

**City and County of Honolulu**  
**Storm Water-Wastewater Advisory Group (SW-WAG) Meeting #5**

September 23, 2024, 4:00-6:30 pm

In-Person | Pīkake Room, Neal Blaisdell Center

**ATTENDEES**

*SW-WAG Advisory Group Members*

American Council of Engineering Companies - Hawai'i (June Nakamura)  
Castle & Cooke – Developer Representative (Kapiolani Street)  
Chamber of Commerce Hawai'i (Gwen Yamamoto Lau)  
City Council District 1 – Neighborhood Board 24 (Philip Ganban)  
City Council District 6 – Neighborhood Board 16 (Simeon Rojas)  
City Council District 7 - Neighborhood Board 18 (Chandra Kanemaru)  
City Council District 7 – Neighborhood Board 20 (Lawrence Higa)  
Fresh Water Initiative (Mark Fox)  
Hawai'i Reserves, Inc. (Jeff Tyau)  
Hawaiiiana (Jon McKenna)  
Honolulu Board of Water Supply (BWS) (Barry Usagawa)  
Roman Catholic Church Diocese of Honolulu (Frank Doyle)  
State of Hawai'i, Department of Hawaiian Home Lands (DHHL) (Cherie-Noelle Kaanana)  
Sustainable Coastlines (Rafael Bergstrom)  
The Nature Conservancy of Hawai'i (Kim Falinski)  
University of Hawai'i (Sheri Ching)  
Waipahu High School – Student Representative (Dalen Calistro)  
Waipahu High School – Advisor (Sherry Tenn)  
Wastewater Activities and Innovations (WAI) (Stuart Coleman)

*City & County of Honolulu Staff*

Roger Babcock (Director and Chief Engineer, Department of Environmental Services (ENV))  
Mike O'Keefe (Deputy Director, ENV)  
Gene Albano (Director and Chief Engineer, Department of Facility Maintenance (DFM))  
Randall Wakumoto (Program Administrator, DFM, Storm Water Quality Division (SWQ))  
Dustin Harbottle (Civil Engineer, DFM, Division of Road Maintenance (DRM))

*Consultant Team*

Joan Isaacson (Kearns & West)  
Dave Ebersold (CDM Smith)  
Rhea Quezon (CDM Smith)  
Cami Kloster (G70)  
Evelyn Navas-Aron (G70)  
Juli Beth (JB) Hinds (Birchline Planning LLC)  
Laurens van der Tak (Jacobs)  
Ming Ding (AECOM)

*Agency Representatives and Project Partners:*

Lauren Roth Venu (3Rwater)  
Megan Muramatsu (BWS)  
Nancy McPherson (DHHL)  
Keisha Rorimpandey (Jacobs)  
Tyler Law (Ikehu Utility Solutions)

## 1. Welcome and Agenda Overview

Joan Isaacson (Kearns & West), as meeting facilitator, welcomed attendees and reviewed the meeting agenda and guide for productive meetings.

See *slides 1 to 4* of the presentation materials provided at [StormWaterUtilityOahu.org](http://StormWaterUtilityOahu.org).

## 2. Public Comment

There were no public comments.

See *slides 5 and 6* of the presentation materials.

## 3. Wastewater

### ***Recap of Previous Meetings and Today's Objectives***

Dave Ebersold (CDM Smith) provided a recap of previous Storm Water - Wastewater Advisory Group (SW-WAG) meetings and restated that their purpose is to engage in collaborative discussions and seek input from Advisory Group members on sewer rate adjustment alternatives. A delicate balance exists between maintaining rate payer affordability and supporting the needs of the sewer system to protect public and environmental health. It is also important to keep in mind that, per the City and County of Honolulu Resolution No. 98-197, CD1, wastewater rates are the sole source of funding for the wastewater program.

Dave reminded the SW-WAG that approximately 70 percent of ENV's sewer rate revenue is generated by the fixed charge and about 30 percent of the revenue is generated by the volumetric charge (based on water use). In previous meetings, discussions were held regarding the potential to increase the portion of sewer rate revenue generated by the volumetric charge in order to allow customers more control over their bill and to promote water conservation. Additionally, the Advisory Group has talked about the importance of the rate structure being transparent and understandable, stable and predictable, as well as fair and equitable. Dave stated that this meeting's purpose is to further explore rate adjustment alternatives and affordability assistance.

