

City and County of Honolulu
Storm Water of O'ahu Stakeholder Hui (SWOOSH)

March 5, 2024, 4:15-6:45 pm
Virtual Meeting held via Zoom

ATTENDEES

SWOOSH Members

AARP Hawai'i (Keali'i Lopez)
Fresh Water Initiative (Mark Fox)
Hawai'i Community Foundation (Dana Okano)
Hawai'i Green Growth Local2030 Hub (Shelley Gustafson)
Hawaii Reserves Inc (Jeffrey Tyau)
KUA (Malia Heimuli)
Mālama Maunalua (Doug Harper)
Neighborhood Board #31, Kailua (Levani Lipton)
Roman Catholic Church Diocese of Honolulu (Frank Doyle)
Sustainable Coastlines Hawaii (Rafael Bergstrom)
Wai'anae Mountains Watershed Partnership (Yumi Miyata)
Waikiki Business Improvement District (BID) (Trevor Abarzua)
Waipahu High School (Dalen Calistro, Student Representative)

Public Agency Staff

Gene Albano (Director and Chief Engineer, City & County of Honolulu Department of Facility Maintenance (DFM))
Randall Wakumoto (Program Administrator, City & County of Honolulu DFM, Storm Water Quality Division (SWQ))
Roger Babcock (Director and Chief Engineer, City & County of Honolulu, Department of Environmental Services(ENV))
Matthew Gonser (Chief Resilience Officer and Executive Director, City & County of Honolulu Office of Climate Change, Sustainability and Resiliency)
Saani Fong (Planner, City & County of Honolulu, SWQ)
Starla Takahara (Contracts Officer, City & County of Honolulu, SWQ)

Consultant Team

Cami Kloster (G70)
David Ebersold (CDM Smith)
Evelyn Navas-Aron (G70)
Joan Isaacson (Kearns & West)
Juli Beth (JB) Hinds (Birchline Planning, LLC)
Lauren Roth Venu (3Rwater, Inc.)
Laurens van der Tak (Jacobs)
Ming Ding (AECOM)
Minghua Luo (AECOM)

Members of the Public:

Christin Reynolds (One World One Water)
Lori Yamada (Envision Kaimuki)
Sherry Tenn (Waipahu High School Academy of Natural Resources)

1. Welcome and Agenda Overview

Joan Isaacson (Kearns & West) welcomed attendees and reviewed the meeting agenda and guides for productive meetings.

See *slides 1 to 5* of the presentation materials provided at StormWaterUtilityOahu.org.

2. Public Comment

There were no public comments.

See *slides 6 and 7* of the presentation materials.

3. Roundtable Aloha

Joan Isaacson shared an icebreaker question for attendees to check in with one another and provide an opportunity for further introductions.

See *slides 8 and 9* of the presentation materials.

4. Mālama Maunalua | Hawaii Community Foundation Grant

JB Hinds (Birchline Planning, LLC) presented on behalf of Doug Harper of Mālama Maunalua, a non-profit organization. Mālama Maunalua (MML) has received a grant from the Hawaii Community Foundation (HCF) that is supporting work by MML and 3R Water to carry out green infrastructure (GSI) pilots in under-served communities on Oahu. The grant is funding focus groups, mapping, and outreach to determine how to make it feasible and appealing for rental properties and less-resourced homeowners to implement GSI.

This project builds on a National Fish and Wildlife Foundation (NFWF) funded project that MML carried out in 2023. MML, Birchline, Hey & Associates, and 3R Water collaborated on a pilot program in East Honolulu that: 1) estimated how much water is coming out of watersheds and what is their reduction potential; 2) developed an intense outreach process involving surveys, as well as methods to begin socializing residents on how to use “Follow The Drop” technology; and 3) designed stream restoration that is starting to move forward under the Storm Water Quality program. Overall, it is a multiscale program working to make GSI installations feasible and affordable.

The survey done under (2) above touched on barriers such as the difficulty in finding contractors to install GSI. The initial expense is also a limitation for many homeowners. The funding from HCF in this new phase will cover some of the costs for installation on pilot sites as a way to work through the mechanics of getting GSI funds turned into real projects on sites.

