

DRAFT -- WATER RATES PUBLIC COMMENT, TESTIMONY, QUESTIONS, EMAILS TABLE (06/18/18)

PUBLIC HEARINGS

Speaker #	Organization OR Public Hearing Date	Summary of Question	Response to Public Comment
Speaker #1	Public Hearing 4/26/18	Asked if there would be any changes to the way BWS takes payments. For example, currently, there is no service fee when paying a bill over the phone.	Mr. Lau responded that billing over the phone will continue, and added that BWS is looking at a different payment system, which will make the payment process over the phone more efficient. Mr. Lau explained that BWS would also continue to provide online payment service without charging a service fee. Because BWS is a utility, credit card companies give them a good deal. Credit card companies charge BWS about \$1.55 per transaction, which BWS absorbs so that the customer doesn't have to. However, if in the future the credit card companies lose money over the deal, BWS may have to start charging a fee. If that does happen, Mr. Lau assures that BWS would provide sufficient notice to its customers.
Speaker #2	Public Hearing 4/26/18	Asked why the first tier of water usage was drastically adjusted from 13,000 gallons down to 2,000 gallons.	Mr. Lau responded that ten percent of the 150,000 households BWS serves use only about 2,000 gallons or less a month. To create a positive incentive for customers to use less water, BWS wants to provide some service to its customers by making that first 2,000 gallons at below cost. Mr. Lau continued that it is a big difference from the current structure, but the intention of structuring the tiers this way is to help people who are struggling and to also give that same opportunity to all BWS customers to encourage conservation.
Speaker #3	Public Hearing 4/26/18	Asked if development in the Kaka'ako area is presenting a challenge for BWS because of the high volume of condominiums being built.	Mr. Lau responded that the HCDA (Hawaii Community Development Authority) estimated water demand around 10 million gallons a day for Kaka'ako. BWS has enough capacity, right now, to handle that demand. However, Mr. Lau explained that the Water Master Plan looked at population growth all the way to 2040, and findings show that more sources need to be developed to keep up with that growing demand.
Speaker #4	Public Hearing 4/26/18	asked, between single-family residential and multi-family residential, which category do high-rise condominiums fall under?	Mr. Lau stated that high-rise condominiums would be considered multi-unit residential. He explained that anything more than two units is considered multi-family (multi-unit) residential. Mr. Lau added that the larger condominiums, and even townhouse complexes, have one large meter. Their rates are based on a "per dwelling unit" basis. To calculate the "per dwelling unit usage", divide the total water usage from the one large meter by the number of dwelling units being served by that meter.
Speaker #5	Public Hearing 4/26/18	asked why the hotels, restaurants, and shopping centers pay a low flat water rate.	Mr. Lau first stressed that these are "draft" rates and that the purpose of this meeting is to obtain public input. To answer the question, Mr. Lau explained that the cost of service was determined for each of the different customer classes – single-family, multi-family, non-residential, agriculture, and recycled and non-potable water customers. Non-residential customers are actually paying about 120 percent of the cost to serve water to them, which helps subsidize the other customer classes. The proposed rates will bring them down to 117 percent at the end of the five-year period. Mr. Lau stated that BWS is proposing to keep the flat rate structure for this customer class because of its diversity, ranging from schools, government buildings, hotels, shopping centers, restaurants, and industrial customers. Mr. Lau explained that rather than creating a complicated rate system, keeping it simple would be most appropriate since this customer class is paying more than the cost of service.
Speaker #6	Public Hearing 4/26/18	asked if there are any plans to recharge the fresh water aquifers, and is there a danger of the aquifer levels getting so low that there will be a saltwater problem.	Mr. Lau answered that BWS watches it very closely by checking on the chloride levels. If the levels are elevated, BWS reduces the amount of water pumped out to that location. Mr. Lau added that when fresh water falls on the mountains, it soaks down through the lava rock and is absorbed into the cracks and crevices of the lava rock. He explained that fresh water, being lighter than saltwater, floats on top. BWS has monitoring wells that check the location of the transition between the salt water and the fresh water. If BWS sees that transition moving up, it is an indication that the lens could be shrinking in that area. Mr. Lau stated that BWS is very concerned about how climate change affects rainfall, and in turn, how that might affect the sustainable yield, or how much fresh water can be pumped reliably without endangering the fresh water resource or aquifer. Mr. Lau explained that BWS is looking at recharge projects, especially in Nuuanu. East Honolulu recently suffered from a severe storm, which caused a significant amount of rainfall to go into the ocean. BWS would ideally capture that rainfall behind the Nuuanu Dam and then have it flow down to an area where it can be treated and injected back into the fresh water aquifer.
		also inquired what the difference in cost is between a recharge project, such as the one Mr. Lau spoke of, versus seawater desalination.	Mr. Lau asked Barry Usagawa, Water Resources Division Program Administrator, to address this question. Mr. Usagawa stated that seawater desalination is much more costly due to the need for pumping seawater to a higher pressure to have it filtered through reverse osmosis. Mr. Usagawa explained that desalination costs about 10 to 12 dollars per gallon to develop, whereas groundwater sources cost about half of that. However, having desalination is crucial because it makes the system more resilient. Mr. Usagawa stated that climate change projections to 2100 indicate that West Oahu will become drier. Supplementing and diversifying the water system will help BWS continue to provide fresh water into the future.
		explained his understanding of how much it costs to develop a desalination system versus developing a new well source, and asked if his understanding was accurate.	Mr. Usagawa answered yes, and stated that groundwater wells are less costly, but what brings the cost of new connections down even further is successful conservation. Mr. Usagawa explained that conservation frees up existing source capacity at a cost lower than what it would cost to develop new well sources. In Honolulu, the water demand decreased by approximately 15 million gallons per day due to conservation. Those sources remain available, as long as climate change does not decrease rainfall and aquifer yields.
		asked if there is new material or technology that makes better pipes	Mr. Lau expressed that he wishes there was a perfect pipe that would last forever. He explained that metal pipes corrode over time, so BWS has explored other materials like plastic. Plastic doesn't have corrosion problems, however it is a very delicate material that needs to be installed and handled very carefully, or it could fail catastrophically. Mr. Lau stated that BWS has used high-density polyethylene (HDPE). He explained that it is black and thick-walled, but it still has its shortcomings. Mr. Lau stated that BWS would be exploring new types of plastic that are being developed.
		inquired about the Haiku Stairs, and asked why BWS does not just get rid of it.	Mr. Lau responded that the stairs are on BWS's parcel. Mr. Lau explained that he has been attempting to transfer that parcel to another agency because managing the stairs is not BWS's core mission of providing drinking water to the community and it drains BWS's resources. Mr. Lau asked if anybody in the audience has hiked up Haiku Stairs, and how it was for them. One meeting attendee answered that it was steep. Mr. Lau agreed and stressed that climbing the Haiku Stairs is dangerous and illegal because it is closed.

		asked how using bonds affect the rates, and how are these bonds paid back.	Mr. Lau explained that bonds help spread the cost over time. Investing in the water system is not a steady line, due to rising and falling costs. To smooth it out, BWS uses revenue bonds. Drinking Water State Revolving Funds, which have very low interest rates, are also used. Mr. Lau added that for repairs of two BWS dams, BWS went to the State Legislature for Special Purpose Revenue Bonds. These are issued by the State, hopefully at a cheaper rate than if BWS were to sell the bonds themselves.
Speaker #7	Public Hearing 4/26/18	asked how the proposed rate increases compare to those in past years.	Mr. Lau responded that in 2011, the rate increase was approximately 9.65 percent per year, over a five-year period. The current rate proposal works out to about four to five percent annually, from year two to year five. Mr. Lau continued that the rate increases in 2011, before he became the Manager, were a result of years of deferred rate increases. He explained that it would be easier if he did not have to notify the community about the need for rate increases, but he strongly believes in doing what's right by explaining to the community that rate increases are necessary to cover the cost of operations and to continue investing into the water system infrastructure.
Speaker #8	Public Hearing 4/26/18	asked if the rising costs of fuel and supplies have been considered into the rate increases.	Mr. Lau responded that the long-term financial plan assumed an inflation rate of around three percent a year, so the plan accounted for the increasing costs of operations.
Speaker #9	Public Hearing 4/26/18	asked if BWS has anything that monitors its pipelines and detects any leaks.	Mr. Lau answered that BWS has an ongoing program, whereby their Leak Detection Team checks for leaks daily. He explained that they use sophisticated equipment that allows them to hear the sound of the leak and determine its location. This has allowed them to repair leaks before they turn into main breaks.
Speaker #10	Public Hearing 4/26/18	asked if BWS could ask the Department of Environmental Services (ENV) to provide their own sewer rates, so that the burden could be lifted from BWS.	Mr. Lau responded that, although sewer charges are clearly marked that they come from a different department, people still have a hard time distinguishing that. Mr. Lau stated that he would forward this request to the Director of ENV.
Speaker #11	Public Hearing 4/26/18	asked if the water rate payers were effective with water conservation, would that affect the revenue produced by the proposed water rates.	Mr. Lau responded that conservation does affect revenues because BWS's primary revenue comes from people paying for the water they use. He explained that despite lower revenues due to conservation, BWS still promotes conservation because Hawaii has a finite fresh water resource that may be diminishing over time. Mr. Lau added that BWS also wants to empower its customers with the ability to have more control over their water bills through conservation.
Speaker #12	Public Hearing 4/26/18	asked how BWS arrives at the numbers they project for future rainfall	Mr. Usagawa stated that the University of Hawaii has done some modeling to 2050, 2080, and 2100 for BWS to see the range of possibilities for rainfall. In these models, more severe droughts and more severe storms are expected. Mr. Usagawa explained that a diversified system that includes recycled water, desalination, and groundwater is necessary to ride out those periods of drought in the future.

Name (where available)	Organization OR Public Hearing Date	Summary of Testimony	Response to Public Comment
Rod Schultz	Public Hearing 4/26/18	Mr. Schultz testified in opposition of the 20 percent rate increase over four years. Mr. Schulz feels it's excessive, unwarranted, and unfair. Mr. Schultz also objects to single-family residences having a higher rate increase because he feels single-family homes are more efficient users of the water supply. Mr. Schultz also opposes adjusting the water usage tiers from 13,000 gallons to 2,000 gallons and 6,000 gallons. Mr. Schultz stated that any increase in the cost of living in Hawaii is difficult for the people.	No response required with testimony
Williman Milks (sent letter)	Public Hearing 4/26/18	Mr. Milks testified neither in support nor opposition of the five-year rate increase proposal for the reasons set forth in his written submission via email. Mr. Milks' testimony offered three areas of opportunity for further innovation. Mr. Milks recommends that BWS do more than joint invoicing, merge two agencies' costs only for pricing purposes, and have the City's Public Works Department join with the Board of Water Supply to undertake a joint comprehensive cost study. Mr. Milks' full testimony can be viewed on the website: boardofwatersupply.com/waterrates	No response required with testimony

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Speaker #1	Public Hearing 5/14/18	Please explain the variables that indicated that single-family residential customers pay less than their fair share (less than the cost to serve them). Still not clear why residential are not paying as much as apartment buildings.	Facilitator responded that "Cost of service" of any class of customers looks at all the costs for the Board of Water Supply to operate and maintain the water system, plus the costs of capital improvements. We determine how much of those costs are associated with each different customer class (e.g., single-family residential, multi-unit residential, non-residential, agricultural, and non-potable/recycled water customers). It's a complicated process, but it's documented in the rate study that will be available around July. Then we look at the revenue that comes in from that same group of customers. We compare the revenue collected from that customer class to the cost to serve them. We determine whether those customers pay more than the cost of service, or if they pay less. The result of that analysis is that single-family residential customers, for example, currently pay about 88% of the cost to serve them. It's an artifact of a rate structure that was set many years ago, and over time water use patterns change. There are also better data available now to do more comprehensive analysis and better analyze the actual costs associated with those different customer classes. So it's really a factor of a couple of different things working together. Single-family uses more than multi-unit on a per unit basis. The impact on usage of water each day is much greater for a household as opposed to a dwelling unit in a townhouse complex or an apartment building, especially in the high rise condos. Multi-unit developments typically have a landscaped area that is a smaller footprint. The effect of multi-unit residential on system capacity in terms of peak demand is less than single-family residential. There are also differences with non-residential customers too. The single-family residential customer pays about 88% of the cost to provide services. Non-residential customers are actually paying about 120% of the cost of service, so they're providing a subsidy to other customer classes in the system.

