

### Update on the Public Hearing #3 Held on May 15, 2018

At about 6:30 p.m. on May 15, 2018, in the Benjamin Parker Elementary School Cafeteria at 45-259 Waikalua Road, Kaneohe, Hawaii, the Public Hearing commenced to discuss the Five Year Water Rate Proposal.

NOTE: Presentation of Proposed Water Rates is the same as shown at the April 26, 2018 Public Hearing #1. Please refer to these minutes for an overview of the presentation or view the video on our website at [boardofwatersupply.com](http://boardofwatersupply.com). Minutes for the May 15, 2018 Public Hearing #3 will focus on questions, responses and testimony from the audience.

### QUESTIONS AND ANSWERS

Speaker #1: Has there been any discussion about separating the BWS (Board of Water Supply) 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 bills to monthly bills in 2013. The sewer portion of the bill was becoming really large. ENV has to follow an EPA (Environmental Protection Agency) 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 are 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 do not want the signal to be masked. Are you for separating the bill ma'am?

Speaker #1: 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 is going to be hard for the public to grasp.

Ernest Lau: It is 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: 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?

Ernie Lau: We are replacing the old pipe with brand new pipe.

Speaker #2: 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: 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 an 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: 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 #3: 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.

Dave Ebersold: 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.

Speaker #3: 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.

Speaker #3: 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.

Speaker #3: 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: 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."

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?

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 that I should adjust it to 75 pounds after the regulator if I do not want to keep blowing stuff up in my house.

All night long my shut off valve, which I have replaced five times already, blasts maybe every hour for about five seconds and then shuts 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.

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.

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 what we call the static pressure at your location. So my apologies for the situation, sir.

Speaker #5: 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?

Ernie Lau:

The way the State law is set up, Board of Water Supply was 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.

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.

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.

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.

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.

One of the things we are looking for is other sources of revenue. One 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.

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.

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.

Speaker #6: Aloha. I wanted to know how you are preparing for the issues of climate change and how it will affect our island water supply?

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.

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?

Barry Usagawa: We are also concerned about the impacts droughts may have on our water supply as well as our coastal infrastructure.

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.

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.

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 will 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.

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.

Speaker #6: 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?

A second question is: With the melting of the icebergs and ocean levels rising, will freshwater aquifers also rise and/or will they become saltier at the bottom?

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.

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.

Sea level rise is a hard nut to crack. We are 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 are trying to identify what areas would be the highest priorities.

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.

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.

Speaker #7:

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.

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.

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.

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.

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.

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.



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.

We are 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.

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.

Speaker #7: 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.

#### PUBLIC TESTIMONY

Speaker #8: Hi, my name is Ted Kanamori 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.

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.

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.

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.

Thank you.

Speaker #9:

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.

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 [expletive]. Excuse the word, but that's the word.

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.

Thank you.

Dave Ebersold:

Thank you for your comments. I want to thank you for taking the time to come out, spend time, and learn about what's being proposed with water rates. There's additional ways to provide public input, through the website, mail, e-mail, phone calls, look forward to that. Thank you for spending the time tonight to be here and take an interest.

A young child is shown from the chest up, splashing water from a public fountain. The child's face is tilted back, eyes are closed, and mouth is open in a joyful expression. Water is spraying from the fountain's spout and splashing onto the child's face and hair. The background is a soft-focus green, suggesting a park or natural setting. The overall mood is one of freshness and vitality.


***Ka Wai Ola***

All life depends  
on water



**Board of Water Supply**  
City and County of Honolulu

The Board of Water Supply (BWS) delivers  
safe, dependable, affordable water  
to your tap ...

