

Update on the Public Hearing #4 Held on May 24, 2018

At about 6:30 p.m. on May 24, 2018, in the Mililani Recreation Center #5 at 95-1101 Ainamakua Drive, Mililani, 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 www.boardofwatersupply.com. Minutes for the May 24, 2018 Public Hearing #4 will focus on questions, responses and testimony from the audience.

QUESTIONS AND ANSWERS

Speaker #1: 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.

Ernie Lau: 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.

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 have to make sure I had \$300 for the bill every two months.

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.

Speaker #1: 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.

Ernie Lau: 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.

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 percent of the cost it takes to provide service to them.

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 percent -- 20 percent 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 percent (rather than 120 percent), and non-residential will continue to subsidize other customer groups.

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.

Non-residential customers are going to pay a higher cost for the monthly customer charge that varies with the size of meter. Hotels typically have bigger meters.

Speaker #1: 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.

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.

Speaker #2: 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.

Speaker #2 : 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 percent. And if you used 6,000 gallons, it went up 20 percent. If I were to tell you that your mortgage or an airplane ticket would go up 30 percent 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.

Speaker #2: 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 are also making massive improvements to the sewer collection system. I am sorry, I can't really answer your question tonight. We would be glad to check with the Environmental Services.

Speaker #2: 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.

Speaker #2: BWS's customer charge could increase as much as 30 percent 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 is why the essential needs tier was developed – to try to help especially those that earn really fixed incomes. 10 percent of our customers use 2,000 gallons or less.

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: 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: 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, www.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: 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: 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.

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.

Speaker #6: As far as you know does ENV have the ability to float revenue bonds as well?

Ernie Lau: They do also.

PUBLIC TESTIMONY

Speaker #7: 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.

Speaker #8:

My name is Jim Dilibern 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 thereof, 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.

A young child is shown from the chest up, splashing water on their face. They are holding the handle of a public fountain with their right hand. Water is spraying from the fountain's spout and splashing onto the child's face and hair. The background is a blurred green, suggesting an outdoor park setting.