### ***Comparison of Rate Structure***

To ensure stability and predictability, rate adjustments must be implemented in a manner that prevents "rate shock" (i.e., rapid and substantial changes in the amount paid). Furthermore, rate adjustments must allow customers to anticipate their costs, while also allowing ENV to forecast the revenue it will receive once those rates are applied.

Joan distributed a "Comparison of Rate Structures" handout. Dave encouraged Advisory Group members to look at the objectives on the handout and consider how the rate examples presented during the meeting support or work in contrast to them.

Dave provided bill examples for a single-family residence at 9,000 gallons of water use per month and several non-residential customers (fast food restaurant, hotel, office building, and large shopping center). Each bill example showcased the monthly bill under the current rate structure (approximately 70 percent fixed and 30 percent volumetric) and also what the monthly bill would be if the percentage

of fixed charge was adjusted from 70 percent to 50 and 60 percent, respectively. It is important to note that these bill examples are based on existing rates and DO NOT include necessary increases in revenue requirement.

#### Q&A

**Please note:** For all Q&A/Discussion sections, the notes with dashes (-) represent comments and questions from SW-WAG and the notes with open points (o) represent the project team's responses.

- Based on the non-residential bill examples shared and considering Equivalent Single-Family Dwelling Units (ESDUs), if the fixed portion of the bill goes down why does the monthly cost go down? Shouldn't it go up?
  - o Dave responded that it directly correlates to water usage relative to the proportion of ESDUs. The non-residential bill is comprised of a fixed charge that is based on the ESDU count and a volumetric charge that is based on water use. If a customer is a low water user and more of their bill is based on the volumetric charge, then the customer's bill should decrease. This remains true even if the fixed charge was based on something other than ESDU count like water meter size.

#### **Affordability Feedback from Meeting 4**

Income-based affordability programs are important, especially as the cost-of-living increases. It is important to acknowledge that affordability programs are funded by other sewer rate payers. Based on previous feedback received from Advisory Group members, if a kūpuna program is implemented, it is recommended that it be income-based. Other previous input provided by Advisory Group members regarding affordability programs include: major crisis events should be included as an eligibility factor, ENV should consider partnering with other agencies to verify customers needing support, and ENV should consider social assistance programs with a tax write-off incentive (i.e., donations to support other customers in need).

#### Q&A

- In the bill examples presented, the estimate for non-residential customers reflected a fixed charge and a uniform volumetric charge. Would it be possible to run the estimate with a tiered volumetric charge?
  - o Dave responded that a tiered rate structure was discussed during previous meetings and one of the concerns was the potential for rate shock for higher water users.

See *slides 7 to 23* of the presentation materials.

#### **Affordability Programs Examples**

Dave presented Honolulu's *Rent and Utility Relief Program (RURP)* as an example of an affordability program on O'ahu. RURP was implemented in response to the impacts of the COVID-19 pandemic to provide relief towards rent and utilities, with up to six months of assistance. To qualify, applicants must meet three criteria: 1) experience economic hardship (e.g., loss of job, reduced work hours, etc.), 2) at least one household member must demonstrate risk of homelessness or housing instability, and 3) the household income must be at or under 80 percent of the area median income (AMI) for Honolulu. Catholic Charities Hawai'i and the Council for Native Hawaiian Advancement verify RURP qualification. Over 21,000 households have been approved and over \$250,000,000 in relief has been provided by the City and County of Honolulu.

One potential ENV affordability program is a direct bill payer program, which could provide a credit on a portion of the fixed charge to residential customers who pay their ENV sewer bill directly (e.g., homeowners residing in the residence). Similar to the RURP, this program could be income-based and require verification of qualifications by a third-party, non-profit organization such as Catholic Charities of Hawai'i or Council for Native Hawaiian Advancement each year. The credit (amount to be determined) could be distributed to qualified customers on a first-come, first-served basis up to the maximum available funds per year. An affordability program such as this offers income-based support to residential customers as suggested by the SW-WAG.

Dave invited Advisory Group members to share their thoughts on a residential direct bill payer program, and Joan opened the floor for questions and/or comments from the SW-WAG.

