



Honolulu Board of Water Supply  
**Stakeholder Advisory Group**

Meeting 16 – Wednesday, June 21, 2017 4:00 to 6:30 pm  
Neal S. Blaisdell Center, Hawaii Suites

Meeting Notes

**PURPOSE AND ORGANIZATION OF MEETING NOTES**

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

**ATTENDEES**

There were 14 stakeholders present, two members of the public, as well as BWS and CDM Smith staff. The stakeholders represent diverse interests and communities island-wide.

The following Stakeholders Advisory Group members attended:

- |                  |                                |
|------------------|--------------------------------|
| Matt Bailey      | Aqua-Aston Hospitality         |
| Jackie Boland    | AARP Hawaii                    |
| Pono Chong       | Chamber of Commerce Hawaii     |
| Bill Clark       | Resident of Council District 6 |
| Shari Ishikawa   | Hawaiian Electric Company      |
| Will Kane        | Mililani Town Association      |
| Gladys Marrone   | BIA of Hawaii                  |
| Bob Leinau       | Resident of District 2         |
| Robbie Nicholas  | Resident of Council District 3 |
| Alison Omura     | Coca-Cola Bottling Co.         |
| Dick Poirier     | Resident of Council District 9 |
| Cynthia Rezendes | Resident of Council District 1 |
| Cruz Vina, Jr.   | Resident of Council District 8 |
| Suzanne Young    | Honolulu Board of Realtors     |

**MEETING AGENDA**

- Welcome and Introductions
- Public Comment on Agenda

- BWS Updates
- Accept Notes from Meeting 15
- Weight Value Statements about Water Rates
- Water Rates Policy Issues
- BWS's Cost of Service for Major Customer Classes

## **WELCOME AND INTRODUCTION**

Dave Ebersold, meeting facilitator and Vice President of CDM Smith, welcomed everyone and reviewed the objectives for Meeting 16.

## **PUBLIC COMMENT ON AGENDA ITEMS**

None.

## **ACCEPTANCE OF NOTES FROM MEETING 15**

Accepted.

## **BWS UPDATE**

Ellen Kitamura, BWS Deputy Manager and Chief Engineer, announced that on the following day -- June 22, 2017, 6:00 pm-8:30 pm, at the Moanalua Middle School at 1289 Mahiole Street – the Navy and EPA would hold a public meeting to share some of the results of work that they've been doing on the Administrative Order of Consent (AOC). She encouraged stakeholders to attend.

Ellen reported that the BWS board approved the FY 2018 budget of \$311 million. In all areas except for the capital projects, the BWS is reducing spending compared to last year's budget. The capital program increased from about \$70 million to \$120 million.

She said that the public comment period for the Haiku Stairs EIS preparation notice ended on May 23, however, additional comments were still being accepted. Among them will be a resolution that the Kaneohe Neighborhood Board just passed regarding what they want included for study in the EIS. The BWS has received more than 700 public comments and is going through them and responding. It will take approximately a year to complete the EIS.

Ellen provided information about the water main break on Kalaniana'ole Highway between Waiholo Street and Kaimoku Way over the previous weekend. The pipe that broke was a 12-inch line. The section removed will be examined forensically to determine the cause(s). She said that the crews acted quickly and once again the BWS appreciated the partnership with the Department of Transportation. Mike Fuke added that the Honolulu Police Department was also instrumental to response efforts. The installation of a contra-flow lane helped ease traffic conditions.

## QUESTIONS, ANSWERS AND COMMENTS

**COMMENT:** Thank you for your hard work. Did you see the editorial praising your response to the main break?

**QUESTION:** How old was the 12-inch line?

**ANSWER:** It is more than 70 years old.

## WEIGHTING OF VALUE STATEMENTS FOR WATER RATES

Dave reviewed the overall rate setting process and schedule. He also reviewed reasons why value statements about water rates and water rate structures are very important:

- They provide a common language that we can use to help understand what it is we're trying to achieve.
- They illustrate the complementary and sometimes competing aspects of certain objectives.
- They support clear communications for expressing interests and values.
- They help us understand various alternatives and their impacts, and the impacts of potential changes and rates on those groups.

