on rates, including interviews on the "Hawaii Matters" program on 94.7 KUMU. Ellen Kitamura and Joe Cooper appeared most recently.

He then brought attention to a page 1 article in the morning paper about the Governor's request to the State legislature for funding to improve emergency preparedness for the

State of Hawaii. The article covered a lot of different areas, but not water. Ernest indicated that BWS was not asked for information for the article.

He said BWS depends on Hawaiian Electric for electricity to pump water. It could be assumed that after a hurricane it could take a while to restore power. BWS is working to address this with backup generators. Currently, there are not enough generators to cover every pumping station, especially the well stations around the island, so BWS is looking to strategically locate backup generators at locations that would serve the greatest number of people.

BWS also seeks to provide support to critical facilities like hospitals. For these purposes, BWS has obtained seven mobile generators. The largest is 900 kW, almost a megawatt, and has to be towed by a tractor rig around the island. A 1.5 mW fixed in place generator is being installed at the Beretania pump station. Fixed generators also are being installed at Halawa Shaft, Kunia Wells I, and Kalihi Shaft. At those locations, BWS can serve a large number of people.

Additional funds have been applied for through FEMA's Hazard Mitigation Grant Program, to purchase a 500 kW mobile generator that can be moved to pump stations or other sites. Sometimes when a hurricane is headed toward Oahu, BWS will proactively lease generators for a week and deploy them, which is far better than trying to secure one after the hurricane hits.

Another approach to provide water in an emergency is to create "oases" that people can come to pick up water to transport back to their homes. This could be done in partnership with community-based groups like the Manoa CERT (Community Emergency Response Team), locally called "Be Ready, Manoa".

BWS has tested portable, disposable containers that people can use to transport water. BWS is looking to encourage the State and County to pre-purchase a large number of this type of container. They store flat so you can put a lot of containers on a pallet, but they can hold about two gallons of water that somebody can carry. These containers will keep water safe for short time periods. BWS cannot ensure water service post-hurricane that's from a tap or that you don't have to boil, but BWS wants to look at ways to provide water in some manner for customers.

BWS talks regularly with Hawaiian Electric and has identified the critical locations in the BWS system for power. If Hawaiian Electric can get power restored to some of the major water pumping stations, then BWS can take the generator at that location, move it to another location in the community, and gradually restore water service.

QUESTIONS, COMMENTS, AND ANSWERS

Comment: It seems like they always talk about having an emergency kit, with a radio, batteries, flashlight, etc. Water is critical, but I don't know of anybody that has all the stuff you'd need for safe emergency water pulled together. A person could give them \$500 and walk away with everything you need. There's no place where it's all consolidated where someone could just go down and purchase it. There are places that might do it but their

profit margins are crazy. It might be an opportunity for the Board of Water Supply to try to put together an emergency water response kit.

Q. I congratulate you on having 'first call'' on the generators. But generators don't mean anything without the fuel. If you're putting in a 1.5 mW generator at the Beretania station, where are you going to put the fuel tank? I've installed fuel tanks for large generators -- up to an 800,000-gallon fuel tank -- and that takes up a lot of space. That's also a question for all of the remote generators that you're going to put out there. What is your resource to be able to keep those working?

A. For Beretania, we're looking at 6,000 gallons of fuel storage. BWS is reaching out to hospitals that also have limited capability. Our plan is to go to all of the major hospitals and have a discussion, exchange contact information. Critical services should have multi-agency, multi-jurisdiction actionable plans laid out ahead of time, even the idea of logistical support. If it's mobilizing the National Guard to help with the transport of fuel, then that should be determined ahead of time for these critical services.

Comment: I'm glad to hear that because when I read the report yesterday, and we had our neighborhood board meeting last night, my feedback to our Governor's rep was that was a very poorly written plan.

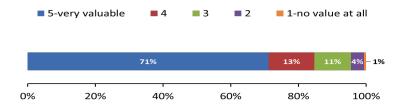
Comment: As much as I can, I try to express the opinion with these entities to create integrated, comprehensive plans. And we need to not talk about pie in the sky stuff; we need to look at action plans that actually meet logistical needs. Another group is the hotel industry. It's time to work together to develop a comprehensive integrated plan for the good of our community.

RESULTS OF BWS ON-LINE RATES-RELATED SURVEY

Kathleen Elliot-Pahinui, BWS Information Officer, began by explaining that BWS wanted to test some assumptions critical for the rate-setting process. One easy and cost effective way was to do an on-line survey, which gives a good snapshot of how people are thinking.