<p>Speaker #2</p>	<p>Public Hearing 5/14/18</p>	<p>I'm here to ask questions. I work for the Board of Water Supply. I'm a meter reader. I'm here because I believe that they've (BWS) been using the employees to save money, because they don't hire enough employees, so the employees that are there have to work harder. That's how the Board of Water Supply saves money. When you get the senior employees to leave, you save much more money because they're paid more. So they (BWS) bring in contract workers, they threaten them. You're trying to do your job, and the contract worker is afraid to speak up, because of retribution. You guys can tell anybody anything, but you know when it comes out in the wash, we'll see who's telling the truth, because that's what I've been watching. I've been watching a lot of our co-workers going out with less people than they should be.</p> <p>Now, all of a sudden, you see them hiring all new people. Why? Is it because the investigation is coming through? Yeah, we're being investigated, because of things that happen at the Board of Water Supply. I'm not at liberty to give all this information, when the investigation comes out please read and watch. Because it's not all hunky dory at Board of Water Supply.</p> <p>We have T-shirts that are green, and they have a water drop (logo). Then all of a sudden, they decide to put BWS and another water drop on the back because of branding. Now I ask all the customers that walk by, "Do you notice our new T-shirts?" They said, "No, what's the difference?" Because the shirt looks the same thing. The only thing that's missing is the pocket. On top of that they tell us, "Oh, we forgot to put the pocket on it." To this day, the pocket has never returned. We have to put our writing utensils someplace. They want us to wear this plastic thing so we can stick all our pencils inside there. You know what, that's *****.</p> <p>Well, if you take all the money that you've been saving on the workers, you're getting a lot of money from them.</p> <p>Also, when they (BWS) bought this (automatic meter reading) system, they never put it out to bid. Why? They cannot tell me I wasn't there, because I was there. They bought a system. The first day we read 4,500 meters; 1,500 didn't read. That's one third. And we were warned by the guys who were putting it in. These things suck.</p> <p>Okay, so that's millions of dollars they wasted. I don't think they should be in charge of more money so they can waste some more.</p>	
<p>Speaker #3</p>	<p>Public Hearing 5/14/18</p>	<p>How does what you're proposing here dovetail into the presentation you made about three or four years ago relating to water rates? There was a proposal at that time. The reason I came here tonight was to listen to what presentation you were going to make and what kind of rationale was going to be used to support the water rates. I want to know, how do these water rates that you're proposing dovetail into the water rates that have been in use for the past couple of years? I think all of you realize that there have been steady increases in the water rates over the past three or four years.</p> <p>It was at a Neighborhood Board meeting in Waipahu. As part of your presentation, you mentioned that the reason for BWS having to increase the rates was to pay for deferred maintenance by your predecessors. My statement to you at that time was, "I hope that my granddaughters are not present at another presentation that they go to, and your successor is making the same kinds of arguments."</p> <p>So you are trying to get ahead of the curve? Trying or succeeding? Doesn't mean they will?</p>	<p>The current water rates were adopted by the BWS Board in 2011. That was a series of 9.65% increases each year for about five years, compounding close to about 70% over the period of time. The rationale then, which is actually very similar to the rationale today, is the need to continue to invest into our water system infrastructure. The idea then was to develop additional revenue to provide a larger capital program. That has happened, and since then we've also embarked on developing a long term water master plan that looked ahead 30 years, and evaluated the entire water system infrastructure. Time will tell. Hopefully we're still around by the time we can see the results of this, because it doesn't happen overnight. But the idea is to start ramping up to 21 miles a year, which is 1% of the 2,100-mile system. That's probably just the minimum necessary and what the American Water Works Association recommends nationwide. We're going to ramp up gradually in about 10 years, and sustain that at 21 miles a year going forward.</p> <p>So you're absolutely right. The test is going to be: Can we implement and can we sustain this, and will it provide the results over time? That's one of the reasons, sir, I asked the BWS Board to adopt the water master plan. Water managers come and go. Some of my predecessors were only there for two years. I've been here six years. But the idea is the reason the Board of Water Supply was created semi-autonomous, and that board members had overlapping terms was so that BWS could develop and support implementation of long range plans. So by having the BWS Board adopt the water master plan as policy, I'm hoping to sustain this program going forward.</p> <p>What we're trying to get to is, let's not do a period of zero rate increases for a long time, like say 11 years, and then have to do this big catch up where the customers suffer because the rate increases have to generate lots of money in a short period of time. But let's see if we can step the increases up incrementally. Over the four years of increases being proposed in this rate proposal for the single family residential customers, increases would be about five percent per year. If we can increase rates on this incremental basis over time and at the same time ramp up our capital program, and also leverage floating more revenue bonds to balance out the cost to current customers, that will help keep rates affordable for our customers. The 70% compounded increase was a shock to our customers. But we had to do it, because the capital program was shrinking. We didn't have enough money to do cover those costs.</p>
<p>Speaker #4</p>	<p>Public Hearing 5/14/18</p>	<p>Obviously with all the building going on, we're bringing on new customers. If BWS is going to stick to replacing 21 miles per year, we are basically not going to replace enough, because as you add new customers and adding new developments, you're also adding more miles of pipelines. I didn't see how these new customers that you're bringing on, who are adding new funds, help with what you're going forward with? Shouldn't that (increasing the miles of pipeline replaced annually proportionally with expanding the system for growth) be part of the plan? I know that in 10 years we're going have more people, or at least more customers, more pipelines, and more of everything else. But yet you're not adding them into this mix. So when we come back in 10 years, will we say: "Oops, 21 miles isn't going to cut it anymore"? In 10 more years, are we going to come back here and start over again? I don't see where you're adding in future people.</p>	<p>Ernie Lau: In the Water Master Plan, we used population projections going out to the year 2040. We converted those projections to increases in water demand. You're right that the service area will probably grow, but we're looking at is, hopefully, more compact development, especially along the transit line as it gets built out, and that infill development will help reduce the spread of our infrastructure over time.</p> <p>BWS doesn't necessarily put in all of the infrastructure. Sometimes we have others put in, which would also address your concern. In the larger developments, the developers put in the water system infrastructure.</p>
		<p>Yeah, but we still have to maintain it.</p> <p>We're talking about replacing 21 miles a year, so when you get past five years, you're still looking at serving this bigger population, so 21 miles won't be enough.</p>	<p>Ernie Lau: Yes, we have to maintain it.</p> <p>The target of replacing 21 miles over the long term might have to increase. Like I mentioned earlier, replacing 1% of the system annually is the minimum (1% of the 2,100-mile system is 21 miles). If the system creeps up to 2,500 miles total, then that 1% will be 25 miles replaced a year to sustain that.</p> <p style="text-align: right;">Ernie Lau:</p>

		Revenues will be increasing, so do you really need to float that many more bonds when you sell more water or have more money coming.	The customer base will grow, so more potential revenue coming in. Good point. The Water Master Plan is updated every 10 years. As developers build, they're going add the miles of pipeline they need for their developments. For every hundred miles of pipe added, our "one percent" goes up. If the system increases to 2,200 miles, we will have to replace 22 miles of pipeline a year. That'll increase incrementally. Now, how we pay for that? Large developers put in the infrastructure themselves. They install it at their cost, which is passed on to the homeowners that purchase the properties there. Then the infrastructure is dedicated to us. Those pipes are brand new, so they should last 100 years. We won't need to replace them for quite some time if they're put in right and they use the right materials. So our cost to replace new pipe is very low. The 21 miles of pipeline that we're talking about are 50-100 years old. In the Water Master Plan, we analyzed the entire water system, and prioritized which pipes we need to replace. We prioritized by risk, which looked at the consequence of failure and the likelihood of failure. We have all the data of main breaks in the last several decades. If a pipeline is serving a facility like a hospital, it's a high consequence if we disrupt water service. Those pipes get ranked higher, and they get replaced quicker than others. We know which pipes we want to replace. We just have to put our nose to the grindstone and get them replaced. It's on us to make sure that we can put the capital projects out, get the funding for them, and then implement the plan. Five years ago, we didn't have such a comprehensive plan. Now we do. And we can only make it better, and we'll keep updating that. You folks hold us to the candle, right.
Speaker #5	Public Hearing 5/14/18	With regard to maintenance, is that only for changing pipes? You have preventative maintenance, basically. Is that a high percentage of what the Board of Water Supply will do with the upcoming increase? I'd like to understand it a little more.	Ernie Lau: No, it isn't. Ernie Lau: There's a category of projects called "renew and replacement". Those projects replace or fix existing infrastructure. The renew and replacement component of our capital program is the largest part of our capital program. It isn't only pipes. In the early years, when we projected out what capital projects are needed, we identified pumps, tanks, and treatment systems that we need to address. Then over time the focus will become the big component items, like pipelines. We'll replace some pipelines right now because we're ramping up to 21 miles in 10 years. The proposed Capital Improvement Program for next year is to replace seven miles.
Speaker #6	Public Hearing 5/14/18	One of the charts showed a level charge, I believe, of \$9.25 per month. Can you go back to that chart? My question to you is: Why is the charge for a five-eighth inch meter \$9.26 per month, and the charge for a 12-inch meter is also \$9.26 per month? I noticed that there's a big proposed adjustment for those in the future. But why is it those rates are (currently) all the same for all the categories?	Ernie Lau: Yes, that is the customer charge. Ernie Lau: Thank you, sir, for pointing that out. After the rates were adopted in 2011 – I started in 2012 – that was one of the big questions people had: Why was the customer charge the same for all meter sizes? Remember, the five-eighths and three quarters meters are usually your homeowners. A major shopping center might have four eight-inch meters. We're proposing a change come July 1st of 2019, to vary the customer charge by meter sizes, so customers with the bigger meters pay more per month.
		When I look at nine dollars versus \$598 per month for the largest meters, I'm asking what the heck happened here? Not that you should not be charging that amount. Why were we charging only \$9.26? Are you saying that's because it was the error on the part of the previous administration?	A decision was made at the time that they wanted to structure it that way. I can't explain, but I did suffer the consequence of after it was adopted. I started after the rates kicked in in 2012. So you're right. The charge for an eight-inch meter will jump to \$276 per month. For that customer with an eight-inch meter, probably a non-residential customer, \$276 is a small percentage of their total water bill. Yes, it's probably about 2%. So you're right. That's why we're proposing this change to vary that charge by meter size. There are two components to this fixed charge. One component is related to providing the customer service and the billing. That's the same whether or not you have a large meter or a small meter. The other component varies by the cost of the maintenance required for the larger meter.
Speaker #7	Public Hearing 5/14/18	Does the Board of Water Supply have any say so in the construction of monster homes being built on this island? So you don't have any input on that? You see all these bathrooms going in, 17 bathrooms in one house, and you have no input? It just made sense. I wasn't criticizing the increases, because I think it's warranted. But why wasn't it done before?	Ernie Lau: We are asked if we can provide water service to those projects when they come in, but it's really the responsibility of the Department of Planning and Permitting in the city. We have the input of whether or not we can serve them, and if we can serve them, what the cost will be. There is a water system facilities charge, which is an impact fee. It's calculated by fixture units, so the more plumbing fixtures you have in the house, like 10 bathrooms, then they're going to be paying that much more to the Board of Water Supply, for the up front water system facilities charge. But the decision to approve the permit or not is mainly made by the Department of Planning and Permits with the input from all the agencies. BWS provides comments whether or not we can provide service to that project. Ernie Lau: Just driving around the community, I don't know for sure what's classified as a monster home, but I see these big structures in a mostly single family residential area, but these large structures take up most of the lot. When someone wanting to build a monster home (or any home) comes in, they have to file a building permit application. It starts at the Department of Planning and Permitting. It comes through the Board of Water Supply, and we count what their water is use going to be, based on fixtures. If they have 10 toilets, it's probably going to result in installing a larger water meter, and they would be paying a larger impact fee. That's a one time capacity charge, because if they all flushed at one time, it would impact our system. So we have a permitting process that reviews all new development for water availability, fire protection, and other considerations. The new development has to be consistent with our rules and regulations. All of that is regulated through a city permit system. I wanted to go back to the current uniform customer charge of \$9.26 per month, because I think I heard you characterize this as an error. What I would add, from a perspective of what's acceptable and what discretion water utilities have in establishing water rates and charges, that this is a discretionary decision that a water utility has available to it. They consider what costs it is trying to recover, and should the charge be the same for every customer or vary by meter size? What I heard you say is that it made a lot of sense to you to vary it by meter size regardless of what was done before in that decision. Ernie Lau: It was a policy decision made at the time. This is our only real fixed charge that recurs every month. What we wanted to do is generate more of our revenue through the charges for water usage (per 1,000 gallons) and keep our fixed charge lower. We wanted to encourage customers to practice water conservation so you try to manage your water bill more. We want to empower our customers by keeping our monthly fixed charge at a smaller size.

Speaker #8	Public Hearing 5/14/18	I was complaining earlier about the way my water bill is apportioned – 80% of the water bill allocated to inside the house, and 20% to the landscaping. In my case, it's just reverse of that. My water use is 80% for landscaping. You told me that particular ratio was not determined by the Board of Water Supply; that it's done by the Department of Environmental Services. The problem with that is, in my case where I use water mostly for landscaping, they're (Department of Environmental Services) charging me all this extra money and I'm not using the sewer.	Ernie Lau: That's correct. That relates to your sewer charges, and you have the ability to submeter your irrigation system. For the Board of Water Supply, we don't use that. Ernie Lau: You have the opportunity to install a submeter, and I know you're going to follow up with the Department of Environmental Services about that. Thank you. Good point.
Speaker #9	Public Hearing 5/14/18	I am a member of the stakeholders group. I live in a townhouse that's behind Buzz's Steakhouse. We have two-inch water meters that feed our complex. I'm telling the president of my board that currently we pay \$9.26 per bill. Now, in 2019, that bill goes up to \$38.81. But I have seven meters. So my association will have to pay seven times that \$38. Now, to your point, what I did some years ago when I was the president of my board, I demanded to spend \$35,000 to have a sub meter on my association, because I don't want to pay the sewer charge for water for my sprinkler system that doesn't go into the sewer. The residence manager is tasked on a monthly basis to read the submeter and send that information to the Department of Environmental Services. They subtract the amount of water that we use for our lawn system from water from the Board of Water Supply, and that's how we compensate for that. I paid for that thing (submeter) in five years. It was worth it to have a submeter installed. The problem coming up now is that the association pays for everybody's water. I'm demanding another \$45,000 to submeter all the units, because I live in a townhome. I believe you pay for what you use, and it's fair. So as a member I expressed this point to all the stakeholders. That's what we're trying to do. I think this is equitable. We need to sustain our system, because I'll be long gone, but the water system remains. We have to take care of that. Thank you.	Barry Usagawa: Are you talking about diversified farmers trying to come in for a water meter to irrigate the crops? Part of setting the ag rates is anticipating one house on a farm. With the ag rate, you pay the same amount as a single family home for the first 6,000 gallons, then for water use above 6,000 gallons per month, you get the subsidized rate at \$1.89 per thousand gallons. That's going up to \$2 per 1,000. The rate is subsidized to promote diversified ag because we all benefit from fresh produce in our stores and in our farmers markets. To get that subsidized rate, they have to submit an annual application and provide GE tax information that they are in commercial agricultural business to get that rate. Country farmers and gentleman farmers are an approved land use on agricultural land. A lot of communities are concerned that they just buying that land for the view and they're growing some fruit trees to make like they're farmers. Are you not taking away prime ag from real farmers because you're building on house instead? That's a big land use question that the Department of Planning and Permitting has to grapple with too. But for BWS to give them a subsidized agricultural rate, they have to show that GE tax license, and they have to use more than a certain amount to get the lower water use rate – more than the proposed 6,000 gallons per month. If they don't have those two things, then they don't get the subsidized rate, and then it's just a country estate. They also need to apply every year to get that rate.
Speaker #10	Public Hearing 5/14/18	Does that mean that you don't determine what ag land is, or who is in ag? Is it done by someone else? gentleman farmers than real ag land. Who actually determines what's ag?	I'm talking more
Speaker #11	Public Hearing 5/14/18	The chart showed a proposed monthly charge of \$598 for customers with large meters. Is that a flat rate? If they exceed that in their use of gallons of water, do they pay extra? Normally who would pay \$598 as of July 2022? per month just because you have that meter? It's going to be a hell of a bill.	Ernie Lau: The customer charge is a fixed charge. It's tied to the size of the meter. Their water use is billed at the cost per 1,000 gallons. The customer with an eight inch meter is probably a non-residential customer or a large condominium complex. This charge is regardless of customer type, just based on meter size. Ernie Lau: There are two components to your bill. One is the fixed charge, which is what we're calling the customer charge. It's a flat rate per month based on your water meter size. Ernie Lau: Right. And then they pay the usage charge on top of that. When you take the whole bill and you look at this fixed customer charge per month in relation to the total bill amount, not counting the sewer part, it is still a smaller percentage of their total bill, because their water usage bill is so large. This customer would have a large meter because they had lots of water usage on their property.
Speaker #12	Public Hearing 5/14/18	I have a comment, then a question. The first comment is, I would suggest that at your future meetings that you have proposed, you encourage the homeowner and attendees to bring their water bill. Because as you were explaining this, I was trying to imagine what my bill looked like and all the components that went into it, how that relates to me as to how that's going to change. I would suggest that your information officer get that word out. The other comment that I wanted to make is, you're looking for conservation means. I don't know if this is a conservation measure – I know it would conserve my money – but I understand a little bit about putting in a submeter for agriculture or for my landscaping, such as this gentleman spoke about. Would it be appropriate for some kind of credit for people that are going to make that kind of a change? You're looking for ways for people to want conserve, and also people are going to see these kinds of changes in their costs. They're going to be looking for ways to offset that. For the Board of Water Supply to offer that as an alternative or something that they might want to consider and pursue as a means of saving money for the future like Cruz did with his condominium association. Many years ago, people watered their plants by hand. Right now, the vast majority of homes going in have sprinkler systems. That may be a reason why you're getting higher consumption. I don't know if that's part of your calculations that have gone into, but I'm thinking about that. The last thing I want to ask is what was the rationale, historically, for having implemented subsidies to residential homes in the first place?	Ernie Lau: I can't answer the question at this time. We can look into it. But you have a good suggestion about looking for different ways for water conservation, because it's cheaper to save water through conservation than to build new wells, put in new pipes and tanks in the system. We're bringing back the rebate program. We used to have a toilet rebate program. We're bringing back rebates right now for water efficient clothes washers. So if you're in the market right now for water efficient clothes washers, we're going to be offering a rebate of \$75 back from the purchase of a water efficient clothes washer. Barry Usagawa: We're only scratching the surface with rebates at this point. We have rebates for rain barrels coming out next month. Rebates for irrigation controllers will be available in the fall of this year. Using a submeter is a definite way to conserve water. I firmly believe that if you don't know how much water you're using, you don't know how to conserve water. You have to measure it. They have meters now for just the shower, or for the hose bib/garden hose, and you can reset it every time. If you're washing your car, or you're irrigating by hand, you know how much water you're using. In Kapolei, a developer was looking at building a combination of uses with commercial on the bottom and residential on top. They're talking about installing submeters in the residential so they pay for what they use. Instead of paying a non-residential for mixed use, you can segregate. It's the same thing with electricity too. The idea is, if you could submeter it, people have a greater awareness of how much they're using and move to try to save.
3x5 Cards #1	Public Hearing 5/14/18	3-cards submitted on Desalination: Desalination not discussed at meeting; Kalaeloa has an offshore terminal for tankers to pipe crude to shore; water intakes for desal will need oil fouling sensors for protection; can tankers purge bilges / waste at this terminal / anchorage point? How ill this affect the desal plant's intakes? Saudi Arabia uses close to shore surface intakes (500m to 1 km); protects sealife but subject to surface debris and wildlife fouling; subsurface intakes fouled by nets and sealife. What is done with plant byproducts, salt, minerals, etc from the desal process? Sea discharge and membrane back flushing raise salinity to lethal levels for sealife in a localized area.	Cards submitted after meeting - no verbal response provided
3x5 Cards #2	Public Hearing 5/14/18	3-cards submitted on rates: recommend single family and multi-residential should have the same rates for the first tiers. Rate changes seem reasonable / acceptable. I think the more they are the same for single-family and multi-unit for comparable tiers, the less complaints and issues will arise. Understanding the cost of delivery discussion it would still make more sense if the essential needs tier rates were standardized across the out years.	Cards submitted after meeting - no verbal response provided