#### Q&A

- It is an important idea especially when considering homeowners who have cesspools. The majority of people realize the importance of replacing cesspools, but people can't afford to go through with the change. Was RURP assistance only provided during the COVID-19 pandemic?
  - o Roger Babcock (ENV) stated that the RURP's funding is no longer available, but this does not mean that City Council would not fund a similar program.
- How would a program similar to RURP be funded in Honolulu?
  - o Dave responded that funding a similar program would require allocating money received from rate payers and using a portion of those funds to offset the bills for those who qualify under the program.
- A first come, first served system feels unfair. If the program is income-driven, then anyone that qualifies should receive something. Who will be able to verify qualifications and deal with applications?
  - o Dave responded that ENV could partner with established entities and leverage their expertise to administer the affordability program.
- What percentage of ratepayers' money would go towards this program; is there a balance or percentage ENV is seeking to determine how much ratepayers should be contributing towards this program?
  - o Roger responded that they have been looking at 2.5 percent of the overall budget being allocated towards customer assistance.
- Is there an industry standard, or are there other cities that have implemented something similar to RURP to understand what percentage they used?
  - o Dave responded that affordability programs vary greatly. Detroit offers an extensive affordability program, but the affordability program is funded by the bills of customers who do not qualify for assistance. It is an extreme response to an extreme situation.
  - o JB Hinds (Birchline Planning) noted that 3 to 5 percent of the revenue is typical to designate for an affordability program. Factors that may affect participation in an affordability program are whether those who qualify find it worthwhile to apply for the funds, and the credibility of the organizations that will administer the program. It is possible that funds can be set aside but customers do not actually apply.

- Are there other options besides an income-based program? If the data is available, could higher rates be applied to those with the financial means to support it?
  - o Dave responded that it is not possible to apply higher rates to those in higher income brackets.
- Could a charitable assistance fund be used? There may also be customers that would like to personally contribute to the program; is this possible?
  - o Dave responded that during the August SW-WAG meeting, the possibility of rate payers contributing to a fund that assists those in need was discussed.
- Does BWS have a program for low-income customers?
  - o Dave responded that BWS's program has been discussed in previous SW-WAG meetings. If a customer is behind on their bill, BWS customer service representatives can work with those individuals to help waive certain fees and provide referrals to outside assistance agencies. BWS also offers water conservation rebates. However, BWS does not have anything similar to the potential direct bill payer program discussed at today's meeting.
- The data being presented as percentages is not meaningful. If those percentages are converted to actual numbers, what does that look like?
  - o Roger responded that the SW-WAG's feedback is crucial to determine what would be proposed for a program. A percentage of ENV's budget could be dedicated to providing affordability assistance (e.g., 2.5 percent of ENV's revenue or approximately \$10 million).<sup>1</sup> A variety of factors must be considered for the affordability program, such as what the total benefit for each household will be and how many customers could qualify for assistance under the program. If households at or below the *Asset Limited, Income Constrained, Employed* (ALICE) level were considered, approximately 40 percent of the City and County of Honolulu's population would qualify and this is not financially feasible. It is also important to acknowledge that vetting qualifications and handling the necessary related paperwork is not something a City agency, such as a utility, can handle. Contracting with a third-party organization is necessary. There may be another opportunity at a later meeting to discuss actual numbers. A lot of the information being presented and discussed in this meeting is modeled after the RURP.

#### ***Rate Modeling Results and Sample Bill Examples – Draft Rate Proposal (with Affordability Assistance)***

Dave explained that the rate adjustment alternatives and bill examples presented in this section (see, slides 28 to 75) include the necessary sewer rate increases. Dave and Joan explained that after the presentation of this section, the SW-WAG would be asked to provide input on which rate structure ENV should implement from the following three options: A) 70 percent fixed / 30 percent uniform rate (approximately ENV's current rate structure); B) 60 percent fixed / 40 percent uniform volumetric (phased in over a 2-year period); or C) 50 percent fixed / 50 percent uniform volumetric (phased in over a 4-year period).