Below is the list of values discussed at the May 2017 meeting.

- Legal
- Recover Full Cost of Water
- Credit Strength
- Fair and Equitable
- Stable and Predictable
- Encourage Conservation
- Understandable
- Affordable

At that meeting, the group spent time talking about “affordable”. Dave said that the team put together a value statement for “affordable” (below) using the input that stakeholders provided. He welcomed any comments and/or revisions to it.

### **AFFORDABLE**

*Affordable has multiple components, all of which point to delivering the right quality of water for the lowest reasonable price:*

- ◆ *Can depend on reliable water service*
- ◆ *Water bills are reasonably consistent, month-to-month*
- ◆ *Recognize and address that low income residents have limited means to pay their bills*

- ◆ Recognize that customer classes provide valued services, e.g. agriculture, and affordable water supports the sustainability of those services
- ◆ Customers have the ability to control their expenses through conservation
- ◆ The right qualities of water (potable v. non-potable) for the right uses are available at reasonable prices

## QUESTIONS, ANSWERS AND COMMENTS

**COMMENT:** Add “fixed income” to bullet #3 (low and fixed income residents).

**COMMENT:** The future significant increase in the combined water bill will be charges for sewer service. Charges for water will be much less than for sewer. Customers will see much higher bills and perceive that that’s for water, not for the combined services. This will influence the perception of affordability.

**QUESTION:** People don't differentiate when there's only one number that they pay even if it's delineated on the bill and clearly delineated. It's still viewed as water. Is there a way to separate the bill so that the Department of Environmental Services (ENV) takes the heat that they need to take versus BWS?

**ANSWER:** You could certainly make that recommendation.

**COMMENT:** I agree with that except that it would have to go under the Stable and Predictable value category. Affordable really is about the cost of the water. It would help to have people understand how their costs are broken down.

**COMMENT:** The use of the word “perception” is really important. The Board of Water Supply has always talked about how important water is but that's a *really, really* important message as it relates to the word “perception”. To perceive the value of water, take the water away and you’ll find out what it's worth. That's a more difficult message to deliver.

**QUESTION:** If the water portion of the bill is so small compared to the sewer service portion, will any savings we can carve out for low income customers will be “eaten” by the other part of the bill for sewer services? I'm not trying to sound callous but in order for it to make a difference, you would have to lower the water bill by 50%. In the broader scheme of things, how are we going to make that work?

**COMMENT:** I think we need to keep the cost of the water reasonable. Everybody's bills in every single area (water, sewer, electricity, etc.) are going up but if each group tries to address people's underlying fixed income and manage their own part, we don't have to be responsible for the other groups. We need to know where water fits within the scheme of utilities overall.

Dave responded that the idea here is to recognize that different value statements may not all align, or may even compete with each other. This is where it gets hard. Stakeholders are going through the process of looking at the impacts of the types of decisions we'll have on changes in rates. Is this a value, that as a group, stakeholders think is important – doing something to recognize that some people have limited means to pay their bills? Is that an important thing to recognize in the value statement? That's really the question.

Stakeholders responded:

- It's something that we're all going to have to look at not just for today, but also in the future. Even though we're talking about low-income/fixed-income residents, when you look at the bigger scheme of things and how fast money has grown, we're talking about the inflation of the dollar in some regards. The question becomes: How do we take a look at the future growth of the dollar in the water arena? Our recommendations may be across all residents, not just low-income customers. The affordable value statement is a trigger for us to keep in mind that there are some people who have more limited means, who are more challenged to be able to pay their bills. We need to recognize that we're all here in the middle of the Pacific without any other resources. We still need to live within our means. I think it's important to include that not only do we need to recognize that there are some residents that are more challenged in paying their bills, but how does this translate to what happens in the future also?
- The affordable value statement language reminds us that these are for residents. We have low-income residential housing. Perhaps, the value statement should extend to the hotel industry or Airbnb. You have people coming in and out all the time and they're contributing to our economy.
- Politically, there are always more residents who vote than there are business owners. It's always easy to pass higher costs to businesses because it's politically easy. On Oahu, there are 100,000 businesses and half a million voters. The math works out pretty easy. That's my concern. From a practical standpoint the average residential customer pays \$40 a month. To make cuts so that a customer feels it, you're going to have to do it by a very large percentage. A 10% cut is \$4.
- Stakeholders discussed whether or not to include the word “fixed” in the value statement (low- and fixed-income). Ultimately, the group agreed that if customers have low-income, they have limited means; thus adding “fixed” to the statement isn't necessary.