Follow-Up Call	Public Hearing 5/14/18	<p>CC Division Head had follow up call with one meeting attendee: Best meeting ever attended with people from city or state...well prepared, well done...everyone articulated their points (in a way that could be understood)...superb presentation...sympathetic and empathetic....really interested in us."</p> <p>He said his biggest take away last night was that "the BWS is really interested in us." He made it clear that his feedback pertained to everyone he encountered last night, in and outside of the meeting room.</p> <p>When I asked what we could have done better or differently he said he was "very interested in everything" the BWS had to say and couldn't think of anything we could have done better last night. He encouraged us to keep on doing what we're doing and suggested that we consider more incentives as soon as possible to make people aware of their consumption and how to control it. He gave credit to the guy outside (Barry) for talking to him about rain bird sensors and explained that he's had to do his own research on conservation methods, but would like to see more of that come from BWS.</p> <p>He closed with, "Education is the best medicine for healing wounds."</p>	
Name (where available)	Organization OR Public Hearing Date	Summary of Testimony	Response to Public Comment

No public testimony given at hearing

Speaker #	Organization OR Public Hearing Date	Summary of Question	Response to Public Comment
Speaker #1	Public Hearing 5/15/18	Has there been any discussion about separating the BWS water and Department of Environmental Services (ENV) sewer bills?	Ernest Lau When most homeowners look at their total bill, the water component is usually much smaller than the sewage portion so we have asked about separating the bills. The decision to bring the bills together was made, over 30 years ago for efficiency purposes, such as saving on postage. The combined bills are getting larger, so, we actually changed from bi-monthly bill to monthly bills in 2013. The sewer portion of the bill was becoming really large. ENV has to follow an EPA consent decree that requires improvements to the sewer system and treatment plants on a certain schedule, so their rates have gone up quite significantly. Unfortunately, there is still concern about efficiency with regards to billing so we cannot separate the bills, yet. We are hopeful that someday we can separate the bills. We're trying to encourage people to save water. If the sewer side of the bill is still two or three times larger, it is more challenging to see significant change in your bill due to conservation efforts and we don't want the signal to be masked. Are you for separating the bill ma'am?
		I don't know anybody that calls it the water and sewer bill. Everybody calls it the water bill, which is very misleading. The relative increase really is not that big when you think about the water and sewer combined so I think that's going to be hard for the public to grasp.	Ernest Lau: It's a little confusing, and this point has proven true in our customer surveys and focus groups. The water portion of the bill may be a third or a quarter of the total bill, and we talk to customers who are upset about the total bill being so much. Thank you for bringing that up.
Speaker #2	Public Hearing 5/15/18	I heard you say that BWS is replacing six miles of water mains/pipes per year. Can you explain how? Are you replacing the pipes as the water mains break or are you putting new pipes in the ground? Or how are you going about it? Let me rephrase the question. Are you waiting for the water mains to break and then replacing the pipes? Or do you have a plan where you guys are replacing the pipes before they break?	Ernie Lau: We're replacing the old pipe with brand new pipe. Ernie Lau: The plan is to replace the pipes before they break and get ahead of them, eventually. I'd like to ask Barry Usagawa, the head of our Water Resources division to answer your question. He is the project manager for our Water Master Plan. That plan included an extensive evaluation of all 2100 miles of pipelines, and we scored every segment of pipe in the system to try and determine how we should replace them, and in what order. Barry Usagawa: As part of the Water Master Plan, we did a extensive evaluation of the water system, a comprehensive water system analysis, and a forensic analysis on why water mains break. Age of the pipe, type of soil, corrosion and pressure are the primary causes of main breaks. Our consultants at CDM Smith prioritized the pipes in segments. We then evaluated them by risk, which is the consequence of failure times the likelihood of failure. The likelihood of failure is based on the main break history. If the main is serving a high consequence customer like a hospital, we need to limit disruptions in service there because that could affect the public health. If we could replace 200 miles of the highest risk pipe at one time, which is impossible, but if we could do that, we could reduce the amount of main breaks by half. We have identified the highest priority pipes that need to be replaced; it just takes us time to actually do that. This is a big challenge but the Water Master Plan was the first step to determine and identify the pipes that need to be replaced first. That was followed by assessing the BWS rate structure to provide the funding. The next step is ensuring that our internal capacity to implement construction projects and ramp up to 21 miles of replacement per year. That's why we're giving ourselves 10 years to ramp up to replacing 21 miles per year. We have a main break model that tells us that if we do not replace these mains, main breaks will increase. If we do replace them, main breaks will decrease.
Speaker #3	Public Hearing 5/15/18	I have an issue with the billing. I conserve a lot of water. I have had a rain catchment system for over 10 years. I use 300 gallons of city water a month so, I'm charged at the lowest rate. The water meter is read only by 1000s of gallons, so on the fourth month I get charged because it has turned to 1000. But in actuality I've used only 300 gallons. Therefore, I'm charged extra every fourth month. So that's a problem I'd like to address.	Ernest Lau: You only use 300 gallons a month, that's really great. I'm going to ask Joe Cooper, our Water Works Controller to respond to that question. Joe Cooper: We charge for each 1000 gallons of water use. The first 1000 gallons is in the lower tier charged at \$4.42 per 1000 gallons. So if you use only 300 gallons a month, you'll just get charged the billing charge until your meter turns over and hits 1000 gallons. So if you use 300 gallons a month, you would have only been charged the base charge for three months. On the fourth month, the meter turns over and reads 1.2 thousand gallons and we charge you that \$4.42 for that 1000 gallons that you've used over the four months. Facilitator: So, that water bill, under that scenario, would be \$9.26 each of three months. Joe Cooper: And then the next month it would be \$14 dollars and a few cents.
		I don't think that's correct. I'm still using 300 gallons. The meter has 100-gallon and 10-gallon increments on the dial, but you're only reading the 1000 gallons increments.	Ernest Lau: Customer care representatives are here so could you spend a few minutes with them after the meeting? You could also talk with Joe Cooper to go through the details of your water bill and make sure we get that question answered more specifically.
		I know your answer is going to be that it's cumulative. On the fourth month it's the 1000. It's a fact. But way back when, the Board of Water Supply used to read the 100-gallon dial, and the 10-gallon dial. That was a more accurate representation.	Joe Cooper: I think what you're asking is, if we were reading per 100 gallons then we would bill you 44 cents for 100 gallons. And you would like that approach better.

		No, I'd like to have more accuracy because I'm not the only one that uses less water. There are others like me who are very strong in conservation, and I try very hard. So I'm charged an extra five or six dollars, is it? So that's \$12 a year. I think that's more accurate right? My actual usage is 300 gallons. And then I'm charged extra.	Ernest Lau: I'd be glad to follow up with you on this. Could you also let me know when it was that we moved from billing on 100-gallon basis, or reading on the 100-gallon or 10-gallon basis to reading on a 100-gallon basis?
Speaker #4	Public Hearing 5/15/18	<p>My statement is more on the side of being conservative of drinking water. Let me tell you my problem. Last June, the Board of Water Supply did something – I cannot find out what – but our water pressure increased. It blew all the ice trays and filters used to make ice in the refrigerator. I've been calling since the middle of last June to find out why they've been wasting water by opening a fire hydrant to lower the pressure at my house and others in the neighborhood. And every time we call to find out if something is being done, all we get is " If we close that fire hydrant, we're going to blow the pipes in your house."</p> <p>What did the Board of Water Supply do to increase the pressure? I also realize that the pressure at the top of my street is not as high as where I live, down at the bottom of the street. I would like an engineer to call me and tell me what pressure I should be getting before the regulator. I'm getting 150 pounds of pressure per square inch. That's with the fire hydrant open. What is it going to be when the fire hydrant closes?</p> <p>After my regulator, I am presently getting 110 pounds of pressure to my house. This is why my shower is leaking out of the house, my bathtub is leaking out of the house, everything's leaking. So I bought a new regulator which I'm going to install tomorrow, but I will not adjust that regulator until somebody from the Board of Water Supply tells me how much pressure the Board of Water Supply should be supplying me before the regulator. I know what I should adjust it to 75 pounds after the regulator if I don't want to keep blowing stuff up in my house.</p> <p>All night long my shut off valve, which I have replaced five times already, blasts maybe every hour for about five seconds and then shut off. Why is that? I've lived there four years already and I've never had this problem before. I can smell chlorine in my faucets from midnight to 2 o'clock in the morning. It is horrendous. You can smell it before you even taste it.</p>	<p>Ernie Lau: Thank you sir, for telling us about your situation. I actually have engineers here tonight who can help you with that. I also have the head of our water quality division here, and he can have a chemist actually go out and draw a water sample and actually measure the chlorine in your home. So it sounds like it's going to be multiple divisions looking into your problem sir. And I'm sure maybe your neighbors might be experiencing similar situations.</p> <p>My apologies again sir, for that situation. So please leave your name, phone number, and address with Barry Usagawa, from our Water Resources Division and we'll look specifically and we can calculate we call the static pressure at your location. So my apologies for the situation sir.</p> <p>(BWS team members met with speaker on the side during the meeting to assist him with his concern).</p>
Speaker #5	Public Hearing 5/15/18	I understand that you guys are separated from the city and you don't get any money from them to do any of the infrastructure work. Why is that?	<p>Ernie Lau: The way the State law is set up, Boards of Water Supply were created in 1929. This was by the territorial legislature. They wanted the Board to focus on the water supply for our community. In 1929, there were concerns about Honolulu running out of water because of uncontrolled well drilling in the community. People found out there was artesian water; they could just drill a well and the water flowed out of the ground. There was also a lot of politics at the time. So the territorial legislature felt, with water being so important to our community, it was best to make the Board of Water Supply semi-autonomous. BWS was part of city government, but on its own as a Water Board. We have seven members on the BWS Board that are not elected to office. They are able to do long-term planning, and raise water rates when necessary.</p> <p>Along with that governance model came the idea that the Board and the water system should be self-sufficient financially. BWS depends on its rates and charges, and does not get any money from the city or the state through tax revenues.</p> <p>So sir, good point. We want to try, over time, to just have smaller increments of increases each year. We want to keep on investing more heavily into the infrastructure. Pipe replacement, as one example, is going to be ramped up to 21 miles a year to sustain the system.</p> <p>The worst situation would come if we didn't increase water rates for a long time. We would then have to do a catch up. Infrastructure issues don't go away. And a lot of our infrastructure's underground, you cannot even see it. But the pipes are getting older and breaking down and we see that manifested as main breaks in our system.</p> <p>Good question. We have to try to reduce political influence by having our own Board and making sure that we can invest adequately in the water system. But it does create a burden on our water customers.</p> <p>One of the things we are looking for is other sources of revenue. On example is that we are looking at a public-private partnership to develop BWS's open parking lot on Beretania Street and provide us with additional revenue.</p> <p>Another thing that we did this past session was with the state government. We sought authorization by the state legislature to issue special purpose revenue bonds on our behalf to help improve our dams in Nuuanu. The state has access to cheaper money to borrow. We would be responsible to pay for the debt service. What we want to do in the future is go to the state legislature to request CIP funds every year.</p> <p>We are doing a lot to support farmers by giving them a very discounted water rate. Because there is not an island-wide irrigation system to support farmers, they have to take water from BWS to farm in some locations. Maybe they can give a few million each year for related CIP projects. Every dollar we can get from the state is less money we need from our ratepayers.</p>