Additional revenue is required for operation and maintenance and the Capital Improvement Program (CIP), which includes the last phase of the 2010 Consent Decree discussed at previous meetings. Due to

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<sup>1</sup> This example is provided for discussion purposes only and does not reflect real proposed numbers for a potential assistance program.

these rising costs, the rate payer revenue requirement is projected to increase an average of 8 percent per year from fiscal year (FY) 2024 to FY 2040. Note that each FY begins on July 1<sup>st</sup> of the previous calendar year. Therefore, FY 2024 spans from July 1<sup>st</sup>, 2023, to June 30<sup>th</sup>, 2024, and FY 2040 spans from July 1<sup>st</sup>, 2039, to June 30<sup>th</sup>, 2040.

Total sewer rate revenues need to increase 9 percent per year for six years beginning July 1st, 2025 (FY 2026), and will then increase by 8 percent, 7 percent, 6 percent, and 5 percent each year from July 1st, 2031 (FY 2032). This is a total increase of 115 percent over the next 10-years. Inflation is built into the annual revenue increases as follows: 4 percent starting July 1<sup>st</sup>, 2025 (FY 2026), 3.5 percent starting July 1<sup>st</sup>, 2026 (FY 2027), and 3 percent each FY from July 1<sup>st</sup>, 2027 (FY 2028) through July 1<sup>st</sup>, 2034 (FY 2035). The compounded inflation for the 10-year period is 36 percent, which means that approximately 36 percent of the 115 percent revenue increase will go towards covering inflation.

### ***Monthly Rates in Numbers***

Dave reminded SW-WAG members that the rates and bill examples presented at today's meeting are draft calculations and are intended for discussion purposes only. City Council will decide what the final rates will be, but the SW-WAG provides valuable input in this process. It is also important to remember that the rates and bill examples are comprised of a fixed charge and a uniform volumetric charge (per 1,000 gallons of water use).

A draft 10-year analysis of monthly rates for single-family residential, multi-family residential, and non-residential customers was presented to the SW-WAG for consideration. The rates for each customer type were presented for each of the following options: Option A) 70 percent fixed / 30 percent uniform volumetric rate (approximately ENV's current rate structure), Option B) 60 percent fixed / 40 percent uniform volumetric (phased in over a 2-year period), and Option C) 50 percent fixed / 50 percent uniform volumetric (phased in over a 4-year period).

- ***Option A:*** The current monthly fixed rate for single-family residential customers is \$77.55 and the volumetric rate is \$4.63 per 1,000 gallons of water use. Under *Option A*, the rate structure remains 70 percent fixed and 30 percent volumetric. As such, each fiscal year the fixed rate and volumetric rate will increase according to the proposed 10-year rate schedule (9 percent for the first six years starting July 1, 2025, and then 8, 7, 6, and 5 percent each year starting July 1, 2031).
- ***Option B:*** For single-family residential households under *Option B*, the fixed rate decreases while the volumetric rate increases for the first two years. This is because under *Option B* the rate structure is shifted to a 60 percent fixed rate / 40 percent uniform volumetric rate over a 2-year period. This results in different increases in bill amounts for customers because of differences in their water use. Once that 60 percent fixed / 40 percent uniform volumetric rate structure is established, the changes in bill amounts are no longer affected by the shift in rate structure and will increase by the same percentages for all customers according to the 10-year schedule.
- ***Option C:*** For single-family households under *Option C*, the fixed rate decreases while the uniform volumetric rate increases for the first four years. Similar to *Option B*, this is because the rate structure of *Option C* shifts to a 50 percent fixed rate / 50 percent volumetric rate over 4

years. This results in different increases in bill amounts for customers because of differences in their water use. After the 4 years, the rate increases are no longer affected by the shift in rate structure and the bill amounts will increase by the same percentages for all customers according to the 10-year schedule.

For multi-family residential customers, rates were presented per dwelling unit. The current multi-family residential fixed rate is \$53.32 per dwelling and the volumetric rate is \$4.63 per 1,000 gallons of water use. The fixed charge for multi-family residential customers is lower than the fixed charge for single-family residential customers because, on average, multi-family dwellings use less water than single-family households. The volumetric rate for multi-family residential customers is the same as the volumetric rate for single-family residential customers over the 10-year period. Changes in multi-family residential bill amounts exhibit the same patterns observed in *Options B* and *C* for single-family residential rates. For non-residential customers, the proposed fixed and volumetric rates are the same as single-family residential rates over the 10-year period.

