

MINUTES
FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: February 16, 2021
TIME: 9:00 am
PLACE: Online via Zoom
Meeting ID: 957 5828 3582

Chairperson Suzanne D. Case called the meeting of the Commission on Water Resource Management to order at 9:11 a.m. and stated it's being held remotely and being live streamed via YouTube for public viewing due to the ongoing Covid-19 pandemic; noted the meeting was set to take live oral testimony; any written testimony would be acknowledged when the submittal items come up. Chairperson Case read the standard contested case statement.

MEMBERS: Chairperson Suzanne Case, Dr. Kamana Beamer,
Mr. Michael Buck, Mr. Neil Hannahs, Mr. Wayne Katayama,
Mr. Paul Meyer

EXCUSED: Mr. Keith Kawaoka

COUNSEL: Ms. Linda Chow

STAFF: Deputy M. Kaleo Manuel, Mr. Dean Uyeno, Dr. Ayron Strauch,
Ms. Rae Ann Hyatt

OTHERS: Ms. Meredith Ching (Alexander & Baldwin), Mr. Daniel Sargent
(McBryde Resources), Ms. Chui Ling Cheng (U.S. Geological
Survey)

All copies of written testimonies submitted will be included at the end of the minutes and is filed in the Commission office and are available for review by interested parties.

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A. APPROVAL OF MINUTES

January 19, 2021

Chairperson Case noted a correction to the date of January 19, 2020 to January 19, 2021.

Commission Secretary, Rae Ann Hyatt confirmed the correction to be made.

PUBLIC TESTIMONY – None

MOTION: (BEAMER/HANNAHS)**To approve the minutes as submitted – noting the date to be corrected****UNANIMOUSLY APPROVED****(CASE/BEAMER/BUCK/HANNAHS/KATAYAMA/MEYER)***021621 00:16:08***B. INFORMATIONAL BRIEFING****1. Commission on Water Resource Management – Draft Amended Interim
Instream Flow Standards for the Surface Water Hydrologic Unit of Lāwa‘i
(2050): Lāwa‘i Stream**

PRESENTATION GIVEN BY: Dr. Ayron Strauch, CWRM Stream Protection & Management Branch

Dr. Strauch briefed on the geology of the Lāwa‘i surface water hydrologic unit which is in the Southeast part of Kaua‘i. There are a number of registered stream diversions along the upper and lower regions. The plantation-era diversion on Lāwa‘i Stream is Diversion 812, which is the source of water for Lawai Ditch. The USGS estimated low-flow characteristics for the right branch, which doesn’t account for the inflow from the left branch, which is important as the Lawai Ditch intake is below the confluence. To estimate the water available at this diversion, staff determined flow yield for the right branch using USGS flow duration statistics and then scaled these values for the left branch as the two catchments have nearly identical land use and geology patterns but differ slightly in catchment size.

The low-flow characteristics available at Diversion 812 is determined by summing the characteristics for the two branches. While this method does not account for the slight groundwater seepage gains in streamflow between the confluence and the diversion (an slight underestimation of flow), the left branch catchment receives slightly less rainfall (a slight overestimation), and the two sources of error offset each other. Verification of this method can be made using the two left branch measurements made during USGS seepage runs of the combined flow of Lawai Ditch and Lāwa‘i Stream below the ditch. There are also a number of instream values and uses upon the stream. The stream also supports numerous freshwater biota which the HSA ranked the stream as “moderate” (3 of 4).

McBryde Resources manages the ditch monitoring gage which reports monthly how much water is diverted. At the Huinawai reservoir, the system splits into the “Agricultural Park system” and the “Kukui ‘ula System”. The Pō‘ele‘ele Well, located near Huniawai Reservoir, is a high capacity well that can pump up to 5 mgd to supplement water availability in the dry season and may be relied upon following implementation of an IIFS.

The Ag Park System feeds non-potable needs to: AES Solar Farm, A&B Ag Park, Kauai Coffee Fields, and the National Tropical Botanical Gardens. The Kukui‘ula System serves the farm needs at Kukui‘ula as well as landscape and golf course irrigation.

The timeline of this study was stated. In order to implement the proposed IIFS, the stream diversion itself needs to be modified so that low-flows remain in the stream, and only flows greater than 2.4 cfs are able to be diverted along the left bank.