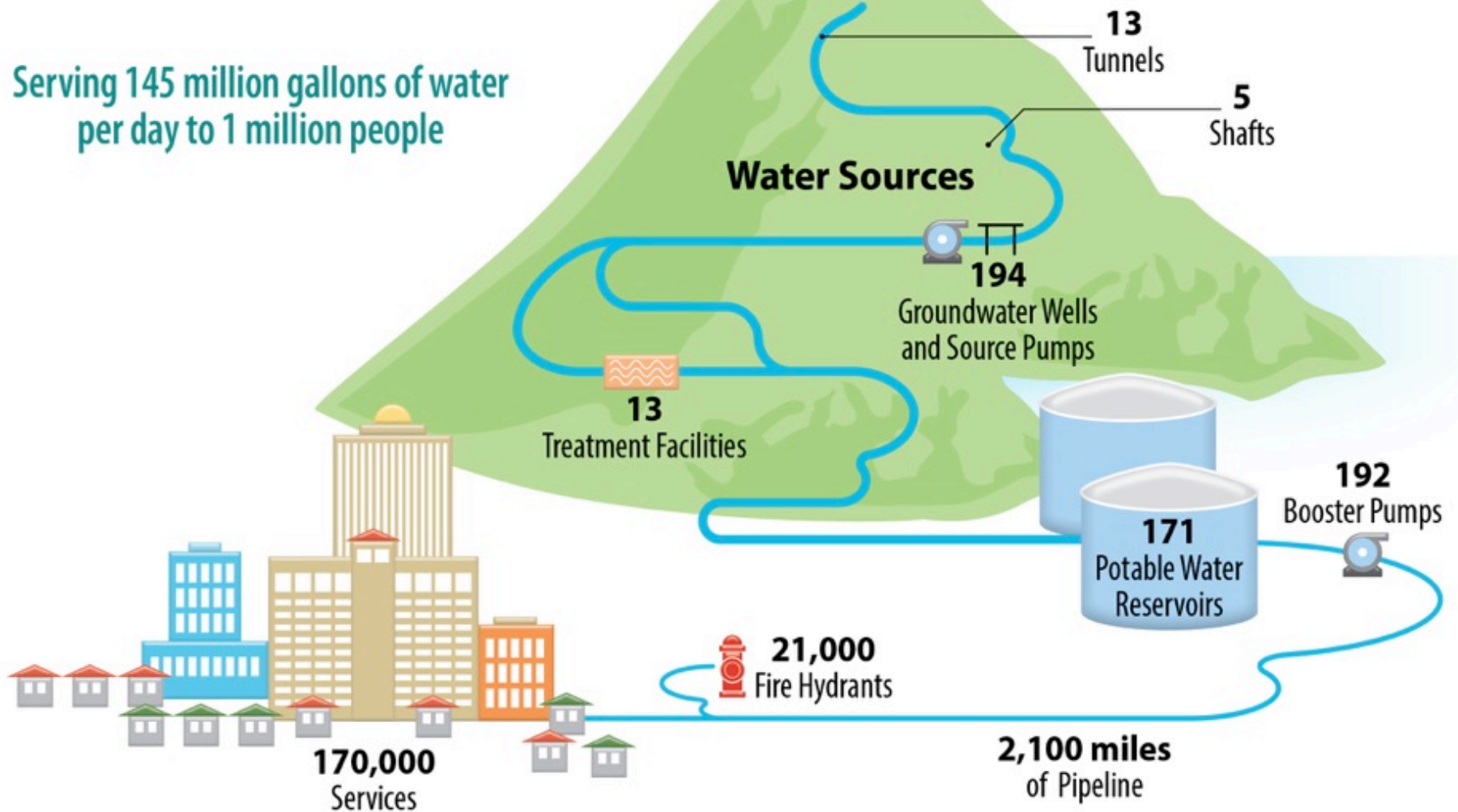
A close-up photograph of two hands, one from a child and one from an adult, gently holding a clear glass filled with water. The background is a soft, out-of-focus green, suggesting an outdoor setting. The lighting is warm and natural, highlighting the texture of the skin and the clarity of the water.

... every minute of every hour  
of every day.



# Delivering water from underground water sources to your home requires a large and complex system.

Serving 145 million gallons of water per day to 1 million people





Are we prepared  
to provide safe,  
dependable, and  
affordable water  
for the next  
generation?

# The BWS Water Master Plan ...



- ... Looked ahead 30 years
- ... Evaluated the entire water system
- ... Identified necessary improvements
- ... Balanced needs with costs of providing water to our customers



Here are some of the  
findings of the Water Master Plan.



*Finding:* We need new drinking water supplies for Ewa, Waianae, and Honolulu.