- Stakeholders also pointed out that the last bullet of the draft value statement repeats a point made in the opening sentence. The group agreed to delete the last bullet and adjust the opening sentence to:

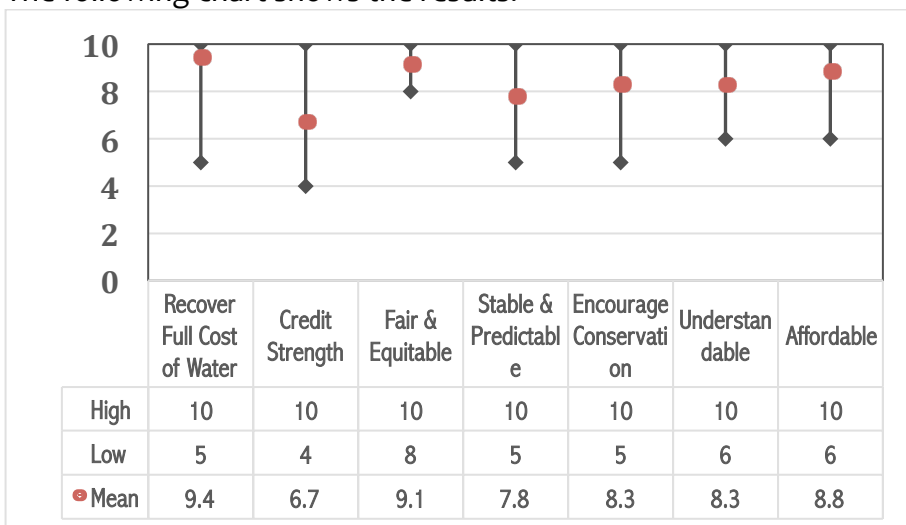
*Affordable has multiple components, all of which point to delivering the right quality of water (potable v. non-potable) for the lowest reasonable price.*

- Stakeholders discussed whether or not to include the word “address” in the third bullet: *Recognize and address that low-income residents have limited means to pay their bills.* The initial concern was whether or not including “address” in the value statement would force the BWS Board to take some action. Taking action should be within the Board’s jurisdiction to decide, not the Stakeholder Advisory Group’s. Other stakeholders said that including “address” doesn’t preclude the Board from “taking no action”, but one said that it implies that something will be done. The consensus was to leave in the word “address”, recognizing that the BWS is already taking some actions to address the needs of low-income customers.

### EXERCISE: WEIGHTING VALUE STATEMENTS

Dave explained the weighting exercise process. He asked stakeholders to review the value statements, write down on post-it notes how they would score (weight) each one, and put the post-it notes on value statement posters in the room. The highest weight would be 10, lowest would be zero, and stakeholders were not restricted in how many value statements received 10s, zeroes, or otherwise. He added that the “Legal” value statement was not included for the weighting process since it is considered to be threshold/non-negotiable.

The following chart shows the results:



## WATER RATE POLICY ISSUES

Dave introduced Brian Thomas, with Public Financial Management, to walk through how different utilities in the country deal with different water rate policy issues. Brian said that rate design is as much art as science. People are generally familiar with rate designs for different services and industries, like flying commercial airlines and taking Uber for transportation. Water rate design is a little bit different and perhaps a little bit harder to deal with than these examples. Related decision-making involves making choices about things like these:

- The mix of fixed charges vs. volumetric charges
- The number, size and price of residential rate tiers
- Consideration of alternate non-residential rate structures and prices
- Special rates for specific customer classes, to reflect community values, e.g. agriculture
- Creating an affordability program
- Water System Facilities Charge

Brian reviewed all of these with the group, adding highlights and examples as follows:

### Fixed vs. volumetric charges

- Prior to the mid-1980s, people in New York didn't have water meters. How did they pay their water bills? They paid a fixed charge, regardless of how much water they used.
- We have water meters here and BWS collects revenues based on the amount of water that each customer buys. These charges are not fixed, but volumetric – based on use.
- What components of the BWS's costs do we want to recover through a fixed charge? How much do we need to collect in a fixed charge? We will have to make choices to answer these questions.

