



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

Meeting 35 Thursday, July 16, 2020 4:00 – 5:30 pm
Virtual Meeting

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

This was a virtual meeting in which 16 stakeholders participated on-line and/or by phone, in addition to BWS and CDM Smith staff and members of the public. The stakeholders represent diverse interests and communities island-wide.

The following Stakeholders Advisory Group members participated:

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|-------------------|--------------------------------|
| Bill Clark | Resident of Council District 6 |
| Mark Fox | Environmental |
| Shari Ishikiawa | Hawaiian Electric Co. |
| Micah Kane | Hawaii Community Foundation |
| Will Kane | Mililani Town Association |
| Dan Kouchi | Chamber of Commerce, Hawaii |
| Bob Leinau | Resident of Council District 2 |
| Helen Nakano | Resident of Council District 5 |
| Robbie Nicholas | Resident of Council District 3 |
| Dean Okimoto | Nalo Farms, Inc. |
| Christine Olah | AARP Hawaii |
| Dick Poirier | Resident of Council District 9 |
| Alison Richardson | Coca-Cola Bottling Co. |
| Cynthia Rezentes | Resident of Council District 1 |
| Guy Yamamoto | YHB Hawaii |
| Suzanne Young | Honolulu Board of Realtors |

WELCOME

Dave Ebersold, meeting facilitator and Vice President of CDM Smith, welcomed the group and outlined the meeting objectives:

- Receive updates regarding recent BWS activities
- Accept notes from Stakeholder Advisory Group meeting #34
- Hear about One Water Framework and provide input
- Learn more about BWS's response to COVID-19

As this was a virtual meeting with most people logging on through their computers, Dave walked the group through basic steps and procedures.

PUBLIC COMMENT: None

BWS UPDATES

Ernest Lau, BWS Manager and Chief Engineer updated the group on Red Hill fuel tanks. Sierra Club and Board of Water Supply have both filed to intervene in a contested case hearing on the Navy's application to Hawaii Department of Health for a permit to operate. A hearing may take place in November 2020 to provide the public with an opportunity to comment on the application.

Ernie said BWS Board meetings are taking place primarily online. The BWS lobby is closed to the public and may reopen after Labor Day but only if it is safe. BWS is renovating the lobby in the meantime to have it ready for social distancing along with other safety measures. He thanked the Capital Projects division for leading the renovation effort and the Customer Care division for keeping service going during the construction. Ernie closed by stating that BWS is continuing to work throughout the pandemic. About 80 employees are teleworking full or part time. BWS's crews still go out and fix main breaks.

Comment: There was a bad main break in Hawaii Kai and it was really impressive to see how quickly the BWS team dealt with it and so quickly. The water was back on within 12 hours in my building, and even though the project took a full week, we never had any break in service other than that. I talked with BWS employees working on the fix, and they said that they felt that the Board of Water Supply does a good job in being responsive to the public and being supportive of their employees.

ACCEPT MEETING 34 NOTES: Accepted

ONE WATER COLLABORATIVE FRAMEWORK

Barry Usagawa, Water Resources Program Administrator, said that the City Climate Change Commission unanimously supported the One Water Collaborative Framework for Climate Resilience at its June 2020 meeting.

He began his presentation by posing this question: "Why do we need One Water Collaboration Framework?" A large portion of climate change impacts involve water. Too much water or too little of it is problematic. He showed a Venn diagram of the various forms of water. One Water is another name for Integrated Water Resources Planning, which recognizes that all water is part of the hydrologic cycle from rain, stormwater, freshwater, wastewater, recycled water, and sea water. Freshwater security, drought, flooding, sea level rise, coastal erosion, wildfires, heat and humidity are huge climate change challenges and no one agency can resolve them alone. The only way we will

be able to adapt to climate change is to work together, holistically. Therefore, the One Water Collaborative Framework is being developed among agencies involved in water, wastewater and storm water infrastructure, land use planning, climate resilience, and adaptation areas.

Core benefits include water conservation, reuse, and green infrastructure for storm water capture and recharge. These align with the Freshwater Council's Freshwater Blueprint Goals for 2030 and the One Water Framework can help multiple agencies move forward their related initiatives.