BWS received over 1,000 responses to this survey. If you look at the political polls in the newspaper, they talk to 400 people when they call a race. To see some cross-correlation for scientific accuracy, BWS went to Ward Research for a 650-person online panel. They presented the same questions to a weighted, demographically diverse, geographically, statistically significant group. The results were remarkably similar.

Kathleen discussed several results with the Stakeholder Advisory Group. For the BWS On-line survey, the first thing asked was: "What is the value of water service to you?" 84% said valuable or very valuable. (See graphic on the next page.) The BWS tagline is to ensure safe, dependable, and affordable water. That was parsed out to three separate questions asking: How important is it for BWS to have sufficient funding to provide each of these three attributes. Having safe water was judged the highest, and then dependability, and then watershed protection and conservation.



Asked whether the cost of BWS's necessary improvements be shared by current and future generations, 83% of respondents felt strongly it should be shared; the remaining 17% felt strongly it should be paid for today.

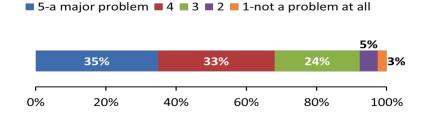
One of the things being discussed in the Stakeholder Advisory Group has been lowering the amount of water usage to put a customer into the upper rates tier to help encourage conservation. 65% of respondents thought that the upper tiers should be reduced.

The next question was: "Would you support adding a new tier at a very low rate to ensure affordability and reward conservation?" This is that essential needs tier. 54% responded positively.

Comment: We understand it's the essential needs tier. People may not have understood that this is for essential needs.

Comment: You're right. We didn't call it out as an essential needs tier. When we were designing the survey, we recognized the issue of being able to explain the complexity of tiers and shifts in the tiers. The results and the trends are positive, but it's a difficult topic to explain to people.

Next we asked: "Do you think water main breaks on Oahu are a major problem?" (See graphic below.)



It's a not surprising that 68% see main breaks as a problem.

Next we asked: "How important is it to replace more pipeline?" 81% think we need to be replacing more pipeline. This is a good number for BWS. It supports our goals and supports the strategy to ramp up to replace 21 miles per year within 10 years.

About 68% of respondents liked the idea of discounted rates for recycled and non-potable. People seem to understand recycled water.

Results for continuing subsidized rates were:

- 52% are supportive of continuing subsidies for local agriculture.
- 42% are supportive of subsidies to elderly and/or low-income customers. Here the survey didn't call it essential needs, although it's pretty clear what's meant.
- 42% responded positively regarding waiving one-time fees and charges for the fire sprinkler retrofit for older housing complexes.
- 41 % responded positively for discounted rates and charges to homeless shelters and housing.
- 32% responded positively to one-time fee waivers and charges for construction of affordable housing.

Asked to indicate the level of support for dedicated fees for water conservation, 36% responded positively. Responses for dedicated fees for watersheds were higher at 46%.

The Ward survey was a little bit more rigorous in terms of weighting. BWS's survey went to whomever we knew, or talked to, or who were attracted to our web site. Opinions about main breaks and sharing costs were pretty much identical between the two surveys, as was the input about recycled water. For subsidies though, the BWS online survey was consistently lower than the Ward Research results. The Ward Research respondents were much more supportive of subsidies. Assistance for elderly and low-income customers was much lower in the BWS survey versus the weighted survey.

BWS's on-line survey had proportionally a few more respondents from Windward, East Honolulu and North Shore. 60% of our survey respondents indicated they heard about the survey through social media and neighborhood boards. We may have seen responses a little bit lower on subsidies because of who we were talking to. BWS sent out the survey twice to the neighborhood commission and to all neighborhood boards. We also used Nextdoor, a new social media platform, and got a lot of comments in that. Neighborhood boards are people who are already active in their communities, so they're going to be more vocal about how they feel.

ITERATIVE RESULTS OF THE RATES MODELING

Dave reminded the group that, in January, BWS held a workshop with its Board to seek guidance on nine key water-rate policy issues. Ernie gave an overview of these in his update in January.

Dave described the Board's "guardrails" for each of the nine key rates issues. Questions were asked and answered throughout this discussion.

- For **Cost of Service Alignment**, the Board suggested adjusting single-family and multifamily residential rates to move closer to cost of service. Currently, single-family residential customers are subsidized, and multi-family residential customers pay more than their cost of service. The concept is to bring multi-family down and raise single family up.
- For Affordability, the Board said to make no changes to current affordability programs.

Comment: I sit on a national board. Right now we're talking about a water infrastructure paper coming out about the middle of this year. One of the case studies is Detroit, Michigan where, if you're behind \$150 or 60 days of not paying your bill, they automatically turn off your water. At one point they were turning off 2,000 households a month, essentially leaving about 100,000 people without drinking water or sewer service. They were turning off residential customers but not turning off commercial customers. The UN said turning off somebody's water is tantamount to denying someone basic right to live.