### Rate tiers

- BWS wants to encourage people to conserve, and so it uses what are called the inclining block rates (rate tiers) for residential customers.
- BWS single-family residential customers get the first 13,000 gallons at \$4.42 per thousand gallons. Multi-family residential customers pay that same rate for the first 9,000 gallons.
- Water rates double between the first and third tiers. 94% of single-family residential customers stay within tiers 1 and 2. Nearly all multi-family residential customers stay within tiers 1 and 2. That's a good indication that high cost of the third tier is effective in getting customers to conserve. Increasing the third tier would not generate a lot of money.
- What about non-residential (commercial, industrial institutions)? Their water usages are different and the use of inclining block rates is much more complicated. If a customer runs a hair salon versus a restaurant versus a large industrial type of

production – those uses are different and employing the inclining block rate doesn't seem quite right.

- For a lot of agencies, doubling the water rate among tiers isn't enough. Some charge their highest tiers seven or eight times more than their first.
- As we talk about affordability and other programs, one of the options is to change the BWS's first tier. Instead of the first tier charging \$4.42 per thousand gallons for up to 13,000 gallons, it could change to charging a lower rate (a lifeline rate) for up to 5,000 gallons, for example.
- BWS has the ability to change where tiers start and stop, and to increase and decrease the prices of those tiers as well. The question is what are we trying to accomplish? What costs are we trying to recover? What signals are we trying to send? These are all important questions to consider and choices to make.

### Conservation

- Regarding water rate policies that affect conservation, if the water bill were based solely on the commodity rate (no fixed charge, billed for water used), the customer is in complete control of his/her bill. The bill is completely dependent on how much water that customer takes.
- BWS encourages conservation, and in effect, tells its customers: *Don't buy as much of our water*. What happens to revenues? Revenues actually go down as people conserve and buy less water.
- What was the reward for people in California and Las Vegas actually doing what they were asked to do during the recent drought, which was to conserve? Rates had to be raised to cover the utilities' costs.

### Water System Facilities Charge

- How much should a new house, or a new housing development, or a new hotel, contribute in the form of Water System Facilities Charges, as each of these create new burdens on the water system?
- Some utilities have a very simple rule: "Growth" is going to pay the full cost for providing system capacity. Growth pays for growth.
- Other utilities might choose to incentivize growth and consider how to structure the water system facilities charge and what it pays for.

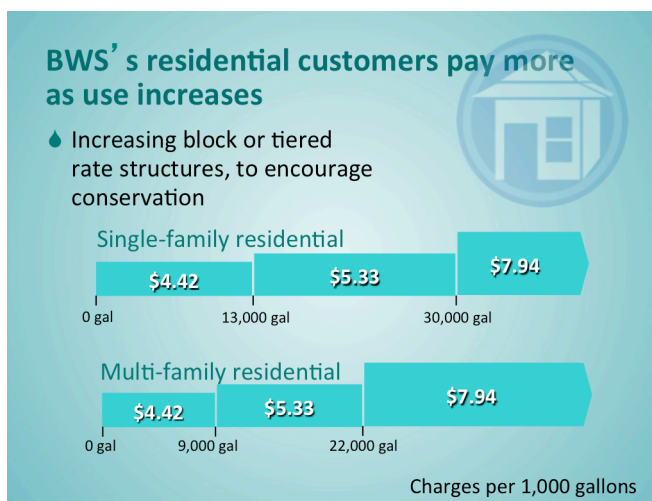
## **QUESTIONS, ANSWERS AND COMMENTS**

**QUESTION:** A single-family house could have four people or one. Is there any way to base the rate on the number of people as opposed to the definition of the four walls?



**ANSWER:** That approach is very complicated. In Southern California, they're charging something called "budget based rates." They start with assuming a single family home has four people, and then customers with more people in the household apply for more water in the first billing tier based on a standard amount of usage. What it really amounts to is almost every residential customer gets a custom bill. The billing system is much more complicated. The number of customer service representatives goes up. There's a lot of downside to this approach, but that's how some utilities have addressed your question.

