

MINUTES  
FOR THE MEETING OF THE  
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: June 16, 2020  
TIME: 10:00 am  
PLACE: Online via Zoom  
Meeting ID: 944 9027 8332

Chairperson Suzanne D. Case called the meeting of the Commission on Water Resource Management to order at 10:07 a.m. and stated it is being live streamed via YouTube for public viewing and noted the meeting was set to take live oral testimony and any written testimony would be acknowledged when the submittal items come up. Chair Case also read the contested case disclosure statement.

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

**STAFF:** Deputy M. Kaleo Manuel, Mr. Roy Hardy, Ms. Lenore Ohye,  
Mr. Dean Uyeno, Dr. Ayrton Strauch, Mr. Nicholas Ing,  
Ms. Rae Ann Hyatt

**OTHERS:** Mr. Avery Chumbley (Wailuku Water Company),  
Mr. James Geiger (MRW Law), Mr. Hōkūao Pellegrino (Hui o Nā  
Wai ‘Ehā), Mr. Isaac Moriwake (Earth Justice on behalf of Hui o  
Nā Wai ‘Ehā), Mr. Alan Mair (USGS), Mr. Jason Misaki (DLNR-  
Div. of Forestry/Wildlife), Mr. Derek Esibill (Pacific American  
Foundation)

**COUNSEL:** Ms. Robyn Chun, Mr. Colin Lau

All written testimonies submitted at the meeting are filed in the Commission office and are available for review by interested parties.

Chairperson Case thanked everyone for conducting the Commission meeting remotely due to the stay-at-home COVID-19 mandate.

**061620 00:20:25**

**A. APPROVAL OF MINUTES**

May 19, 2020

PUBLIC TESTIMONY – None

**MOTION: (HANNAHS/KATAYAMA)  
To approve minutes as submitted  
UNANIMOUSLY APPROVED**

**061620 00:20:55**

**B. ACTION ITEMS**

- 1. Action on the Petition Requesting a Contested Case Hearing Before the Commission on Water Resource Management Filed by Wailuku Water Company, LLC on Agenda Item B-2 of the February 18, 2020 Meeting (Issuance of Written Notice of Violation for Enforcement Against Waste, and Recommendation to Impose Fines Against Wailuku Water Company, LLC, Owner/Operator of Waihe'e Ditch, In Response to HRS §174C-13, Citizen Complaint filed by Hui o Nā Wai 'Ehā Alleging Waste by Wailuku Water Company at Pale'a'ahu Gulch, Nā Wai 'Ehā Surface Water Management Area, Maui, TMK No. (2) 3-6-004:003) and Delegation of Authority to the Chairperson to Appoint a Hearings Officer**

PRESENTATION GIVEN BY: Mr. Dean Uyeno, CWRM SPAM Branch

Mr. Uyeno presented the submittal item, read the summary of request and provided the background information. Mr. Uyeno noted there was a discrepancy when CWRM received Wailuku Water Company's petition on March 2, 2020 as noted in Exhibit 2; however WWC did file the petition in a timely manner; as such CWRM recommends granting a contested case hearing for WWC.

On February 28, 2020, the Commission also received an Application to be a Party in a Contested Case Hearing Before the Commission on Water Resource Management, filed by Hōkūao Pellegrino, for Hui o Nā Wai 'Ehā. An application to be a party (other than as petitioner) in a contested case is treated as a request to intervene. That request will be addressed by the hearings officer.

Staff recommends the Commission move forth with its recommendations.

**061620 00:25:12**

Chairperson Case – reminded Commissioners on the sole issue on whether to grant the request for contested case and not to discuss the substance of the matter, which pertains to testifiers as well.

**QUESTIONS**

Commissioner Hannahs – commented on the error of the date stamp with regards to the public's confidence when errors are noted and the need to be more diligent and professional in work.

Commissioner Katayama – asked under the current environment, how is the process to be handled by the hearings officer?

Chair Case – noted for the AG’s to comment and said the normal process will be followed and noted that an online platform like Zoom will be utilized for the proceedings.

Mr. Lau, Deputy AG – added that what usually happens in an enforcement action is whomever is appointed first entertains a motion whether the appointment is suitable to the parties, and then will entertain whether any parties want to intervene; at which time the Hui may put forth its case to intervene. After that, the parties will brief the matter, evidence will be heard and a suggested decision will be made and presented to the Commission, in which they will make a decision on.

***061620 00:28:20***

Chairperson Case – asked for any public testimony and reminded those to limit the testimony in regards to the matter before the Commission which is whether to grant the request for contested case and not get into the substance of the matter.

### PUBLIC TESTIMONY

Mr. Hōkūao Pellegrino (Hui o Nā Wai ‘Ehā) – Aloha mai kākou Chair Case, Water Commissioners and staff. I, Hōkūao Pellegrino of Waikapu, Maui, President on behalf of Hui o Nā Wai ‘Ehā will be providing testimony on this particular agenda item. The Hui filed a waste complaint with CWRM dated October 18, 2019, regarding the dumping of water by Wailuku Water Company between September 29, 2019 and October 18, 2019; between October 22, 2019 and November 11, 2019; and between January 5-9, 2020. Commissioners were to hear the staff submittal and Notice of Violation on February 18, 2020. Four Hui board members including myself, traveled to O‘ahu to testify in support of the staff recommendations. CWRM staff were unable to present their findings and Commissioners were unable to review the Hui’s complaint, due to Mr. Avery Chumbley’s abrupt request for a contested case hearing. The Hui requests Chair Case, Deputy Director Kaleo Manuel and all Commissioners to clarify what exactly this contested case request is about, when the Hui’s complaint hasn’t been heard.