Laurens van der Tak noted that for the future storm water utility, a credit manual is being developed and will describe how storm water fees would credit individuals for capturing and storing storm water. JB Hinds further provided that Lauren Roth’s 3RWater “Follow the Drop” technology has developed the software to provide a simple way for residents to assess their own properties and related storm water volume reduction, with the goal of it becoming a straightforward, efficient basis for future credits to assess how much water communities are ultimately dealing with.

The Post-Assessment Survey – strongly informed the HCF grant scope moving into 2024.

- Thirty-two (32) people participated.

- When asked as to the likelihood of installing and implementing green infrastructure if it were free, nearly every respondent said they would be interested in participating if it were free of cost.
- Respondents underwent an intense “Follow the Drop” property assessment prior to taking the survey.

Barriers – Largest barriers identified in responses were 1) Cost; and 2) who would install the practices on a site.

- Overwhelmingly, responses focused on up-front cost and contractor-related questions (i.e., who do I trust? How do I find them?).
- These issues must be addressed to develop an effective program, especially for rental properties where owners may not be as engaged in the runoff issues and capture opportunities on site.

Incentive Program – The HCF grant is directed to Mālama Maunaloa, 3RWater, and the community at-large towards a 2-year project. Some funds will be provided as a match for GSI installations. JB noted that the team is working to address 1) ‘knowing what we know’ from phase one; and 2) renter household, which are not as likely to get them involved. Moreover, many residents in this group identify as low-income households. Facilitating GSI for these projects is critical; projects will not work unless renters as well as the property owners are involved.

- Immediate next steps: Stakeholder Advisory Group members were asked to support the project by helping JB, MML staff (Doug Harper, Pam Weiant) or Lauren Roth Venu identify neighborhoods that might have strong home ownership culture and GSI opportunities, but financial needs; or other underserved communities whose leaders might be able to facilitate an introduction to engage renter communities. The team is hoping to take on the ‘tougher cases’ to develop an effective program. The HCF grant includes money for implementation, and it is strongly informative of how the credit manual and incentives are being developed - whatever the path our fee will take!

See *slides 10 and 17* of the presentation materials.

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

- Can this type of project be implemented in very developed areas like Aina Haina? Is data available regarding total runoff water in the area? Does the run-off data include runoff from the non-developed part of the watershed?
 - o Lauren Roth responded that this analysis did not include total-runoff information, but they could determine 95% of the runoff in the area came from residential infrastructure. These studies provide preliminary information as to whether people will continue to select green infrastructure, such as catchment, and how this will inform the City & County for future programming. JB confirmed that the concern as to watershed contributing factors is valid and this study was not able to address all the factors contributing to the runoff.
- Knowing total runoff could be helpful to know what effect the project is having. Does the stream restoration project area include Wailupe Drive, specifically, where there is a stormwater outlet that drains into the ocean? Would it be possible to see a difference in water quality if the project were implemented in the area?

- The stream restoration project and installations of GSI are in early phases. It is certainly the hope that over time, these will lead to reduced pollution and runoff to that particular outfall.
- Water catchment tanks to fully collect roof runoff could cost upwards of \$10-15k and would be ideal if it were provided free of cost. If installed, would it be possible to work with DFM so that the cost is absorbed back by the program through, for example, not charging residents the fee until the total cost of expenditure is covered?
 - JB responded that storm water utilities charges based on impervious area must offer credits if residents reduced their impact on the storm drain system. It is necessary to have a credit mechanism where determined water reduction will result in a reduction of residents' bills. There must be an incentive for the credit program, and the team needs to determine the most equitable way to do this with the most water quality benefit. She also noted that the modeling / mapping tools available tell us where the best use of money is (as in the case of Moanalua). There is potential for smaller, disconnected areas where a difference can be made.
 - Randall Wakumoto stated that DFM's credit or rebate manual is being developed this year, and conversations on credits can also take place at that time, while the team investigates opportunities and solutions. As the manual is developed, DFM and the team will investigate if there can be a full 100% credit for investments in green infrastructure. All Stakeholder Advisory Group input to date and the recommended action has been for a maximum 60% credit with 100% granted for treating off-site runoff. These conversations help to evaluate what people want to see and what their concerns are so they can be addressed and become part of the manual. The team will present more in-depth information in the coming months.