**QUESTION:** What's the policy or the thought behind the policy of having the second tier for multi-family residential customers beginning at a lower gallon usage? (See slide referenced below.)



**ANSWER:** In general, the single family resident has more outside water usage. Multi-family residences don't have as much irrigation.

**RESPONSE:** So the BWS is subsidizing people watering their lawns.

**RESPONSE:** I wouldn't say that the BWS is subsidizing people for watering their lawns. When we take a look at cost of service, we can discuss this in more depth.

**QUESTION:** Sometimes people conduct a pricing sensitivity study. For instance, if you raised a price 10%, is there any statistical correlation with how people might respond to a 10% versus 5% versus 15% increase? Have you done much with pricing sensitivity studies?

**ANSWER:** Brian has seen more price elasticity studies, rather than sensitivity studies. Southern California and Las Vegas utilities have looked at the impact of a price increase on the amount of water purchased – e.g., a 10% increase would result in a 3% decrease in the quantity of water purchased. That's called price elasticity. Water, as a portion of most people's income, is a relatively small amount. An increase going from \$40 to \$41 isn't going to have a big impact on people's behavior. Some academic research has looked at what

happens if we increase a particular tier. What's the impact of changing a particular tier versus the average bill?

**QUESTION:** With regard to custom rates, are any of them weather dependent? For instance, if you're an agricultural person and you had a really big drought, you're probably going to use a whole lot more water because it's not raining. Are those kinds of rates ever adjusted in a short amount of time and might that be weather dependent?

**ANSWER:** Rates can be changed in a relatively short amount of time. However, for large agriculture in California, it's almost the opposite. In dry years, they pay more for water because water is worth more.

With no further questions, Brian moved on to discuss affordability programs.

#### Affordability Programs

Brian told the group about different affordability programs around the country. He said that a number of the examples he would show address water as well as wastewater and/or other services. He said we need to focus on what the BWS can control, and that is water – the revenues that BWS can generate and the costs that must be covered.

Brian said that according to the American Water Works Association, more than 60 percent of water utilities partner with community organizations or local government agencies to help low-income water customers. He said there are many different kinds of affordability programs, including:

- Bill discounts and credits
- Flexible terms for repayment
- Block rate structure and lifeline rates
- Temporary or crisis assistance
- Water efficiency and leak repairs
- Community and local government assistance programs
- Income-based discounts

He summarized several affordability program examples as follows:

Bill discounts and credits	
California Water Services Co.	<ul style="list-style-type: none"><li>• 50% discount on fixed monthly charges up to \$360 per year</li><li>• Qualified if enrolled in Women Infants and Children (WIC), Medicaid, or other public assistance programs</li></ul>
Seattle Public Utilities	<ul style="list-style-type: none"><li>• 50% discount on water bill for households &lt;70% Median Household Income (MHI)</li><li>• Emergency assistance of 50% of an unpaid bill</li></ul>

	up to \$371 annually
<b>Flexible terms</b>	
BWS	<ul style="list-style-type: none"> <li>Moved from bi-monthly to monthly billing</li> <li>Offers zero-interest plans to pay off past-due payments</li> </ul>
Washington, D.C., Boston, Detroit, Philadelphia, and Baltimore	Moved from quarterly to monthly bills
<b>Block rate structure and lifeline rates</b>	
BWS	Uses an inclining block rate structure
LA Department of Water and Power	<ul style="list-style-type: none"> <li>Expanded to 4-tier inclining block rate structure. First tier based on indoor basic water needs</li> <li>Seniors and disabled customers get 31% discount on the first 13,464 gallons of water every two months</li> </ul>
Norman, OK	Lifeline rate less than 50% for first 5,000 gallons
<b>Temporary or crisis assistance</b>	
Portland, Oregon	<ul style="list-style-type: none"> <li>Offers Low-Income Utility Assistance Program providing a \$150 crisis voucher every 12 months</li> <li>Safety net to delay shut-off, waive delinquency charges, offer interest-free payment plans to customers facing medical emergencies, loss of jobs, divorce, or other life disruption</li> </ul>
Kansas City, MO	One-time credit up to \$500 per year for customers facing water turnoff due to emergencies
<b>Water efficiency and leak repairs</b>	
Portland, ME	Households < 80% of MHI may qualify for plumbing repairs, replacement and installation of water saving devices
Aurora, CO	Pays to replace aging plumbing fixtures with new water-efficient devices for households receiving low-income benefits for electricity
<b>Community and local government assistance</b>	
Washington Suburban Sanitary Commission (WSSC)	<ul style="list-style-type: none"> <li>Helps financial hardship customers pay delinquent bills; administered through the Salvation Army</li> <li>Funded by donations from customers (“round up” bill payment), WSSC employees, and the general public</li> </ul>
Washington Urban League	<ul style="list-style-type: none"> <li>Serving People by Lending A Supporting Hand</li> </ul>