Based on the current staff submittal and recommendations to the Commissioners, it looks as if the Hui is being completely left out of the proposed contested case process. The Hui filed a complaint with CWRM staff and made a recommendation for Commissioners to review and act or not act upon. No decisions were made on the Notice of Violations therefore, what is the basis for Wailuku Water Company’s contested case request? There seems to be a procedural flaw occurring on this particular issue that needs to be addressed head on by the Commissioners.

Furthermore, the Hui’s constitutional rights seems to be in question as it relates to our ability to be a part of this process. The way in which Wailuku Water Company request has played out proposes a number of procedural uncertainties. Therefore, the Hui formally asks the Water Commissioners to deny Wailuku Water Company’s contested case request without prejudice to a later request, after Water Commissioners address the staff submittal and the Hui’s waste complaint.

The Hui acknowledges and appreciates the work that CWRM staff has put into this complaint and the recommendations to issue fines against Wailuku Water Company on

the illegal dumping of surface water from the Waihe'e River, Wailuku River and Waikapu Stream into Pale'a'ahu Gulch. It is our hope as a community non-profit organization made up of volunteers that work, investigate, report, and responsibility to uphold our mission to protect our streams, native aquatic species, ecosystems, and native Hawaiian kuleana kalo farmers, that is not done in vain.

Hui o Nā Wai 'Ehā humbly asks the Water Commissioners to thoroughly think this through as a means to address the bigger picture of injustices for Nā Wai 'Ehā. Mahalo.

Mr. Isaac Moriwake (Earth Justice on behalf of Hui o Nā Wai 'Ehā) – Aloha Chair Case and Commission members. We do appreciate Deputy Director Manuel and Commission staff for taking this issue seriously and for trying to move forward expeditiously during these times. We're not opposed to the proposed action per se, but we are opposed to the Commission moving forward as proposed at this time. Instead, we support the Commission further flushing out what's going on here so this matter can be handled and can proceed in the most efficient and orderly way possible for the interest of everyone involved; and that includes Wailuku Water Company (WWC).

The Hui did signal this concern in its request to participate in this contested case hearing. Unfortunately because of the total shutdown after WWC pulled a premature trigger on its contested case request, so far all we have is a staff submittal on the Hui's waste complaint recommending the issuance of a Notice of Violation (NOV), but no Commission decision on whether to issue such a notice or go another route. So procedurally, this matter should go back to the Commission when it can review the submittal, the record, the testimony, and even the legal authority arguments that WWC is now raising; consider how to move forward, narrow the scope of issues, and indicate whether a NOV will be issued or something else. At that point, a Contested Case Hearing request would be right. Right now, what we're doing is cutting short the Commission's regulatory and trustee kuleana.

Legally and logistically WWC's contested case request should be denied without prejudice at this time until the Commission can address the staff recommendation for issuance of a Notice of Violation.

Deputy Director Kawaoka is here; so imagine if a polluter could cut short DOH's investigation process by preemptively asking for a contested case even before the NOV is issued? How would that work and where would you go from there? That's the questions we're raising here. This is a CCH on proposed Commission enforcement. If the Commission is going to designate an Attorney General, a Deputy AG and staff to serve the prosecutorial function in this case, who are the necessary parties, and witnesses or is it expected for the Hui to be solely obliged to prosecute this case and if so, why isn't the Hui made a lead party out right in this recommendation?

Again, the Hui has submitted a timely request, which is barely mentioned in this staff submittal. These are legal questions but also practical efficiency questions. We do appreciate the Commission taking these issues of waste seriously; one of its first times in its history, but it should be done in a thoughtful and methodical way and not hap-hazardly just by delegating it to a hearings officer and taking it over to a CCH. I imagine the

Commissioners would want to discuss this with their attorney, but I can be available for further questions if necessary.

**061620 00:36:22**

Chairperson Case – asked the Commissioners for any questions and called upon Wailuku Water Company for a statement.

Mr. James Geiger (Attorney on behalf of Wailuku Water Company) {also present Mr. Avery Chumbley of Wailuku Water Company} – Thank you Chair and Commissioners. We don't have much to add other than the reason we made the request was for efficiency. The staff report did not contain all of the information that would be necessary for the Commissioners to act and we felt it important that the Commission have a complete record upon which to act, so on the next occasion rather than making multiple actions on the same events. So that's why we filed the request for contested case; we think it's timely and most efficient method to do this. If anyone has any questions, we'd be happy to answer it.

**061620 00:37:37**

Chairperson Case – asked for any questions and cautioned the Commissioners that only procedural matters are being discussed otherwise will be taking a vote on the matter.

## QUESTIONS

Commissioner Hannahs – (to Mr. Moriwake) mentioned how he (Mr. Moriwake) arrived to the (February) meeting after Chair Case read aloud the contested case statement process that says "...if such a request is made before the Commission's decision, then the Commission will consider the request first – before considering the merits of the item before it." – Are you suggesting that policy is inappropriate or mischaracterization of what you believe to be the contested case process?

Mr. Moriwake – stated he wasn't sure if that tracts the binding rules, but believes it depends on the situation and what the proposed action is. Reiterated that today the proposed action was considering a staff submittal to issue a Notice of Violation which is the very first step to say the Commission is going in this direction, it looks like a violation; diverter, please respond. Without that first step of the Commission framing what its' going to do in moving forward and issuing a notice; it's a free-for-all. Again, we recognize WWC's right to a contested case if the Commission issues a notice that would implicate such rights. Right now, the Commission hasn't done anything at this point. I think procedurally, logistically it's most sufficient to go back to the Commission, consider the staff recommendation whether to issue an NOV, then we can talk about a contested case or not; it may be that the Commission may come up with another approach. That was the type of discussion that was beginning to occur when WWC asked for a contested case immediately.

Commissioner Beamer – noted that what Isaac has mentioned has been brought up in conversation and essentially what Commissioners were told by the AG and what Chair Case has said at the beginning is essentially once a contested case is requested, we have to stop all proceedings.