Speaker #6	Public Hearing 5/15/18	Aloha. I wanted to know how you are preparing for the issues of climate change and how it will affect our island water supply?	<p>Ernie Lau: Good question. It's on everybody's mind, especially here in Hawaii. What we're currently doing is an assessment of the vulnerability of our water utility to the effects of climate change. We are assessing the impact from sea level rise, and also, changes to rainfall and changes in the intensity of storms on the island. The BWS and the Water Research Foundation, which is a national research organization in the water industry, are funding the research project that is currently underway. When we have those results we'd be glad to come back to the community and share that information.</p> <p>Some of the initial concerns are in the coastal areas with sea level rise. Experts have talked about a rise of 3.3 feet, and now they're talking about possibly rising more than six feet by the end of 2100. Our coastal pipelines that are already buried underground will start to be inundated in salt water on a permanent basis. We will have to replace these pipes more frequently because of corrosion of the metallic pipe. Challenges include: How do we fix water main breaks when they are constantly under the ocean water? How do we de-water the area to fix the water main breaks?</p> <p>Barry Usagawa: We are also concerned about the impacts droughts may have on our water supply as well as our coastal infrastructure.</p> <p>The study is about 3/4 of the way through. The University of Hawaii did some climate modeling for us, and made rainfall forecasts to the year 2100. UH researchers have found that, in their statistical down-scaling model, the leeward side of the island will get less rainfall by as much as 65 to 70 percent. The leeward side of the island, Waianae for example, is going to get a lot drier in that scenario. In the researchers' other model, they're saying that some places like windward and upper Honolulu will get wetter, and the leeward side wouldn't be as dry.</p> <p>What would we do if the most conservative model turns out to be the case? If rainfall decreases by that much, we expect the sustainable yields to drop. Each aquifer is filled with rainfall and recharge. A portion of that can be pumped out and still maintain the aquifer health, basically forever, as long as rainfall is consistent. If rainfall drops, then the yield will drop too. Sustainable yields in the aquifers could drop by as much as 34 percent. If that is the case, we will have to make some drastic adaptation measures to ensure that there's enough supply.</p> <p>The study is identifying what those adaptation measures are. They will certainly include advanced conservation, producing more recycled water, capturing more storm water. We will have a project to capture storm water in the Nuuanu Dam and recharge the aquifer. We'll have to advance more of our watershed management projects to ensure that the forests are much more healthier, to be a better sponge to capture that less rainfall.</p> <p>On the mainland, some communities are actually taking wastewater and double treating and disinfecting it. Then they put that water into the ground, and eventually pump it for drinking water. The technology is there. That is a bleak future but it is something that we need to fold into our plan. We'll continue to monitor what happens in the future to determine what atmospheric situations may come up and then we'll adjust.</p>
		<p>On the leeward side, rather than just monitoring, couldn't you repopulate trees and use recycled water for irrigation so the Waianae coast doesn't have to get to that point?</p> <p>A second question is: With the melting of the icebergs and ocean levels rising, will freshwater aquifers will also rise and/or will they become saltier at the bottom?</p>	<p>Barry Usagawa: To try to stay ahead of the impacts of climate change, we're doing more watershed projects. BWS is focusing on the Makaha and Waianae watersheds, because those two aquifers provide about 40 percent of Waianae's water. Recycled water produced near Waianae is a little too salty for irrigation of crops. With sea level rise, we expect more salt to get into the collection system. We'd have to desalinate that recycled water. We are investing in advanced conservation, watershed projects, and transporting more water in.</p> <p>To answer the second question: Fresh water sits on top of salt water because of the difference in density. If sea level rises three feet, the aquifer will rise three feet. It will not affect our wells.</p> <p>Sea level rise is a hard nut to crack. We're trying to identify the streets and areas that will be most impacted by sea level rise. Last year we had King Tides and we have pictures of the Ala Wai flowing into Ala Wai Boulevard, into the golf course and around Waikiki. This is called nuisance flooding. We're trying to identify what areas would be the highest priorities.</p> <p>We need to raise streets. The target for Hawaii is going to be to raise streets 3.2 feet. We have the new Office of Climate Change, Sustainability, and Resiliency and the Climate Change Commission. The State also has a Climate Change Commission. They're working on bills at the legislature to start to fold in the findings of the State Climate Change Plan. We are folding their findings into day to day planning and the CIP.</p> <p>We are going to focus our efforts on drainage. How do you drain these high priority areas at high tide? BWS is one of the city agencies that is trying to do more, engaging the University of Hawaii and the professional community, and collaborating with other agencies.</p>
Speaker #7	Public Hearing 5/15/18	I think it's really important to acknowledge that a little over 30 years ago there was no State Commission on Water Resource Management, and no State Water Code. Would you address the interface between county level Board or Water Supply here on Oahu and the other counties, with the State Commission on Water Resource Management, especially with respect to the fact that the Board of Water Supply is managing what it can manage. But there are many other straws in the cup, including private entities. Maybe you could address that interface, because there's such a huge need for everybody to be on the same page, whether it's chemical inputs or withdrawals of water and how those relate to each other.	<p>Ernie Lau: I served for a brief time, as a deputy of the State Water Commission. I also served as a water manager on the island of Kauai. In the state of Hawaii, we have some of the major elements we need. The Water Code provides the State overall authority. It also designates that water resources in the state of Hawaii, especially the freshwater resources, are not owned by private individuals. They are a public trust resource for the people of Hawaii.</p> <p>The Water Commission monitors the condition of the water resources, both the surface water and ground water across the state. When they find that the resource is being threatened by overuse, or planned overuse, they can take steps to actually take over and regulate the resources in that region. One of the areas that they designated as a groundwater management area was the whole island of Oahu.</p> <p>The Board of Water Supply is the biggest groundwater user on Oahu. We have to get a permit from the Water Commission to tell us how much we can pump each day on a sustainable basis on a long term from the different aquifers on this island.</p> <p>The Water Commission is active in different areas of the island. On Oahu they're the most active for groundwater. We look at it as an important partnership because we're both looking out for sustainability and health of the resource, and we don't want to overuse the resource.</p> <p>The Water Commission is responsible for water resources across the whole state of Hawaii. But they don't have the staffing and resources or research and data collection that they need to actually get a better understanding of the condition of the resources. So, I've advocated that, unless you're going to give them enough resources, they can't implement the code as it's written. It's a great code but the Water Commission is challenged by not having enough resources to carry out their mission.</p> <p>For our long-term health, these partnerships are going to be very important as we start to see the effects of climate change. We need to support the effort better, increase the collaboration and take away the barriers of siloed-thinking.</p> <p>We're focused on drinking water, but our Watershed Management Plans look at all water use including agricultural use, environmental needs, and native Hawaiian uses. We take a very broad, holistic approach and try to do grassroots planning with the community in these areas.</p> <p>Climate change is a multi agency, private and public sector issue. But right now, there's a lack of collaboration. We need to be breaking down the silos, and looking at the issue and challenges that face all of our community. We need to look at it broadly and see how we can work together for the good of our community, because we live on an island.</p>
		The rate changes that are being suggested are in so many ways a huge investment in an organization that's really holding the discussion to the level that it should be at. Yes, there should be far more collaboration but, without the Board of Water Supply and all of the work that it's doing, we wouldn't be addressing these. The rate changes will help to support safety, precautionary measures for a long ways down the road.	Ernie Lau: And you can see that for the first time, we're now looking at trying to focus more funding resources toward water conservation and to the care of our watersheds.

Name (where available)	Organization OR Public Hearing Date	Summary of Testimony	Response to Public Comment
Ted Kanemori	Public Hearing 5/15/18	<p>Hi, my name is Ted Kanemori, and I didn't intend to say anything formal when I got here. First of all, I want to commend the Board of Water Supply for all the clean, good, terrific drinking water that we've been having over the years. I know that it's sometimes a thankless job. I also want to thank you for the information. That's a lot of information that you gave tonight. And to me, some of it went in one ear and came out the other ear because I see it as a bill.</p> <p>And what I want to say is that, just listening to this I can understand there is a need to go ahead and fix whatever needs to be fixed. But in 2006, I was at city hall listening to the Board of Water Supply ask for increases in rates for the next five years, all under the auspicious of "oh we have to play catch up." That's the bottom line. And then after five years, Board of Water Supply came back and asked for another five years. And I remember Romeo Cachola saying "Oh, you mean the first five years is up already, so that's gone, and we'll go back to the old rates and then you're going to ask for another five year increase." And you said "No, no, no, no. We're going to keep the rates after the 5 years, and then we're going to increase it another five years." And that went on and on and on until today.</p> <p>I just want to give you my perspective as an end user. I've lived in the same place for 47 years. I've seen my water bill, or water/sewer bill, triple and almost quadruple. What you're doing is you're asking for another rate increase for another four or five years.</p> <p>This past Sunday, the newspaper said the base costs of water for the average single-family household customer is proposed to rise 14.3 percentage over four years, starting in 2019. Well, as a retiree on a fixed income, every increase in my monthly bill, no matter how small or how big is important to me. Just wanted to say that.</p> <p>Thank you.</p>	No response required with testimony
Nathan Kau	Public Hearing 5/15/18	<p>Nathan Kau: I work for Board of Water Supply. I'm a meter reader. All these guys are talking about "Oh, we have sewage bill." All these guys know, they come and tell us. I'm tired of listening to that. Why don't you do something about it? Cause all of your employees have to put up with that garbage. You guys don't answer the phone, you don't talk to the customers. But what I'm saying is: I don't know if these figures are right, they might be, they might not be. I don't trust who's running. Why? Because we've been lied to so many times. I'm not talking about all supervisors. I'm just talking about certain ones because they're the ones that lie to us up to our face.</p> <p>I've had customers tell me "I've called water supply and I want them to fix this leak" and they don't fix the leak. The customer actually went out and fixed it themselves, because it's coming in the line, coming onto their property and it's making mud of the dirt in front of their house. They had a little fruit stand and the mud was going all over the place. I turned it (the complaint) in four times in a row, and nothing was done. So if you telling me that we're hunky dory and all that garbage, it actually depends on the workers. And that's why I'm upset, that's why I'm here. Because they treat the workers like ****. Excuse the word, but that's the word.</p> <p>They come down, they give us – I'm a meter reader – they gave us five-year old cars. The cars start breaking down almost immediately. Why? Well it's not us. You get a five-year old car, it starts breaking down, five to seven years old. So we want good equipment too. We don't even have enough computers for every worker we have. And they're contract workers and they can threaten them any way they want, because if you're not a full-time worker under civil service, you have no protections. So if they tell you, you go out there and you drive slower than the speed limit and you get a ticket, you have to pay the ticket. So this is all fine and dandy but how does it affect us? We're the guys that make it work. And I don't hear you guys talking about us.</p> <p>Thank you.</p>	No response required with testimony
Name (where available)	Organization OR Public Hearing Date	Summary of Question	Response to Public Comment
Speaker #1	Public Hearing 5/24/18	<p>BWS went from billing every two months to once a month, and now you charge us twice the fees. I've been told by some of your staff that it's because the sewer part of the bill became too high. That doesn't change the fact that we're still going to have to pay the same amount of money for our sewer bill as well as the water bill. Are we being charged twice as much in fees, which we shouldn't pay? I don't have a problem with you raising some of the rates, but if you went back to billing every two months, we would pay less for the fees, and then you can raise the rates and people probably wouldn't be so upset with you guys.</p>	<p>Thank you sir for that question. You're right. We used to have a water bill every other month – it's what we call bi-monthly billing. The change to monthly billing was made in 2013, but the city council and the Department of Environmental Services requested this change years earlier. The sewer bill was getting larger they wanted us to look at billing monthly.</p> <p>Across the country, more frequent billing is actually one of the best practices to make payments easier for people. People remember to set money aside to pay that bill. I looked at my water bill last night. Water and sewer combined is about \$150 per month. If I had to wait every two months to pay, then I'd making sure I had \$300 for the bill every two months.</p> <p>It would be cheaper for us and easier to manage if we billed for water only on a bi-monthly basis. We process over two million bills a year. I'd love to return to bi-monthly, but we're going to have to separate sewer charges from the bills before that happens.</p>
		<p>Single-family homes are paying way more than non-residential, for example, hotels. Hotels are paying a small amount compared to what we're paying. They're probably using a lot more water than we are at home per unit. I know when I go on vacation somewhere I don't worry about the water; most people don't. Hotels should be charged the same rate as us single families. We should not have to subsidize them. You should be able to charge them the same rate based on their water usage.</p>	<p>The single family residential rate is tiered, so the more water we use, the more we pay per 1,000 gallons in the higher tiers. But for non-residential customers – that includes the hotels, hospitals, government buildings, and industrial customers – they're on a flat rate.</p> <p>When we looked at what customers pay compared to what it costs BWS to provide them service, we found that single-family homeowners were getting subsidized by other customer types. We found that non-residential customers are paying 120% of the cost it takes to provide service to them.</p> <p>When residential customers are at home, we're using water. During the day, children go to school and we go to our jobs. When we get back home, we start using water again. This is what we call "peak demands", and they are higher among the residential customers than the non-residential customers. Those non-residential customers' water use is steadier throughout the day. The system capacity to serve them is less expensive. Non-residential customers are subsidizing residential customers to the tune of over 120% -- 20% more than the cost to provide them water service. The BWS considered this carefully and concluded to keep the flat rate for the non-residential customers and try to bring their rate closer to what they're paying for right now. We are striving to reduce that to around 117% (rather than 120%), and non-residential will continue to subsidize other customer groups.</p> <p>We didn't feel we were quite ready for changing to a tiered rate structure for non-residential customers. Non-residential customers include hotels, restaurants, government buildings, shopping centers, hospitals, retail, and industrial customers. We are not going to set up different rate schedules for each of the different non-residential customers at this time.</p> <p>Non-residential customers are going pay a higher cost for the monthly customer charge that varies with the size of meter. Hotels typically have bigger meters.</p>
		<p>According to what you're saying, if they're paying \$4.96 and I'm paying \$18, how would they subsidize me? I don't understand.</p>	<p>Ernie Lau: Yes, but when we look at the actual dollars collected for the water that they use, the revenue from this customer class is actually more than it would cost to provide them the service.</p>