5. Progress Updates Towards Budget & Goals

JB and Randall provided a refresher on where the Storm Water program currently stands, as well as detail on projected budgets. The project is transitioning its focus on the new fee and cost; it is a good time to revisit the 2019 projections in comparison to now. The biggest factor currently affecting the project is inflation.

Beginning of Storm Water Journey

- 2018 was the foundation for the Storm Water Feasibility Study and the project team shared with SWOOSH what the City & County was spending, as well as a prospective budget for 2020.
- 2019, the Storm Water Utility (SWU) Program Budget was developed.
- 2020, a SWU rate analysis was performed.
- 2022, the Storm Water Strategic Plan was developed ('why?' and 'what?' goals).
- 2023, AECOM worked with DFM on budget projections with a fine level of detail and built on collective bargaining agreements as well as filling in 30% staff vacancies.
- 2024 will involve new cost projections and SWU fee options. Stakeholders now have a detailed understanding of the cost of services as well as what the impacts will be.

Cost of Service

- Using the 2018 Cost of Service Study, three budget options were established in 2020 to determine fee impacts. The three options developed are ‘Basic Compliance,’ ‘Better Program,’ and ‘Ideal Program’ (see *slide 22*).
- As of fiscal 2019, SW spending cost was calculated at \$22m annually, for a total of \$91.6m. This falls within compliance of the calculated ~\$98m budget for Option 1 – Basic Compliance. Option 2 – Better Program’s annual average program cost is calculated at ~\$132m, while Option 3 – Ideal Program is calculated at ~\$177m annually.
- A “Plan C” budget was identified as an option that falls between what is ‘Best,’ or recommended. This budget works towards a steady state investment and would involve ~\$40m in capital projects, for ~\$135m total.
- The previous 2023 plan, which assumed a fee would be adopted by FY25, included key investments such as improving asset management, filling staff vacancies, leveraging grants, increasing customer-facing and presence, expand monitoring and, with a dedicated fee, develop a debt-funded asset renewal program.

Where are we today?

- DFM and AECOM are currently projecting a total program budget of \$109m for FY25, in comparison to the previous \$94.6m projections based on an FY23 fee implementation. The new calculations consider inflation, and the current projected total is close to where all projections expected it to be when the same projections were done in 2020.
- Current goals include improving assets and information management, filling staff vacancies, grant management, stream cleaning and green infrastructure (i.e., leveraging grants and increasing customer-facing inspections / presence) and expanding monitoring.
- Developing a debt-funded asset renewal program has not taken place because a dedicated fee is not available yet.
- Current Storm Water operating expenses for FY25 are projected at a total of \$59.6m.

Financial Reporting – PowerBI database system.

- The analysis looks at how many people and at what level of staffing are carrying out storm water drain repair, as well as what is being spent and where.
- Information regarding commitments made to the public during public outreach in 2020 is based on the above priorities. This information is now available and responds directly to feedback received from the communities as to concerns about where the funds are being spent.
- A number of key changes in spending and new investments were shared.
 - Randall Wakumoto shared *slide 28* of the presentation, which provides projections including DFM being at 100% staffing. DFM is working on filling positions that were established during 2020 but which have not been filled due to an inability to give full funding to salary

requirements. In the past two fiscal years, the City administration has made it a priority to provide funds for critical staffing. Additional staffing requirements will be looked at during Storm Water Utility fee considerations. DFM is currently projecting what will be needed for necessary services, while remaining proactive in achieving other goals and not just responding to emergencies.

- JB Hinds shared that projections for 2025 are not far off from the projections for 2025 that were developed in 2020.
- Randall Wakumoto provided that 10% increases on all salaries have been incorporated into the Cost of Service analysis. This projection is inclusive of current and anticipated positions that need to be filled. The intent is to be 100% funded and to have all positions filled.

The Impact of Inflation

- Randall Wakumoto explained the project had to fully consider and incorporate overall costs (i.e., materials, contracting, auto, etc.), as well as collective bargaining agreements, and the increases that will be taking place in different classified positions over time. This is all now fully incorporated into all projections being presented, as well as in the PowerBI database.