I'd like to ask Jim (Geiger), are you against the Commission having further understanding on this issue or share why the contested case was filed in this fashion? I tend to agree that it would've been nice to have an opportunity to learn about the issue.

Mr. Geiger – answered the reason it was filed is because the staff report didn't contain all the information. So, what was being done was the Commission was being asked to make a decision whether an NOV should be issued and also make decisions concerning potential penalties that would be imposed without having a complete record, so the request was made so that we could give everyone a complete record. As we indicated in the request, a petition for contested case, we fully expect that the Hui should be a participant in this because they were the complaining party.

Commissioner Beamer – if that's your position, is there a way for us to have a hearing as a Commission and not go into contested case, where you folks could work with staff and agendaize this item?

Mr. Geiger – it's up to the commission as to whether they appoint a hearings officer or not. My belief is that, and my experience in dealing with these things, it is usually more efficient for the Commission to have a hearings officer to create the record upon which they can act, than it is to have the entire Commission act as the hearings officer.

Mr. Moriwake – if I can clarify, we're not proposing that the entire Commission act as the hearings officer in this case, we're proposing that the entire Commission act as a Commission in considering the original staff recommendation to issue an NOV. I think it's an important distinction. I would think Wailuku Water Company would have an interest in avoiding legal fees in litigating something it may not need to, if the Commission deliberates this and charts a path forward.

**061620 00:43:52**

Chairperson Case – asked Commissioners for any other comments and asked for a vote/motion on the matter as staff submitted for item B-1

**MOTION: (HANNAHS/KATAYAMA)**

**To approve B-1 submittal as submitted.**

DISCUSSION

Commissioner Beamer – I have one consideration given that Wailuku Water has said they've asked Nā Wai 'Ehā to be a party (I heard that mentioned by Jim), I wonder if the Commission would consider an amendment to ensure that (Hui o) Nā Wai 'Ehā is a party to the Contested Case Hearing?

Chair Case – I think the matter needs to be heard by the hearings officer and if they want to agree to it at that point, it would be a simplified decision from the hearings officer side, but procedurally, that's the way it is handled and the AGs will correct me if I'm wrong.

Commissioner Beamer – my only concern is a hearings officer deny Hui o Nā Wai ‘Ehā standing, but in the event they did and they move forward with this contested case and bring it back to the Commission, I worry if it would be useful?; if you could clarify.

Chair Case – the question is – in a violation whether there’s someone else that’s a party to a violation proceeding; that’s the procedural question. They’re certainly a complainant and obviously interested in the result, but procedurally, that’s the question

Mr. Colin Lau (Deputy AG) – right now we’re in the Sunshine Law Chapter 92 and flirting with being in Chapter 91. Once it’s in Chapter 91 that would be the kuleana of the hearings officer to decide whether to allow intervention or not. For clarity, it would be better that if you do allow an amendment to the submittal at this point, it really muddle the issues right now. Let the hearings officer have the determination on whether they should intervene or not.

Chair Case – what we’re trying to do is have a procedurally correct process here, that’s why we’re being careful about this.

Mr. Lau – if you deny the contested case to Wailuku Water (Company), this would be coming back to the Commission; if you want to do that, it would be a possibility. I don’t see what the basis for denying would be though because they do seem to have an interest according to what was filed in Exhibit 2, they are a petitioner and according to your rules, the petitioners are participants in a contested case and granted membership as a party. It’s less clear that the Hui would have standing to be a party on the basis of being an enforcement as Isaac was suggesting, unless the Commission decides that they should enforce rather than the Commission itself. According to the Commission’s motion itself to have a contested case under 13-167-51, then it’s up to the Commission to decide who’s going to prosecute.

Commissioner Buck – if we wanted to setup terms of reference for the hearings officer, at what point in time would that be appropriate; do we need to do that now, or when we choose a hearings officer? When would we frame the terms of reference to have the hearings officer engage in this contested case? We’ve done that in mediation when we’ve had open-ended contested cases, so I’m wondering what ability we have and where in the process we might be able to frame the scope of the terms.

Mr. Lau – if you’re suggesting that they go directly or consider mediation, 13-167-55 talks about mediation as a part of a pre-hearing conference, but that’s usually after the parties have been determined; it’s a subsequent step.

Mr. Moriwake – Deputy Lau, you raised an important point about who’s prosecuting here, and we raised the same question/testimony so some clarity would be helpful before we dive into this.

Chair Case – to be clear, the Hui filed a complaint with the Commission, the Commission took action on the complaint to pursue a Notice of Violation in that process. It’s a violation, a direct action between the Commission and the alleged violator, based on the

complaint that the Hui brought. The alleged violator which is Wailuku Water Company asked for a contested case and that's what this proceeding is.

Mr. Moriwake – thank you for that clarification; I suppose it's up to the hearings officer if you move forward along these lines to figure out how that actually works.

Commissioner Katayama – what would the hearings officer be charged with; what would be his scope of work? That would help us develop and answer all these questions arising from the Commission and various parties.

Chair Case – I want to be careful we don't confuse the scope of work with hearing a dispute with a legal proceeding on a violation. I think if the Commission staff were to ask for participation by the Hui as a matter of evidence, that might be a way that the hearing proceeds. It's different from having the Hui be a party to a violation action that's between the Commission and Wailuku Water; that's what I think we're trying to pin down here.

Commissioner Katayama – where do we stand at this point in time?

Chair Case – right now there was an allegation of a violation against Wailuku Water Company from the Commission, based on the Hui's complaint; and Wailuku Water asked for a contested case hearing on that.

Commissioner Katayama – so the hearings officer will be charged with determining if there is sufficient evidence for a violation

Chair Case – correct.

Commissioner Hannahs – can I assume that the minutes of the original meeting at which this matter arose, as well as these minutes, will be available to the hearings officer?

Chair Case – they're public documents; if the hearings officer feels it's appropriate the hearings officer can certainly review them.