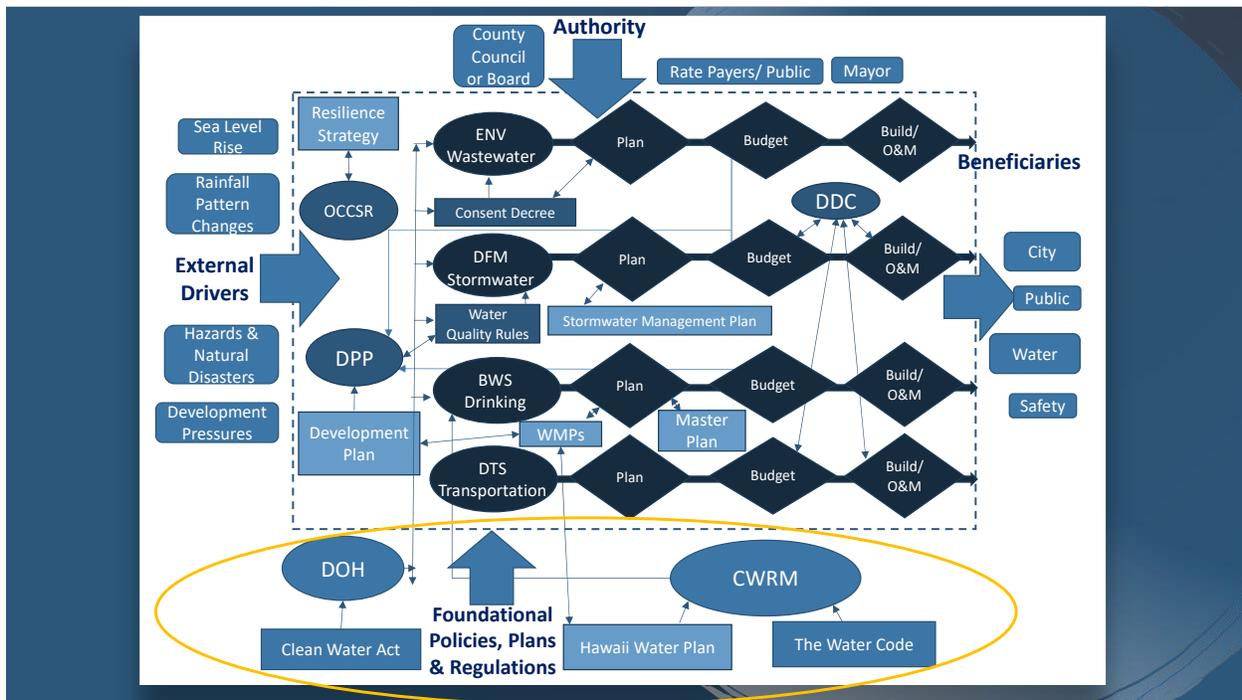
Barry said we're also looking at emergency preparedness, coastal erosion, sea level rise and adaptation, and social, cultural, economic, and environmental issues. Currently, the city's governance structure isn't designed to collectively address the planning, budgeting, and design and construction of infrastructure necessary to prepare for and adapt to impacts of climate change and sea level rise. Raising streets, for example, takes coordination from several agencies because of co-located utilities.

People will expect the city to have a plan in-place when they begin to notice the impacts of climate change and sea level rise, such as flooded streets toward mid-century. The One Water Collaborative Framework will institutionalize agency collaboration collectively working towards responding to the pending crisis, with actions ready and communications in place to decrease those impacts.

The One Water Framework is intended to meet the Mayor's 2018 Climate Change and Sea Level Rise Directive, which set planning targets of 3.2 feet of sea level rise by mid-century and six feet by the end of the century. These targets are especially important for critical facilities with low risk tolerance. The point of the Framework is to outline how everyone would work together to meet those targets, and to focus on regulation changes, policies, planning, programs, and delivering and implementing adaptation projects.

How do we apply the One Water Framework? Barry said we start with existing plans and programs. Then we look for integration points within the city organizational structure. This is followed by formalizing those integration points and collaborative actions. This allows us to establish scopes of work with shared priorities and demonstration projects.