QUESTIONS

Commissioner Beamer – asked on the water quality in Pō‘ele‘ele Well-if it’s potable good drinking water?

Dr. Strauch – answered he believe it is but did not analyze the water quality of the well. The current pumpage of all the aquifers in the area is not near the sustainable yield.

Commissioner Beamer – clarified on the measurement of flows and use of the excess to fill the reservoirs to mitigate the periods of drought; and a further backup is the well.

Dr. Strauch – confirmed statement.

Commissioner Buck – thanked Dr. Strauch for the work done and asked on page 21 (of the submittal) the pump 3 ditch from Hanapēpē to Lāwa‘i Reservoir is that a big flux?

Dr. Strauch – explained the Lāwa‘i Reservoir is at the end of the pump 3 ditch, but there’s coffee irrigated from it and also a pipeline that feeds some of the NTBG needs which draws from the reservoir and ultimately comes from Hanapēpē.

Commissioner Buck – how much water from Hanapēpē is added to Lāwa‘i?

Dr. Strauch – would need to ask McBryde or NTBG to confirm.

Commissioner Buck – asked about Diversion 812.

Dr. Strauch – noted since the Lāwa‘i intake has been partially closed to limit how much water is diverted, there’s been mostly continuous flow over the dam and it’s not a substantial impediment to upstream migration.

Commissioner Buck – can you quickly summarize what we learned from the low-flow research on your recommendation?

Dr. Strauch – the low-flow values developed by USGS were used to estimate the amount of water available in Lāwa‘i Stream as a whole. The values were estimated for one part of the watershed and we were able to scale up based on the differences in areas to how much is available at Lāwa‘i intake. It was not feasible to gauge the stream below the confluence.

Commissioner Meyer – thanked Dr. Strauch for his thorough presentation and asked if he came up with the IIFS recommendation prior to this or was that deferred – what was the recommendation back then?

Dr. Strauch – we stopped working on it following the Public Fact Gathering meeting because of much interest in delaying until the USGS studies were final but did not do a full analysis of determining how much (water) was at the intake.

Commissioner Meyer – your comment in the report with additional IFS that turbidity may clear up going forward, do you expect it to clean-up as we go forward?

Dr. Strauch – yes, during slow moving water, sediment drops-out so you have a series of pools and runs and in those habitats when those have no flow-through the sediments build up (gave more detail on the hydrology of sediment build up).

Commissioner Meyer – asked on the comment on water reuse relating to wastewater capture and treatment.

Dr. Strauch – yes, they pushed the utilization of R-1 that's available in the region and because the development is still ongoing, the County and private entities are able to add gray-water pipeline distribution easily; especially when the end use is a golf course, there's no pushback. Most of the golf courses in the area are irrigated with R-1 water.

Chair Case – noted that the diversion has connectivity and is not blocking upstream migration of 'o'opu, and asked if there was tilapia below there.

Dr. Strauch – the tilapia is far below in the lower reaches where NTBG is located. There's Stillwater damn that acts as a barrier to upstream tilapia movement so there found in the brackish zone at the lower reaches. Water spills over the top of the dam and 'o'opu are able to migrate up but not the tilapia.

Chair Case – asked on the numerous undocumented diversions upstream if it's this stream?

Dr. Strauch – replied no.

Commissioner Beamer – Mahalo Dr. Strauch, it's exciting to know there are many native species like 'o'opu and perhaps 'ōpae making their way. Also thank you for talking through the storage issues and the ways current agricultural efforts can still be prosperous and successful given this proposed IIFS. I'm wondering on the quality of the habitat, is there an H value?

Dr. Strauch – if we assume models developed for Maui are equivalent for Kaua'i, with the assumption the Q65 value is 100% baseflow, then it would be approximately H100. For Maui, we assume that 90% of the habitat is supported by 64% of the baseflow.

Commissioner Beamer – we're confident this is going to be improving the habitat for the native species and still meeting the current usages for Ag – great work. Are there any drawings (particularly the cement dam) or what do the modifications look like or are we working with or is it McBryde that owns that portion of that diversion.