Ka Wai Ola

All life depends
on water



Board of Water Supply
City and County of Honolulu

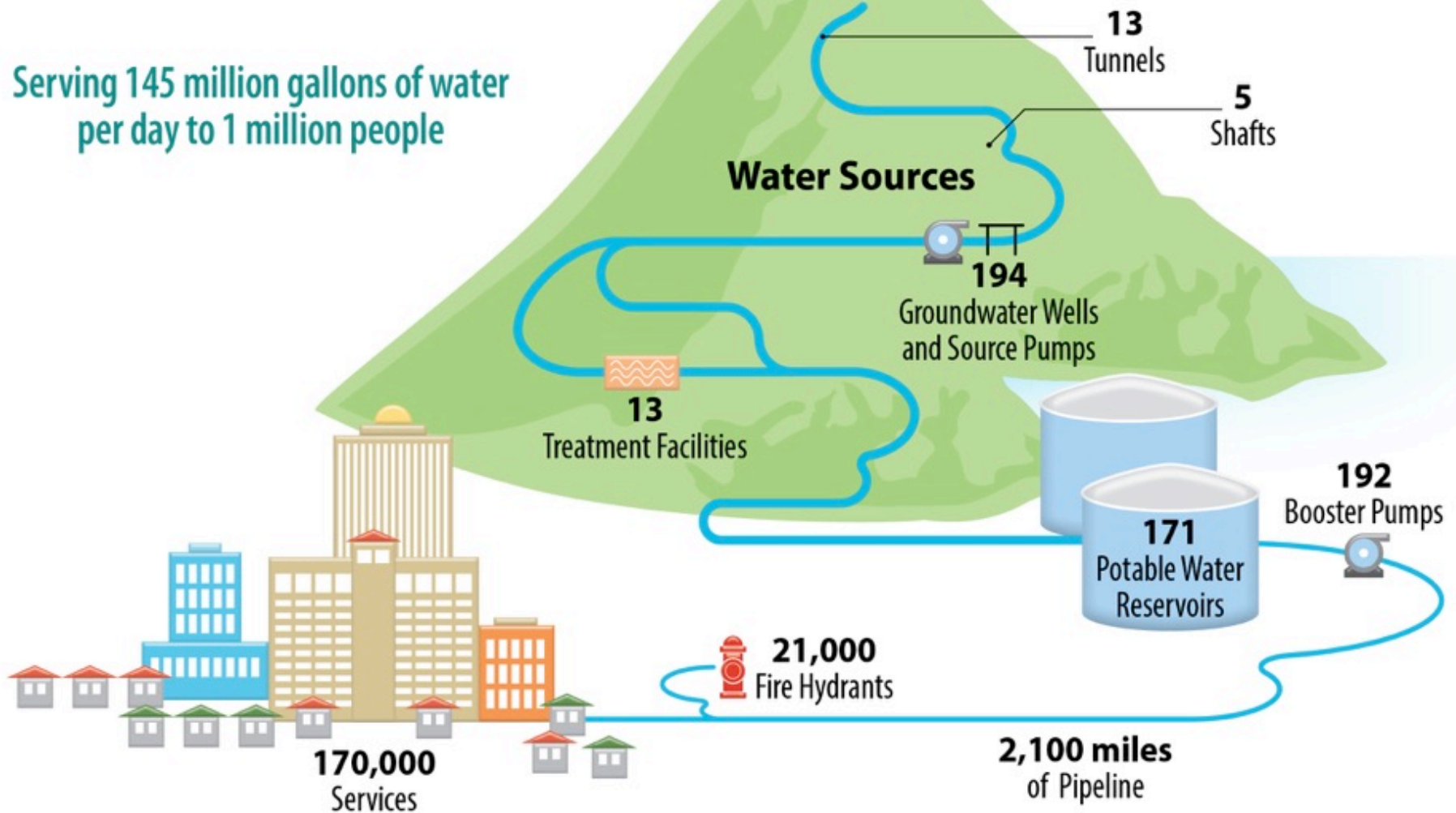
The Board of Water Supply (BWS) delivers
safe, dependable, affordable water
to your tap ...

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.