Barry showed a diagram of the city's organizational structure and processes around planning, budgeting, and building (see page 4). The diagram maps out the planning and infrastructure agencies for wastewater, stormwater, drinking water and transportation. It also shows authority agencies (e.g. Mayor, City Council) and regulatory agencies (e.g. DOH, CWRM). It applies external drivers (e.g., sea level rise, rainfall pattern changes) and beneficiaries (e.g., public). Lastly, it shows the formation of a One Water Panel. All of these are key integration points.



Barry then described seven proposed actions of the One Water Framework.

Action One is to formally establish a One Water Collaborative Framework. A draft ordinance has been proposed that would codify internal procedures across separate but connected city departments and build momentum towards an institutionalized collaboration. The draft ordinance proposed to establish a collaborative framework to address climate change and sea level rise. (The draft ordinance, Bill 65 was submitted to the City Council on August 27, 2020.)

Action Two is to develop formal interagency memorandums of understanding (MOUs). The MOUs will provide more detail on how the city departments and agencies would collaborate to work on mutually beneficial One Water demonstration projects and share funding.

Action Three is to establish a One Water Panel. Barry said city agencies are developing the One Water panel first, but their plan is to involve State agencies and eventually the private sector, as well. The One Water Panel will consult on city projects and programs, help coordinate private development master plans, and help update building codes and design standards. One Water Panel participants will be at the division head level, who are civil servants with extensive institutional knowledge, but also involve the agency directors who have departmental authority.

Action Four is establishing a One Water component in a broader planning framework. Barry said that city development plans, sustainable community plans, and our watershed management plans are being updated to incorporate policies and strategies for climate change adaptation and sea level rise.

An example of Action Four is dealing with sea level rise along the coast. In our Water Master Plan, we looked at risk and vulnerability of coastal infrastructure and identified 20 miles of pipelines that would be subject to inundation with seawater and corrosion. These pipes will be replaced over time

with materials like PVC or bonded coated pipe to resist corrosion. Each infrastructure agency (storm water drainage, wastewater, and streets) should conduct a similar vulnerability approach. Each agency is at a different point in trying to update their long range infrastructure plan, but that needs to happen because those plans are going to drive a lot of the projects that we will work toward under the One Water Framework.

Action Five is related to the coordination of a CIP and annual budget for a One Water Resilience checklist. The checklist is a climate change resiliency roadmap that the One Water Panel will follow.

- Included is *research and monitoring* of sea level rise so the rising trends are known and modeling is updated. This will help with any decisions about when to raise streets and on managed retreat of repetitive loss areas. A groundwater monitoring well network is being developed that will help identify differences in how and where groundwater reacts to sea level rise relative to ocean tidal gages.
- *Policy and regulation* is another area of focus of the checklist. An example could be a land use policy to include sea level rise exposure areas into the City Special Management Area permitting system and updating shoreline setbacks, accounting for sea level rise. Flood insurance rate maps should account for sea level rise.
- *Financing* will be through incremental appropriations over time. On the East coast, FEMA is paying for the purchases of properties in some repetitive loss areas that continue to flood. Tax incentives, improvement districts, and fees are some of the options for financing strategies.
- In *planning and engineering and feasibility studies*, vulnerable infrastructure systems will be identified. Under the One Water Framework, we will develop adaptive strategies, drainage master plans, on-site reuse, elevate-or-retreat criteria, post-disaster reconstruction planning and other strategies. High priority areas are easily recognized during King Tides – Mapunapuna, Waikiki, Iwilei, Kakaako, and Aiea Kai. All utilities will need to be lifted when streets are elevated. The trigger to lift streets is when nuisance flooding that modeling shows will begin by mid-century. Traffic hazards will be prevalent and solutions have to be ready.
- The checklist also includes public outreach and communication; design; and construction.

Action Six is to coordinate with private development on designing and building projects that are climate resilient and adapt to sea level rise. As private developers typically go to several different city departments for permits, this action is an opportunity for the developers and departments to coordinate in an “Open House” format, and help developers include integrated resiliency solutions in their projects.

Action Seven is the identification and implementation of One Water demonstration projects. This list of projects includes: Mapunapuna sea level rise adaptation, University Avenue complete streets, Ewa water reuse, Ala Wai Stormwater Management Plan, cesspool conversions, and Waihee Loi restoration.

