

MINUTES
FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: June 18, 2019
TIME: 12:00 pm
PLACE: Waimea, Hawai'i, Kūhio Hale
Kalanimoku Bldg.

Chairperson Suzanne D. Case called the meeting of the Commission on Water Resource Management to order at 9:45 a.m.

The following were in attendance and/or excused:

MEMBERS: Ms. Suzanne Case, Dr. Kamana Beamer, Mr. Neil Hannahs, Mr. Wayne Katayama, Mr. Paul Meyer, Keith Kawaoka

STAFF: Deputy M. Kaleo Manuel, Robert Masuda, Roy Hardy, Queenie Komori, Patrick Casey, Bob Chenet, Dr. Ayron Strauch

COUNSEL: Julie China

OTHERS: Bill Thompson, Jeff Zimpfer, Keola Awong, Tyler Paikuli-Campbell, Paula Cutillo, Peter Fahmy, Jonathan Scheuer, Ph.D., Nicole Lui, Ruth Aloua, Alex Leonard, David Barnes, John Richards, Rob Taylor, Lance Fukumoto, Amanda Tanaka, Riley Smith, Bill Moore, Paul Eyre, Shelly Stephens, Peter Adler

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

A. SITE VISIT (9:45 AM)

Kaloko-Honokōhau National Historical Park – Kaloko Fishpond

Chair Case – Kaloko-Honokōhau has been a large part of DLNR's discussion over the last few years, I wanted to give the Commissioners an opportunity to experience the historical area and its natural resources and show the interaction between salt water and fresh water.

Pule

Mr. Thompson (Superintendent) – thanked everyone for being there and gave historical background of Kaloko-Honokōhau NHP (roughly 600 acres), show the importance of its place in connection with Native Hawaiians and the cultural significance and also the natural resources in the protected area. The parks obligation is committed to the

preservation of its natural environment and to keep the traditional relationship between people and nature. Extended an open invite to DLNR staff and families to visit the park.

Ms. Aloua – (Po‘o, Hui Kaloko-Honokōhau) – has ancestral ties to the Kaloko area; assist in coordination and facilitate restoration efforts in removing evasive plants to help restore the fish pond to its natural habitat. The fish has been returning with the tides and the area is slowly seeing natural regrowth of native vegetation and returning to its natural state and reforming itself. Removal of invasives has been on-going for the last four years and hope to complete it within the next two years and hand the task over to the next generation. The challenge is the “pick-up” of the gathered rubbish because large trucks can’t come into the grounds, the ‘opala has to be air-lifted out.

<group toured the fishpond and the immediate premises and heard a brief overview given by other NPS staff of the on-going restoration efforts by community groups; before and after photos were shared; NPS thanked CWRM for visiting>

RECESS: 10:15 AM

RECONVENED: 12:20 PM

B. APPROVAL OF MINUTES

March 19, 2019

MOTION: (HANNAHS/BEAMER)
To approve the minutes
UNANIMOUSLY APPROVED

May 21, 2019

MOTION: (KATAYAMA/BEAMER)
To approve the minutes
UNANIMOUSLY APPROVED

C. FOR INFORMATION ONLY

1. Briefing on Proposed Amendment and Update to the Water Resource Protection Plan of the Hawai‘i Water Plan to Combine the Waimea (80301) and ‘Anaeho‘omalu (80701) Aquifer System Areas (ASA) Into the Waimea-‘Anaeho‘omalu System/Sector Area (80302)

PRESENTATION GIVEN BY: Roy Hardy

Mr. Hardy – gave a power point presentation and update to the Hawai‘i Water Plan. The top two focuses on the Water Resource Protection Plan (WRPP) and the Water Quality Plan (Protection Policies) in collaboration with DOH, followed by state needs, and finally

County-wide demands and land use consistency. The WRPP studies the nature and occurrence of water, uses by hydrologic units and programs to conserve, augment, regulate, and protect the resource. The CWRM has legal authority to ask all diverters of water use (pumpage), no other State entity has that authority. The first initial adoption of the WRPP started in 1990, update in 1992, and last update in 2008 was the biggest in which the sustainable yields will be amended in the updated WRPP. A current draft update will be proposed at the next CWRM meeting. The sustainable limits will be set for Hawai'i Island aquifer system areas focusing on Waimea, 51 wells and 'Anaeho'omalua with 29 wells; and bring down the current SY to 16 (Waimea).

Commissioner Beamer – is there one observation well in 'Anaeho'omalua and do you happen to know the elevation of that one?

Mr. Hardy – yes. <referred to Patrick>, Pu'uana'hulu?

Mr. Casey – we measured it today, it's 1512 ft and 780ft is in the basal.

Mr. Hardy – and the water level is around, 9 feet? Both Patrick Casey and Bob Chenet are the guys that go out and measure throughout the islands and verify the observation wells. People who are not using their wells should be reporting it to us if its not in use, we have an online reporting system.

<continued with presentation>

Mr. Hardy – we are finding new things with 'Anaeho'omalua and down south, with the amount of saltiness. The coastal areas we see are more sensitive to chlorides. With high elevation areas the water is good and not much problems. Our diagrams vary for each well and place, dependent on the area. The question came up – “how does CWRM estimate SY?” We use different methods, public information, RAM, RAM2, and numerical models and other public studies. RAM (Robust Analytical Model) is the one we use, which has been the most useful tool in determining sustainable yields. In the chart on page #29 shows the up to date recharge ranges from the studies of 1990, 2008 and 2019. The majority of Hawai'i Isle SY remains the same with the exception of the northern tip.