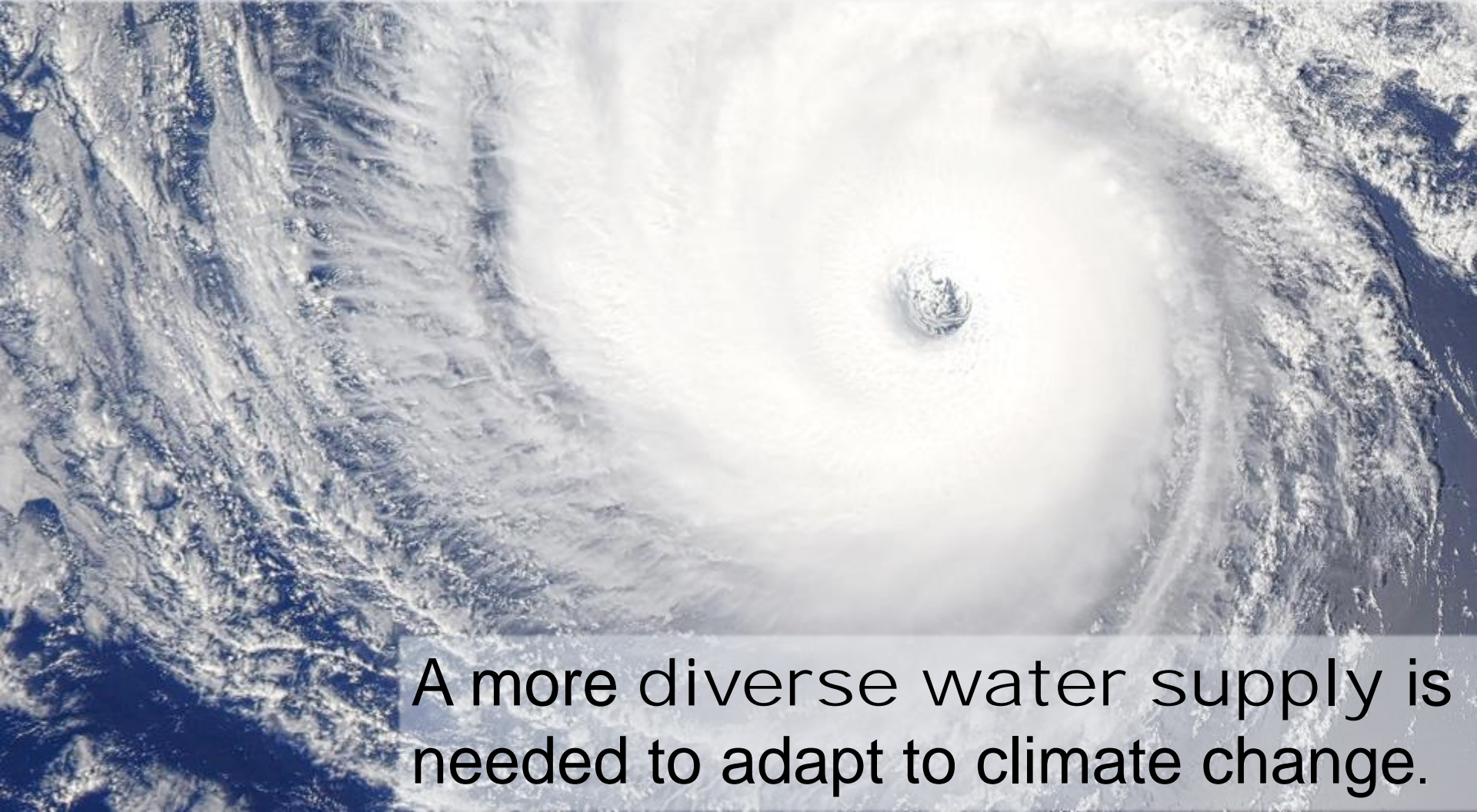


Finding: BWS pipelines suffer deterioration from age, corrosion, and soil, leading to more than 300 water main breaks per year.