Low water users in every customer class would benefit from *Options B* or *C* because a greater proportion of the bill is based on water use. Of the three options, *Option C* would benefit low water users the most because it has the greatest proportion of the bill based on the volumetric rate (50 percent). It is important to note that all three options generate the same amount of total revenue.

#### Q&A

- Do we have to increase the volumetric rate? In the long run, the fixed charge would be best for those on a tight budget or when considering multi-generational households.
  - o Dave responded that the volumetric charge must be raised in proportion to decreases in the proportion of revenue from the fixed charge to achieve sufficient total revenue for ENV.
  - o Roger provided that the rate structures being presented all amount to the same total revenue. Reducing the proportion of the fixed charge incentivizes water conservation and allows customers to have more control over their bill. The calculations presented are based on requests and previous feedback received from the SW-WAG.

#### **2023 Single-Family Water Usage Curve**

Dave presented 2023 single-family residential customers data on average monthly water consumption as a cumulative percent of sewer bills. Approximately 10 percent of single-family residential customers use 2,000 gallons or less of water per month. Approximately 50 percent (the median) of single-family residential customers use 6,000 gallons of water or less per month. The average (mean) single-family residential customer uses approximately 9,000 gallons of water per month. Approximately 70 percent of single-family residential bills are for 9,000 gallons of water or less. Also, less than 2 percent of bills are issued to customers who use 35,000 gallons or more of water per month.

#### **Comparing Sewer Bills**

Example sewer bills were provided for each customer class (single-family residential, multi-family residential, and non-residential) at various water usage levels for each option (*Option A*, *Option B*, *Option C*). Since monthly bills are determined by the rates, all sewer bills followed the rate trends described in section **Monthly Rates in Numbers** of these minutes. Namely, monthly bills under *Option A* will increase in accordance with the 10-year rate increase schedule. Due to the shift in rate structure,

monthly bills under *Option B* will experience a lower increase for the first two-years for lower water users and higher increases for higher water users compared to the 10-year schedule and *Option A*. Once the rate structure reaches a 60 percent fixed rate / 40 percent volumetric rate, the monthly bills will follow the same percentage increases outlined in the 10-year schedule. Under *Option C*, this pattern extends to the first four years of increases, after which percentage changes in all bills will follow the percentage increases in the 10-year rate schedule. Please see slides 41 to 73 of the presentation for the bill examples.

Across all bill examples, lower water users benefit from *Options B* or *C* since a greater portion of the bill is based on the volumetric rate. *Option C* offers the most benefit to low water users because this option has the highest percent of the bill based on water use compared to the other options. For example, starting July 1, 2034 (FY 2035), a single-family residential customer at 2,000 gallons of water use would pay \$183.26 per month under *Option A*, \$160.93 per month under *Option B*, and \$144.06 per month under *Option C*. Furthermore, the bill for a single-family residential customer at 2,000 gallons of water use per month would undergo the following compounded increases over the 10-year rate setting period: 115.7 percent under *Option A*, 89.4 percent under *Option B*, and 69.6 percent under *Option C*. The total increase in bill amounts over the 10-year period would be lowest under *Option C* for low water users. The bill examples provided for multi-family residential and non-residential customers with low water usage showcase the same pattern.

On the other hand, higher water users of every customer class would benefit the most under *Option A* because less of the bill is based on water use. Under *Option A*, which is ENV's current approximate rate structure, 70 percent of revenue is generated from the fixed charge while only 30 percent is based on the volumetric rate. Starting July 1, 2034 (FY 2035), the bill of a single-family customer at 35,000 gallons of water use per month would be \$446.92 under *Option A*, \$554.94 under *Option B*, and \$636.57 under *Option C*. The total compounded increase for each option over the 10-year period is 115.7 percent under *Option A*, 167.8 percent under *Option B*, and 207.2 percent under *Option C*. Essentially, higher water users would experience the least amount of rate increases under *Option A* because less of the bill is based on water use. Bills for multi-family residential and non-residential customers with high water use follow the same pattern.