***Finding:*** We have sufficient pumping capacity today, but we need additional backup pump capacity.





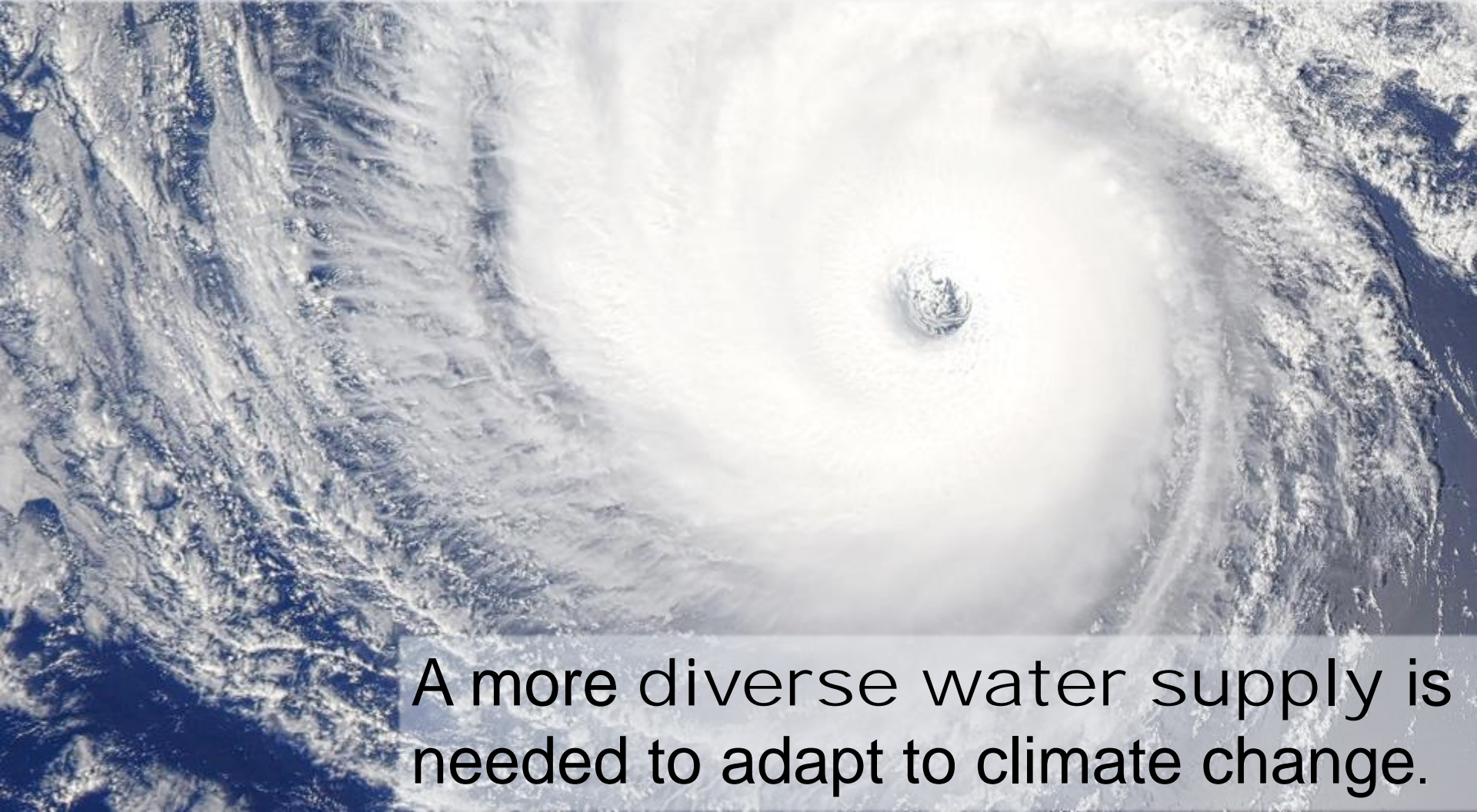
*Finding:* BWS pipelines suffer deterioration from age, corrosion, and soil, leading to more than 300 water main breaks per year.

*Finding:* Oahu cut its daily water use by 30 gallons per person since the 1990s, saving over 12 million gallons per day, but we still need to do more.





*Finding:* We expect rainfall to decrease in West Oahu, but the intensity of storms to increase.




A more diverse water supply is needed to adapt to climate change.





*Finding:* Healthy watersheds are necessary to sustain our water supply over the ages and require care and conservation.