Speaker #2	Public Hearing 5/24/18	Is it this board that's appointed by the mayor that's going to ultimately make the determination as to whether this proposal goes forward? There's no oversight on that. Is that right?	Ernie Lau: Board members are accountable to carry out the mission of the Board of Water Supply. They are appointed by the mayor, and they have to go through a vetting process for approval by the City Council. They are not elected.
		You mentioned that one of the goals of this plan was to have gradual increases. When I did some rough figuring of the numbers from 2019 to 2022, the monthly customer charge based on meter size went up some 30%. And if you used 6,000 gallons, it went up 20%. If I were to tell you that your mortgage or an airplane ticket would go up 30% over the next four years, that would be more than gradual. The point is that it's small numbers but in percentage terms, it's still a very significant increase.	Ernie Lau: Yes, I see what you said. But when we think about it, it's three dollars more over the five-year period. We looked at the combination of both the water use rates and monthly customer charge. In the example of using 6,000 gallons a month, the total bill is around \$35.78 a month. It would go up over the five-year period. This includes the fixed charge and the usage charge, because you have to look at both together because that ends up being the total bill, total water bill about five percent a year. But the total bill is what our customers have to pay. Thank you sir.
		You want to raise your water rates. But what about the sewer? Now you already mentioned it and we all know that our sewer part of the bill is two to three times higher than our water. Are the sewer rates going to go up at the same time?	Ernie Lau: The sewer rates are the responsibility of the Department of Environmental Services. I don't speak for them because I have no control over the sewer bill. Yes, they're probably going to increase their rates. There's an EPA consent decree that mandates they have to make improvements under a certain timeline. The improvements are quite extensive, including secondary treatment at our big treatment plants. They have to go to secondary treatment and they're also making massive improvements to the sewer collection system. I am sorry, I can't really answer your question tonight. We'd be glad to check with the Environmental Services.
		They should be here. Their charges are part of the bill.	Ernie Lau: The combined bill is done as a service to the city for efficiency, and to save rate-payers money.
		BWS's customer charge could increase as much as 30% on the water bill over the four years. If they're (ENV) going to follow what BWS is doing, then that could be double or triple what you guys are raising your rates on. That's why they should be here to at least answer that question as well.	Ernie Lau: Thank you sir. Good point. Well, the next time we do this, maybe we'll invite them. When we look at rate increases, we want to do it carefully because we know everybody's struggling. That's why the essential needs tier was developed – to try to help especially those that earn really fixed incomes. 10% of our customers use 2,000 gallons or less. Ernie Lau: So sir, since you use 2000 gallons or less, you're going to see probably the lowest increases for the single-family residential customers. The other thing that essential needs tier does is give positive motivation to encourage people to try to use less water.. That essential needs tier is being charged at below-cost rates per 1,000 gallons.
Speaker #3	Public Hearing 5/24/18	How are you going to decide which water mains to repair first?	Barry Usagawa: For part of the water master plan, we did a comprehensive look at the evaluation of the whole water system including pumps, reservoirs, and treatment. The biggest asset we have is our pipelines. So we looked at all the pipelines and evaluated them through a condition assessment. We evaluated each pipe by a concept called "risk". "Risk" is the consequence of failure times the likelihood of failure. Likelihood is based on the historical data of the number of main breaks. We have a pretty good database on what pipes broke and the cause. The primary causes are corrosion, ground settlement, and internal pressure. Our design life for pipelines is about 100 years, but some of these don't last that long for various reasons. The consequence reflects who we are serving. If we're serving a hospital, those pipes cannot be breaking very often because then you disrupt hospital services and surgeries and the like. Also of high consequence are the economic centers of Waikiki, the transportation centers of the airport and the harbors. Another is Waianae, because there is just one pipeline going in. If we have a main break there, it shuts the water off for a whole day for most of the coast. Then we identify what pipes that are the highest risk. So we know which pipes we need to replace. An evaluation has concluded that, if we could replace 200 miles of the highest risk pipelines throughout the island right now, we could reduce our main breaks by half. But it takes years to actually replace them. We're replacing pipes at a rate of six miles per year, and we want to ramp that up to 21 miles per year. We're giving ourselves 10 years to achieve that. The water master plan identifies what we need to do. The rates provide us the funding needed to do that. Then there is internal capacity to be able put those projects out. Those three pillars all come together to determine how fast and which ones that we replace. Our goal is to reduce main breaks. If we can replace those highest priority highest risk mains we feel that over time we will get those main breaks down.
Speaker #4	Public Hearing 5/24/18	I have a question about the pesticides that are down the aquifer. What's the life expectancy of them and how often do we get the report that tells the concentration of those in our water?	Ernie Lau: Our mission is to provide safe, dependable and affordable water to our community now and into the future. The first word is safe. There are many places around the world where you can't drink the water out of the faucet. But here, "safe" is our number one component of our mission. Erwin Kawata: As far as the life expectancy goes, we've been treating since the 1990s. They were first discovered in the 1980s. The concentrations haven't decreased at all, so we expect it to continue probably for the next several years. In terms of the monitoring, we do it monthly. Initially we did weekly testing, and collected enough data to understand how the treatment facility is working. Now we're at a point that we test monthly and the data is available to whoever would like a copy of the results. Every year we distribute our water quality report, and it include the test results. But if you'd like to have data from individual months, you can always call the BWS water quality division and we'll be happy to give you a copy. Ernie Lau: Customers that receive a water bill will get this water quality report. If you live in a condominium you may not get a water bill so you can go on to our website, boardofwatersupply.com. Look for water quality reports, and if you enter your address it'll give you the copy of the water quality report that serves your area. That includes what water sources serve your community and what has been found in the water in the past year. Thank you.
Speaker #5	Public Hearing 5/24/18	Is there any plan to try to coordinate with other departments, like Department of Transportation. Is there any plan to try, especially on the main roads when you know far in advance that you are going to replace a water pipe, to talk to the other departments so you only repave it once.	Ernie Lau: That's a great question. It's been an ongoing challenge. We do coordinate. The roads are paved on a different time cycle from water pipeline work. Usually roads last about 10 years before they have to redo the paving. Repaving projects happen pretty quickly. When you replace a water line, it's underground. So we have to dig a trench, lay the pipe, and hook up all the meters. Those projects can take three years to get done, because it's just a different level of effort. Sometimes road resurfacing involves vibrate to compact the asphalt to reach a certain standard or specification. That vibratory roller shakes the ground so hard, and if our pipes are old underneath there, we're finding that it can start to leak. Then we have to dig up the road unfortunately. I'm really sorry about that. But we hire a paving contractor, do a temporary for the short term, and within a month come back with a permanent repair that hopefully is as good as the road was after the city did the job. Jason Takaki: What you bring up is a valid concern. We do meet monthly with the city departments as well as the other utilities – gas company, Hawaiian Electric, Verizon – to try and coordinate our projects. But many times our schedule of replacing high priority pipes doesn't fit with the plans for other utilities. We do try our best to coordinate whenever a project is planned for repaving. The Department of Transportation does come to us and ask us if we have plans to do a water main replacement in that area, particularly if they're doing concrete pavement which is very difficult for us to work under if we have a main break. It's very difficult but we're trying our best.

Speaker #6	Public Hearing 5/24/18	I really feel for the residents because we're going to get hit with both a sewage and a water increase and the timing is really bad. Have you considered a charter amendment to allow the city to float bonds to partially pay for this modernization project? Probably not for the whole thing, but that way we can for both the sewer and the water projects at the same time. I know it would require a charter amendment for you to accept those bond funds, but that would provide some relief to the residents as far as not having to raise their rates at the same time. This is going to be a significant increase in their bill. As far as you know does ENV have the ability to float revenue bonds as well?	Ernie Lau: That's a good question. What we're trying to do is get to a place where the rates for water goes up in small increments so there are no large increases at one time. Over the five-year period, we're projecting that we will collect an additional \$60 million. That's not enough to pay for all the operations and also this capital program. We're going to float revenue bonds. We have that ability, with the support of the Director of Budget and Finance, the city council. In the last few decades we've been issuing revenue bonds and we have the obligation for repayment of the debt of the bond. The State Revolving Loan fund is very cost effective. We leverage as much as we can. Effective interest rates are around one to one and a half percent. Ernie Lau: They do also.
3x5 Cards #1	Public Hearing 5/24/18	Great presentation	Card submitted after meeting - no verbal response provided

Name (where available)	Organization OR Public Hearing Date	Summary of Testimony	Response to Public Comment
Bill Rudich	Public Hearing 5/24/18	My name is Bill Rudich, I live here in Mililani Mauka. I don't disagree that you definitely need to do some work on your systems. Leaks and the water main breaks are unacceptable in terms of loss of water and things that are going on. That being said my concern is that you're asking for a tremendous amount of money to be generated with the rate increase. The question is: Are you spending all the money that you have on what's basically part of your regular charter? Specifically, my concern is you're spending over a million dollars on consultants, litigation, and things like that related to Red Hill. That seems to be under the purview of the Department of Health, the EPA, or the water supply, which is not a regulatory agency. I think that before this type of rate increase should be approved, there should be a full accounting publicly of how much you have spent, how much you plan to spend in this area and compare that to what you're saying are your shortfalls.	No response required with testimony
Jim Dilbertini	Public Hearing 5/24/18	My name is Jim Dilbertini and I'm going to follow on Bill's comment here. I'm a recovering lawyer. I took the liberty to pull the statute, and although Mr. Lau talks about how providing safe drinking water is within his charter, I don't find that at all in the statute. BWS is to provide the water and to collect and receive, expand and account for all sums of money derived from the operation there of, and other monies provided. The director of the Department of Health is the one who is responsible for enforcing the drinking water standards. And I, like Mr. Rudich, object to the fact that I think there has been an abuse of authority to spend \$1.1 million, \$100,000 on a litigation firm in San Francisco to get involved in the Red Hill matter when that is already being examined by both the U.S. Environmental Protection Agency and the State Department of Health. So, like Mr. Rudich I would ask for an accounting of those sums and then maybe a revision as to the amount that's needed to move forward. Thank you.	No response required with testimony

Speaker #	Organization OR Public Hearing Date	Summary of Question / Comment	Response to Question / Comment
Speaker #1	Hawaii Chamber of Commerce	Are there types of pipes that have a longer of life?	
Speaker #2	Hawaii Chamber of Commerce	With rate increases what kind of revenue do you expect to generate?	
Speaker #3	Hawaii Chamber of Commerce	Lot of cost in CIP and infrastructure.	
Speaker #4	Hawaii Chamber of Commerce	We are 30-40K housing units behind demand which will grow. Do we have enough water?	
Speaker #5	Hawaii Chamber of Commerce	Is BWS looking at desalinization?	
Speaker #6	Hawaii Chamber of Commerce	How will climate change impact BWS?	
Speaker #7	Hawaii Chamber of Commerce	What about recycled water?	
Speaker #8	Hawaii Chamber of Commerce	Is water conservation through low flow fixtures still viable? What other options are out there?	
Speaker #9	Hawaii Chamber of Commerce	How do our water rates compare to the mainland?	
Speaker #10	Hawaii Chamber of Commerce	What do we do in response to the main break?	
Speaker #9	Hawaii Chamber of Commerce	The City is paving the roads and they are very nice, now there are cuts in the pavement.	

Neighborhood Board	Summary of Presentation from Neighborhood Board Minutes	Response to Question / Comment
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Waianae Coast NB #24

Water Rates Increase – BWS: BWS Program Administrator of Water Resources Barry Usagawa gave a presentation and reported the following:

- **Water System:** Usagawa discussed the interconnected water system on Oahu, including its 13 tunnels, nine (9) shafts, 194 ground water wells, 13 water treatment plants, and 171 potable water reservoirs. This system is connected through 2100 miles of pipeline that carry 145 million gallons of water per day to almost 1 (one) million people on Oahu.
- **Water Master Plan:** Usagawa commented that The Water Master Plan was adopted in 2016, defining long term infrastructure goals. He commented that BWS is using the master plan as a guide to improve the resiliency of the water system through \$511 million in improvement projects, reduction of the number of main breaks of the island, and expansion of the water conservation program and the watershed program, requiring \$3.4 million per year per program.
- **Water Main Breaks:** The BWS will reduce main breaks by increasing the pipe replacement miles per year, prioritizing the highest risk lines in the process. Usagawa discussed the history of main breaks, concluding that main breaks have jumped within the last two (2) years from less than 300 per year to over 340 per year. He commented that BWS plans to increase the rate of pipe replacement from six (6) miles of pipeline a year, to 21 miles of pipeline a year over the course of 10 years. He identified BWS's goal to reduce main breaks to below 300 a year.
- **Water System Improvement Projects:** BWS has identified projects in the Council District (CD) 1 area they plan to pursue over the next four (4) years. Usagawa discussed the following water system improvement projects: improvements to the water system to areas of Makakilo; a water line on McArthur Street; general Waianae water system improvements in the area of Pillilau Park, through Plantation road, to Waianae Valley Road. Usagawa summarized that there are a total of 45 projects, \$300 million, 16.2 miles of pipe in CD1 over the next 10 years.
- **Water Rates:** Usagawa discussed the proposed water rate changes intended to fund these projects. The following changes were defined as follows:
 - **Essential Needs Tier:** Those customers using less than 2000 gallons of water a month will see reduced rates. Usagawa commented that this allows customers to control their water bill through conservation.
 - **Water Meter Size Rates:** BWS customers base rates will change based on the water meter size to reflect the high cost of replacing larger meters.
 - **Water Rate Changes:** The average BWS residential customer will see a rate change from \$9.22 to \$12.09 a month over five (5) years. This is subject to change based on meter size.
- **Residential Rate Tiers:** Usagawa defined the current three (3) tiers for residential customers: residents using up to 13,000 gallons of water per month pay \$4.42 per month; residents using up to 30,000 gallons of water per month pay \$5.33; residents using above 30,000 gallons of water per month pay \$7.94. Usagawa outlined the change in the tiers as follows:
 - **0 – 2000 Gallons per Month:** The base rate for customers using less than 2000 gallons of water per month will rise from \$3.79 to \$4.46 per month over the next five (5) years.
 - **2000 – 6000 Gallons per Month:** The base rate for customers using up to 6000 gallons of water per month will rise from \$4.46 to \$5.25 per month over the next five (5) years.
 - **6000 – 30,000 Gallons per Month:** The base rate for customers using up to 2000 gallons of water per month will rise from \$5.06 to \$5.85 per month over the next five (5) years.
 - **Over 30,000 Gallons per Month:** The base rate for customers using more than 30,000 gallons of water per month will rise from \$8.00 to \$9.45 per month over the next five (5) years.
- **Water Bill Impacts:** Usagawa defined the following impact on residents from the water rate changes:
 - **Single Family Residential:** Residents of a single family residential using 2000 gallons of water or less will expect to pay \$18.10 to \$21.10 over five (5) years. The average water user of 9000 gallons per month will expect to pay \$51.00 to \$59.00 per month over five (5) years. A user using WAIANAE COAST NEIGHBORHOOD BOARD NO. 24 TUESDAY, MAY 1, 2018 DRAFT REGULAR MEETING MINUTES PAGE 7 OF 10 35,000 gallons of water per month will expect to pay \$197.00 to \$228.00 per month over five (5) years. Usagawa explained that the pay rates are progressive, whereby the first 2000 gallons of used water are paid at the first tier rates, with the following usage up to 6000 gallons, 30,000 gallons, and above 30,000 gallons paid at their respective tier rates.
 - **Multi-Family Residential:** Usagawa defined the differences between the single family residential units and the multi-family residential unit water rates. While the below 2000 gallons user rates will remain the same, the second tier will be up to 4000 gallons of use per month. Usagawa explained that this is justified through the variance in water consumption and reduced levels of irrigation for multi-family residential units. The third tier goes up 10,000 gallons of use per month, with the fourth tier paying the highest for all consumption exceeding 10,000 gallons of water per month.
 - **Non-Residential:** Usagawa commented that commercial, or non-residential, customers will pay a flat rate from \$4.26 to \$5.27 per month. Usagawa explained that while residential units are fairly uniform in their water consumption, commercial units vary greatly in their water consumption needs. He concluded that due to the wide variety of commercial developments, a tier structure would be too difficult to develop. He concluded that the conservation program focused on residential customers.
 - **Subsidies:** The BWS decided to maintain subsidies for local agriculture, separated in three (3) tiers.