I would hope that the plans for BWS will be equitable to both residential and commercial; that we don't penalize one over the other.

Comment: So I think your point is, whatever policy there is that it be equitable, that it be fairly applied evenly across the board.

- Dave continued, saying that for **residential rates**, the guidance was to shift the tiers to encourage more conservation and to also establish an essential needs tier.
- With regard to **recycled and non-potable Rates**, they suggested increasing recycled and non-potable rates to recover more of the cost of service, especially for RO customers.

Q. When I read that, I was wondering about the backstory. Are they thinking that there's so much fresh water that it's not worth our island's investment in making sure that people use recycled water? Is the thought that there's a never-ending supply of fresh water and it's okay to shift away from water recycling?

A. No, that's not the thinking. The Board directed that these rates not go so high or be raised so fast that it discourages recycled water use. They felt that maintaining the incentive to use recycled water was critically important.

Q. Will recycled water still be priced lower than regular water?

A. We're going to see that tonight, and then ask for your input.

- Regarding agricultural rates, their guidance was to retain the existing subsidy levels.
- Regarding **non-residential rates**, their guidance was to make no changes to the rate structure.
- Regarding the **monthly charge** they guided BWS to change the structure of the charge to vary by meter size.

- For **fee subsidies**, the Board gave direction to provide subsidies for affordable housing, homeless shelters, and fire sprinkler retro fits, with the amounts of these subsidies to be determined later.
- Regarding the **fire meter standby charge**, they supported establishing a fire-meter standby charge to recover the cost of service.

Dave mentioned that he knew a few members of the Stakeholder Advisory Group were at that Board workshop. He encouraged them to share their thoughts.

Comment: I went to that meeting because I was curious if they really listen to us. I was very impressed with the Board members themselves, how they are intellectually curious, and how they're really trying to come up with fairly rational decisions. I was even more impressed with the Chair. He's very aware of what we do, and he's very complimentary of what we do.

Comment: Yes, I'd like to say I found the meeting very informative. The Board seems to pay attention to what the stakeholder group does here. I was really impressed that the Chair recognized the efforts stakeholders group.

Meter-based Customer Charge

Dave continued the discussion on rates, starting with the change to move from a flat monthly charge to a customer charge based on meter size. He explained that everything discussed that evening in terms of the rate modeling assumes that the customer charge that varies by meter size is in place.

Fire-meter Standby Charge

He said that currently, the costs associated with private fire service are charged to all BWS customers, rather than just the people who have those meters. BWS is proposing a change that would align the recovery of costs come with the people who have those meters, because they're the ones that get that benefit. The potential charges are pretty modest and would replace any occasional commodity charges that happen on those meters, primarily for testing. The meter-based charge is easy to bill, easy to administer, and places the recovery of cost of service with those customers who are benefiting from the service.

Q. For the fire meter charges, why is there a big jump on July 1, 2019?

A. Dave said that, for many of the changes that would be discussed today, we're talking about setting rates for a five-year period that begins as of Fiscal Year (FY) 2019, which actually starts on July 1, 2018. But, we're not proposing any changes to the rates in FY 2019, so customers would continue to pay the current rate of \$4.96 per thousand gallons of water used. That would change in 2020 to being charged a flat rate per month based on meter size.

Q. Why is the jump from FY 2019 to FY 2020 so large? If you look at '21, '22, and '23, the price jump is not as drastic?

A. The measure for FY 2019 is the current method of charging per thousand gallons of water used. If you don't use any water, you don't pay anything. If you use a thousand gallons of water, you pay \$4.96. The new fire meter standby charge would go into effect in FY 2020 at a flat rate to recover the cost of servicing that meter. This would apply whether or not any water is used.

Q. When I see a bill, I don't care about a thousand gallons. When I'm writing a check, I'm looking at the money. I will compare last month's bill with this month's bill to see what it is. The optics are not good for the higher charge.

A. That is like comparing apples and oranges.

Q. I understand that. The optics of it are still off. How do we make it clear so it doesn't seem like such a big jump?

A. That's a good point. I think I understand what you're saying.

Response: It's a whole new system of cost recovery of how we're calculating the charge. Perception wise, you're absolutely correct.

Comment: The customer is not going to have the same information that we're talking about in here, when they see their bill.

Comment: So the way I look at it, this is more like prepaying insurance. In the event you have a fire, you would be paying at a fixed rate. If I have a fire before the rates change, I would get a big bill because we would have to use a lot of water. In the future, I pay the fire meter standby charge per month, so if I have a fire it's already paid for.