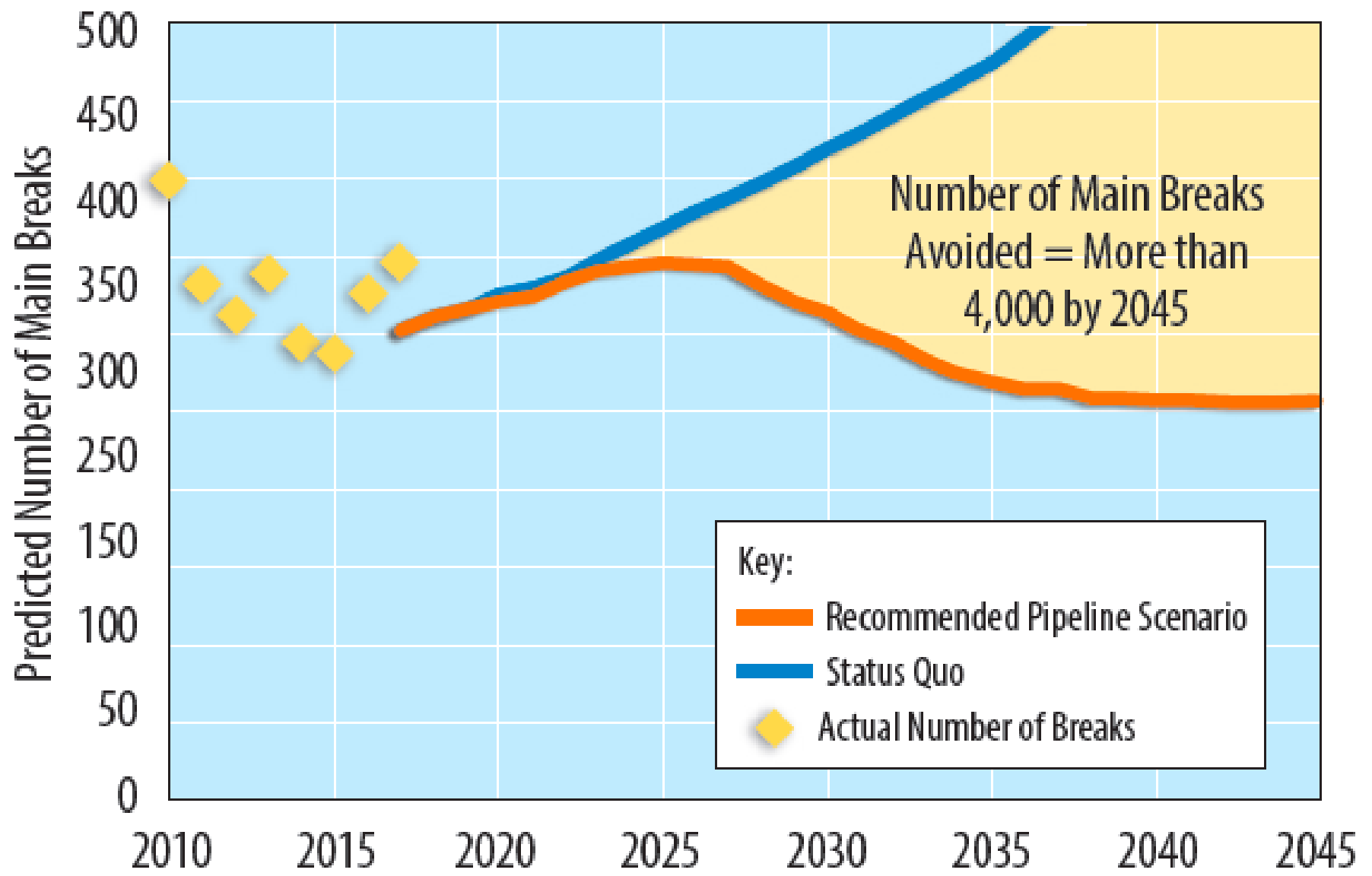


Over the next 30 years, BWS will invest in 800+ infrastructure projects island-wide, with total costs above \$5.3 billion.