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.



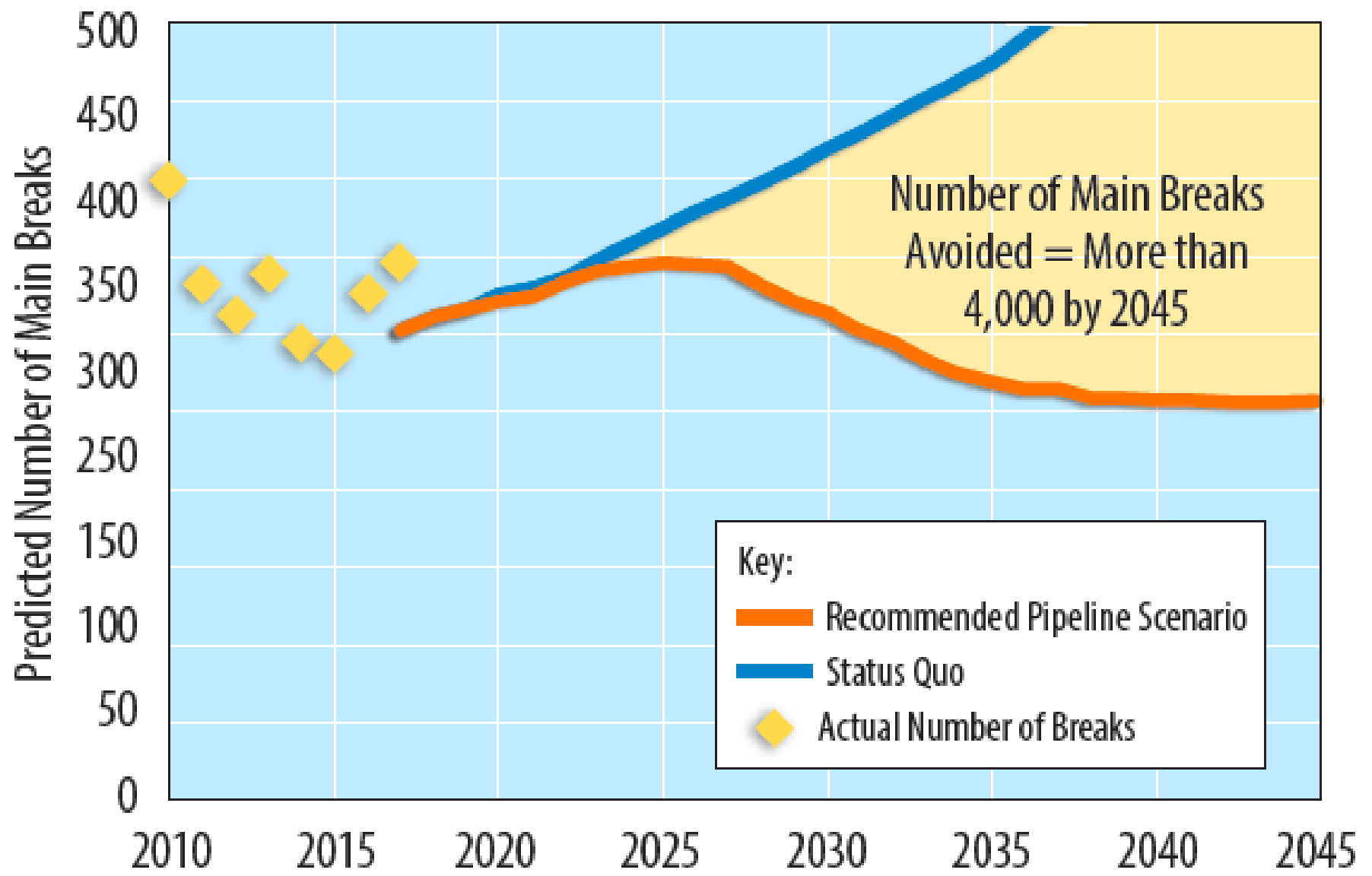
Finding: Healthy watersheds are necessary to sustain our water supply over the ages and require care and conservation.