Response: Actually, if you have a fire, that water usage amount isn't billed. What would be charged is water used for testing your sprinkler system and maintenance. Keep in mind that fire service has to be available all the time, non-stop, 24/7, at huge flows, instantaneously. There's a cost to provide that readiness to serve on the system. There's also a cost to maintain those meters; it's about \$400,000 per year in total. All of us are paying a part of that right now, because the people who have these meters don't have this fee right now. What the new monthly fee does is direct the recovery of that cost to just the locations that have private fire services.

Dave said that this is really the conversation we wanted to have, because there's going to be a lot of questions. BWS is not just changing the rates; they're changing the structure. We want to have your feedback of how the public and our other customers will react. Dave moved on to further explain different elements of the water rates and the proposed changes, noting this would be "the hard stuff." Pointing out features on a chart (shown on the next page) he explained:

Rate Element	Board "Guardrails"	Alternative A
Single-Family COS Multi-Family COS	Move closer to COS	 SFR = 95% COS recovery in 2023 MFR = 100% COS recovery in 2023
Residential tiers	Establish "Essential Needs" tier Shift tiers to encourage more conservation	 "Essential Needs" 2 k-gal/dwelling unit/month Balance this with increase in 2nd tier so that 6 k-gal customers (50%) get modest increase Avoid rate shock by limiting increases to not more that 2x the overall revenue requirement 2 k-gal and \$ amount of "Essential Needs" tier in MFR same as SFR.
Recycled/non- potable	Increase to recover more of COS	 COS recovery of 80% by 2023, may differ among individual components.
Agricultural	Retain existing subsidy levels	For consistency with SFR, go to 3 tiers
Non- residential DRAFT – for illus	No change, uniform rate stration and discuss	All rates should go up some, even a small amount on only

With regard to **single family and multi-family cost of service (COS)**, the Board guardrails set direction to move rates closer to the actual cost of providing service for each of these customer classes. Currently, single-family residential customers are subsidized about 12%. Non-Residential customers pay for part of that, as do multi-family residential customers. In each of the alternatives to be discussed, that balance is addressed by taking sngle-family residential customers from the current 88% COS recovery up to 95% recovery by 2023 and multi-family rates are adjusted to move down to 100% COS. That's consistent in all the variations that we're going to be showing you.

For **residential tiers**, the Board guardrail was to establish an "essential needs" tier, and to shift the tiers to encourage more conservation. All of the alternatives to be discussed at this meeting include an "essential needs" tier set at 2,000 gallons of usage per month. That's been balanced with an increase in the second tier, so single family residential customers who use around 6,000 gallons per month or less (about 50% of the BWS customers) see only a modest increase in their bills.

To avoid rate shock, rate increases are limited to no more than twice the overall increase in revenue requirement. Over the course of five years, the overall revenue requirement goes up cumulatively 12.5%. The effort has been made so that nobody's bill will increase more than twice that amount (25%). An effort also was made to create some consistency in the "essential needs" tier between single family and multi-family residential customers.

For **recycled and non-potable** customers, the guardrail was to increase those rates to recover something closer to the cost of service. For all of the alternatives, recycled and non-potable rates have been increased to about 80% of cost recovery, while retaining a significant subsidy to incentivize use of recycled water.

The guidance on **agricultural services** was to retain the existing subsidy levels. Agriculture currently pays about 60% of its cost of service.

For **non-residential rates**, the guidance was to retain the uniform rate. This will stay, but in all of the alternatives the non-residential rate will increase some.

QUESTIONS, COMMENTS, AND ANSWERS

Q. If we don't recover 100% of costs of service for single-family residential and if we don't recover 100% for other customer classes, who's making up the difference?

A. All the businesses are. It's all of the non-residential users that are paying more than their cost of service and who subsidize single family residential, agriculture, recycled, non-potable.

Q. And their rates are high enough right now to cover everything that we have up here?

A. Yes. Today the books balance. We've calculated the cost of service and we know how much those subsidies are. However, the guardrails guide us to start to shift those things. Remember the zero sum game? Recall the consistent message in all of three groups was to move closer to cost of service for single-family residential customers. The subsidy was too big. Another was that it didn't seem like multi-family residential should be subsidizing single-family residential.

Q. When you talk about the amount of water charged per family, single or multi-family, it seems that should reflect an allocation per person, because that's how water gets used generally. How do you factor in the amount of gallons per person, which seems to me the reality check. Are you just dealing with broad spectrum averages?