# Over the next 10 years:

Results	Investment
💧 Reliability and resiliency of our water system will increase	<b>\$511 million</b>
💧 The number of main breaks will go down	<b>\$876 million</b>
💧 Increased investments in conservation will preserve existing supplies and delay the need for new ones	<b>\$3.4 million</b> (per year, 4% of infrastructure investments)
💧 Targeted funding for watershed protection will help us adapt to a changing climate	<b>\$3.4 million</b> (per year, 4% of infrastructure investments)



*Annually replacing 21 miles of pipeline is recommended to reduce main breaks*

## TOTAL WATER CHARGES

Customer Inquiries? Call 808-748-5000  
Water Trouble? Call 808-748-5000 (24 hours)  
Office Hours: Monday thru Friday 7:45 am to 4:30 pm

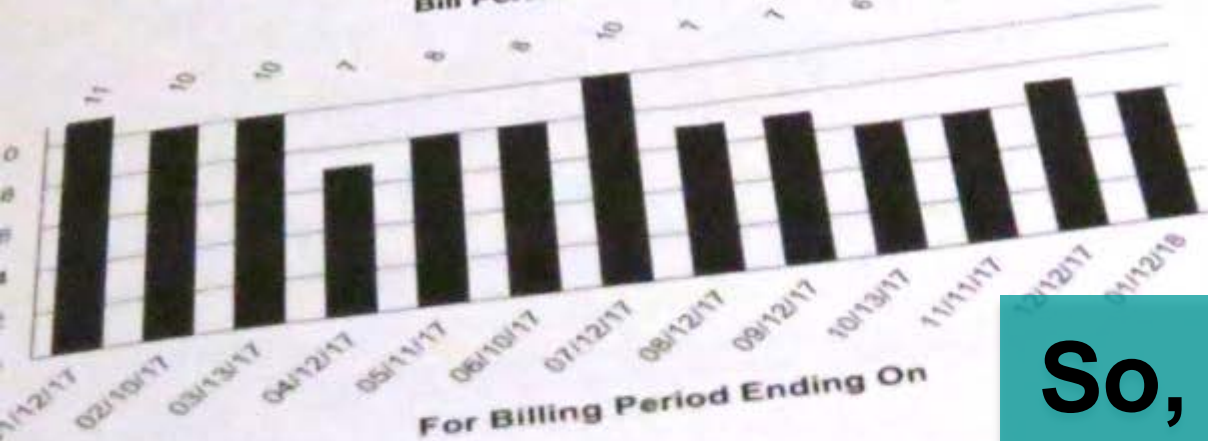
\$35.78

## ACCOUNT INFORMATION

Account Number  
Name  
Address  
Billing Date

01234567890  
ALOHA, NUI K  
1234 ALOHA WY  
01/12/2018

Bill Period Usage (kgal)



Indicate address changes

BOARD OF WATER SUPPLY  
COUNTY OF HONOLULU

## TOTAL SEWER CHARGES

Sewer Questions? Call 808-768-3333  
Sewer Trouble? Call 808-768-7272 (24 hours)  
Office Hours: Monday thru Friday 7:45 am to 4:30 pm

## WATER & SEWER BILLING SUMMARY

Previous Balance  
Payments  
Adjustments  
Corrections  
Current Charges

## TOTAL AMOUNT DUE

PAYMENT MUST REACH US

DATE	Water U THOU GAL
01/12/2018	6
12/12/2017	
11/11/2017	
10/13/2017	
09/12/2017	
08/12/2017	
07/12/2017	
06/10/2017	
05/11/2017	
04/12/2017	
03/13/2017	
02/10/2017	
01/12/2017	

So, let's talk  
about rates, the  
way we pay for all  
that we do.

# Remember – We're Just Talking about Water Rates



not Sewer Rates



Water rates are proposed for a 5-year period beginning in July 2018 through 2022.

There would be no increase until July 2019.

Increases are expected to generate about an additional \$60 million over that time.



**Board of Water Supply**  
City and County of Honolulu



# This is what BWS is committed to do with new rates

- Raise rates gradually
- Provide a low cost “Essential Needs” tier that rewards conservation
- Encourage conservation by highest water users
- Address subsidy of single-family residential by multi-unit residential customers
- Everyone pays their fair share