Barry said that Hawaii provides a very unique situation for a One Water Framework. We have full political and regulatory control of our watersheds, from the head waters into the oceans and that's very unique in the US. We're in a position to really be a leader in One Water. It's a way to implement

actions and define how we can meet the climate change directive. The One Water Framework can help us adapt to climate change, improve infrastructure resilience, and protect our natural resources.

Comment: It's really exciting to see this kind of coordination, the approach, the planning. Visually, in this presentation everything is shown as connecting in circles. For me, it reminds me of a round table and I've always been an advocate. Get everybody to the table as early and as quickly as possible, so we can begin conversations. Especially given where we're at today with COVID and food security, this framework starts to get us to a point where we can think about them as part of our planning. Water and energy are so important to that. There's a lot of kinetic motion in the movement of water, and maybe One Water will get us to a better place so we can impact sea level rise and climate change in our own small way. The One Water initiative is not just here; it's elsewhere as well.

Q: How extensive has that conferencing and networking been?

A: What we see on the mainland with One Water programs is different cities initiating them based on different drivers. Climate resiliency is the driver for Honolulu. In other places, water shortages have been the driver of some One Water programs, particularly in the Southwest. Los Angeles is a great example of that. Their One Water program started off as a traditional integrated resources plan well over a decade ago. In other areas, like Miami, they have been driven top down by political leaders.

It's exciting to look at this for Honolulu because Oahu is such a microcosm for everything that's so critical in a One Water program. Having complete control of the watershed under a single jurisdiction is quite unique. Institutionalizing the One Water collaboration in the context of an ordinance would also be very unique.

Q: I think it's a great program. When is this going to be shared with other people in the public so that they can get behind this to support when an ordinance comes through or to support and give input? People in my area can provide additional data that this group can use to help formulate where and how to accommodate sea level rise with all of our roads and your water lines under them. We want to participate or at least follow what's going on to be able to provide that ad hoc support as this moves forward. I think this is excellent. Some of our roads in Waianae are scheduled to be underwater, but we want to be part of the discussion of "what do we do with them"? From that standpoint, quite a few people would be very interested. That's the only thing in what I saw presented that I'm a little bit concerned about -- we're not tapping into that resource.

A: That was one of the comments from the Climate Change Commissioners, particularly about the rural areas. We wanted to start small and establish the One Water Framework with the intent that, as we start to get used to the idea of it and build some momentum, we would begin outreach because, absolutely, that's where we need to be. With the Water Master Plan, we opened the door to getting input. You folks gladly walked through that door and helped us see a broader picture, and that made it a better plan.

Comment: An example is this storm water tax they want to put on everybody. They want to essentially look at a satellite view of your property, say that more than 50% of your property is impervious surfaces, so we are going to charge you "X" amount for helping to deal with the stormwater. When I tell them that none of my water runs off, so why are you going to charge me

when it all percolates down? They had no answer for me when I said none of my water runs off my property. At some point in time, if you don't take input like that early on, you're not going to be able to move too far either. I know it's a balancing game.

Q: A lesson learned for the Water Master Plan is get that input early and put the investment upfront in responding to questions and comments, so that when it's time for the adoption or the actual decision, it's less tenuous. Barry said that he is on the storm water advisory group. These are exactly the points that were brought up at community meetings about the storm water utility and fees.

Barry said One Water projects need community input, moving forward. He is working with agencies to recognize the benefits and work on these joint projects. In the collaboration, we need to eventually involve the state, private organizations and landowners.

Q: Has Puerto Rico done a One Water approach? There's so much coordination that needs to happen when there's a disaster or a pandemic. Puerto Rico has many similarities to Hawaii. What do you know of their approach?

A: The presentation we heard from Jose Valenzuela in January was largely on Puerto Rico's emergency response preparedness. One of the outcomes of doing projects is to make Hawaii more resilient to these types of threats. It takes one hit from a major hurricane and then water systems and wastewater systems don't work if they aren't resilient.

Q: What is the status of the ordinance, and is there anything that this group do to help at this time?