A. What a water utility cannot do, in any administratively feasible way, is understand how many people are living in a given house or apartment. You take the average among BWS customers. We're showing examples that are based on those averages to provide a comparison. Dave said that, one thing stakeholders might consider, is whether 2,000 gallons a month is the right amount in the "essential needs" tier.

Comment: I actually am so gratified to see from the last conversation I had that the multifamily customers aren't bearing so much more of the cost in this model. From a perception perspective, I just want to mention every time I see "multi-family", I think about families in what would be considered single-family dwellings with multiple families living in them. Many people in Hawaii have multi-generational families. When you get ready to go out to the public it might go over better if there's a way to explain that that multi-family means high rises and condos as opposed to a home where you live with your grandson and your granddaughter.

Dave reminded the group that the overall change in revenue requirement (not rate increases) is over a ten-year period -- 44.3% cumulatively. On average, that's going to be funded 50/50 through bond financing, and with cash from water rates.

The rate-setting period is five years. The cumulative increase in revenue requirement (again, not rate increases) is 12.5%.

Comment: At the Board meeting, it was at this point that the reporter from the Star Advertiser claimed that we're going to have 12.5% rate increase. Ernie had to explain that we're looking at a five-year plan. Thank you, Ernie. Dave called attention to handout distributed at the start of the meeting.

What we're trying to do

- Provide an "Essential Needs" tier
- Encourage conservation
- Reduce subsidy to single family residential
- Bring multi-family down to cost of service
- Avoid rate shock
- No free ride all rates go up some

Dave commented that the next topic involves a lot of numbers, and numbers can be confusing. The handout might be helpful to focus on what it is that we're trying to do in all of the rates scenarios about to be shared. Dave encouraged group members to think about these goals. If you look at some numbers and they don't make sense to you, it's important to go back and see whether or not it's helping to achieve one of these goals. Is it not doing one of these things? Or did the result surprise me? Did it go the way I expected? Or whatever it is. That's the conversation we want to have. If there are changes needed, then what do you want out of that change?

RESULTS OF RATES MODELING

Dave asked Brian Thomas to explain three themes or variations of the most recent results of water rates modeling for all of BWS's customer classes.

Residential Rates

Brian explained that today's rates discussion would reflect three theme variations shown below:

Lower the lowest	"Essential Needs" 85	Highlight the highest
Very low cost "Essential	Price "Essential Needs" 85%	
Needs" tier, and	of tier 2, and	Same as
Balance with tier 2 so 6 k-gal bill rises modestly	Balance tier 2 so 6 k-gal bill rises modestly.	"Essential Needs" 85
o k-gai bii fises filodestiy	nises modestly.	
Price "Essential Needs" tier	Price MFR "Essential	Same as
the same for SFR and MFR	Needs" at 85% of tier 2 for consistency	"Essential Needs" 85
		Higher usage level and cos
		in tier 4, and

Brian reminded the group that:

Single-Family Residential (SFR)

- 97% of SFR customers fall within BWS's current tiers 1 and 2.
- 50% of SFR customers use 6,000 gallons per month or less.
- The "average" SFR customer uses approximately 9,000 gallons per month.

Multi-Family Residential (MFR)

- 50% of MFR customers use 5,000 gallons per month or less.
- The average MFR customer uses approximately 6,000 gallons per month.

Brian compared and discussed a range of possible future water rates for single and multifamily residential customers for the group's consideration. Highlights included:

- Tiers for single-family residential would break as follows:
 - Tier 1 -- essential needs tier, up to 2,000 gallons/month
 - Tier 2 -- 2,000 to 6,000 gallons/month
 - Tier 3 -- 6,000 to 21,000 gallons/month
 - Tier 4 -- 21,000 gallons/month and above
- Tiers for multi-family residential would break as follows:
 - Tier 1 -- essential needs tier, up to 2,000 gallons/month
 - Tier 2 -- 2,000 to 4,000 gallons/month
 - Tier 3 -- 4,000 to 8,000 gallons/month
 - Tier 4 -- 8,000 gallons/month and above

Brian explained that under different modeling scenarios, residential customers' bills could increase or decrease over the five-year period FY 2019 – FY 2023:

- Single-family residential bills (including monthly customer charge based on ¾" meter) would increase a total of approximately \$1 per month on the low end (2,000 gallons) to nearly \$48 per month on the high end (45,000 gallons), over the next five years.
- Multi-family residential bills (also including monthly customer charge based on different sizes of meters, and also based on low rise and high rise complexes) would vary from a *decrease* of about \$2.50 (small low rise with ¾" meter, 2,000 gallons per month per unit) to an increase of more than \$2,000 (large low rise with less than 300 units and an 8" meter, 14,000 gallons per month per unit).
- Note: These are hypothetical changes (increases/decreases) to bills to demonstrate how different rates would impact single-family and multi-family customers. They are not the whole bills.