Commissioner Hannahs – what's comforting to me is within these minutes, we have statement by Mr. Geiger on behalf of his client that the purpose they're pursuing this contested case is to establish an accurate record of the matter; secondly, that they feel that the Hui's perspective on this is relevant to that record; and third, they have no objection on welcoming the Hui as a party to the contested case proceeding. Given that that's part of the record that'll be handed to the hearings officer, we can trust the officer will do his/her job in a manner that considers that.

Chair Case – Mr. Geiger, is that an accurate statement?

Mr. Geiger – yes.

Commissioner Beamer – with this vote, are we determining whether or not the Commission might be the hearings officer or a Commissioner?



Chair Case – right now, the staff submittal is to approve going into a contested case on this matter and delegating the authority to appoint a hearings officer to the Chair.

**061620 00:55:35**

Chairperson Case – asked for a vote on the matter to approve B-1 as submitted.

**There were six (6) ayes and one (1) opposed.**

**Opposed by Commissioner Beamer.**

**B-1 is approved as submitted.**

Mr. Pellegrino – questioned if this will be the case anytime a potential violation comes into play?

Chair Case – it is the same issue, yes. Procedurally a violation is between the Commission and the violator, based on complaints; thank you.

**061620 00:57:30**

**2. Authorize the Chairperson to Enter Into a Joint Funding Agreement with the U.S. Geological Survey for a Water Budget Sensitivity Study, Island of Maui, Hawai'i**

PRESENTATION GIVEN BY: Ms. Lenore Ohye, CWRM Planning Branch Manager

Ms. Ohye presented the submittal item and provided a brief background of the submittal. The study was divided into two phases; Phase 1A which consisted of species evaluation and site selection followed by Phase 1B an intensive field data collection phase.

Phase 1A consisted of the following five (5) tasks: 1. candidate site review and reconnaissance; 2. data collection to measure transpiration and infiltration rates for selected species and study sites; 3. data processing and analysis to accomplish Phase 1A objectives; 4. proposal development for Phase 1B, and; 5. stakeholder/cooperator engagement to present Phase 1A results and a proposal for Phase 1B.

The results of the Phase 1A study revealed that it was difficult to determine which species have greatest potential for water-resource impacts without data collection, and that there were significant challenges with paired-plot design for data collection. Because of these difficulties, USGS decided to shift their initial approach and conduct a sensitivity analysis first on the vegetation parameters to better prioritize what data should be collected. The water budget sensitivity study will help to identify the areas of greatest uncertainty, determine which aquifer systems are most affected, determine what types of additional data are most needed and where they should be collected, and inform future ground water modeling efforts. The proposal is attached as Exhibit 2.

The total cost of this 1.5-year study is \$100,000. USGS will fully fund the study. This JFA covers the first \$50,000 of available federal funding. USGS plans to amend the JFA to add another \$50,000 in the next federal fiscal year starting October 1, 2020 to complete the study.

**061620 01:00:59**

Chairperson Case – asked Mr. Mair of USGS for any comment and the Commissioners for any questions

## QUESTIONS

Commissioner Buck – I completely support this and I think the focus of this originally was to understand the impacts of how we manage watersheds and assure that the management actions end up in something productive. There's been a focus on native and non-native and transpiration rates and understand and support that. Regards to groundwater on Maui, it's clear from your preliminary data that any sort of forest is better than grassland and the infiltration rates between non-native and native forests, is still unknown. I think the biggest upside for groundwater on Maui is going to be to retain forests, and that will be issues with West Maui with the forest fires; and the potential for agroforestry as we convert this. There's a focus now on slight difference between native and non-native in existing forests and a much better overall picture of groundwater on Maui and how we can increase our groundwater. I encourage staff to take a more complete view of the groundwater. Another comment on native vs non-native, in my experience, it's the structure of the forest that has the most impact on infiltration rates. If you're just going to focus on individual species and transpiration rates, there's certain non-native species that do change the structure of the forests which makes a huge impact.

In Maui if we're looking at an overall water budget, the conversion of mono-culture agriculture to more diversified Ag that could include trees in certain aspects, and the ability to protect the existing forests no matter if they're native or non-native, from wildland fires or land conversion, to me would be the biggest upside for increased groundwater availability for Maui.

Thank you USGS for help with the funding but I think we need a more complete holistic view on groundwater on Maui – thank you.

Commissioner Meyer – thanks Mike. I agree and thank you for your comments. So much has changed over recent years in terms of water distribution on Maui that this kind of study is very much in need to be done and I think we can all benefit tremendously from the result of it and I support it. In this current atmosphere of budget scrutiny, is there any reason to be believe that the funding for this project might be in jeopardy and is there a role for the commission there?

Ms. Ohye – in the submittal we do discuss we had identified this project and completing it as a priority in our Water Resource Protection Plan and allocated \$50,000 to match with USGS but because of the economic restrictions due to Covid-19 crisis we're not able to utilize those funds and that's why USGS is agreeing to fully fund it. Whether their additional \$50,000 comes in next federal fiscal year, I couldn't say but that is what was relayed to us, that they did plan on getting that funding. Alan, do you have more information on that?

Mr. Alan Mair, (USGS) – unfortunately, I do not. I think they’re committed to the \$50,000 now and I’d have to check with our center director to learn more of what would happen next year.

Commissioner Katayama – given the objectives as scope of this project, where would we be in terms of understanding the data that would be generated over the next year, is this a longer term project where after year two we need to continue going?

Ms. Ohye – from what I understand, it is a longer-term study. Originally it was thought we could accomplish this in two phases, but the data results of the collection after phase 1, and the difficulties in finding paired plot studies across all the different regions - Leeward vs Windward, elevation differences, above cloud and below cloud base, different species – made the researchers understand that this is not an easy question.