- Public Hearings: Usagawa promoted the Monday, May 14, 2018 public hearing on water rates at Kapolei Hale at 6:30 p.m. BWS will hold public hearing in Kaneohe on Tuesday, May 15, 2018 and Mililani on Thursday, May 24, 2018. Usagawa encouraged residents to attend hearings nearest them and/or submit comments to the BWS, accepted until Saturday, June 30, 2018. BWS plans to make a decision on the rate structure in July 2018.

Questions, comments, and concerns followed:

Non-potable Recycled Water/ Golf Courses: Smith commented that through the new rate structure, golf courses will pay 57 cents per month through their use of non-potable recycled water. Smith asked and Usagawa commented that they currently pay that rate, and their rates will increase at the same percentage as other customers over five (5) years. He clarified that BWS plans to promote recycled water for conservation purposes. He added that the cost to serve the golf courses can be met by that rate structure. He concluded that the BWS did not want to hike rates for any users. Smith asked and Usagawa responded that only serve potable water to three (3) golf courses, adding that many golf courses have their own wells. He commented that nine (9) golf courses in Ewa use recycled water.

Koike asked and Usagawa responded that Makaha golf courses use water from their wells, as well as through overtunnels under BWS. Koike asked and Usagawa responded that the cost to serve Makaha golf course is similar to the range of recycled water rates, as they use their wells first before they use water from BWS.

Chair Poe asked and Usagawa clarified that the golf courses utilizing potable currently pay the \$4.42 rate.

Koike expressed his concerns with golf courses paying less per gallon than agriculture, despite the agricultures greater benefit for residents. Usagawa responded that the variance in cost relates to the cost to serve recycled water, potable water, and drinking water. Koike asked and Usagawa responded that farmers are allowed to drill their own wells, adding that Waianae geology makes it difficult to create usable wells for agriculture.

Kuliuouu-Kalani Iki NB #2

Board of Water Supply (BWS) – Rian Adachi, Jane Pascual, and Robert Morita, circulated a handout, provided a presentation, and reported the following:

- Main Breaks – No main break report was available for April 2018, the report will be provided at a future Board meeting.
- Water Rate Presentation – The BWS has proposed necessary adjustments to water rates to continue operations to provide water for Oahu. The following was highlighted:
 - Water Source – All of Oahu’s drinking water is derived from underground, no surface water is used.
 - Water Master Plan – A Water Master Plan was completed in 2016 to examine the BWS’ capacity to provide fresh water to Oahu throughout the future. Over the next 30 years, the BWS will invest in over 800 infrastructure projects across Oahu costing over 5.3 billion dollars. Over the next 10 years, the BWS will invest over 511 million dollars to address reliability and resiliency in the water system, 876 million dollars to address main breaks, 3.4 million dollars per year for conservation, and 3.4 million dollars per year for watershed protection.
 - Essential Needs Tier – The BWS has proposed a new essential needs water tier for roughly 10 percent of customers who utilize less than 2,000 gallons of water per month.
 - Rate Changes – Changes to water rates and bills begin in July 2019, assuming the proposed changes are adopted. Bills for the essential needs tier are expected to initially drop slightly, then gradually rise each year. Bills for all other tiers are expected to gradually rise each year.
 - Subsidies – Current subsidies for local agriculture and recycled water are expected to be maintained.
 - Public Hearings – Public hearings will be held throughout Oahu to discuss proposed water rate changes.
 - Testimony – Testimony regarding proposed water rate changes can be submitted to the BWS at contactus@hbws.org.

Kahaluu NB #29

Board of Water Supply (BWS) Presentation on Proposed Water Rate Changes – Barry Usagawa and Dymian Racoma, BWS, circulated handouts, conducted a presentation, and reported the following:

- Public Comment Period – The proposed rate structure’s public comment period is ongoing until June 2018.
- Reduce Main Breaks – A Water Master Plan was completed in 2016 to examine the BWS’ capacity to provide fresh water to Oahu. Over the next 30 years, the BWS will invest in over 800 infrastructure projects across Oahu costing over 5.3 billion dollars. Over the next 10 years, the BWS will invest over 511 million dollars to address reliability and resiliency in the water system, 876 million dollars to address main breaks, 3.4 million dollars per year for conservation, and 3.4 million dollars per year for water shed protection.
- Council District 2 – The BWS has 49 projects, 266 million dollars, and 41 miles of pipe replacement planned for the City Council District 2 area.
- Essential Needs Tier – The BWS has proposed a new essential needs water tier for roughly 10 percent of customers who utilize less than 2,000 gallons of water per month to promote water conservation.
- Rate Changes – Changes to water rates and bills will begin in July 2019, assuming the proposed changes are adopted. Bills for the essential needs tier are expected to initially drop slightly, then gradually rise each

year. Bills for all other tiers are expected to gradually rise each year. Sewage bills are not under the BWS' jurisdiction and will not be included in the water rate changes.

- Subsidies – Current subsidies for local agriculture and recycled water are expected to be maintained.
- Public Hearings – Public hearings will be held throughout Oahu to discuss proposed water rate changes. Hearings are scheduled for Monday, May 14, 2018 at Kapolei Hale, Tuesday, May 15, 2018 at Benjamin Parker Elementary School, and Thursday, May 24, 2018 in Mililani.
- Testimony – Testimony can be submitted by June 30, 2018 to the BWS at contactus@hbws.org.

Diamond Head-Kapahulu-St. Louis
Hts NB#5

BWS Water Rates Presentation: Joe Cooper of BWS gave a presentation and reported the following:

- Cooper expressed the importance of maintaining the water infrastructure. He commented that the Water Master Plan was a study undertaken to assess the needs of the water system over the next 30 years. The project took close to four (4) years to complete, with a supplemental infrastructure and finance plan developed in tandem. The BWS planned over 800 projects over the next 30 years at an estimated five (5) billion dollars.
- Main Breaks: Cooper commented that one (1) of the goals of the Water Master Plan is to reduce main breaks. The water infrastructure has experienced 250 to 350 main breaks every year over the last five (5) to 10 years. He commented that at the current replacement rate of five (5) to seven (7) miles of pipeline a year, the BWS expects up to 500 main breaks a year in the future. He commented that the BWS plans to increase the rate of pipeline replacement to 21 miles of pipeline a year to reduce the number of main breaks to sufficient levels.
- Rates: Cooper commented that the BWS sought to be fair and equitable when planning the rate changes to encourage conservation as well as provide an "essential needs tier" for residential units. The essential needs tier will be a special discounted rate for residents for the first 2000 gallons of water used per month to encourage conservation.
- Tiered Structure: Cooper outlined the tier structure. Currently, the base charge is about \$9.26 per month for all residents. He commented that the base charge will soon be based on meter size, clarifying that most residents have a 3/4 inch meter, affording them the smallest base charge. This rate will start at \$9.26 to \$12.00 over the next five (5) years. Customers with larger meters will pay a large rate proportionate to their bill.
- Single Family Residential: The proposed tiers for single family residential customers are 1) less than 2,000 gallons of water 2) up to 6,000 gallons of water 3) up to 30,000 gallons of water, and 4) over 30,000 gallons of water.

Questions, comments, and concerns followed:

1. Tiers: Matson asked and Cooper clarified the residential tier structure changes. The current tiers are as follows: 0 to 13,000 gallons - \$4.42; 13,000 to 30,000 gallons - \$5.33; over 30,000 - \$7.94. The proposed changes create an essential needs tier up to 2,000 gallons.
2. Condominium/ Residential: Linda Wong asked and Cooper clarified that condominiums will be charged under the multi-family residential rates.

Mililani-Waipio NB#25

Proposed Changes to Board of Water Supply Water Rates: Barry Usagawa, Program Administrator of Water Resources with the BWS, gave a presentation and reported the following:

- Background: Usagawa reported that the BWS has 2100 miles of pipeline throughout the island. He reported that the BWS has been working on the Water Master Plan for three (3) years. He commented that over the next the 30 years, the BWS will be investing in over 800 infrastructure projects for a total cost of 500 billion dollars. Over the next 10 years, they will be spending 500 million dollars on improving the reliability and resiliency of the water system. He added that the largest cost is in trying to reduce the number of main breaks. The Water Master Plan also intends to increase and incentivize water conservation and watershed protection.
- Main Breaks: The BWS experienced over 346 main breaks in 2017, while the average number of main breaks over the last 10 years has been under 200 a year. He added that the trend is continuing towards the end of the fiscal year. He commented that the BWS replaces only 6 miles of pipeline a year, which will lead to a rise of main breaks every year. He reported that the BWS has set the goal of manually replacing 21 miles of pipeline a year over the course of 10 years. He added that main breaks ought to go down below 300 a year.
- Water Rates: The BWS created an essential needs tier for the first 2000 gallons of used water per month, adding that this applies to all residential customers. He commented that the tiers have been adjusted to motivate water conservation, as the water tiers are structured for higher use customers to pay more. The BWS created a monthly customer charge based on meter size. He commented that most residential customers lie within a 5/8 inch to 3/4 inch meter size. The monthly fee for the average residents will rise to \$12.00 a month by 2022. 4 inch to 6 inch meters will see their rates rise as well. Usagawa reported that the rate for Single Family Residential homes for the first 2000 gallons will start at \$3.79 in 2018 and will rise to \$4.46 by 2022. He added the rates for the use of 2001 gallons to 6000 gallons, 6001 gallons to 30,000, and above 30,000 gallons of used water will be in the range of eight (8) to nine (9) dollars per thousand gallons. He reported that 50% of residential customers use 6000 gallons or less of water per month. Usagawa concluded that owners of single family residential homes that use less than 2000 gallons a month will see their bill rise from \$18.00 per month to \$21.00 per month over the next five (5) years. The average water MILILANI/WAIPIO/MELEMANU NEIGHBORHOOD BOARD NO. 25 WEDNESDAY, MAY 23, 2018
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Oahu's Neighborhood Board system – Established 1973

user (around 9000 gallons a month) will see their bill rise from \$49.00 per month to \$59.00 per month by 2022. A higher water user will pay \$228.00 by 2022.

- Multi-Unit Residential: Usagawa outlined the tiers for multi-unit residential: 0 – 9000 gallons, 9000 – 22,000 gallons, and above 22,000 gallons. He commented that the multi-unit residential rates are lower than the single unit residential rates because single unit residential tends to use more water, and put more of an impact on the system.

- Non-Residential: Usagawa reported that non-residential customers have a flat rate due to the inconsistencies of water use between customers. The flat rate will rise from \$4.96 to \$5.47 by 2022.

- Agricultural Subsidies: Usagawa reported that the BWS plans to continue subsidies for agriculture.

- Other Subsidies: Usagawa reported that they plan to continue subsidizing recyclable and non-potable water, as they promote use of lower-quality water for irrigation to save high-quality water.

Questions, comments, and concerns followed:

1. Desalination Plants: Arellano asked and Usagawa responded that the BWS is moving forward with desalination plants.

2. Non-Residential Rates: Aki asked and Usagawa responded that the non-residential customers include the visitor industry, hotels, shopping centers, etc. Aki asked and Usagawa responded that non-residential rates are uniform across the board due to the differences in water use. Aki commented that residential customers could be paying significantly more money for water use than the hotel industry. Usagawa agreed, commenting that residential customers use over 50% of the water and put a higher demand on the system.

3. Climate Change: Aki asked and Usagawa responded that in anticipation of lower rainfall due to climate change, the BWS will need to create an adaptation strategy through water conservation and watershed protection. He added that in regards to sea-level rise, BWS infrastructure is vulnerable particularly around bridges. The BWS has identified 21 bridges which will be directly undermined due to sea-level rise. He commented that main breaks would also be affected by sea-level rise, and storm water pumps may be necessary in the future. He commented that they are exploring areas that are the highest priority for sea level rise risk, and assessing how to raise the streets/infrastructure to avoid damage.

4. Natural Disaster Response: Freed asked if there are plans to provide water to the population in the case of a particular damaging natural disaster. Usagawa responded that there are State and City emergency response plans that the BWS is a part of. He commented that there are seven (7) mobile generators with four (4) permanent generators planned to ensure pumps can function.

5. Pipe Replacement: Svrčina asked what currently keeps BWS from replacing 21 miles of pipe per year. Usagawa responded that the BWS first needs extensive planning of what pipes ought to be replaced first. He added that the Water Master Plan did an extensive evaluation of the water system, followed by additional assessments of pipe risks. He added that funding is needed to replace that mileage of pipe per year. He reported that they need to improve their capabilities of implementing those projects. Svrčina asked and Usagawa responded that the BWS will be hiring more people, including engineers. He added that construction costs are rising due to the Rail and Transit-Oriented-Development (TOD).

6. Conservation Program: Usagawa reported that BWS started a rebate program for conservation measures, including rebates for rain barrels and specific water efficient clothes washers. Vice Chair Lee urged the community to conserve water not just for conservation, but for emergency preparedness purposes as well.