Brian talked about assumptions made related to cost of service and residential rates. The BWS Board set guardrails to bring both single family and multi-family residential rates closer to cost of service, based in part on recommendations by the Stakeholder Advisory Group.

- The potential rates reflected a steeper increase in single-family rates to recover more of the cost of service. In this model, the starting point was 88% recovery in 2018, increasing to 95% recovery by the fifth year of the five-year rate increase.
- The potential changes for multi-family rates reflected a much lower increase to recover less of the cost of service than today. In this model, the starting point was 108% recovery in 2018, decreasing to 100% recovery by the fifth year.

Brian also showed the group comparisons of hypothetical whole bills for each of the five years of the five-year rate increase. Stakeholders provided the following input:

QUESTIONS, COMMENTS, AND ANSWERS

Q. The numbers shown here are just for water, not sewer, right?

A. Yes, these relate to the water you use. Your sewer bill is for the water you flush and drain.

Comment: Compared to bottled water, even after increases like these shown today, water on Oahu is the best bargain on the island.

Comment: If a condominium complex has 100 dwellings (dwelling units), and the whole complex uses 200,000 gallons, that's 2,000 per unit. The residents don't directly benefit from saving water or comparatively lower rates. They should benefit from what they pay for services, but there's no way for the individuals to be sure savings are passed along.

Comment: In the effort to prevent sticker shock, I think you've over-weighted going slow at the beginning. I think I'd rev it up a little quicker and let people live with the reality check of it all. The amounts at the bottom end are so small.

Q. What would the cumulative increase be for these examples?

A. The cumulative increase for Single-family residential over the five-year period ranged from approximately 6% to nearly 30% in the hypothetical examples. The cumulative change for multi-family residential over the five-year period ranged from a *decrease* of nearly 7% to an increase of nearly 12% in the hypothetical examples.

Q. Why are people using those much larger amounts of water (e.g., 30,000 – 45,000 gallons per month)? Are there some particular needs associated with that high use?

A. The bulk of the high use appears to be swimming pools and landscaping.

Dave showed a map that highlighted areas of high water use. These generally corresponded with areas with single family homes that would have pools and large landscaped areas.

Comment: We've seen a similar map before.

Q. Why is there such high water use near Kalihi?

A. We suspect that is an area with a large number of multi-generational homes.

Q: In the new multi-family development in the Kaka'ako area, some of the new units are very small – only 300 square feet in total size. Does that resident pay the same per dwelling unit cost as another resident who lives in a much larger space and who uses more water?

A. Typically the monthly maintenance fee is based upon the size of the dwelling unit. In that case, the person in a 300 square foot unit would pay less in maintenance fees than the person in a 900 square foot unit.

Comment: A bigger unit might have more occupants. How the association handles their maintenance fees is up to them and their covenants. The Board of Water Supply doesn't have a voice in those fees.

Q. What will happen with buildings that have (for example) 50% affordable units and receive subsidies?

A. The subsidies for affordable housing relates to an impact fee that is charged up-front before the units are built.

Comment: The subsidy would benefit the builder, not the residents. I just want to make sure because for general public knowledge, the thought may be that it's a subsidy to help a low-income household. When we get to the point of messaging, this distinction has to be very clear or the general public will think otherwise.

Comment: The lower the overall costs for the developer to build, which includes impact fees, the end result is a lower cost to the person purchasing.

Comment: The whole purpose of this potential subsidy is that we get more affordable units. Those units are less costly so that people can move in. So that's where the benefit actually gets to the end user.

Q. When some of the developers are not constructing new affordable housing, but they're buying up other places for affordable housing, will that affect prices of ...?

A. That's a discussion about the Water System Facilities Charge that we will have at another meeting. We'll put that question into the "parking lot" to come back to in the future.

Comment: I don't know if I like the titles (of the variations) because it seems like the "highlight the highest" is the one where rates increase more gradually than the others. Without really analyzing any more than seeing it visually like this, I would prefer the "highlight the highest".

Q. Is BWS going to show all of these slides and alternatives to the public?

A. No, we're looking for the Stakeholder Advisory Group's input on this. The feedback could be "That doesn't look right, "Hey, could you do more of this" or "Wow, those increases were too much for single family. Can you back off of them overall" or "One residential didn't go up enough."

The BWS team will use that feedback to narrow down to rates that the Stakeholder Advisory Group could recommend to the BWS Board. That would be a single recommendation, not alternatives.

Then BWS's Board will also be considering the same information and provide direction. Their direction could be to take that single proposal to the general public for their input.