The reason we’re pursuing it is to support the watershed partnerships. It’s an expensive endeavor to protect our mauka watersheds. When they ask for funding, there’s often a question by the funders on what is our return on investment? If we invest this much, are we going to get groundwater recharge? Our role here at the Water Commission is to support the forestry department and the watershed partnerships, to try to get the hydrologic information. It also helps us because we rely on the recharge estimates to develop sustainable yields. Because of the uncertainties in the differences in recharge between the different forest covers, there is greater uncertainty in our recharge and sustainable yield estimates.

It is a critical question for us, but it does appear we are feeling our way through this. We learned a lot from Phase 1A. Phase 1B will give us more information and USGS is going to pursue results depending on that. The submittal does layout several next steps the researchers are envisioning right now.

Mr. Mair – this is a collaborative effort in terms of the overall approach with effort by Tom Giambellucca and his eco-hydrology lab at the University of Hawai’i. We’re hoping the study can help guide the data collection efforts for Tom and his group. In the past, Tom’s group focused on leaf-level measurements to characterize and quantify the differences between native and non-native plots and plots that were dominated by non-native species, compared with plots dominated by native species. We’re hoping it will guide data collection efforts in terms of what information is needed to reduce the uncertainty in our recharge estimates and where it should be collected.

As Lenore highlighted, we had difficulty when we expanded our site reconnaissance to other parts of the State. Initially when we first did the site on Maui, we’re able to find paired plots with differences dominated by native vs non-native species; but broadening that out to the other islands including looking at the long list of high priority non-native species that were identified in our workshops on each of the islands, it became clear that it would be challenging to find different sites in different environments. It was also found that plants/forest species behave differently in different environments so one site of data is not going to answer the question.

Commissioner Katayama – commented that the State will continue to be under financial stress and asked how USGS will support this program financially?

Mr. Mair – could not provide a definite answer and would need to refer that to the center director

Commissioner Katayama – asked if this program is tailorable to fit the right funding amount?

Mr. Mair – answered that the next phase that's discussed today is for an analysis that will produce a report; but can't say for the future; but for now, it's looking for funding to complete this study

Commissioner Hannahs – thanked Mr. Mair for work done on this project and asked about page 20 of the presentation regarding Maluhia and asked about the graph's contents and comparisons.

Mr. Mair – acknowledged the study was done on the Windward side of West Maui which shows the comparisons of uluhe (native) and the strawberry guava.

Chair Case – noted the conductivity of the strawberry guava non-native plot is higher or more saturated than the uluhe.

Mr. Mair – stated that based on this testing, you would see higher infiltration potential in the strawberry guava plot when compared to the adjacent uluhe (native plot).

Commissioner Hannahs – thanked Mr. Buck for his comments and noted that when you look at the data in a limited way, it can be picked out of context to suggest a pathway forward in terms of managing our forests that most of us would agree would be disastrous. How do you preclude that kind of abuse on the use of the data once it's produced? How do you assure your data is presented in a way that considers and has a footnote that those things matter?

Chair Case – commented for example that uluhe typically grows in disturbed opened areas and not associated with a forest structure; maybe uluhe compared to strawberry guava is the wrong kind of comparison.

Mr. Mair – agreed that Chair Case and Commissioner Hannahs raised several issues and found that in the Maluhia study, root structure has a significant impact on the results and referred to the box plot graph. Noted that the root structure (at Maluhia) caused a very high infiltration and spoke of how the tests were performed at three different locations and noted that the data is published as data releases without interpretive analysis and referred to slide--21 and compared that with slide-19 at the Kahoma location. With structure, it was part of the reason USGS moved away from developing plot comparisons because there are so many differences in comparing the different plots; and thought a better approach was to do more modeling to help guide the data collection and are proposing to continue data collections with our collaborative team in the overall approach.

Commissioner Hannahs – thanked Mr. Mair for his answer and appreciates the work that's being done and asked is there a way the work can be done to assure a multi-disciplinary approach and integration in reaching out to cultural practitioners, for instance, and incorporating their kinds of data points as well?

Mr. Mair – replied that they have several data needs such as land cover and species distribution maps. More information on what the forests used to look like and how they've change overtime combined with other data can help guide and reduce difficulties.

Commissioner Beamer – is supportive and wants to build off the comments and noted that looking at the complexity of the issues and forest structure and not compare apples to oranges is important which will cause inadvertent assumptions and appreciates this conversation. There's a lot of complexities between how the forest is constructed and infiltration; land cover has changed significantly.

Asked if there are studies about prolonged diversions of water and their impacts on groundwater - what could we say about 150 years of water being diverted from a watershed and what it tells us about the groundwater there versus if streams are allowed to flow in terms of recharge? Are there studies you could point us to, to be better informed?

Mr. Mair – answered that some of those questions could be answered through the numerical groundwater models developed with work that's been done in that area; I can get back to you and forward that information on specific studies on that kind of issue.

Mr. Roy Hardy (CWRM Ground Water Manager) – added to Mr. Mair's numerical model example such as the 'Iao numerical model which showed a scenario of restoring streamflow would help to restore or increase recharge in the basal areas.

Commissioner Katayama – asked on slide-33 how close is it to moving into Phase 2 and if there's sufficient data for the watershed modeling phase of the study?

Mr. Mair – replied that this new study they're doing now is considered as the Phase 2 modeling work and don't have any proposed watershed modeling work and is strictly proposing a water budget modeling effort at this time.

Commissioner Buck – commented on the difficulty in getting paired studies in Hawai'i because we're so variable everywhere, but proposed any easier one is (a study of) an adjacent forests to non-forests on the same area; just on the edge of the forest reserve, may get cleaner data as we need to constantly manage the message; the forest reserves are over 100 years old and effective in groundwater recharge and need the data to back it up.

Mr. Mair – responded it is a good point and during the reconnaissance it was added as an extra category called grassland comparison sites that was identified while working with DOFAW which may come up in future data collection efforts which will be able to use.