	<p>program helps low-income customers pay bills</p> <ul style="list-style-type: none"> <li>Funded by water customers who round up their bills and private contributions</li> </ul>
<b>Income- based discounts</b>	
Philadelphia, PA	<p>Income-Based Water Rate Assistance Program enacted 2015, first in nation</p> <ul style="list-style-type: none"> <li>Sets rates as a fixed percentage of household income, with a minimum bill of \$12 per month</li> <li>0 to 50% of federal poverty level receive monthly bills calculated as 2% of monthly income</li> <li>50% to 100% of federal poverty level receive monthly bills calculated as 2.5% of monthly income</li> <li>100% to 150% of federal poverty level receive monthly bills calculated as 3 percent of monthly income</li> </ul>

**QUESTION:** If a customer is running up a debt, can he/she pay with an in-kind service rather than money, or work off the debt?

**ANSWER:** Brian said he doesn't know of utilities currently using that approach. Most urban areas have some form of payment plans.

With no further questions, Brian asked Dave to discuss Water System Facilities Charges (WSFC).

Water System Facilities Charge

Dave told the group that Mayor Caldwell talked to the BWS's Board about the possibility of providing a waiver or subsidy of the WSFC to stimulate affordable housing. Dave said he wanted to provide some background around what the charge is, what it covers, and the process of updating it.

The WSFC is based on water use capacity. It applies to all new developments and residential properties that require water from the BWS system. Besides new developments, the one-time charge also applies to adding fixtures like sinks/tubs/toilets in existing homes. It excludes developments that have paid for and installed all or part of their own water system.

Minimum charges are different for each of the different categories for the Board of Water Supply. Charges for residential customers are based on a minimum of 20 fixture units, about enough for a three-bedroom, two-bath house. The residential minimum charge is about \$3700. The minimum WSFC for non-residential customers is about \$12,000. For agricultural customers, the minimum WSFC is about \$4800.

Dave showed a table of other water utilities' Water System Facilities Charges:

	BWS	Maui	Kauai (proposed)	Las Vegas
Residential	\$3,706	\$12,060	\$14,115 (1)	\$6,418
Non-residential	\$12,417	\$12,060	\$14,115	\$6,418
Agricultural	\$4,819	\$12,060	\$14,115	\$6,418
Special			\$4,940 (2)	

Notes:

- (1) Multi-family/hotel rooms \$9,880
- (2) For affordable housing, per dwelling unit

BWS hasn't updated its WSFC since 1993. BWS charges based on the number of fixture units, not meter size. Someone with a house that has 50 fixture units with a ¾-inch meter pays a lot more than somebody with a house that has 20 fixture units and a ¾-inch meter.

Dave said that there are several issues to think about when establishing the WSFC. These include:

- Some agencies want the developer to cover the full cost of the water system that serves their new development. They don't want any of those costs to fall to their existing customers.
- Some agencies decide about what portion of the water use capacity they want to recover in their WSFC.
- Some agencies might set the WSFC lower than the full cost of recovery to encourage new development in certain areas.
- Other decisions to consider include: Do you have other people who are paying the WSFC subsidize a specific target, like affordable housing development? Alternatively, do you take that subsidy requirement and spread it across your entire rate base?