Kahuluu NB #29

Board of Water Supply (BWS) Presentation on Proposed Water Rate Changes – Barry Usagawa and Dymian Racoma, BWS, circulated handouts, conducted a presentation, and reported the following:

- Public Comment Period – The proposed rate structure's public comment period is ongoing until June 2018.

- Reduce Main Breaks – A Water Master Plan was completed in 2016 to examine the BWS' capacity to provide fresh water to Oahu. Over the next 30 years, the BWS will invest in over 800 infrastructure projects across Oahu costing over 5.3 billion dollars. Over the next 10 years, the BWS will invest over 511 million dollars to address reliability and resiliency in the water system, 876 million dollars to address main breaks, 3.4 million dollars per year for conservation, and 3.4 million dollars per year for water shed protection.

- Council District 2 – The BWS has 49 projects, 266 million dollars, and 41 miles of pipe replacement planned for the City Council District 2 area.

- Essential Needs Tier – The BWS has proposed a new essential needs water tier for roughly 10 percent of customers who utilize less than 2,000 gallons of water per month to promote water conservation.

- Rate Changes – Changes to water rates and bills will begin in July 2019, assuming the proposed changes are adopted. Bills for the essential needs tier are expected to initially drop slightly, then gradually rise each year. Bills for all other tiers are expected to gradually rise each year. Sewage bills are not under the BWS' jurisdiction and will not be included in the water rate changes.

- Subsidies – Current subsidies for local agriculture and recycled water are expected to be maintained.

- Public Hearings – Public hearings will be held throughout Oahu to discuss proposed water rate changes. Hearings are scheduled for Monday, May 14, 2018 at Kapolei Hale, Tuesday, May 15, 2018 at Benjamin Parker Elementary School, and Thursday, May 24, 2018 in Mililani.

- Testimony – Testimony can be submitted by June 30, 2018 to the BWS at contactus@hbws.org.

Name (where available)	Method of Submittal	Summary of Question / Comment	Response to Question / Comment
Bert Charlton	City DART 3/2/18	Caller upset that the water rates are going up again and is asking how over the last 16 years he has seen his bill go up over 500%. He is asking how the city and water supply can think people can afford these increases and still live. Asking how the Mayor can allow this too.	Response from letter sent to Mr. Charlton: We researched your account for a five-year period 2013-2018 and found that your water rates have increased about 30% during this time frame. However, your water usage did increase for a period of time which would have also increased what you were paying for the water service. Please note that this relates to your water charges only. Concerns regarding your sewer fee and how it is calculated need to be addressed by the City Department of Environmental Services (ENV) (shared contact info).
Mr. Yoon	Phone call on 3/28/18	Mr. Yoon would like to see the rate proposal continue based on "per person"; he also suggested circumventing the hotel room tax and charge a transient rate based on visitors to the hotels here on Oahu. He feels that would be a fair way, since our visitors use water and would make it more fair for everyone, resident and visitor alike.	Did not want a return call
Wayne W. Gau	City DART 3/28/18	Water rates should in no way be raised. I spend one-fifth of my social security pension every year on water bills as it is. If the city needs more money, then cut out frivolous beautification projects and rein in the rail construction costs.	Response from letter sent to Mr. Gau: Thank you for your message to the Board of Water Supply (BWS) via "Tell It To The Mayor" regarding the proposed water rate increase. We appreciate your comments and suggestions. We will be sharing the with our Board of Directors as part of the testimony received from the community regarding the water rates draft proposal. The BWS oversees the management of Oahu's potable (drinking) water supply and water rates. Concerns regarding the sewer fee and how it is calculated, need to be addressed by the City Department of Environmental Services (ENV) (provide contact information).

Sam Moore	Phone call on 3/29/18	Excerpted from a phone call with Mr. Moore: Mr. Sam Moore was one of our customers who was affected by the 2013 estimated bills. He called to accuse the BWS of not being truthful and honest with our customers about the impact of our rates on them. He said that, according to his calculations, the impact on a single family home is more like 32.53 percent. It would appear he took the Star Advertiser's calculated final cost of \$52.65 and divided it by the current cost \$39.78. Mr. Moore, who lives in Kailua, also complained that we are only holding one meeting on the Windward side for all district residents. He asked when we are going to be at the Kailua Neighborhood Board meeting. Has this been scheduled yet?	The 12.5% increase applies to the increase in revenue over 5 years, not the rates. Star Advertiser calculations are incorrect, as they do not consider the different tiers or the monthly customer charge. We are changing the entire rate structure to more equitably distribute the costs of service to different customer classes and people will see different effects on their charges, based on customer class We are creating a new Essential Needs tier that will be available to all customers, so everyone benefits from it.
Merle D. Crow	Letter received on 4/2/18	Summary of 2-page letter: Agrees that water lines need to be repaced and should have been done years ago. However, majority of BWS costs are fixed and not directly related to the number of gallons of water that flow through the system. The proposed increases are unfair to the older residential areas with larger lots and those in the drier areas of Oahu. Newer homes have small lot sizes vs older ones. The sewer fees have a base charge to cover the fixed costs and it is estimated that nearly 80% of the costs of the wastewater sysgtem are fixed. Since a significant portion of your costs are also fixed, wouldn't a base charge to cover the fixed costs of the system be a fairer way to recover funds to cover your total costs rather than increasing the rates based on consumption	Letter sent thanking for input and that the letter will be posted on the BWS website.
Rueko Kitami and Dennis Suzuk	Email received 4/2/10	Questioned fairness of sewer rates based on water consumption. Currently service single-family residences pay 88% of the costs to serve them and multi-units subsidize the balance. The imbalance of swer fees should be corrected.	Letter sent: Thank you for your email to the Board of Water supply (BWS) in which you expressed concern about the way you are being billed for the swere fee. The BWS oversees the management of Oahu's potable (drinking) water supply and water rates. Concerns regarding the sewer fee and how it is calculated, need to be addressed by the City Department of Environmental Services (ENV) (provide contact information). We would also like to clarify the statement of "single-family households bay 88 percent of the cost to serve them" refers to water service only. It does not apply to sewer service.
No name provided	Phone message received 5/9/18	Doesn't like rate hike.	
R. Uyeno	Email received 5/11/18	I am against the increase. Millions of dollars collected from last rate increase not used and why are you asking for more? I question what was supposed to do last time and compare to what was actually done. Where is the money being spent!? Letters stating I saved water; that is a waste. Give me a nickel credit instead of wasting \$.50 in postage and cost to create the letter.	
Norman Tochiki	Phone call on 5/14/18	The rates is not fair to the West Side because it is dry there and they need to use more water to irrigate the yard. It is not fair to tell normal people to cut water use when people with swimming pools are obviously using lots of water. He believes the BWS powers that be have already made up their minds about the new rates and the public hearings are all shibai. He believes in the past the BWS told people to cut water use, which ended up reducing revenue because people saved water so now need to raise rates. It is not fair to tell people to save water when all kinds of new communities keep being developed. Someone with deep pockets is paying somebody off.	Caller wished to share concerns did not request a response
Jancel Gabur	City DART received 6/1/18	Would like Mayor to consider lowereing utility cost so his parents can afford it.	Thank you for your email message regarding the cost of living in Hawaii. We will share your concerns with the BWS Board of Directors. BWS oversees the management of Oahu's potable (drinking) water supply and water rates. Concerns regarding the sewer fee and how it is calculated, need to be addressed by the City Department of Environmental Services (ENV) (provide contact information).
Dennis Tingey	Email received 3/28/18	We all should not forget that the BWS is a monopoly, we cannot go to brand B. Why is their nothing in their proposal for cost controls? It cannot be solely revenue driven. Does anybody believe the City's BWS is efficient, effective, and well managed? We need somebody other than the board to take a second look at this. How about an audit, how about a BWS consumer advocates office akin to what the PUC has? Looks like the hard working people of Hawaii are being fleeced again?	Had a follow up call: BWS addressed concern about outreach Several news articles about rate increases 4 public meetings Also NB and community groups Go out with proposed rates and get public feedback and taking comments Will respond back to all written comments Give input to the BOD before they formally adopt rates Concerns about the method and vehicle to provide testimony Survey should be very objective not written with bias - felt our surveys were biased Did we send survey with the bill? HECO had proposed rate increase and PUC approved and were going to do it until Trump did windfall to corporations made the consumer advocate look at it again Point was somebody played devils advocate. Who plays devil's advocate at the BWS? • .013% of your customers have responded and most negative o Efforts to get it out - do more o Do need to balance outreach with spending ratepayers money on these efforts • Cut out the fat and make improvements say cut budget say 2% o What is my budget and we manage to it • Board of Directors - not as robust as the PUC no real oversight o No consumer advocate like HECO
Loyson	Email received 6/12/18	I cannot find any place on your site to submit testimony or comment! It appears that all your studies have been toward making changes and not to any other consideration! I do not know who you contacted/surveyed that support lower rates to farmers etc as large water users! Probably just the farmers! I DO NOT SUPPORT LOWER RATES FOR FARMERS OR ANYONE ELSE THAT IS A LARGE USER OF POTABLE WATER! THOSE WHO USE MORE SHOULD PAY MORE ACCROSS THE BOARD! WITH THE EXCEPTION OF THOSE WHO ARE WILLING TO USE WATER THAT HAS LIMITED TREATMENT FOR RE-USE WATER! EVERYONE ELSE, INCLUDING HOTELS & ETC., AND OTHER LARGE USERS SHOULD PAY MORE IF THEY USE MORE PER 1000 GALLONS.IN ADDITION FIRE METER STAND BY SHOULD CONTINUE TO PAYFOR THE ACTUAL WATER USED IN ADDITION TO FEES TO MAINTAIN THEIR STANDPIPES! allowing THEM TO SLIDE WILL ENCOURAGE THEM TO USE MORE WATER THAT THEY MAY HAVE BEEN CONSERVING WHILE BEING CHARGED FOR IT AND IS NOT A SMART WAY TO GO!	Aloha and mahalo for your email last week regarding the proposed water rate increases. We will include your comments in the formal record of public comment, along with our responses. However, I also wanted to respond to you directly. We are proposing a number of changes to the structure of our water rates that move customers closer to paying their fair share while also reflecting community values such as reduced rates for agricultural and recycled water use. An option we initially considered was leaving the existing rate structure unchanged and increasing rates uniformly for all customers. However, our cost of service analysis documented that our single-family residential customers are currently paying less than the cost to serve them(88%) while multi-unit customers are paying more (103%). Based on this information and input from our Stakeholder Advisory Group, the BWS Board of Directors provided direction to have customers pay closer to their fair share. An agriculture water rate has been in place since 1964. The purpose of this discounted rate is to encourage on-island production of fresh, local agricultural products and over half of our customers support maintaining a discounted rate for agricultural customers. Maui, Kauai, and Hawaii also provide special rates for agriculture. Despite the discounted rate, agricultural customers too will experience an increase. Depending on the size of the water meter and the amount of usage, we estimate that these rate increases will range from approximately 3 to 13% cumulatively over the next five years. We have about 500 customers that receive the Ag rate and they must show their GET license. We also do checks of their farm to ensure that they are legitimate commercial farmers. They must apply annually for this rate – it is not given in perpetuity and if they do not reapply, they revert to the Single Family Residential rate for all water usage.

			<p>All non-residential users pay for the water they use. The more that any of these customers use, from the smallest to the largest, the more they pay. We have approximately 8,600 non-residential customers and they vary widely in the size and type of business, from small retail stores to hotels, schools, and parks. Given this diversity, water usage is not an indicator of water use efficiency. Consequently, we don't consider tiered water rates for non-residential customers to be as equitable as the uniform rate. In addition, non-residential currently pay more than their cost of service and will continue to do so as this helps funds other rate classes including single family.</p> <p>The Fire Meter Standby Charge is proposed to be monthly and will recover the \$400,000 that BWS currently spends on maintaining these meters. Charges for incidental water usage from these meters are currently less than \$100,000 per year and the difference is made up by all of our other customers. Dedicated fire meters are only to be used for fire protection; leakage and all non-fire related usage is prohibited. In the event that misuse occurs, we are proposing that it be charged at a penalty rate of \$10 per thousand gallons and that the customer be subject to prosecution.</p>
Bob Richards	Email received 6/14/18	<p>If in fact a 12.5% rate hike is needed during the next five years, the annual rate increase should be prorated to about 2.3% to 2.5% each year for five years to reach the desired 12.5%, where the rate would be frozen for subsequent years. As you can see from the below, your proposed calculations only go out four years and are from 4.9% to 6.3% over the requested 12.5%. I've provided a "Should be" row indicating what the prorated increase should be to reach the requested 12.5% rate hike, which should cover the 2019 ~ 2023 five year period. (Also included charts of his calculations).</p>	<p>Thank you for taking the time to evaluate the BWS's proposed changes in water rates. Over the next five years, we need an additional 12.5% in revenues – the total amount of money we collect from our customers. This is not the same as our proposed rate increases because our rates vary for our different customer classes, e.g. single-family residential, non-residential. In fact, we are proposing changes in the structure of our water rates, especially for single-family residential and multi-unit residential customers.</p> <p>Single-family residential customers currently pay less than the cost to serve them (88%) while multi-unit residential customers pay more than the cost to serve them (103%). One of the objectives of our proposed changes is that everyone pay their fair share, and so we are proposing to move single-family customers closer to their cost of service (95%), and bring multi-unit customers down to their cost of service (100%). As a result, each of our different customer types will see different increases in their rates, with single-family rate increases being higher than others. In aggregate, these will provide a cumulative increase in revenues of 12.5% over five years.</p> <p>I have attached charts showing the total cumulative 5-year increases for both rate classes. Please note that this takes into account the monthly customer charge (based on meter size), and tier rates.</p>
Cindy Kuneshige	Email received 6/15/18	<p>Upon review of the Spring 2018 BWS mailing regarding proposed rate increases, I had a question about the 12 percent subsidy for SF residential customers, particularly the words "cost to serve them." Is the subsidy of 12 percent actual water costs or service costs, as in administrative, meter, pipe maintenance etc.? And why does it cost more for SF residents?</p>	<p>When calculating the "cost to serve them", we include the total annual operating and capital costs. These are all of the costs required sustain, capture, treat, move, store and deliver water to our customers every minute of every hour of every day of the year. The methodology we follow is defined by the American Water Works Association in its manual entitled M1: Principles of Water Rates, Fees, and Charges. This methodology is the industry standard and followed by nearly every water utility in the country.</p> <p>The primary reason that it costs more to serve single-family residential customers is due to their water use patterns. These customers' daily usage tends to have two very large peaks. The first is in the morning, when many people are getting ready for school and work all around the same time. The second is in the evening, when people typically return home at the end of their busy days. The water system must be designed to meet the demands of the peak hour on the hottest day of the year, and that peak is highest with single-family residential customers. Non-residential customers tend to have much more even daily usage patterns, thus resulting in a lower peak demand on the water system.</p>
Clyde Omija	Email received 6/18/18	<p>As stated in your newsletter, "These proposed draft rate adjustments are needed to accomplish the following objectives:</p> <ul style="list-style-type: none"> - Increase investments in Oahu's water infrastructure - Reduce main breaks - Encourage conservation - Provide funding for disaster recovery - Ensure that everyone pays more of their fair share of water service <p>I recall the last time you requested a water rate increase, you mentioned the same bullet points. Yet nothing has been accomplished. We still see an huge increase in water main breaks. Correct me if I'm wrong in that there is an average of one water main break every day. I would to see a detailed plan on how you will address each bullet point. In my opinion, the last two bullet points are just a way to take our money away under the guise of providing better service.</p>	<p>Thank you very much for your comments. You requested to see a detailed plan addressing each of your five bullet points. I'm pleased to let you know that, over the past four years, the BWS has invested significant effort in preparing the detailed plans that are guiding our proposed rate increases and that all of these plans are available on our website. They include our Water Master Plan, Long Range Financial Plan, and Infrastructure Investment Plan Summary. Here is the link to these plans which can be downloaded as pdfs: http://www.boardofwatersupply.com/customer-service/bws-seeks-community-input-proposed-rate-changes. Please scroll down and on the right hand side under Resources & Information you will see the plans.</p> <p>These plans have been developed with guidance from our Stakeholder Advisory Group, whose members represent a diversity of interests from across O'ahu. Like all of our Board meetings, these meetings have been publicly noticed and open to the public. The agendas, presentation materials, and notes from each of these meetings are also available on our website: http://www.boardofwatersupply.com/water-resources/water-master-plan/stakeholder-advisory-group-meeting-materials.</p> <p>In addition, attached is a list of the pipeline projects that have been completed since 2012.</p> <p>These materials will provide the detailed information that you requested. If after reviewing them you have additional questions, please don't hesitate to contact me. Your comment and the response will be posted on our website.</p>
Leon Kau	Email received 6/21/18	<p>Thank you for your contact information tonight. I really don't have to check my water now but may one day. I do want to provide my thought of how we are charged for water. I asked about a charge per household member vice by residence. Every individual should be given a credit of water usage per month, property size should be given water credit per square footage. When water usage exceeds the allotted credits, the water usage charges will apply. Conservation should be based on individual usage. A residence with one occupant is now allowed to use more water than a family of six. This does not encourage water conservation. Irrigation for a 10,000 sq ft cost more than a 5000 sq ft residence.</p>	