Comment: I think that the "highlight the highest" spreads the increases pretty evenly across all of the tiers. You're going to introduce a new lower tier (rate decrease) at the very bottom. With the "highlight the highest" alternative, you're already experiencing a low bill. And then couple it with the addition of the lower tier rate, what you're doing with the "highlight the highest" is sufficient.

Dave asked if the cumulative increase percentages caused anyone concern?

Comment: Not really because we're trying to raise the single-family rate to recover more of the cost of service. So, if that's part of the message going forward to the general public, they're going to understand that it's higher than the 12.5% (published in the newspaper).

Comment: I think it's way too complicated. For the vast majority of people you need to just highlight that you want to encourage conservation, you want to make things fair, you are expecting the single-family homes to pay more of their cost of service, and that kind of stuff.

Response: Kathleen said she agreed. She said we're already working on the PowerPoint and keeping it as simple as possible. We will also honor that person in the audience who wants analytical information, but we also don't want to overwhelm with too much information. Thank you for your suggestion.

Comment: You may have to adjust your message depending on where you're going and who your audience is going to be. You guys are going to get eaten alive out in some areas. People in my area are always talking about how high their water bill already is. We know they are referring to the sewer portion, so you're going to have to clearly say that we're not talking about the sewer bill tonight. In people's minds, the water bill and the sewer bill are connected because they're on the same invoice. The messaging is going to be important. You're going to have to be very succinct in why there's even an increase in the water bill. Because don't forget, a lot of the population expects their water should be free anyway.

Response: Dave said that we agreed and will come back to this important point in March.

Comment: I preferred the "essential needs" alternative. I need to look at it some more, but if you ask right now, I'd say I prefer "essential needs".

Non-Residential Rates

Dave reminded the Stakeholder Advisory Group that non-residential rates have a uniform charge of \$4.96 per thousand gallons. The goal was to slowly step down their cost of service recovery, reducing how much this customer class subsidizes other customer classes. He showed potential rates for the five-year period, followed by annual and cumulate increases for several types of non-residential customers, which included:

- Restaurant
- Hotel
- Church
- Office building

- Large landscaped area
- Large industrial user
- School/college
- Large shopping center

For these various examples, the meter sizes ranged from $1 \frac{1}{2}$ " to 8" and water use ranged from 230,000 to more than 31,000,000 gallons per month. The hypothetical bill increases ranged from 1% to 3.5% annually, and from 6.4% to over 9% cumulatively over five years.

QUESTIONS, COMMENTS, AND ANSWERS

Q. Would a park be considered a "large landscaped area" customer?

A. Yes. So would a golf course if it's on a potable water system. Schools are also big irrigators.

Agricultural Rates

Dave said that agricultural customers would have the same first and second tiers as single family residential customers. The third tier for agriculture would be set at recovering 60% of cost of service. The third tier is priced much lower than the first two.

Dave noted that the slides needed to be updated to reflect the rates used in modeling, and moved forward to a bill comparison. The hypothetical bills were for agricultural customers that had a ¾" meter and used approximately 80,000 and 300,000 gallons of water monthly, respectively. Another example was for a customer that has a 2" meter and used over 500,000 gallons monthly.

Dave asked the group whether or not anyone had concerns about the examples shown. The response was "no".

Non-Potable and Recycled Water Rates

Dave told the Stakeholder Advisory Group that most customers who buy non-potable and recycled water are under contract. Potential changes for this group of customers include:

• Recycled water customers would pay a monthly customer charge.

- Rates charged to non-potable water customers would be bumped by approximately \$0.40 per thousand gallons.
- Rates for R1 water purchased for golf courses would approximately double.

QUESTIONS, COMMENTS, AND ANSWERS

Comment: The potential rates shown are generally reasonable, but it seems that golf customers are disproportionately hit with an increase that doubles the current rate. There will be pushback on that. And as an industry, golf helped the City/County to meet the EPA Consent Decree.

Some of the golf courses may re-open their wells once they're not on contract. Some courses have wells, some don't. And their wells vary in quality of water they can draw, so that'll impact their future plans. Courses under contract could decrease consumption because they will no longer be contracted. I'm not sure what the legal aspects are and each course has their own varying circumstances. Currently these courses are required to take a contracted amount of water whether they use it or not. Some may choose to use less water, re-open wells, or pursue some other solutions to offset the higher water cost.

Response: Are you saying that it feels like it's too much too fast?

Comment: Certain operators are going to look at alternatives. They may blend their water and perhaps use some well water to offset some of that cost. There are other factors. When they pump the water out of their well, there's electricity costs. Each property would probably have to evaluate how they'd proceed once they're off contract.