**COMMENT:** I'm assuming there's a difference in the reason why Maui charges more than Honolulu. Maui people wait years for water meter access, and there is difference in the

elevation. We shouldn't assume but we should ask what the reasons are for the differences.

**QUESTION:** Are Kauai's charges higher because they're based a little bit on urban versus rural? Is the urban system (Honolulu) set up for more additions so it's less costly?

**ANSWER:** Dave said that what you do is look at what the cost of the system is and what that cost is per unit of capacity in the system; what you expect you're going to have to spend going forward to provide for growth. You look at those costs and then determine the WSFC. It's a complicated process.

**QUESTION:** Do those numbers (WSFCs) reflect the installation of the size of the meter also? Is it a bigger umbrella addressing the larger system?

**ANSWER:** It's addressing the larger system. There's a separate charge for actually covering the cost of the meter itself.

**QUESTION:** The water systems facility charge, what's the rough order of magnitude and how much that generates in the course of the year?

**ANSWER:** It's been \$10 to 12 million in the past couple of years.

**COMMENT:** It hasn't been updated since 1993, and it's assessed based on new construction. We've had two or three or four construction booms since 1993. How much money has been left on the table by not adjusting that? It would be like me charging 1993 rates for hotel rooms.

**ANSWER:** That's a good question. It depends on how the WSFC was actually calculated back in 1993 and the methodology that the BWS used. Inherently, thinking about it, everything you said is absolutely right.

### **COST OF SERVICE**

Dave said Cost of Service is the cost of providing water service to each distinct customer class. A cost of service study evaluates the cost to serve different customers and compares those costs to the revenues generated by the water rates. We use that to show the impact of various changes in rate structures to different classes of customers, and also to inform people about rate policy decisions and the impacts of those decisions.

Cost of Service is based upon the following:

- Annual operation and maintenance expenses
- Capital-related costs
- Quantity of water used
- Use and stress of the system

- Number of services to each customer class
- Size of services (i.e. meter size)





The cost of service varies for different BWS customer classes – single family residential, multi-family residential, non-residential (commercial), and agricultural customers.

Dave reminded the group that we discussed peaking factors while developing the Water Master Plan. When everybody gets up in the morning and takes a shower at the same time, residential water use spikes up to about 1.8 times what it is on average. That puts a big demand on the system. The system can't be sized for the average demand, because it has to be able to meet the peak demands. Non-residential customers typically have a much more uniform water usage pattern, so the cost to serve them is less.

Dave said hydraulic modeling results are used along with billing data and engineering judgment to calculate the cost of service for each of the customer classes. Some highlights are below:

- Single family residential is the most expensive type of customer to serve because of that peak. They generate about 50% of the total revenues. The cost of service for single-family residential is \$107 million and revenues derived are only \$96 million – a difference of about 11% to the *negative*.
- By comparison, cost of service for multi-family residential is about \$40 million, with revenues of about \$45 million. The difference is 12% to the *positive*.
- Non-residential customers (commercial) pay a uniform rate. Overall, this customer class provides about 32% of the BWS's revenues. The cost of service for those customers is \$67.5 million. The revenue collected is \$82.2 million, a difference of about 18% to the *positive*.
- Agricultural customers pay a lower rate. Ag customers pay the same rate as residential customers for the first tier (up to 13,000 gallons). The rationale is that most of BWS's agricultural customers have a single-family residence associated with their farms. The second tier covers water for agricultural usage. Agricultural customers generate about 1% of BWS's revenue. The cost to serve them is \$3.8 million, with about \$2.4 million in revenues generated. The difference is about 60% to the *negative*, but in terms of actual dollars, this is not a very large difference.
- Non-potable customers provide about 3% of the BWS's revenue. Their water rate is lower to encourage non-potable customers to come online, decreasing the demand for potable water and thus benefitting all customers. The cost of service is about \$2.4 million with \$1.6 million generated in revenues.

A summary of the Cost of Service study is shown below. Money is coming in from the multi-family residential and non-residential customer classes and flowing to non-potable, agricultural and single-family residential customer classes. That's the current subsidy structure. This is one of the reasons the value statements are important.