Across all customer classes, those who use an approximately average amount of water will see the least changes in bill amounts between options. For example, the average single-family residential customer uses 9,000 gallons of water per month. Starting July 1, 2034 (FY 2035), the bill for this average single-family residential customer would be \$239.19 under *Option A*, \$244.51 under *Option B*, and \$248.53 under *Option C*. The total compounded increase across the 10-year rate increase period would be as follows: 115.7 percent for *Option A*, 120.5 percent for *Option B*, and 124.1 percent for *Option C*. Similarly, the average multi-family residential customer uses about 6,000 gallons of water per month. Starting July 1, 2034 (FY 2035), the bill for the average multi-family residential customer would be \$162.95 under *Option A*, \$165.87 under *Option B*, and \$168.07 under *Option C*. The total compounded increase over the 10-year period would be 115.7 percent for *Option A*, 119.6 for *Option B*, and 122.5 percent for *Option C*. Essentially, a shift in rate structure will not impact the average water user as dramatically as it will impact lower or higher water users. The bill examples for non-residential customers show a similar pattern.



## Q&amp;A

- Considering the examples presented, are we collecting the same amount of revenue for each class of user?
  - o Dave responded that yes, the same amount of revenue would be collected by class of user. This refers to “cost of service allocation,” which is the technical term. The proportion of allocation among classes of users would be consistent across the rate structure examples presented.
  - o Roger added that residential pays for residential service and non-residential pays for non-residential service. One class of users does not subsidize another.
  
- Regarding non-residential customers, it appears the calculations for ESDUs are inconsistent and there are huge disparities.
  - o Dave responded that ESDUs are not a perfect method of allocating charges. The ESDUs were calculated approximately 15 years ago based on past water use data. Utilities try to address discrepancies by basing more of the total rate on water usage.
- Would it be possible to get rid of ESDUs and use only volumetric calculations for non-residential?
  - o This was studied before, but it was determined that non-residential customers would experience a large rate shock.
  
- The calculations presented are based on a 10-year window for the increases. Is this period of time set in stone or will it shift based on the income ENV receives?
  - o Dave responded that once new rates are established, they will remain in place for the determined period of time. Currently 5 years is being considered. Any funds that are not spent within that allotted period of time are held in a Capital Improvement Projects (CIP) fund used in subsequent years for CIP projects. Currently, approximately 90 percent of ENV’s operating budget is spent each year.
  - o Roger stated that the rate package will be passed via ordinance. The rate increase will be programmed for the period of time specified in the ordinance. City Council can adjust the increase depending on future funding requirements. Net income is stored in the cash fund; any additional cash translates into ENV having to borrow less money and incur less debt.
  
- Can ESDUs be amended on a case-by-case basis?
  - o Dave responded that in theory yes, but it is very difficult to realistically accomplish.
  
- Are there any other systems available that may be different from ESDUs that are currently being used nationally and which are successful? Are ESDUs the best method to use?
  - o Dave responded that there are different mechanisms for this. Considering a 100 percent volumetric rate, whether we use meter size or ESDUs as the basis, the same amount of revenue needs to be collected irrespective of the system utilized.
  
- It seems that for small water users, it is more beneficial to stay on a 70 percent fixed / 30 percent volumetric rate structure.
  - o Dave responded that for high water users, a 70 percent fixed / 30 percent volumetric rate structure is best because the greater portion of the bill that is based on the fixed charge benefits them. For low water use customers, a 50 percent fixed / 50 percent volumetric rate structure would be more beneficial because more of the bill would be based on water use.

Index cards were distributed to SW-WAG members to provide feedback on which rate structure ENV should implement and why.

See *slides 24 to 75* of the presentation materials.

#### **4. Storm Water: Direction for Fee Program and Credits**

##### ***Establishing a Storm Water Fee – The Role of Credits***

Juli Beth (JB) began by sharing that a storm water fee will not be introduced to City Council at the same time as the wastewater rates, which must go forward for implementation on July 1, 2025. Wastewater rates are on an abbreviated timeline, which must proceed to keep these infrastructure projects funded.

The team is still working on the development of storm water rates in preparation for their probable introduction through City Council in 2025. Critical next steps include updating the “customer account file,” which will incorporate updated impervious surface area data. Storm water billing calculations are based on customers who own a parcel of land with 300 square feet (sq ft) or more of impervious surface. A cost-of-service study and impervious surface assessments have been used to determine a range for storm water fee rates. How much of the current Storm Water Program costs will be placed on the fee will need to be determined by leadership and City Council as part of determining the rate setting process. A Storm Water Fee is established by ordinance and would charge every property with 300 sq ft or more of impervious surface, including governmental and non-taxable properties. Impervious surface area is supported by U.S. courts as a valid basis for charging storm water fees.