Dr. Strauch – they’re the landowner and operator of it. Essentially, instead of raising the gate to allow water to flow underneath, we would keep the gate down and open up space on the top, which would allow water to spill into the ditch when there’s at least IIFS in the stream (further explained the flows in relation to stream function).

Commissioner Beamer asked on the process of the public submitting testimony. Chairperson Case stated that there is a process to submit testimony that is posted online (on the CWRM website).

PUBLIC TESTIMONY

Ms. Meredith Ching, Alexander & Baldwin – Good morning Chair Case and Commissioners, thank you. We’re not here to testify but here in case there were more questions about the system. We’re fine with staff report; the only thing I would say as Dr. Strauch pointed out, it might not take much work to do the intake to enable the instream flow standard to flow downstream. We might need time to fix our systems so that it’s more able to provide backup for the other water users. For example, Pō‘ele‘ele pump is only used a little and needs to be used more or we need to change out the pump, etc. The reservoirs capacity as noted, needs some work to comply with dam safety regulations so they can supply more water and will look into that in the 90-day period.

Dan Sargent is the head of McBryde Resources and any operating questions at all would be referred to him.

QUESTIONS

Commissioner Buck – thank you; seems like you provided low-cost land rent for agriculture; I’m curious on your current rate of use versus your expected rate of use in the future or are you where you’d think you’d be or expect more water in the future? (this might be a Dan question)-we’re looking at every possibility of storing more water in the reservoirs during high rainfall events and noticed you have reservoirs decommissioned – what’s the state of those and any interest in recommissioning those to be able to store more water in high storm events?

Ms. Ching – (I’ll take the water use question and Dan can talk about the reservoirs) – the estimates that staff presented about 0.5 mgd is accurate and things change; for example, there may be a need for more water so that the Ag park we have that’s twenty 10-acre plots we offer it to people for \$100/per acre, per year. Right now we have 5 tenants but that has varied.

Mr. Dan Sargent, McBryde Resources – (in response to the reservoir question by Commissioner Buck) Thank you Meredith and Chair. As for the reservoirs, we’re in a competing faction between CWRM and DLNR dam safety in that at following the Kaloko dam failure, which actually was a failure by the owner not the actual dam; they’ve decided that after a 5-6 year wait to put on a new regulation that says all dams in Hawai‘i will meet the 10,000 year flood, where-as every dam in Hawai‘i was designed for the 1,000 year

flood. A lot of these dams that are dry right now, you'd need spillways larger than the length of the dam to be able to use them again to meet dam safety standards.

What we've done is try to pick the ones we want to keep and most useful for us for the system and put money into them and leave the others dry to comply with the safety scenarios.

Chairperson Case noted that this (Item B-1) was only an informational briefing for the purpose of being sure everyone has the necessary information to evaluate the proposal before any decision making and stated that anyone can submit comments to CWRM staff.

Chairperson Case also thanked Dr. Strauch and staff for their hard-work and useful, detailed information to move forward and look forward to the final proposal.

Commissioner Beamer also thanked Dr. Strauch and suggested that when the decision making comes before the Commission, to insert a slide relating to ground water around that particular well to see the connectivity between surface and ground water.

Commissioner Hannahs – asked when do we expect to see this coming for action?

Dr. Strauch – replied Kaleo (Water Deputy) sets the agenda but I would expect it next month or the month after.

Commissioner Hannahs – noted on the 90-day clock starts after Commission takes action.

Commissioner Beamer – requested if action could be before June as he will be terming out.

Commissioner Hannahs – requested Ayron to check-in regarding the dam safety issues to follow through on Mr. Sargents representation and bring our state policies in federal alignment.

Deputy Kaleo Manuel – the way we're bringing these IIFS's forward is to provide information for dialogue, feedback and recommendations to get you the data you need to make informed decisions on the IIFS; and based on this dialogue if there was a lot of concern, we would go back and think through things. From the discussion today, we could bring it forward next month or the following month; doesn't seem there's much follow-up on conversation and coordination with A&B, also with community. We'd like to update the IFS as soon as possible and get into implementation as that's where we see actual improvement in streamflow and stream health. That's the intent of this two-step process – provide information, get sense of where we're going and determine the next timeframe of bringing forward an action item.

Commissioner Meyer also thanked Dan and Meredith for their participation and appreciated their helpful comments.