Cost of service summary		Revenue \$M	Cost of Service \$M	Diff. \$M	Diff. %
 <b>Single Multi</b>		\$96.6	\$107.4	-\$10.8	-11%
		\$45.4	\$39.9	\$5.4	12%
 <b>Non- residential</b>		\$82.2	\$67.5	\$14.8	18%
 <b>Ag</b>		\$2.4	\$3.8	-\$1.4	-60%
 <b>Non- potable</b>		\$1.6	\$2.4	-\$0.8	-46%

## QUESTIONS, ANSWERS AND COMMENTS

**QUESTION:** Why are there differences in peaks? Are people in single family residences taking more showers in peak hours? Do fewer people live in multi-family residential?

**ANSWER:** No. Actually, the peak hour factor is the same for multi-family and single family. They take showers at the same time. The maximum day factor is the one that's different because generally, multi-family residences have a lot less landscaping.

**QUESTION:** When you look at the percentages, they don't add up. It looks like everything's running at a deficit.

**ANSWER:** We have to look at the dollars not the percentages. The extra money coming in for multi-family and non-residential is going to the other categories.

**QUESTION:** Is everybody outraged? Multi-family residential is subsidizing the single-family residential customer class. We spent a good portion at the beginning of the meeting talking about low-income people. But it looks like single-family customers – who are more likely to be homeowners – are being subsidized by multi-family people – who are more likely to be renters and don't have the same assets or income capabilities. Regarding the



politics, it's more likely that single-family dwellers are voters. Multi-family are less likely to be voters. Maybe that's why, in part, BWS has that structure.

**COMMENT:** Not all multi-family dwellers are low income. If you look at everything that's being built in Kaka'ako and to the point about usage, the building I live in is probably 60% occupied. The other 40% of people are never there. I don't know that it's necessarily a cause for outrage.

**COMMENT:** I thought that one of the most thorough parts of the presentation tonight dealt with ways to adjust billing to accommodate people who were financially challenged. Regardless of how you created your classes, it seems like there's an awful lot of different options to address people that are challenged.

**COMMENT:** We have to be careful about jumping to conclusions without understanding what the make-up is of single-family dwellings, multi-family dwellings and low-income versus not low-income. We need to understand the percentages and the numbers. Look at Kaka'ako. Right on the borders of Kaka'ako, there are a number of multi-family dwellings that are low and affordable income housing. There are more data to be mined to understand who, what, where and how in each of these categories. For example, agricultural customers are paying \$4.42 per thousand for the first 13,000 gallons based on the assumption that there's residence on their farm. A lot of truck farms have no residences on them.

**COMMENT:** The BWS'S agricultural customers follow an application process to verify that they are actual, viable agricultural businesses.

**COMMENT:** I'm not outraged but I actually am upset because I own a multi-family home in Mililani. I have my own yard. I pay maintenance dues. Basically I pay the same as a single-family customer but I get less water for the amount paid.

**QUESTION:** Can somebody tell us why the structure is such that multi-family residential customers subsidize single-family customers?

**ANSWER:** It's been this basic structure since 1995.

**COMMENT:** But there's no reason about why it's that way.

**COMMENT:** Some of it may not even be a policy. It's just that's how they thought they were doing based on a policy discussion at that time. It just never got changed but it's interesting that one group subsidizes the other.

**RESPONSE:** Dave said that it's very typical across different water agencies to see patterns like this, but we don't often see this big of a difference between multi-family and single-

family residential customers. The non-residential customer class subsidizing residential customers is very common.

**RESPONSE:** Brian said he thinks this is an artifact of time as much as anything else. Causation of the cost of service changes over time, which is why we're doing this study now. Stakeholders have the opportunity to recommend changes. There are some other entities he has worked with where the situation is just the opposite. The residential class pays more to develop business in their community.

**COMMENT:** Coupled with condos are town homes. Town homes are more like a single-family residential because they typically have landscaping. A multi-story condo building doesn't have individual landscaping. That's another dynamic to that multi-family category that you might need to look at.

### **Summary and Next Steps**

Dave thanked everyone for coming and said that we look forward to the next BWS Stakeholder Advisory Group meeting, July 11, 2017 at the Blaisdell Center, Hawaii Suites.