New Costs vs. New Services

- JB Hinds stated that the main, overall message is that cost trajectories and estimates are on track with what was being projected in 2020; there has not been a fundamental change. The project is still looking at a projected budget of \$105-109 million.
- Randall Wakumoto shared that specific costs and details of individual positions are only available to the Department of Human Resources. The projections that are being shared reflect well informed assumptions based on existing union contracts and position descriptions, but may vary depending on individual hiring situations.
- Randall Wakumoto further provided that it was determined the fee would not be introduced in calendar 2024. Nonetheless, DFM has investigated needed costs for capital improvements, salaries, and equipment to meet with agencies to discuss the implications of a fee. The total number of positions stands at 514.5 among all city departments (i.e., Department of Design and Construction, Department of Planning and Permitting, DFM, Department of Parks and Recreation, Budget Fiscal Services, IT, etc.). They have translated this into salaries that can also be found PowerBI.
- DFM must account for collective bargaining agreements and are looking into ways to incorporate this into the cost analysis. The Automotive Equipment Service Division has projected ~\$9m in costs to replace aging assets and can make internal adjustments based on this projection.
- Where can the tracking and financial spending information be accessed?
 - JB Hinds responded that the link cannot be shared, but there are reports that can be generated and that these reports provide excellent information transparency – a goal in the original SWU feasibility study and DFM strategic plan. She thanked Minghua Luo at AECOM for his support in providing reports and helping demonstrate how the PowerBI system works.

See *slides 18-31* of the presentation materials.

6. Increasing Costs of Service

Due to the Covid-19 pandemic many manufacturers have not been able to return to normal operations. Vehicles and construction equipment costs will increase from the 2023 projected numbers.

Due to collective bargaining agreements, the Hawai'i Government Employees Association (HGEA) projects a 10% average increase over the 2020-2023 period. HGEA represents 'white collar' jobs; United Public Workers (UPW) represents 'blue collar' jobs.

Costs increased across the board by 25-30%. The City & County had produced a reasonable estimate for capital improvement projects, but costs had to increase.

- Joan Isaacson inquired whether construction costs keep rising or if they are leveling out.
 - o Randall Wakumoto shared that those costs keep rising because of raw material limitations and the challenge of finding vendors that can provide the materials. Costs are on the uptrend, but everyone hopes these will stabilize soon.

See *slides 32-33* of the presentation materials.

7. City Pilot Program: Kawa Watershed

Cami Kloster (G70) introduced the Kawa Watershed total maximum daily load (TMDL) "Downspout Redirection" pilot project led by the City & County of Honolulu's Department of Facility Maintenance Storm Water Quality Division. The project involves Public Education and Outreach Wasteload Allocation crediting in the Kawa Watershed area near Kaneohe Bay. The crediting is expected to be discontinued. It has been determined that sweeping and stream cleaning cannot make up for the difference and new ways to reduce loads are needed.

A solution is a "Downspout Redirection" project with a goal of reducing total phosphorus pollution by 8 lbs. and which aims to have a 30% participation rate from 727 identified properties. The goal is to engage 218 Kawa residents in reducing fertilizer usage and participate in soil augmentation.

See *slides 34-38* of the presentation materials.

8. Hawai'i Green Growth: National Fish and Wildlife Foundation (NFWF) Grant

Cami Kloster briefly introduced the grant and asked Shelley Gustafson (Hawai'i Green Growth Local2030 Hub [HGG]) to share more details.

Shelley Gustafson stated that HGG is building on Mālama Maunaloa's momentum and is using information from the Ala Wai project's feasibility study to identify a number of 'watershed-to-reef' projects for potential implementation of green infrastructure. Lauren Roth and Birchline Planning are active members of the grant team, and Randall Wakumoto is a collaborator.

- The feasibility study allowed them to identify that HGG would like to participate in projects with "Follow the Drop" and ideally have them transition into an implementation phase. Lauren and Shelley have been working on this goal and have secured another NFWF grant, but HGG is currently focusing on the Ala Wai and Pālolo subwatershed projects. Shelley shared a PDF handout regarding the Pālolo Subwatershed project (*see slide 40* of the presentation materials).

- The Pono Hawai'i Initiative Foundation has provided a grant to assist with these projects. They are currently in the kick-off phase and will be able to provide further details soon.
- DFM has provided a match in the form of Pālolo subwatershed monitoring to allow the project to best 'connect the dots' in terms of needs and achieving goals.

See *slides 39-40* of the presentation materials.