Additionally, JB shared that in order to have a legally valid storm water fee, there must be a process for customers to reduce their fees through implementation of beneficial water capture and other storm water controls on their property. A credit manual to establish policies and procedures for this process is essential and under development. Reducing the amount of impervious area or reducing / treating runoff on-site will reduce the amount of pollution and the volume of water that goes into the storm water system. These actions can also help to alleviate flooding and recharge groundwater.

The Department of Facility Maintenance (DFM) already has programs that support reductions in pollutants, such as volunteer cleanups and adopt-a-drain events, and others that encourage reduction in runoff, such as hosting rain barrel workshops. Pilot grant programs for green infrastructure by other organizations are also taking place and their findings will help in the design of a storm water grant/ rebate program.

There are a variety of financial options for the current Storm Water Program and a future storm water fee. If a storm water fee is created, credits (ongoing reduction), assistance programs to promote affordability, and exemptions (waiver of storm water fee for select (rare) situations) could be offered, as well as the grants and rebates in pilot development today. Qualification for assistance programs is proposed to be income and/or hardship-based to help support customers in need.

##### ***Recommended Policies for Credits***

JB shared that the recommendations being presented stem from work initiated by DFM in 2019. When discussing a **credit program**, there are four elements that must be considered: 1) *eligibility* (who can apply for permanent, ongoing bill reductions and for what types of actions); 2) *maximum amount* (how much of a reduction can be offered); 3) *exceeding the maximum* (cases where certain properties could receive more than the standard maximum reduction); and 4) *application and renewal* (how do property owners apply and how often must they renew their credit status). There are also two types of credits,

*structural* (physical capture of rainwater / storm water runoff) and *non-structural* (activities that reduce the impact of storm water runoff).

### **Eligibility for Structural Credits**

Laurens van der Tak (Jacobs) discussed the two types of credits available. *Structural Credits* are provided for the physical management of storm water runoff. They are contingent upon managing the ‘water quality volume’ (WQV) which relates to the amount of runoff that comes from 1 inch of water across all impervious surfaces on a site. The 1-inch calculation is directly tied to the Rules Relating to Water Quality that the City and County of Honolulu has adopted. Encouraging property owners to capture and treat the ‘water quality volume’ is the primary goal of the credit program.

All credits will require an application. Once an application for structural credits is approved, it will need to be renewed. A renewal period of 3 years for residential customers and annually for all other customer types is being proposed to ensure that the previously approved practices continue to be implemented and maintained. Customers with existing storm water reduction / capture practices would be eligible to apply for credits under a storm water utility.

### Q&A

- How does the Water Quality Volume (WQV) work?
  - o Laurens responded that by capturing the first inch of runoff on a property, the “first flush” of pollution is removed from that site. Managing 100 percent of the WQV from a site could result in the maximum 60 percent fee credit (i.e., a 60 percent reduction in the property owner’s storm water bill). Steps to calculate the 60 percent credit would include 1) calculating the total runoff from a property’s impervious areas, and 2) determining the volume captured by the implemented practices for treatment / reduction of runoff. The credit would be based on the percentage of runoff captured by the stormwater controls.
- Would a credit be renewable after 3 years for residential customers?
  - o Laurens responded that yes, the proposal is that the credit would be renewable.
- Per requirements under the master plan for community development, developers must abide by new Storm Water Quality rules and standards. Keeping those requirements in mind, would it be possible for developers or Association of Apartment Owners (AOAOs) to work directly with the utility – considering these entities are already knowledgeable about WQV – rather than placing the burden on homeowners?
  - o Laurens responded that it is possible, and it is a common practice in storm water utilities to do so.
- How do you plan to administer a credit program?
  - o Laurens responded that the *Follow The Drop* app could be a way for the City manage the program. The data is stored in a master database and the numbers can be fed into a billing system.
  - o JB shared that many peer cities have similar programs that are successful. There would be funds available to administer a program in Honolulu and, considering ENV will be handling its own billing internally, it will make it easier to administer. JB also noted that there is a long lead time to establish a storm water billing system. For example, if Council passes an ordinance in July 2025, the soonest residents would see a storm water bill is approximately 18 months after the