Commissioner Buck – replied on the opportunities in West Maui (forests) with the wildfires that impacted the forests both native and non-native that will help educate people about infiltration and watershed.

**061620 01:29:13**

Chairperson Case – noted there was no public testimony and asked for a motion on the item and thanked Mr. Mair and USGS for all their work.

PUBLIC TESTIMONY – None

**MOTION: (BUCK/MEYER)**

**To approve the B-2 staff submittal as submitted.**

**UNANIMOUSLY APPROVED.**

BREAK 11:30 AM

RECONVENE 11:37 AM

**061620 01:38:03**

**C. PRESENTATIONS**

**1. Overview of Instream Use Protection for the Kawainui Stream (O‘ahu) and Results from 2015 Trial Flow Restoration**

PRESENTATIONS GIVEN BY: Dr. Ayron Strauch, CWRM Hydrologists  
Mr. Jason Misaki, DLNR-Div. of Forestry/Wildlife  
Mr. Derek Esibill, Pacific American Foundation

Dr. Strauch gave a PowerPoint presentation on the item. The Hawai‘i Stream Assessment identified Kawainui/Ka‘elepulu watersheds and others as priority for protection for the island of O‘ahu. Noted a brief timeline of Kawainui/Ka‘elepulu area from pre-contact to the 1940’s-70’s urbanization with a decline in agriculture and known need to protect it’s urbanized communities against flooding. The Maunawili and Kahanaiki Valley have a decent amount of hydrologic data although there are no long-term natural flow stream gaging stations. It could be recreated from ditch gaging stations downstream for low-flow characteristics. Water enters Kawainui Marsh, there’s evapotranspiration, and we can estimate natural low flows in Kawainui Stream. Currently with the construction of the levee, water is cutoff from Kawainui Stream and flows into Oneawa Canal and into Kailua Bay.

Many archeological sites with cultural significance can be found in Kawainui and Hāmākua areas. This area has been identified by the Hawai‘i Stream Assessment as having “blue ribbon” cultural resources, rated one of the highest in the State and has been a focal point for restoration of cultural and ecological resources.

Hawai‘i Department of Health and US EPA has identified Ka‘elepulu and the water bodies in this area as a priority watershed and priority region for establishing total maximum daily loads and improving non-point source pollution. As recently as the 2018 Hawai‘i Quality Monitoring Assessment, the Ka‘elepulu Stream and estuary were rated as impaired.

Primarily from nutrient loading from urbanized runoff as there are a number of storm sewers that drains into the water bodies which cause the nutrient loading and eutrophication.

The Hāmākua Marsh wetlands provide and supports habitat for four (4) native endangered birds and other ecosystem services. The DLNR Division of Aquatic Resources has rated Kawainui as highest for shallow waters which are important for marine and estuary environments. There are also many community groups that have interests in protection of the area. CWRM has been working with DLNR Engineering Division, Division of Forestry and Wildlife and communicated with Department of Health to address instream flows and protection of instream values.

Commissioner Buck – asked on the amount of water that’s diverted into the Waimānalo Reservoir from Maunawili and the impacts that may or not have?

Dr. Strauch – replied that CWRM has been monitoring Maunawili Ditch at the outlet into Waimānalo for six months and also been cooperating with Department of Ag to understand the water use in Waimānalo area. Based on USGS data that’s available from the 60’s and 80’s, there’s a lot of groundwater that’s produced at high elevations, down to the 400ft elevation and only a small amount of that is captured by the ditch system and used. At the moment between 0.6 and 1.0 cfs is currently being used. Relatively to the amount of water that’s entering into Kawainui Marsh, it’s not very much and we would take that into consideration when looking at instream flow standards.

Commissioner Hannahs – thanked Ayron for recognizing the work that some of the community based groups are doing and noted of Ho‘okua‘āina which are small scaled now but have big plans; and hoped that this information are being fed back to the community groups as they would find it very valuable data to support their work. How about large landowners – who are the major players here, Weinberg I know is one, but who else?

Dr. Strauch – answered it’s identified in the instream flow assessment report. HRT owns a large portion of Maunawili Valley and is in discussion (with the State) on purchasing or taking over management of it.

Commissioner Hannahs – wondered what role can they play and contribute to here

Dr. Strauch – agreed

**061620 01:51:26**

Mr. Jason Misaki of DLNR, Division of Forestry and Wildlife gave a PowerPoint presentation entitled Wetland Restoration Kawainui-Hāmākua Complex. DOFAW Management Priorities for Wetlands are as follows: Native/Endangered Species; Recovery/Protection; Restore or maintain ecosystem functions; Protection of Public Lands; Protection of Cultural and Historic Resources; Education and Outreach.

Plans and directives are laid out based on: agency objectives (Management Guidelines), land use designation, funding, consultation with other agencies, public inputs, availability of resources.

Current Management Practices include: modify or restore functional wetlands to promote nesting, increase size of existing wetlands, removal of invasive predators and vegetation, construct new wetlands, assist other landowners in wetland management and support research.

A matrix is used to promote habitat and food sources to the four (4) native endangered bird species that nest in the Hāmākua Wetland area which are the Hawaiian Duck, Moorhen, Coot, and Stilt.

Review of the various steps DOFAW takes in management including: defining wetland/upland functions, threat identification and mitigation options, native vegetation restoration and invasive vegetation control, and restoration and improving water quality. The Kawainui Marsh Environmental Restoration Project is a constructed wetland by the US Army Corps of Engineers that consists of 11 (pond) cells totaling 40 acres, with the primary function to provide a nesting habitat for the native endangered Hawaiian waterbird species. Another wetland restoration project is located at Kahanaiki which is adjacent to the Kawainui Marsh ponds. This project is a more natural restoration project. The Kawainui flood control levee is maintained by DLNR in which 95% of the mangrove has been removed over the last 5 years.