B. INFORMATIONAL BRIEFING (CONT'D)**2. United States Geological Survey - Water-Resource Management Monitoring Needs, State of Hawai'i**

PRESENTATION GIVEN BY: Ms. Chui Ling Cheng, U.S. Geological Survey

Mr. Dean Uyeno, CWRM Stream Protection & Management Branch, introduced the submittal item and Ms. Chui Ling Cheng of U.S. Geological Survey. The Commission approved this project in March 2016, and CWRM staff contracted U.S. Geological Survey in June 2016. In collaboration, it was decided that they needed to look at the monitoring system throughout the State as a whole, working along with other entities. Ms. Chui Ling Cheng of U.S. Geological Survey was the lead researcher.

Ms. Cheng provided a PowerPoint presentation on the submittal item. An important part of water resource management and protection is having good data. This study looks at developing an effective data collection program that considers current and future water resource issues and data quality and accessibility.

In cooperation with CWRM and in collaboration with the University of Hawai'i Water Resources Research Center, the USGS developed rainfall, streamflow, and groundwater monitoring programs that meet State needs for water resources assessment, management, and production in Hawai'i.

Rainfall, Surface Water and Groundwater programs were grouped by their priority areas and were explained and shown on the map slides. The study outlines where monitoring is needed, provides guidelines on quality assurance and control, and encourages publicly accessible data; and hoping the studies will be a first step towards innovative water resource protection and management in Hawai'i.

The publication is available online at: <https://doi.org/10.3133/sir20205115>

QUESTIONS

Commissioner Hannahs – asked about the priority area groupings, what areas were left out?

Ms. Cheng – not much as we tried to include everything we could.

Commissioner Beamer – clarifying if Lāna'i has any active (deep monitoring) wells?

Ms. Cheng – confirmed none.

Commissioner Hannahs – appreciated the report and asked on additional gaging and wondered if we're prepared to resource those immediately or do priorities need to be determined and set.

Ms. Cheng – in the beginning of the study, there were various approaches to the spectrum. If we wanted everything, there'd be a gage in every stream. What we've done is setup these priority areas and to see what are the monitoring needs? These are different from priorities set by the State because of limited funding. In particular for rainfall and surface water, we're working closely with CWRM staff in studying priority sites (gave an example of the low--flow characteristics study).

The short answer is we have to take this in stages and phases to fully implement the program; it will not happen all in the first year; it's probably going to happen 5 to 10 years depending on available funding.

Commissioner Hannahs – do we know what phase 1 looks like yet and are we satisfied given our other timely concerns?

Deputy Manuel – from a budgeting and management standpoint this study looks comprehensively at how we collect data or where data gap exists and is a useful tool for budgeting. Timing wise, it would've been great to get this for next biennium. In two years from now, we can start to be strategic in how we start to prioritize rainfall, stream gages or deep monitoring wells; how we slowly chip away at collecting and filling that data gap. This is also helpful as the Commission is faced with decision making, as wells come on board, requests for stream diversion works permit, if we don't have data, conditions could be placed on wells or stream diversions (further explained the reasoning and need for data collection and deep monitor wells)

Mr. Uyeno – noted every year when the cooperative agreement is reviewed the question always asked is “what is this gage for?” There are gages with a long-term record and the ones we want to keep to look at climate change impacts. The gages that are shorter in nature we use for regulatory purposes or monitoring specific projects. Also, to make sure we're coordinating with other Federal, State and County partners so they know where our priorities lay as a whole from a water resource perspective.

Dr. Strauch – when it comes to stream gaging, 10-years ago we were at the low-point of the history of stream gaging for Hawai'i in terms of active continuous gaging stations. USGS and CWRM started evaluating which gages could be most valuable in terms of reestablishing that long-term record for making future management decisions related to water lease questions, instream flow monitoring, or where are the high priority areas, were to monitor climate change that may affect water availability. Our priorities shifted in some respect, from when I started (at CWRM) more towards water lease questions so we are implementing the State-wide needs assessment as we go with the understanding of our constrained budget. We reached out to partners to cost-share and I think we've grown the long-term monitoring network but have more to grow into.