Linda from Aiea	Call received 6/22/18	<p>Please do not raise the water bill. You are forcing local people to move to the mainland. It is expensive to live in Hawaii. We use 4,000 gallons a month and our water bill is \$180.</p> <p>She said the water portion of her bill was about \$28; I explained about ENV, got her a phone number to call to ask them to reexamine her bill.</p> <p>Questions:</p> <p>What do you mean by “fair share”? (I explained the multi-family subsidy of single family)</p> <p>Why is multi-unit going up only little bit compared to single family? (Explained again about the subsidy. Also explained about the single landscaping shared by multiple units.)</p>	<p>IS II responding to phone call explained the Cost of Service study that showed how Single Family Residence (SFR)s currently pay 88% of the cost to serve them water vs other rate classes. Multi-Unit Residences (MUR) currently pay about 103%. Part of the new rate structure will be to address this and move SFR closer to cost of service (95%) and move MUR to 100%. Recommended caller follow up with ENV regarding the sewer portion of the monthly bill. Provided her with ENV's phone number.</p>
John Dye	Email received 6/22/18	<p>I strongly disapprove of the BWS plans to construct a seawater desalination plant and the associated rate hike. Seawater desalination is extremely energy intensive and has a highly adverse impact on the environment. It also is extremely costly. I do not object to repairing or replacing existing infrastructure, but seawater desalination is not right for Hawaii. Instead, we should focus on conservation and reducing water demand.</p>	<p>Thank you for taking the time to review the proposed changes to water rates and provide your comments. Repairing and replacing infrastructure, which you indicated you do not object to, makes up by far the largest portion of our Infrastructure Investment Plan. As shown in the table below, over the next 30 years, BWS is planning 736 renewal and replacement projects.</p> <p>A summary of this plan is available on our website at www.boardofwatersupply.com.</p> <p>We also agree with you about the importance of conservation and reducing water demand. Between 1990 and 2010, our water demands dropped by 13 million gallons per day despite an increase in our island's population of about 100,000. This is a tremendous accomplishment, but it is not enough. Our Water Master Plan, also available on our website, identifies additional conservation goals and the need to target conservation investments at 4% of our infrastructure investments in order to preserve existing supplies and delay the need for new ones.</p> <p>While it is a vital component of our strategy, conservation alone will not be enough for us to continue to provide a reliable supply of water for Oahu. Diversifying the water supply helps to increase resiliency to adapt to future climate change, where rainfall, in a UH Manoa statistical climate model, could decrease in leeward Oahu by as much as 65% by 2100.</p> <p>Growth and climate change impacts are leading us to a diversified portfolio of solutions that includes additional conservation, watershed protection, recycled water, non-potable water, and new groundwater sources. We are also exploring the use of storm water to recharge groundwater near Nuuanu and a small seawater desalination plant in Kalealoa.</p> <p>You are correct that seawater desalination is energy intensive, costly and could have an adverse impact on the environment. However, with our proposed project we are hoping to evaluate a number of innovations to reduce costs and mitigate potential environmental impacts including using saline groundwater instead of an open seawater intake, subsurface disposal of brine instead of discharge to the ocean, and the use of solar power to offset energy demands and limit greenhouse gases. Funding for this project will not come directly from water rates and will be offset by long term financing strategies such as State Revolving Funds low interest loans or bond issues that will extend the payback period over 20 years. BWS water resource strategies are to pursue conservation, recycled water, renewable energy generation (PV) and desalination, in substantially, this order of priority. A desalination project write-up is attached from the Ewa Watershed Management Plan Public Review Draft, dated May 2017. The full draft can be viewed at this link: http://www.boardofwatersupply.com/bws/media/files/Ewa-WMP_Public-Review-Draft_May-2017.pdf.</p> <p>Hopefully this information places the proposed seawater desalination project in proper context relative to our emphasis on renewal and replacement of existing</p>
Karen Miyake-Kondo	Email received 6/25/18	<p>I like how you have broken down Tier 1 into two categories (0 – 2000 gallons and 2001 – 6,000 gallons). You state in the newsletter that HALF of your customers use 6,000 gallons or less. So why does the 2001 – 6000 gallon category have rates that get more expensive after July 2020. Are you trying to “sock it to” the largest consumer category thus making the most money from this category. And yet Tier 2 category (13,001 – 30,000 gallons) have rates that are cheaper beginning in 2019. If this category uses twice as much water as the 2001 – 6000 gallon category, they should be paying more, not less! This should be fixed. I know you need to raise the rates because there are too many water main breaks, but your proposed increase is flawed.</p>	<p>Thank you for taking the time provide us with your comments. Here is some additional information to help explain how the proposed tiers work together. You gave the example of a customer who is using 6,000 gallons of water per month or less. A customer using 6,000 gallons of water currently pays \$35.78 per month. We designed the first two tiers to work together so that this customer would see almost no increase in their bill when the proposed changes become effective in July 2019, as shown in the table below. Their monthly bill would increase by only 6 cents. In each year after that, their monthly bill would increase by approximately \$2. In July of 2022, the total monthly bill would be \$6.23 higher than it is today.</p> <p>The other tiers are structured so that customers who use more water pay more for that additional water. As a result, these customers will see substantially higher increases in their water bills than the half of our customers who use 6,000 gallons or less. The table below shows increases in monthly bills as a result of the proposed changes for a range of customers. Customers whose usage is in the Essential Needs tier will see the lowest increase in their bill, followed those who use 6,000 gallons per month or less. We are certainly not trying to “sock it to” these customers. In fact, the half of our customers using the most water will see the largest increases in their bills, just as you have suggested, with the hope that this will encourage greater water conservation.</p> <p>I hope that this additional information provides a clearer picture of our proposed water rates.</p>

Rene Garvin	Email received 6/25/18	<p>In reviewing your proposed rates for single-family residential rates in the most recent Water Matters newsletter, it seemed to me that the 3rd tier was an extremely wide one and not in keeping with the other rates. There's quite a gap between 6,001 and 30,000 gallons. This struck me as a disincentive in terms of conserving water. If I should use 1 gallon more than the average, I would pay the same rate as those who use an incredible 30,000 gallons? Why should I bother then, once I pass that first gallon? It would make more sense to me to have another tier - perhaps something like 10,000 gallons (or even less) so that if I should be over the 6,000 I would still have a reason to monitor and control our water use.</p> <p>My personal situation is that 8 people live in this house and we typically use about 8,000 gallons per month, which averages out to 1,000 gallons per person. I think it would be hard for us to cut our use to the 6,000 gallons unless we stopped doing laundry (not an option since 4 of the 8 are children) or baths/showers. I would not expect to ever manage to get it much below our current average until the kids all grow up and leave home! However, we are not wasteful and it seems wrong to be lumped in with people using 20,000 and 30,000 gallons.</p> <p>Our usage does go up when there has been no rain for quite awhile and the grass and trees must be watered, but even then we try hard to do it responsibly and follow the tips about how to water efficiently. A lower limit to the tier would encourage our efforts, but the 30,000 gallons does nothing to help me justify to the family why we need to be conservative in our water usage. I will continue to preach conservation to them, regardless of your final categories, but I imagine that there are others who think like some of my family and would encourage you to consider a change.</p>	<p>Thank you for your thoughtful comments, and for your commitment to water conservation. Because of your efforts, and those of others like you, in total our customers use substantially less water today than they did 20 years ago, despite significant increases in our island's population. This has allowed us to avoid building new water source facilities and keep water rates lower than they otherwise would be.</p> <p>You raise a good point about the width of the third tier from 6,001 gallons to 30,000 gallons per month. We evaluated this issue extensively and considered options where the top tier was set significantly lower, as you have suggested. What we found was that there was an unintended consequence, with the potential for disproportionate impacts to low-income, multi-generational households. Consequently, we made the difficult decision to propose keeping the top tier in the same location. However, this decision does not mean that you are "lumped in" with those who use much more water than you, and you and your family still realize substantial benefits from conserving water.</p> <p>Using your situation as an example, a water bill for 8,000 gallons is about \$44.62 using our current rates. Under proposed rates effective July 1, 2019, that would increase by \$1.34 per month. The monthly increases compared to current for each successive year are expected to be about \$3, \$6, and \$9 effective July 1 of 2020, 2021, and 2022, respectively. In contrast, a customer using 20,000 gallons per month pays more than twice as much, or about \$104 per month today. This is about \$720 per year more than in your example. By July 1, 2022, there bill would be nearly \$20 per month higher. So, we think you can still tell your family, in fact with great confidence, that there are substantial benefits from conserving water.</p>
Carol Aki	Email received 7/9/18	On the last page of your Spring 2018 newsletter there is a notice about New Fee Waivers for affordable housing, to retrofit fire sprinklers, and for homeless housing. Can you tell me how you're defining 'affordable housing'?	On the last page of your Spring 2018 newsletter there is a notice about New Fee Waivers for affordable housing, to retrofit fire sprinklers, and for homeless housing. Can you tell me how you're defining 'affordable housing'?

Start Advertiser Web Comments to Sunday, May 13 Article

palani 7/10/2018

BWS wants a \$60 million rate hike (which the PUC will of course grant) to prevent 4,000 water main breaks over the next 30 years. That should come close to covering their costs, so no increase is necessary.

Respect 0 0 Reply 0 Report 0

allie 7/10/2018

Instead of the problematic rail, Honolulu should have committed to a 20-year program to rebuild infrastructure. It would have created more local jobs while dealing with the elephant in the room. Now we don't have the rail and we don't have the infrastructure. Poor planning, if not dishonest planning, from Mufi and his henchmen.

Respect 0 0 Reply 0 Report 0

sailfish2 7/10/2018

Does anybody at BWS know where all that sewer money is? We've been paying huge sewer fees since Mufi Hannerman agreed to abide by the EPA mandate to upgrade the wastewater treatment plants and none of that has happened yet.

Respect 0 0 Reply 0 Report 0

fraapes 7/10/2018

"A subsequent city audit concluded that BWS, while able to quickly get to the root of its problems, had made several mistakes. Among them, the new billing system, which had been slated to cost \$5 million and take 18 months to put in place, ended up costing \$16.4 million and taking much longer to roll out."

The BWS doesn't need to be efficient or above board. Their retirements are intact regardless of performance.

Respect 0 0 Reply 0 Report 0

dtpro1 7/10/2018

What is missing is the key question, what is the BWS and Sewer doing to control costs? It cannot just be about getting more revenue. How much overhead does the board have and how productive and efficient are they? Think most would agree that the City Civil Service based BWS is as inefficient as most other City departments. A thorough vetting (perhaps a vertical audit) of BWS's internal controls and productivity is needed before more rates and fee increases.

Respect 0 0 Reply 0 Report 0

jasurace 7/9/2018

"Rate" increase? Let's talk about that insane monthly sewer fee, which was put in place specifically to fund system repairs. I could use zero water and still have to pay that. My water bill here is more than four times what I paid in LA, and that was in a desert! Most places don't even bill monthly, because the bills are low enough that it isn't worth it.

Respect 0 0 Reply 0 Report 0

leino 7/9/2018

This is a serious reality check. All of us NEED water and no one likes being inconvenienced when the water supply is interrupted. The delivery system is critical and it is time, as with all man made things, to repair/replace the old. The Board has taken a very long and thorough look at this problem and it is better to phase it in now than later. It is ironic that it costs more to dispose of waste water we do not want than to provide clean drinking water we need.. These services are provided by two very different departments and the BWS is saving us all some money by doing the billing for both.

Respect 0 0 Reply 0 Report 0

dtpro1 7/9/2018

Just how efficient is the BWS? Think most would agree that they are just another wasteful City department. They should improve their processes and better cost control before jacking up rates on Hawaii's already overburdened residents.

Respect 0 0 Reply 0 Report 0

ruff_ridah 7/9/2018

Why don't they take money from the \$78 a month per homeowner wastewater money? Ridiculous city ripoffs

Respect 0 0 Reply 0 Report 0

islandsun 7/9/2018

Another example of the city jacking up the cost of living for locals and blaming something else. They are not telling folks about their high margins from all the new condo development which require very little maintenance. Con man mayor strikes again.

Respect 0 0 Reply 0 Report 0