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

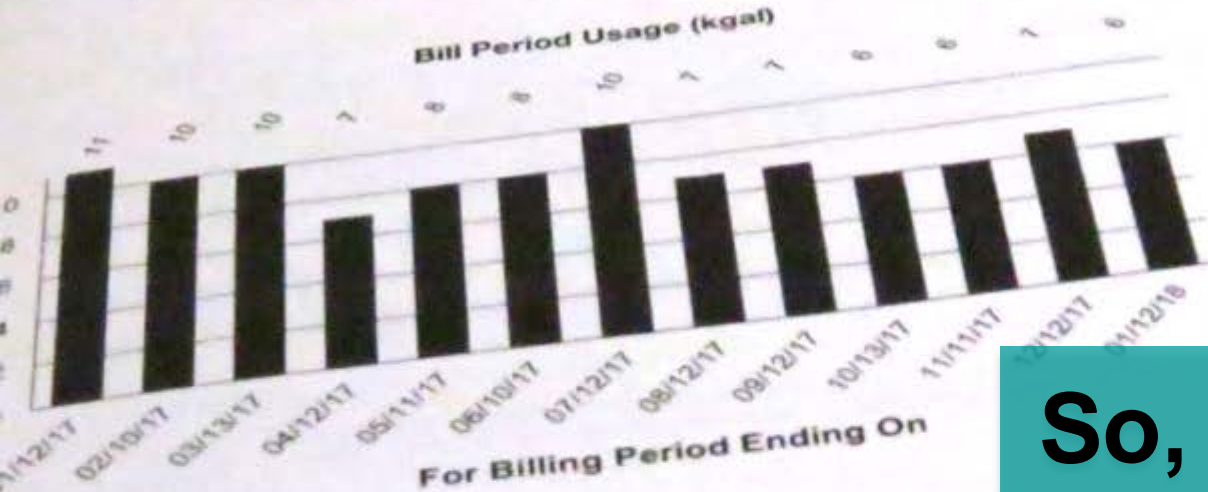
\$35.78

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

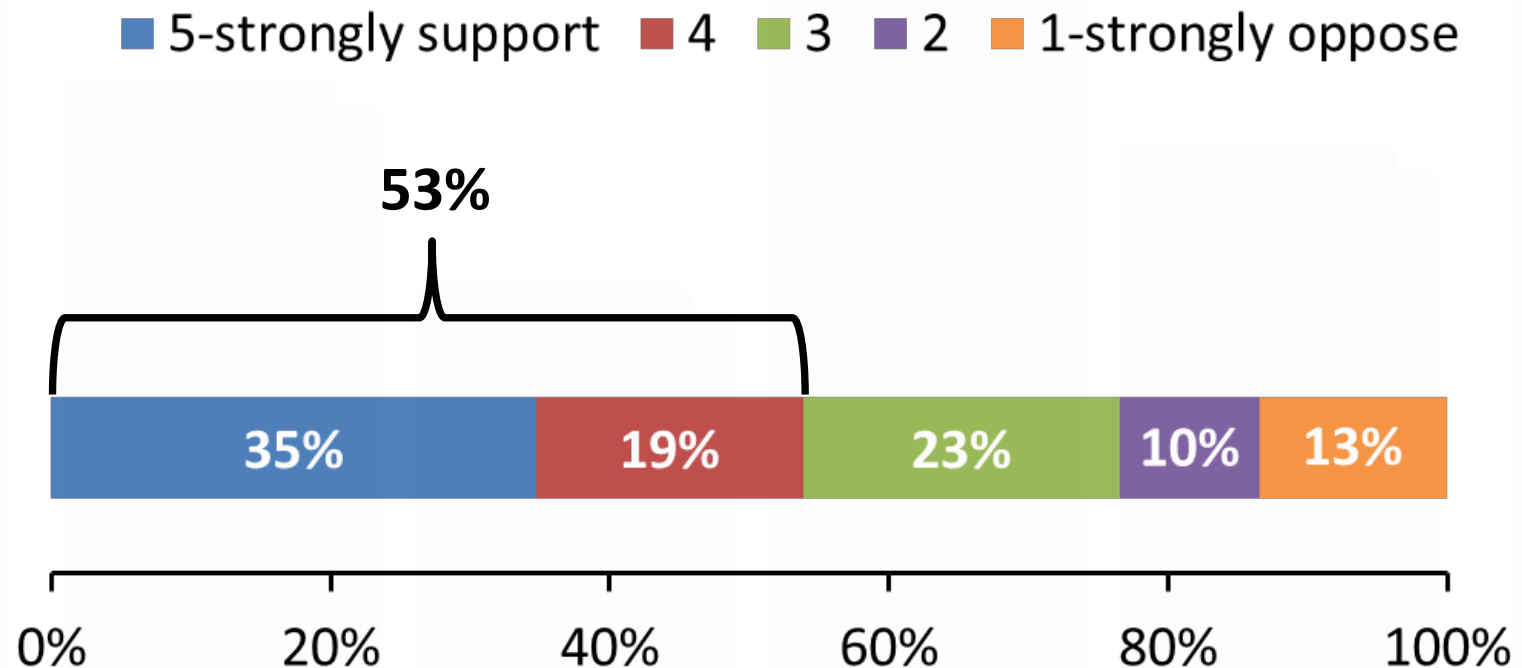


Below-cost rate for first 2,000 gallons per month.

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)

 Meter Size	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
EssN	0 to 13,000	\$4.42	\$4.42	0 to 2,000	\$3.79	\$3.91	\$4.17	\$4.46
1				2,001 to 6,000	\$4.46	\$4.60	\$4.90	\$5.25
2	13,001 to 30,000	\$5.33	\$5.33	6,001 to 30,000	\$5.06	\$5.20	\$5.50	\$5.85
3	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
EssN				0 to 2,000	\$3.70	\$3.71	\$3.72	\$3.77
1	0 to 9,000	\$4.42	\$4.42	2,001 to 4,000	\$4.35	\$4.36	\$4.38	\$4.43
2	9,001 to 22,000	\$5.33	\$5.33	4,001 to 10,000	\$4.95	\$4.96	\$4.98	\$5.03
3	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**