A: The Climate Change Commission will be submitting their supporting recommendation to the Mayor. If the Mayor supports the idea, a draft ordinance will be submitted to the City Council. If you see the benefit and support the ordinance, it would be spectacular for stakeholders to come and support it there. But we still have a lot of work to do within the city to explain it and build support. (Update: the One Water ordinance is part of Bill 65, on climate change, sustainability and resiliency to be heard in the Budget Committee tentatively on Wed. Oct. 21.)

Q: On the tax for the runoff, will it be a standard rate per square-foot, or will there be a differential between the type of imperviousness? For instance, what rolls off the roof is one thing; if you're part owner in a private road, that's a lot of surface area. Is there a possibility that roads will be taxed at a different rate?

A: They have a standard rate per square foot of impervious area as determined by aerial photos and GIS. Then incentive programs are factored in. If, for instance, you have rain barrels off your house gutters and you reuse the storm water on site, there is a credit.

Part of that standard rate addresses what the Department of Facilities Maintenance (DFM) has to do on the public roads. So, the storm water fee cannot go to zero. DFM has a lot of work to do on cleaning storm drains and building green infrastructure.

In the community meetings, the public has asked how the incentive structure works? Is it equitable? What are you going to do with the fee? If you're charging everybody a fee, then you should do a project in every community around the island and not just focus it on one area. DFM intended to

submit the ordinance to create the storm water utility, enterprise fund, and the fee structure this year but retracted that due to COVID's impact on the public and the economy.

If the Stakeholder Advisory Group is interested, the presentation on the proposed storm water utility is really good. Ernie commented that it could be a good opportunity to have DFM present to the group because it falls within the One Water framework. They are trying to build their functional plan and how they would collaborate with others.

Comment: This is super impressive and we are very supportive. If there's anything we can do to support you in the process, let us know.

Q: In other jurisdictions where they've taken this One Water approach, what were some of the hurdles that we might be able to help BWS through on this?

A: One of the biggest hurdles is always funding. One success story has been in Los Angeles where the development of its robust integrated resources plan and One Water process allowed the jurisdictions to put forward a bond initiative to fund One Water-related (storm water) projects. The first bond was \$500 million, approved by an overwhelming majority of voters. Getting interagency collaboration to work together is another challenge. All of the different agencies have their own missions. Trying to move them outside the bounds of that, to see the advantages of this type of collaboration, takes effort. It's worth making that effort before going full scale because multi-agency support is needed for the One Water Framework to succeed.

Comment: There will be a new Mayor, and possibly be new agency directors, in the next five months.

Comment: We have been tracking some of the CIP work at the legislature. Legislature has recognized the impacts that offsite infrastructure improvements have on the cost of affordable housing. There is opportunity there, as well in the future.

Comment: As an urban regional planner my whole professional life, this is interesting to me. What bothers me is that the presentation is very thorough, but it's also very confusing because you're throwing in new elements (e.g. new agencies). And it's very difficult to discern where you're starting from and where it ends up.

When you give the presentation, tell people what needs to be done so that the outcomes we want are different and better. There needs to be meaning to it. State what the opportunities are, and that something different has to be done because we can't achieve those opportunities within the existing system. Help people see the process from start to finish.

For example, you can't do planning at the state level because it's never specific enough to guide decision-making. We came up with functional plans to accomplish that. Agencies developed guiding principles for transportation, water, land use controls, etc. When you're building something, you have to fill out your paperwork and also know how the functional plan works. Sometimes agencies just put together a checklist. But there's no meaning to it.

A: One of the things we need to do is to simplify the diagrams. The Department of Permitting and Planning has a charter responsibility to review the executive budget of the city. When the One Water

Panel prepares its annual CIP budget, they would identify certain initiatives to be funded in the coming budget year. DPP has that authority to review that against a checklist.

Having a long-term target and integrating it into the budgeting process is a way to actually get it done. Because if you don't have that check and balance at the budget level, then opportunities will be missed. The objective is to work together, get core projects identified, and knowing that there's going to be somebody down the budget line that's going to be asking us about progress. That provides that pressure to get things going.