Q. Doesn't this just affect two or three golf courses?

A. Barry said there are about nine golf courses that buy R1 water or are close enough to have access to that source. He added that the recycled water contracts point to a rate schedule, so when the BWS Board adopts a new rate schedule, then the contracts will shift over to the new rates. But the contracts should still be there. If BWS were to reduce the subsidy to golf courses, where would the balance come from?

Comment: Everybody else would have to pick it up.

Q. So you're saying that under the contract, the Board of Water Supply can more than double the rate and still hold them (golf R1 customers) to the contract?

A. Yes. Right now our rate schedule does not have a recycled water rate in it. When we create one, the contracts will switch over to the rate schedule, whatever that rate schedule will be.

Q. The rate that shown here would actually almost double over this five-year time period. Would all the other provisions of that contract still hold? Would they still have to take the water even though the price of water is doubled?

A. Yes, the rest of the contract remains in effect. There have been some revisions to contracts to reduce the minimum water use commitment.

Dave explained how the rate model produced those numbers. He said the BWS Board guardrail was to increase their cost of service recovery for recycled water customers. They didn't provide guidance on how high to take it or how low. Their guidance was: "don't increase it too fast and don't make it so high that it provides a disincentive". So we picked 80% cost of service recovery to start with.

He said that a really important question to the Stakeholder Advisory Group is: Was 80% recovery too high of a number? Did that have an unintended consequence? Should it be a different number?

Comment: Except for golf customers buying R1 water, the increases for non-potable and recycled water customers are relatively small. So the question is, should golf be included in going towards the 80% cost of service recovery for the overall R1 total? If you don't take golf customers up as fast, maybe you could keep the recovery percentage down to 75%, and don't double their cost.

Barry asked the Stakeholder Advisory Group how doubling the cost of water would impact golf fees and the overall economic bottom line of golf courses.

Comment: A lot of things go into the green fees. Fuel costs are rising currently. Minimum wage went up, and now we're working with our union. But if everything except water were to remain flat, there is a fine line for raising fees for luxury or a pleasure kind of expenses.

If the golf course were to say: "Our costs doubled for water, so we have to raise the green fee, let's say \$3", that could push us over the edge. People might say: "I'm not sure if I want to go to play golf." So consequently, golf is always trying to reduce expenses, turn off lights, raise the thermostat warmer, whatever it may be. Golf tries a lot of ways to minimize passing the cost onto the consumer. Like any other type of product that you consume, especially if it's a non-essential product, we really have to be careful of perception. If fees are \$50 versus \$53, did we go over the threshold for your recreational dollar? A lot of that depends on the competition and our neighboring municipal courses. There's a lot of factors so I wouldn't say just because the water went up we'd raise the price on the consumer. We'd probably try to internalize it as much as possible with some tighter controls, labor, and things that most other businesses would do.

Comment: Part of my concern is that golf course survival in Hawaii is critical to recharging our water supply too. We don't have as much ag as we used to. We don't have the plantations to recharge our wells by watering large areas. That's a major part of why golf courses are important to any landscape or any community overall.

Comment: Golf courses are situated over caprock. So the water is not going get down into the aquifer, for this category of water. But we might want to reduce the percent of recovery so this group doesn't face doubled water rates. We're looking at a very restricted area where R1 water is available.

Response: Barry said that golf courses also retain stormwater, another benefit that was mentioned before. He confirmed that golf courses are built over caprock.

Dave said that these were all great points and that the group had given the team good feedback to take a deeper look. He encouraged stakeholders to go back and communicate with their groups, and provide feedback about whether or not this rate setting process is going in the right direction.

He summarized feedback:

- "Highlight the highest" and maybe some additional consideration on "essential needs" is the direction for residential rates.
- The non-residential rate presented made sense: keeping the rate lower than the overall revenue increase, and trying to decrease the subsidization of single family residential rates.
- Assuming everything stays on schedule, the desire is to take Stakeholder Advisory Group recommendations on rate changes to BWS's Board in March.
- If the Board agrees and it looks good to go out to the public, then BWS will outreach extensively island-wide with small group meetings, presentations, briefings, and many other things.
- In addition, the BWS will hold four regional public meetings in April and May. He said it would be great to have stakeholders show up at those meetings.
- If any stakeholder has concerns or wishes to support an idea, or wants to convey opinions directly to BWS's Board, Dave encouraged the Group to attend Board meetings.

The next Stakeholder Advisory Group meeting is Tuesday, March 13th at the Blaisdell Center. Stakeholders were asked to mark April 11th on their calendars for a tentative meeting.

Dave thanked everyone for coming and for their excellent feedback.