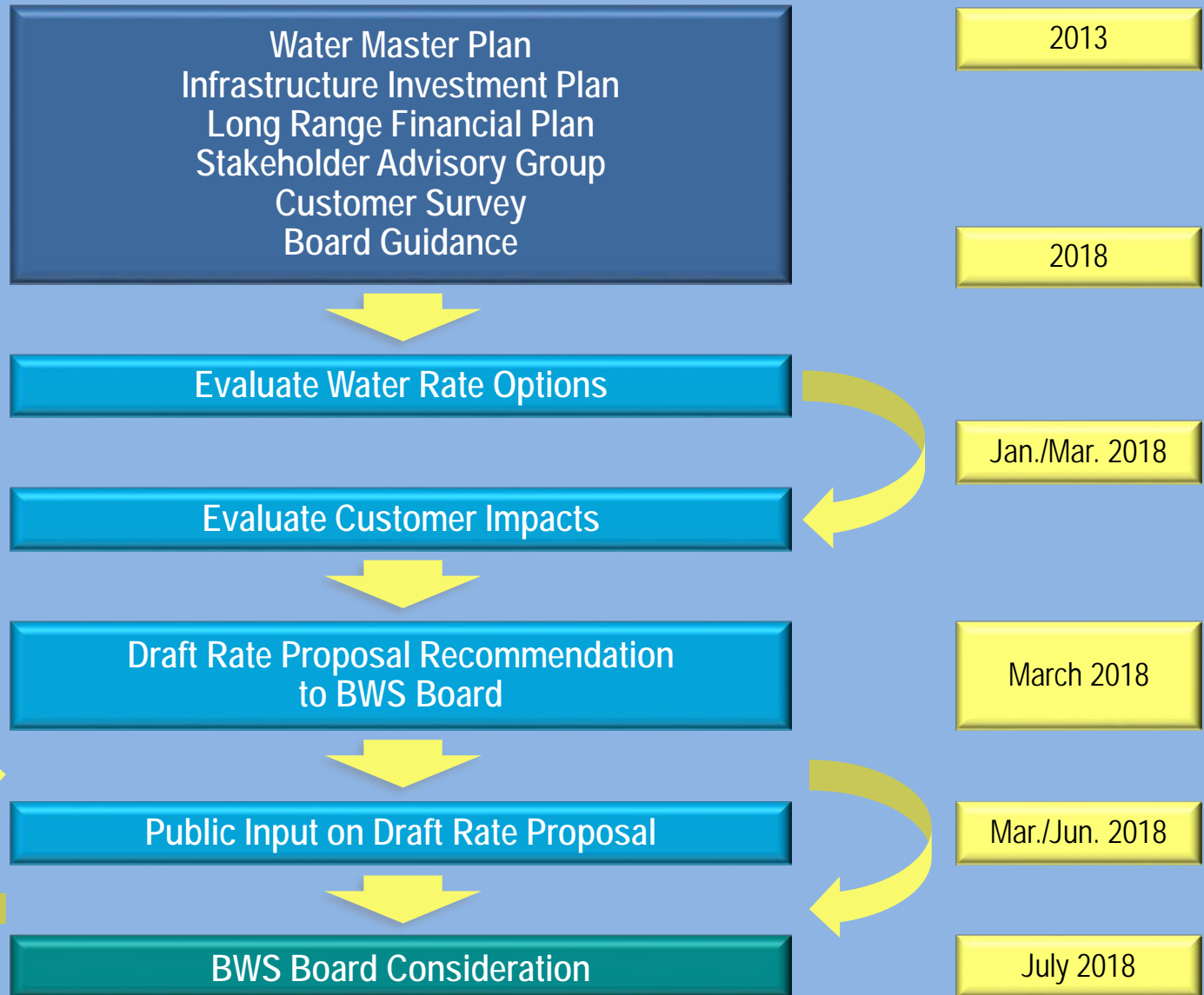
💧 **Standby Charge** (emergency interconnections)

💧 **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

**JUNE 30,
2018**

Questions?

Call: (808) 748-5041

BWS Website: 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?