The Hāmākua Marsh Restoration and Management Project which encompass wetland areas of 22 acres and upland areas are about 60 acres and acquired the upland areas about 5 years ago but managed the wetlands for 20 years and is one of the most successful (wetland) areas; mainly because of its smaller size. Data is collected, analyzed and a report is generated which guides the field operation and management.

Future projects and long-term goals are to continue to manage current restoration areas in Kawainui and Hāmākua; continue to gather data to guide endangered species management; integrate community and cultural stewardship; develop curriculum and science based data collection for area based schools; and expand restoration and enhancement areas

***061620 02:10:50***

#### QUESTIONS

Commissioner Buck – thanked Mr. Misaki for the presentation and work being done and asked if stream flows in Oneawa Canal have any habitat potential? Is there ability to divert more water into Hāmākua during low-flows – does (DOFAW) have that control?

Mr. Misaki – answered there is potential at Oneawa Canal but it's relative to the management that can be done in the area because it's not an area we have jurisdiction over, we can't get it to that point. In general, any waterway has potential for habitat. For Hāmākua, at this point we don't have any control over including water within that system; we rely on rainfall and flow of the stream when the sand plug of Kailua Bay is open. We've been successful in creating the right kind of habitat but always wanting to improve and more so be responsible in making sure we are not contributing to flooding or losing habitat. That's the question we want to answer with the data and projects out there.



Commissioner Buck – following up on that, I’m hearing it would be at times to have more control of the water in Hāmākua as long as you’re not dealing with liability of flood issues?

Mr. Misaki – replied yes, if we can control water in a wetland system, that would help us in the production of a waterbird nesting habitat.

Commissioner Hannahs – thanked Mr. Misaki for the great material and referred to the aerial view of the levee and it being a good opportunity for public education and asked if there was signage there to educate the public; also referred to the over-tourism in Kailua area and thought it may be a good area to channel the tourism with paid excursions and assistance from community partners to do it and wondered if it was thought of?

Mr. Misaki – answered it was thought of utilizing the levee to create informational signage and inform the public however is currently deciding what is allowable as far as use on the levee. It’s a flood control device and we want to be careful of that. The public are allowed to go on it but at what level? We’re still trying to decide. Our compliance process with our master plan EIS irons it out. As we develop and finalize that, it would give us the information we need to pass along and as far as utilizing different types of commercial or tour groups, we’ve talked about that but would need more community input/feedback. The most important part is we establish what we need for a wetland ecosystem and endangered species conservation so that whenever we do implement these other projects, there not going to interfere.

Chair Case – replied that there’s a lot of interest from various community groups in various kinds of local education; I think the tourism aspect is sensitive in Kailua given its density of tourists creating pressure on the town. Also asked if it’s Mr. Misaki’s stance that the major limiting factor is control of invasive vegetation as oppose to waterflow? Commented on hearing that the amount of water being diverted is not very significant and wondered if it was his experience also.

Mr. Misaki – answered that it was related in that in order to control one or the other, they both need to be addressed at the same time and replied that they really don’t know what’s out there or how to approach controlling or getting rid of it which has been the biggest challenge. The environment is so dynamic because of years of build-up, different inputs, waterflows; that’s where we want to support projects that guide us. Whether or not we do it on a large scale is going to drive how we come to that decision.

Commissioner Katayama – also thanked Mr. Misaki for his presentation and asked what is the risk of urban encroachment onto your project area in terms of increased development where you tend to get more sheet flow so flooding and controlling water runoff in not impacting your areas, do you have a sense of that and ability to minimize impacts of flooding in your project areas?

Mr. Misaki – replied that in general it cannot be controlled. The urban areas that are adjacent to the wetlands, we don’t have control over that land. Our direction is to work with that to gather information and adjust accordingly. As far as encroachment, as long as their designated under our department, the jurisdictional boundaries are clear on what is allowed.

Commissioner Katayama – noted that he would be more sensitive to the increased density around your area rather than physical encroachment as it seems the management areas are well and doing fine, to the fact that City and County of Honolulu would allow higher increased density around you. Asked if there are mechanisms in controlling that sheet flow from impacting your project areas?

Mr. Misaki – replied that DOFAW is aware and will be sensitive to it and says their approach will be once it goes through the compliance process; wants to see what their BMPs are what they propose to mitigate any changes for that. At that level its beyond what I'm able to do and we would provide the information to guide why that area is important and if things change, these are the effects it will have and the repercussions and go from there. We've collected enough data to show the areas are productive and successful and can withstand a little bit of urbanization. If the levels increase, we want to see mitigation in conjunction with that development.

Commissioner Buck – asked if the water in Kawainui is too hot by the time it gets that low, there's no opportunity for kalo production interface with water management?

Mr. Misaki – replied I'm open to all of that. We can re-explore and as we develop our level of management we're at now, we can open that door once again. They're already starting to do test spots at Ka'elepulu Heiau with community groups that have stewarded areas there and have been relatively successful. We're open to all the efficient ways of doing it and want to make sure our priorities are communicated properly, so that we're understanding that a purpose of a wildlife sanctuary is this, and it has to be in compliment to what our key focus is. If we stick to that, I think we can be open to a lot of different ways of managing it.

Commissioner Hannahs – reminded that mauka (of the project), there's the transfer station, Kapa'a Quarry, the landfill, and so forth; asked what are the influences of those uses on the pond – are they managed well that its minimal or a detrimental neighbor?

Mr. Misaki – answered at this point we haven't noticed any affect within our current wetland management areas but it's something that will be identified in an expansion of our exploration of the water quality of the condition closer to that area. It's one of those things we talk about - urbanization within the proximity of management areas.

Commissioner Meyer – asked if there's any issues with algae base toxins such as botulism or any other things you'll find in still and warm water?