# New: Essential needs tier

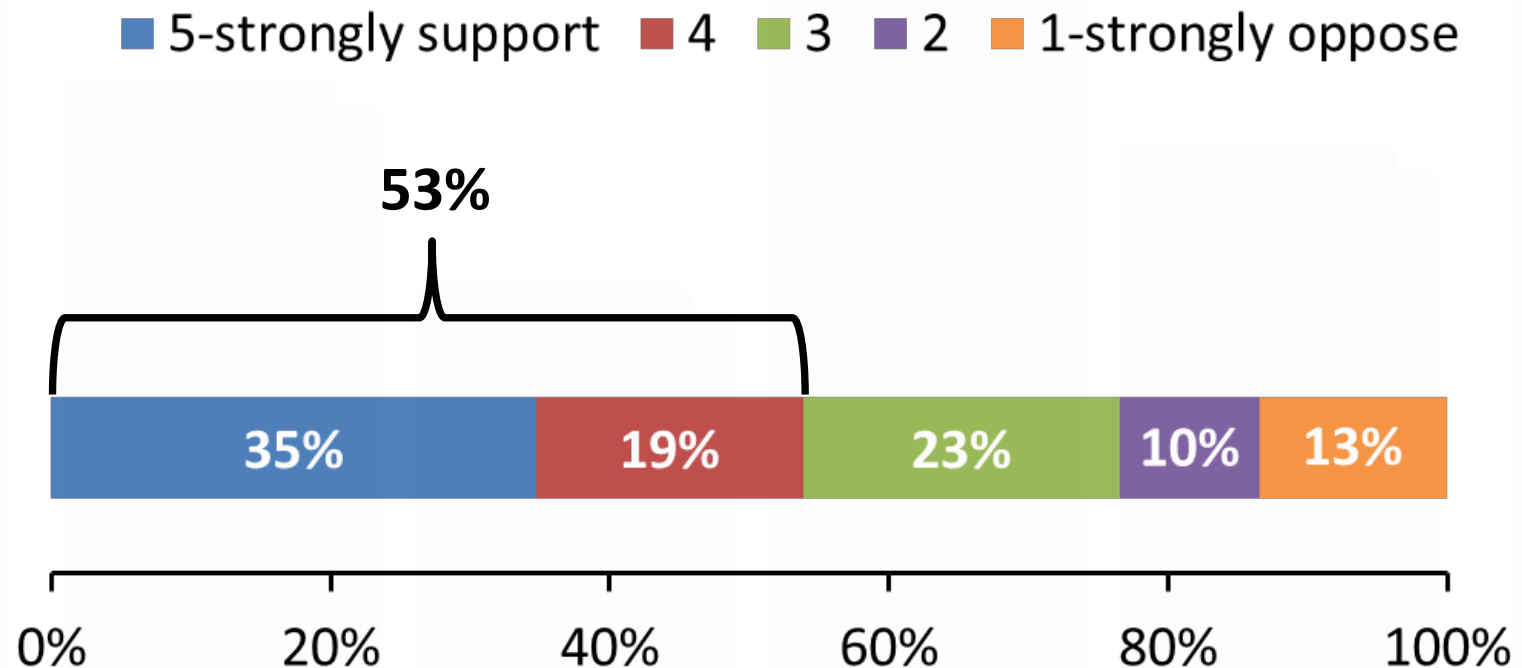


Below-cost rate for first 2,000 gallons per month.

All residential customers get this rate.

10% of BWS residential customers use 2,000 gallons or less.

Over half of our customers support adding a new tier with a very low rate to ensure affordability and reward conservation.






**New:** Adjust tiers to financially motivate water conservation.



# Monthly customer charge – Based on water meter size

## Proposed Monthly Customer Charge (per meter)

 <b>Meter Size</b>	Proposed Monthly Customer Charge in \$ / Month – Effective Dates					
	Current	July 2018	July 2019	July 2020	July 2021	July 2022
5/8-inch or 3/4-inch*	\$9.26	\$9.26	\$10.42	\$10.80	\$11.38	\$12.09
1-inch	\$9.26	\$9.26	\$13.31	\$13.79	\$14.45	\$15.28
1-1/2-inch	\$9.26	\$9.26	\$15.23	\$15.78	\$16.50	\$17.41
2-inch	\$9.26	\$9.26	\$38.81	\$40.18	\$41.61	\$43.45
3-inch	\$9.26	\$9.26	\$47.95	\$49.64	\$51.35	\$53.55
4-inch	\$9.26	\$9.26	\$91.74	\$94.95	\$97.98	\$101.92
6-inch	\$9.26	\$9.26	\$163.91	\$169.63	\$174.84	\$181.64
8-inch	\$9.26	\$9.26	\$250.03	\$258.76	\$266.57	\$276.78
12-inch	\$9.26	\$9.26	\$541.31	\$560.18	\$576.78	\$598.53

\* Typical for single-family residential customer.