9. Monitoring Projects & Process

Randall Wakumoto shared that DFM is working on a variety of projects that leverage non-for-profit organizations partnerships for grassroots efforts with residents to minimize residential property runoff by installing rain catchments or rain gardens. These projects include Hui o Ko'olaupoko, Mālama Maunalua's in East O'ahu, and HGG's Pālolo Subwatershed projects.

Pālolo Watershed Monitoring

- The Pālolo watershed has a Total Maximum Daily Loads (TMDL) for several pollutants. The State's Department of Health determined the waterbody is impaired. The City must find ways to reduce the TMDL for each pollutant.
 - Local schools in Pālolo provide an opportunity to educate students on the value and impact of water quality.
 - Pālolo as a subwatershed of the larger Ala Wai watershed and it was chosen because DFM is focusing on low income and underserved communities.
- Monitoring approach includes:
 - Eleven (11) stations across Pālolo and Mānoa streams. Grab-samples will be collected bi-annually (summer/winter), and water quality parameters will be analyzed.
 - Two fixed Event Mean Concentration (EMC) stream stations near William P. Jarrett Middle School and Chaminade University/St. Louis School will monitor flow coming during storm events until June 30, 2030, to demonstrate base flow and look for water quality improvement over time.
 - DFM is closely working with Chaminade's president to have their samplers placed next to DFM's to analyze and compare samples collected by both entities, as well as composite samples and Turbidity Sensor outcomes.

Partnerships

- There is an existing joint funding agreement with the U.S. Geological Survey (USGS), with City-USGS coordination spanning over 20 years. USGS has two long-term monitoring stations, one at Pūkele Stream and the other located at the Mānoa-Pālolo Drainage Canal. This contract ends on September 30, 2024, but the partners are already working on extending the joint funding agreement.
 - Other partnerships include Hawai'i Green Growth on the Ala Wai Grant project.

See *slides 41-47* of the presentation materials.

10. City Hiring

Randall Wakumoto provided that the Mayor's office has made filling vacancies and funding a top priority. Hiring goals include filling 100 permanent positions for the current FY2024 period. Their 'reach' goal is to fill 200 permanent positions. As of March 1, 2024, there have been 74 new hires. They are on track and ahead of schedule to fill the 100-position goal by June 30, 2024.

- The City wants to establish a workforce development partnership to identify and train people that might be willing to work for the City. The partnerships may include other water-related agencies such as Maui County and the State Department of Health. Fellowships and other ways to fill positions are also being considered.
- Many open City positions are entry-level. The hope is that employees progress with necessary training as they move up.
- Gene Albano shared the City is hoping to make an impact, especially with Storm Water being an integral service for the region.

See *slides 48-49* of the presentation materials.

11. Stream Cleaning Process

Randall Wakumoto provided a stream maintenance update. Stream cleaning requires heavy equipment, labor, and resources. From the first quarter of 2024, DFM has been placing a strong emphasis on getting crews out to streams and providing maintenance island-wide. Districts are also relying on one another to help achieve goals. Kailua is a good example of this effort; they are helping other districts that are experiencing staff shortages (i.e., Pauoa Stream).

The City is working with the U.S. Army Corps of Engineers to secure a new 5-year permitting to allow for stream cleanup permits.

See *slides 50-51* of the presentation materials.

12. Storm Water Utility: Possible Re-Naming?

From community conversations it has become clear that people are confused by the word 'utility' about its purpose and what services it will provide. It could be beneficial to reframe the SWU to convey the services being provided and improvements associated with the fee. The possibility of including references regarding rebates and/or credits was also discussed.

A poll of advisory group members was conducted on six potential new name options. "Storm Water Services Fund" was the preferred option. Additional name suggestions included 'Storm Water Management Services' and 'Storm Water Investment Fund.' An emphasis on services was seen as valuable and 'fund' was seen as a misnomer.

See *slides 52-55* of the presentation materials.

13. One Water Presentation

Matt Gonser (City & County of Honolulu Office of Climate Change, Sustainability and Resiliency) and Christin Reynolds (One World One Water), consultant to the City, provided a presentation on the City's One Water initiative.

- One Water is an integrated planning and implementation approach to manage finite water resources for long-term resilience and reliability.
- A One Water approach can integrate management of water resources across freshwater, stormwater, and wastewater to maximize efficiencies and reduce waste.