Mr. Misaki – replied there is botulism issues as every wetland waterbird restoration area and have our protocols but that's one of the projects we developed within our restoration pond site; can we monitor the waterflow quality trigger points, which would tell us or give warning if the conditions are there. We have to up our protocols in order to implement them to decrease the chance of large-scale outbreaks. It's something we want to utilize and transfer to other wetland areas. Conceptually its' been a great idea, but implementing that and reaching those trigger points has been a daunting task.

Commissioner Beamer – commented what he saw he appreciated and as a professor at UH Mānoa has had several students do projects related to Kawainui; some being historical,

archival papers that looked at land tenure changes overtime and building of the levees and where the stream used to run. There was a lot of kalo there so I want to encourage you to reach out to UH contingent like Katie Kamelamela (among others); I believe would be valuable to engage. With regards to restoration, what are we restoring to because that area was a kalo production center for some period and portion, thinking about that as a priority would be great. Mahalo for the work.

Mr. Misaki – commented that working with community stewardship groups, cultural and historical features within our management area is the mission for us. We try to address that by speaking with experts that have the right knowledge for it. Our goal is to work with people that have the most time and experience invested in it. I think it's important from our standpoint to not just recover things based on an endangered species per say, but recover them from a cultural and historical perspective; and integrate that with some of the practices we do; but I'll be happy to reach out and more than willing to get together.

Commissioner Beamer – commented on Kanekoa Schultz as a person to contact at Kāko‘o ‘Oiwī on flood mitigation, bird management, and kalo.

Mr. Misaki – replied that he has his contact information and will be in touch with him.

**061620 02:26:25**

Mr. Derek Esibill of Pacific American Foundation gave a PowerPoint presentation entitled Estuary Rehabilitation-Stream Flow Restoration to Ka‘elepulu Estuary. Over the years, Mr. Esibill engaged public and private school students directly into this type of research in this particular area. Also received funding in the past from DLNR, NOAA, and Oceanit. The Watershed Investigations Research Education and Design Program (W.I.R.E.D) looks at the impact of biocultural restoration on how water quality can be restored and established. Ka‘elepulu estuary provides abundant natural resources. With the urbanization boom in Kailua/Enchanted Lakes in the 50's and 60's there are now two watersheds, Kawainui and Ka‘elepulu; with Kawainui receiving all of the perennial streams and Ka‘elepulu receiving urban and street runoff.

The pilot project of flow restoration predicted outcomes suggest positive potential impacts such as: increased average surface elevation from 1.5 to 2.0 ft MLLW; decrease stagnation in Kawainui Stream; eliminate summer low water events associated with bad odors and fish die-offs; lower salinity, improved stream mouth opening and water level control in wetland areas among others. The negative potential impacts were: increased pollution into Kailua Bay, flood threats and lowered water surface elevation into Kawainui Marsh.

The majority of the water in Ka‘elepulu system is housed in the pond itself at 22 mcf. There is freshwater input from street runoff. About 80% of the storm drains in Kailua feed into Ka‘elepulu which could have an impact on water quality that would have estuary challenges. We're proposing if we restore 2 cfs, we would have greater flow into and out of the stream, improving circulation in the area.

Freshwater inflow spreads rapidly along the surface of Kawainui Stream and downstream towards the beach. The berm opening is important as it allows water to leave and when opened appropriately, it scours out a pathway that's deep enough so that when the tide rises,

salt water will come in. That salt-water exchange is critical for estuary functions which makes a significant difference.

There is no statistical difference in water quality along Kailua Beach when the berm is open or closed for: Dissolved Oxygen, enterococcus, total nitrogen, chlorophyll-a, and total phosphate. Salinity does go down. This is not unexpected or a contribution to poor water quality.

The outcomes of the 1.5 cfs flow restoration study found that it does not increase pollution into Kailua Bay, nor did it pose flood threats or weaken the levee. The water in Kawainui was lowered but was insignificant. Mr. Esibill noted this presentation was a brief talk on various studies conducted over several years and as part of a RAMSAR Wetland of International Importance, it is our (their) obligation to steward this area.

***061620 02:55:18***

Chair Case – thanked Mr. Esibill for the interesting and very detailed presentation provided and noted all presentations will be available online and asked the Commissioners for any questions.

#### QUESTIONS

Commissioner Buck – commented to Ayron on the potential upside of diverting water into the Kawainui part of the estuary and asked the impact of instream flow standard?

Dr. Strauch – replied within the Stream Protection and Management Branch’s timeline, we take the instream flow assessment report to the public for community and stakeholder input, consult with various regulatory agencies and landowners, and evaluate how to best protect the instream values – what flow rate is necessary? Part of the evaluation includes what is practical and what benefits DOFAW sees as “x” amount versus “y” amount? What volume of flow rate will improve the stream mouth opening enough to see a benefit at the City level which is responsible for bulldozing the stream mouth. I don’t see this as diverting water as much as restoring the natural flow of water. The Engineering Division’s report identified mechanisms of going over, around, under, and through the levee to varying degrees with some risks, however we don’t want to be a part of increasing any risks. The proposal that Derek provided which is around the levee through the corridor along the highway provides a unique solution that doesn’t involve touching the levee essentially at all. We have to consult the various landowners as DOFAW and whomever want to take on responsibility for managing that. It’s a collaborative effort working with Department of Health and want to make sure that the stakeholders are in support of the proposed decision.

Commissioner Buck – thanked Ayron for his fact finding.

Chair Case – thanked everyone and all presenters for their presentations given.

PUBLIC TESTIMONY – None

**D. NEXT COMMISSION MEETINGS (TENTATIVE)**

July 21, 2020 (TUESDAY)

August 18, 2020 (TUESDAY)

This meeting was adjourned at 1:12 pm.

Respectfully submitted,



RAE ANN HYATT  
Secretary

OLA I KA WAI:



M. KALEO MANUEL  
Deputy Director