Commissioner Beamer – Mahalo Chui for the presentation and seeing where this type of analysis has gone since being on the Commission. To build from Commissioner Hannahs question, it is of importance as the water is being used all across Hawai'i and being diverted. Unfortunately, the development and infrastructure wasn't put in place for the ability to monitor and when we think “water is life”, we as decision makers need the best information

we can get. Maybe it lights a fire to recognize how much of Hawai‘i water is utilized without us really knowing what’s happening in each stream and systems, so it’s incredibly important for us to get this done. I also want to thank the staff for this work.

Commissioner Buck – I’d like to echo and say these are not priorities, these are areas of concern. Honestly, I’m a bit disappointed; I forgot how much we paid for this. I thought it was a great presentation and good start and can’t expect the federal agencies to make recommendations specifically for what’s at stake. If we want to get more funding, we need to be strategic and directive. Chair, I would love for this informational briefing to come back to the Commission with this report and let’s talk about State priorities and have a discussion among Commissioners, strategically what is the best way for the next biennium come up with a top-ten list for State funding or cost-sharing; so it’s critical we take the next step.

Deputy Manuel – Mahalo for that thoughtful push; we’re definitely open to working with staff on developing that. A question to the Commissioners is in addition to the criteria listed related to rainfall, streams and groundwater in terms of filling data gaps, what additional criteria would you like us to review in the prioritization and making recommendations for priorities? Based on what you heard so far is there anything that we’re missing that you would like us to use as criteria for coming up with recommendations for each of those?

Commissioner Buck – it would be great to get these reports before the meeting to have time for reviewing it; and have the Commissioners to respond to you via email so staff can have the first crack in coming up with criteria, then we can have the overall discussion with the Commissioners, would be my recommendation.

Commissioner Beamer – I don’t think B-2 is on the website yet so there’s a gap or lag; especially in this period where we are meeting remotely it’s important to have that; so echoing what Mike said. For the criteria, a more comprehensive analysis would be to drill down more into the immediate priorities and responsibilities of the Commission, maybe a filter on public trust if we’re thinking of streams and surface water areas that have a higher level of public trust use whether it’s DHHL, traditional and customary, or domestic use of groundwater and stream – some filter that enables us to accomplish our fiduciary responsibility, with a greater level of urgency.

Commissioner Meyer – sometimes what gets left behind is the quality of the water resource – salinity, trace elements, contamination, turbidity. It’s a little more difficult to do, but over time, trends can be very important. If that were in addition to amounts of volumes, etc., we’d have some indications trends in water quality from various sources both ground and surface water, would be helpful.

Commissioner Katayama – (for Dean) the presentation was great and it’s a good strategic plan and integrates all the major parties; how are we integrating the different levels of the stakeholders? Also, in identifying all the critical resources what would be your cost of implementation if your wish-list was realized? I think taking a look at County development and water plans may help you prioritize where the pressure is for domestic development.

Chairperson Case appreciated the report and all the information in it as a tool as it will help CWRM prioritize but doesn't give us the priority answers however shows us where gaps are and will have the information we need.

Commissioner Hannahs suggested to not call it a wish-list or Cadillac, as it's a smart strategic plan.

PUBLIC TESTIMONY - None

C. ANNOUNCEMENTS

Deputy Manuel – Announced the retirement of Mr. Charley Ice, CWRM Ground Water Branch and the upcoming retirement of Ms. Lenore Ohye, CWRM Planning Branch; and noted the heaviness of their departure.

Commissioner Beamer – thanked Deputy Manuel for the update and appreciated their work and dedication through the years and asked about CWRM hiring more staff.

Deputy Manuel – noted the positions are there and remain vacant as the State is in a hiring freeze.

Chair Case – commented on the tight general funds and keeping an eye on the CARES Act.

Commissioner Hannahs – shares in the gratitude of Charley and Lenore's service and shares same concern about hiring freeze.

D. NEXT COMMISSION MEETINGS (TENTATIVE)

March 16, 2021 (Tuesday)

April 20, 2021 (Tuesday)

This meeting was adjourned at 10:40 a.m.

Respectfully submitted,

Rae Ann Hyatt

RAE ANN HYATT
Secretary

OLA I KA WAI:



M. KALEO MANUEL
Deputy Director

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Written Testimonies Received: None