Comment: The way to communicate this is to follow some particular projects that have gone through this process, so you can see the stated problem and also see the benefits – kind of like a cost-benefit way of looking at it. In our area, a comparable plan happened back in the 70s and 80s where we ended up with some flood control, some channel streams and notably some streams that we fought off channelization. But that was a joint federal, state, county project. One of the benefits was Kahaluu Regional Park. Everybody's at the table.

BWS FINANCIAL UPDATE

Barry told the group that BWS has been tracking changes in water usage and revenues since the coronavirus forced most people to work at home and caused the loss of tourism to Hawaii's economy. He showed graphs of potable water production since March 2020, one of which included monthly revenues to BWS. The graphs showed an immediate 10 mgd drop in water use in March to approximately 115 million gallons per day. In the following months, water use began to rise tracking closely to the five-year monthly average largely because of hot weather. In fact, this has been Oahu's second hottest year on record and as a result, water demand has risen even higher than the five-year monthly average.

Ellen Kitamura, Deputy Chief Engineer and Manager, said that revenues also revived as water use increased to the five-year average levels. She said that BWS was concerned about the effect of the economy on delinquencies – customers' ability to pay their water bills. She said that in mid-March, the BWS Board decided that it would be unconscionable to terminate water service for non-payment.

She said that, looking at delinquencies in terms of dollars and percentage of customers, 2020 is tracking fairly close to previous years. There was a spike of residential customer delinquencies in March but by June, that was trending downwards back to normal levels.

Commercial customers exhibited a similar trend. Delinquencies increased in March and then decreased by June. BWS's customers are paying their bills but we will continue to monitor the situation.

Ellen asked the group what they had heard or experienced about any difficulties in paying water bills. She said their stories would help BWS better understand their customers and the data we're seeing.

Q: When did we have a partial reopening?

A: It was in June.

Comment: That coincides with BWS getting more revenue.

A: There may have been more confidence.

Comment: There are several different assistance programs available for hardships that people are experiencing. The other thing that's contributing to confidence is the \$600/week plus-up from the federal government adding to unemployment insurance. That extra \$600/week has sustained quite a few people. However, as of July 31st, the \$600/week plus-up goes away. That is when people will be really hurting for help.

A: We will keep on tracking the data but this is really good to keep in mind. The next six months might give us a true picture of what's happening with our customers. Ernie added that BWS was not able to access CARE funds for our customers. CARE funds cannot be used to replace revenue but are available for private utility service. He said we're depending on the assistance programs mentioned to help our customers right now.

Comment: Aloha United Way (AUW) and Council for Native Hawaiian Advancement (CNHA) have programs and received funds from Office of Hawaiian Affairs (OHA). Hawaii Housing Finance and Development Corporation is going to provide more funds for rental assistance and housing probably within another month or two. I also think the State passed a bill to replace the \$600/week plus-up with a hundred dollars a week in funding. BWS needs to know what's coming.

Q: Pumping levels had gone up significantly in May and June, higher than the average. This higher water usage is *without* the 30,000 tourists coming in every day. What does that mean long term, when tourists return; are we going to be overdrawing our supply? Are any of our aquifers going to be in trouble?

A: This situation is an alert, but we don't see a problem at this time. We increased our water conservation messaging in the summer. The weather forecast indicates a dry summer but an increase in rain towards the end of the year.

Q: Has the BWS been impacted by the U.S not monitoring their water pollution levels exempted by the EPA, due the COVID-19 outbreak. Is there any relaxation of monitoring by the federal administration involving any facilities in Hawaii? And was there any lack of monitoring involving the MS4 system in Hawaii?

A: We are not responsible for the MS4 system, which is actually the municipal storm water collection system. The Department of Facilities Maintenance is responsible for the MS4 system and when they come to do a presentation on the storm water utility, that probably is a really good question – to see what facilities might have been impacted by the loosening of these regulations.

NEXT STEPS

Dave thanked everyone for participating in the meeting and discussion. He said that the next Stakeholder Advisory Group meeting would take place on October 15, 2020 at 4:00 pm. BWS is actively evaluating options for the meeting. Virtual meetings are not the new normal for the Stakeholder Advisory Group and in person meetings or hybrid meetings will resume as soon as it is safe to do so. NOTE: Meeting 36 will be a virtual meeting, out of abundant caution due to the COVID pandemic.