- ordinance is passed. It is also important to acknowledge that storm water fees are not as high as wastewater fees. Nationally many credit programs are under-subscribed, but the hope is to encourage City and County of Honolulu residents to take advantage of credit and rebate opportunities.
- Laurens provided that the credit manual will lay out details for qualifications, application requirements and the types of green infrastructure that will qualify under the program.
  - Impervious surface may be the method used to bill for storm water, but is average rainfall and historic flooding incorporated into the calculations?
    - Laurens responded that in a theoretical world, average rainfall and historic flooding would be added, but the differences in fees when calculating the fee this way is not worth the administrative burden that would have to be added on by this process. In principle and ideally this is what a utility could do, but the balance between administrative costs and the outcome does not make the tradeoff feasible.
  - Current property taxes cover the current storm water program; where will the extra funding from property taxes be applied if there is a fee?
    - Laurens responded that elected officials would make this decision.
    - Randall Wakumoto (DFM) responded that the current storm water program is funded by property taxes and the Highway Fund. The fee would provide dedicated funding for storm water, similar to an Enterprise Fund, and the fees would be directly tied to the cost of service for the Storm Water Program.
    - Laurens provided that dedicated revenue streams allow the City to address Capital Improvement Plan (CIP) projects through revenue bonds. Many of the needed storm water CIP projects have been delayed for years. Additionally, it is important to remember that non-taxable properties will be contributing to the storm water fund where today, they do not contribute to these costs.
  - If we consider rainfall, Hawai'i's hydrological patterns are different from the mainland. Locally we receive over 1 inch of water on a regular basis; the rainfall gradients are completely different, especially in the valleys. The City may receive pushback because of this.
    - The potential inequities that may arise when trying to parse out fees based on rainfall will become problematic very quickly. A large storm can carry away large amounts of sediment, but the overall system must be ready for *any* event. Rain is not predictable. Treating O'ahu's system holistically is the best way to address the cost of service while still being equitable.
  - Climate change is changing our local rainfall patterns, and it is very evident that the prevalent trade winds model is no longer reliable. O'ahu will experience heavier rains in leeward areas and less rain in windward areas, etc. We need to consider the "new normal" moving forward.
    - Laurens responded that one of the current challenges the Storm Water Utility is trying to address is climate resilience and adaptation, and how to anticipate any effects stemming from climate change. More funding is necessary to perform additional studies in this regard.
  - Wai'anae is an old neighborhood that does not have storm water infrastructure. How will the fee be implemented in neighborhoods like this?
    - Randall responded that he appreciates this comment and what DFM is currently lacking is long-range planning, especially for coastal communities and / or communities that lack storm water

infrastructure. The cost of service takes into account work that takes place in those areas, such as cleaning canals which require further permitting and are resource intensive. However, long-term projections also require analyzing resilience and improvement projects.

- In the face of climate change and rising fees / costs, we need to take a more integrated one-water approach in planning and financing. People are willing to pay but they have to know what they will receive as a benefit. If the information is provided 'piecemeal' the City could receive a lot of negative feedback. An integrative approach that people understand is necessary. If this is not rolled out well and with a lot of public education incorporated into the rollout, it will not be well received.

To wrap up the meeting's discussions, Joan went over the results from the earlier 'rate objectives' handout straw poll. The initial results were inconclusive, with almost equal preference for options A) 70 percent fixed / 30 percent volumetric (current rate structure), and C) 50 percent fixed / 50 percent volumetric and the remainder of votes for option B) 60 percent fixed / 40 percent volumetric rate structure. The SW-WAG members were asked to vote again by choosing between option "A)" and option "C)." Results from the second poll indicated a preference for option C) 50 percent fixed / 50 percent volumetric.

See *slides 76 to 94* of the presentation materials.

## 5. ENV Updates

No ENV updates were provided.

See *slide 95* of the presentation materials.

## 6. Wrap Up

The next SW-WAG meeting will be held on Monday, October 21, 2024, and will be held in Blaisdell's **Pikake Room**.

The meeting ended at 6:30 PM.

See *slides 96 to 100* of the presentation materials.