Climate resilience requires looking beyond sea level rise; there are additional issues that cause challenges in terms of 'likelihood and consequence,' which further inform top climate hazards and risks. The City & County of Honolulu has adopted climate adaptation strategies.

- Approaches may look different depending on the location where they are being implemented. It is necessary to consider equity when considering how and when projects are done.
- Climate is not a 'tomorrow issue.' How agencies work and engage with communities is a major component of successful project implementation. Ways to bring agencies and communities into the planning process are being considered.
- City agencies (i.e., DFM, ENV) are already suffering direct impacts from climate-related issues.

Coordinated multi-agency project design takes time and must therefore be initiated as soon as possible. Moving forward, it is imperative to create systems to successfully address pressing issues with an emphasis on climate resilience.

Christin Reynolds shared that the One Water Honolulu panel was formed by ordinance in 2020, when Climate Adaptation One Water Policy, ROH 2-10.13(b) was established. It intentionally involved departments from the beginning for the purpose of team building and collaboration. A Memorandum of Understanding details how the departments will work together moving forward. The One Water Honolulu panel is guided by ordinance to ensure consistency across administrations, with future investments for decades.

Thanks in part to a Federal Fiscal Recovery Fund, a One Water Plan is being developed and will include development of interagency planning frameworks and a list of priority projects and related financing strategies.

DFM is a key partner in One Water planning with the Storm Water Strategic Plan and the upcoming Green Infrastructure Implementation Plan. Many One Water projects involve drainage issues and understanding of storm water system capacity. The reason the City is focusing on a storm water management fund is to allow City departments to do more and better work in the future.

Departments need to develop plans and projects that need to be delivered. Addressing emergencies as soon as possible and being proactive will provide communities with the most benefits over time.

Sharing valuable information regarding work being done with communities is an important goal. A new website will be launched with current information on One Water efforts and plans.

- How does the City's One Water Panel interact with State or Federal projects and/or plans and do these tie together at any point?
 - o Matt Gonser responded that the ordinance ensures participating agencies are working along different levels of government (i.e. military, state). Water infrastructure is squarely within the City's responsibility and kuleana. He agrees the State should be further engaged but at this time

the City & County of Honolulu is the lead entity for the One Water Plan, and it must conclude by 2026 per funding requirement.

See *slides 56-72* of the presentation materials.

14. Additional Stakeholder Opportunity

Roger Babcock (City & County of Honolulu, Department of Environmental Services (ENV)) shared ENV is conducting a rate study like the one done for the Storm Water Utility fee.

Sewer fees were last increased in 2017. Because costs have increased, and because major capital upgrades are known to be required in the next ten years, ENV has performed a cost-of-service analysis and is in the process of building a 5-year package to present to the City Council. ENV would like to receive input in advance on the rate structure, its total impact with stormwater and water charges, and information for the community.

A joint Storm Water and Wastewater Stakeholder Advisory Group is being proposed to also assist with the wastewater rates, including review of a rate schedule, tiers, and customer assistance program. Having stakeholders' knowledge and expertise is crucial.

Cami Kloster shared joint meetings might take place more frequently, moving from quarterly to bimonthly scheduling. The meetings may continue on Tuesdays from 4:00-6:30 p.m. The first meeting would be a wastewater focused kick-off meeting and will be in-person. Those not interested in participating should reach out to Randall Wakumoto. Otherwise, participation will be assumed, and attendees will be considered part of the group.

Wakumoto shared that additional stakeholders such as property managers and condominium representatives will be invited to participate.

JB Hinds further shared that because participation is based on organization membership, it is also a great time to integrate the above groups for both wastewater and storm water input.

See *slides 73-74* of the presentation materials.

15. Additional News and Updates

Cami Kloster shared that the Storm Water Quality Division has a new website under the same URL (StormWaterHonolulu.com).

She also provided a brief update on DFM's You Are The Solution program, which includes library displays and demonstration fairs.

See *slides 75-80* of the presentation materials.

16. Wrap Up

The proposed May meeting date will be shared soon.

A poll on a possible future site visit found that SWOOSH members are "Somewhat Likely to Attend" a site visit and preferred a weekday versus a weekend.

See *slides 81-83* of the presentation materials.

The meeting ended at 6:30 PM.