# Single-family residential water rates 2018 - 2022



	Existing		Proposed Rates, Effective Dates					
Tier	Gallons/ du/month	Rate	July 2018	Gallons/ du/month	July 2019	July 2020	July 2021	July 2022
<b>EssN</b>	0 to 13,000	\$4.42	\$4.42	0 to 2,000	\$3.79	\$3.91	\$4.17	\$4.46
<b>1</b>				2,001 to 6,000	\$4.46	\$4.60	\$4.90	\$5.25
<b>2</b>	13,001 to 30,000	\$5.33	\$5.33	6,001 to 30,000	\$5.06	\$5.20	\$5.50	\$5.85
<b>3</b>	More than 30,000	\$7.94	\$7.94	More than 30,000	\$8.46	\$8.60	\$8.90	\$9.25

EssN – Essential needs

Rates are in \$ per thousand gallons

du – dwelling unit

# Comparing bills – Essential Needs – 10% of Single-family residential

## Essential Needs Tier – The Low Water User (2,000 gallons per month)

Current Bill	Future Bill at Proposed Rates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$18.10	\$18.10	\$18.00	\$18.62	\$19.72	\$21.01

# Comparing bills – Median water user – 50% of Single-family residential

**The Median Water User** (6,000 gallons per month)

Current Bill	Future Bill at Proposed Rates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$35.78	\$35.78	\$35.84	\$37.02	\$39.32	\$42.01

# Comparing bills – Average water user Single-family residential

## **The Average Water User** (9,000 gallons per month)

Current Bill	Future Bill at Proposed Rates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$49.04	\$49.04	\$51.02	\$52.62	\$55.82	\$59.56

# Comparing bills – High water users – top 3% of Single-family residential

## **The High Water User** (35,000 gallons per month)

Current Bill	Future Bill at Proposed Rates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$197.03	\$197.03	\$199.58	\$204.82	\$215.82	\$228.66

# Multi-unit residential water rates 2018 - 2022



	Existing		Proposed Rates, Effective Dates					
Tier	Gallons/ du/month	Rate	July 2018	Gallons/ du/month	July 2019	July 2020	July 2021	July 2022
<b>EssN</b>	0 to 9,000	\$4.42	\$4.42	0 to 2,000	\$3.70	\$3.71	\$3.72	\$3.77
<b>1</b>				2,001 to 4,000	\$4.35	\$4.36	\$4.38	\$4.43
<b>2</b>	9,001 to 22,000	\$5.33	\$5.33	4,001 to 10,000	\$4.95	\$4.96	\$4.98	\$5.03
<b>3</b>	More than 22,000	\$7.94	\$7.94	More than 10,000	\$5.90	\$5.91	\$5.93	\$5.98

EssN – Essential needs

Rates are in \$ per thousand gallons

du – dwelling unit



# Non-residential water rates 2018 - 2022



Current	Proposed Rates, Effective Dates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$4.96	\$4.96	\$5.01	\$5.06	\$5.16	\$5.27

Rates are in \$ per thousand gallons

Examples: hotels, restaurants, government, shopping centers, hospitals, retail

# Current subsidies will be continued



**Lower rates for  
local agriculture**

**and recycled  
water**





For affordable  
housing

**And new fee  
waivers**



For homeless  
housing



And to retrofit  
fire sprinklers

# Other BWS charges:

💧 **Fire Meter Standby Charge**

💧 **Standby Charge** (emergency interconnections)

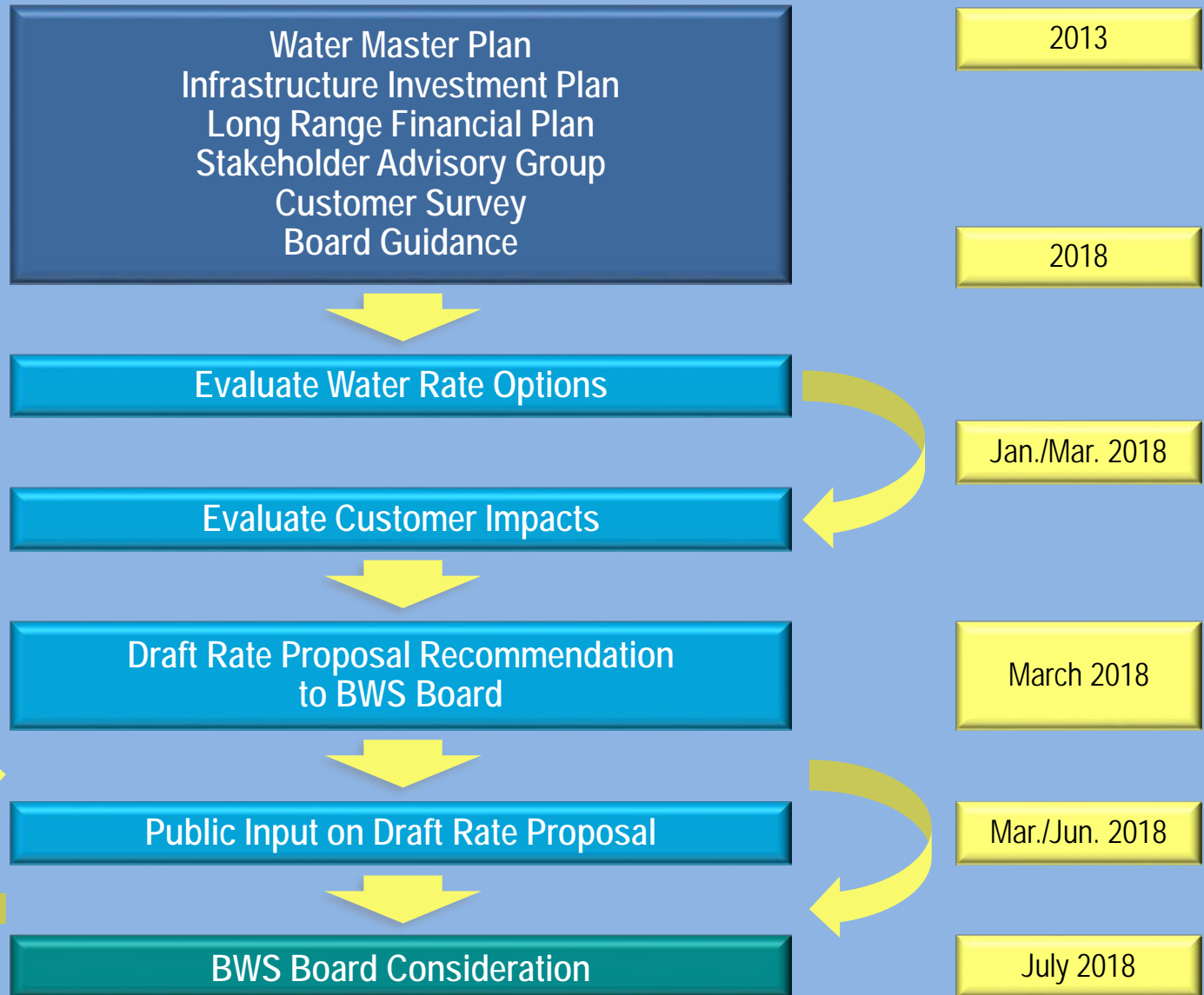
💧 **Water System Facilities Charge**

💧 **Environmental Regulations Compliance Fee  
Cost Adjustment**

💧 **Power Cost Adjustment**



# Process Overview



# Learn More at a Public Hearing Near You

**All Hearings: 6:30 – 8:30 PM**

**Honolulu**

Thursday, April 26  
***Mission Memorial Auditorium***  
550 South King St., Honolulu 96813

**Kapolei**

Monday, May 14  
***Kapolei Hale, ground floor conference room***  
1000 Uluohia Street, Kapolei 96707

**Kaneohe**

Tuesday, May 15  
***Benjamin Parker Elementary School Cafeteria***  
45-259 Waikalua Road, Kaneohe 96744

**Mililani**

Thursday, May 24  
***Mililani Recreation Center #5***  
95-1101 Ainamakua Drive, Mililani 96789



# Give Your Input on Proposed Rates

**Send a letter or an email to:**

## **Board of Water Supply**

Attn: Proposed Water Rates

*630 South Beretania, Honolulu 96843*

Email: [contactus@hbws.org](mailto:contactus@hbws.org)

**JUNE 30,  
2018**

## **Questions?**

**Call: (808) 748-5041**

BWS Website: [www.boardofwatersupply.com](http://www.boardofwatersupply.com)

Twitter: [@BWSHonolulu](https://twitter.com/BWSHonolulu)

Facebook: <http://www.facebook.com/BWSHonolulu>

# WATER FOR LIFE

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



Board of Water Supply  
City and County of Honolulu

## Questions?