Commissioner Beamer – you mentioned the chlorides have been stable, are those sets of wells reporting chlorides?

Mr. Hardy – yes, most of them. The wells in Waimea are higher up and the water is really good, they report 20-150 parts per unit; the 'Anaeho'omalua areas report higher, but some are curiously very fresh, reporting under 200 ppm. Most 'Anaeho'omalua are 500-600 range; below 1000. As you go further inland it's fresher. We found that the water levels mimic the amount of chlorides and other areas in the state like Kahului on Maui, which have similar factors as well and are drier. Other factors which affect the sustainable yields (SY) are due to losing streams into the Waimea ASA (refer to page #36 of handout). The maps also show where the rainfall came from and the recharge amounts. The rift zones and “cracks” play a factor as well as the water levels rise and fall through the vents. The figures are from USGS Rift Zone Map studies from 1946-1987 and the 2010 is from the Morgan Rift Zone Map.

Mr. Hardy – Patrick, who's Morgan?

Mr. Case – he's a USGS surveyor who conducted this type of rift zone studies all across North America.

Mr. Hardy – we're continuing to work with a group of professionals regarding with these type of studies and we are proposing to combine the Waimea/ 'Anaeho'omalu area into one (1) aquifer. It does maintain the minimum recharge and sustainable yield. It appears more consistent with hydrogeologic data and it's a simple management change to address a perceived threat to Waimea area. The proposed amendment should address any issue (refer to page #41 of handout for schedule updates)

Commissioner Beamer – who's the professionals you're working with and how often are you meeting with them?

Mr. Hardy – it's mostly hydrologists and reps from Department of Health, USGS, Water Resource Research Center, UH School of Geology, National Parks, and some retirees who've worked with us before.

Chair Case – are they people outside of this area looking in or are they constituents?

Mr. Hardy – there are some consultants who do work up here.

Commissioner Beamer – what about the Waimea Water Working Group is that the same group of professionals or a subset of that?

Mr. Hardy – there was, but not any longer; Dave Tarnas was assisting. This current group is made up of a lot of diverse professionals.

DISCUSSION:

Commissioner Hannahs – can you go back to slide 14, the ground water management projections... the table takes us to JAN '18, if you were to project future requirements based on possible projects, what would that look like?

Mr. Hardy – there is a water use development plan update, Lance is the consultant will have a better (projected) answer?

Lance Fukumoto (Fukumaga & Associates) shook his head as "no".

Commissioner Hannahs – if you stay at this trajectory it will shoot pass certainly the amended sustainable yield <Mr. Fukumoto answered - yes> before you consider merging <Mr. Fukumoto answered - yes >; and what's stopping us – what would be the effect of setting a revised sustainable yield on growth and increased demand?

Mr. Fukumoto – the revised of 16

Commissioner Hannahs – if you set them does that then affect those projects that might create new demand that exceeds sustainable yield?

Mr. Hardy – all within the Waimea area; and fall within the 90% designation criteria; any new developments in the future will come to CWRM and if CWRM designates the amount at 16 it will protect its public trust resource, we can't allow such project approvals to go beyond the designated 16.

Commissioner Hannahs – so from this graph, if you just took Waimea we are nearing that point. If you combine 'Anaeho'omalua and Waimea, what happens?

Mr. Hardy – it will go up – sixteen plus the thirty to equal 46. And we are seeing the trend with chlorides and water levels react close with sustainable yields and our concern is that we have a water protection plan (in place).

Commissioner Hannahs – are we at risk at all masking the need to temper growth or optimize recharge if we do the merger? It seems like we're only moving the dial a bit but still this trajectory when you look at that rate, it will shoot past 23.

Mr. Hardy – it might, that's more of the Planning Commissions with Counties and where the counties development plans come into play, regarding the needs for this type of developments to have the approvals.

Commissioner Hannahs – when someone uses desalinization how does that factor into the use?

Mr. Hardy – we'd count it if it comes out of the basal lens. 90% sea water or fresher, it will count towards sustainable yield. Problem is what do we do with the reject water, that'll be for DOH.

Commissioner Beamer – this is actual pumpage this graph here, designation supposed to be based on authorized planned use do we have that authorized planned use for either Waimea or 'Anaeho'omalua?

Mr. Hardy – the WUDP is in draft, I'm not familiar yet with the numbers.

Commissioner Beamer – I was just building off of Commissioner Hannahs comments; there's a lot we could do with this data and a lot of questions that'll come up; and you only showed one isotope study but maybe there's others that show a lot of connectivity between 'Anaeho'omalua and Waimea. But there's also a lot of issues it raises: 1) is about designation; it begs the question of authorized planned use right now if we're already pumping at this level; this closest sustainable yield; in general, authorized planned use is usually more than what we're actually pumping right now. I would love to get that information as an update. 2) the chloride data; you mentioned anecdotally that chlorides haven't changed, I think we would need to see that as a Commission. Did that come into your planning process Roy?

Mr. Hardy – the chlorides?

Commissioner Beamer – what do we do? Echoing Commissioner Hannahs comment...treating water like a bank account and I'm just going to borrow from our neighbor next door, 'Anaeho'omalu, without thinking of these larger issues like designation, planning and prioritizing.

Mr. Hardy – authorized planned use and designation are end of the pipe issues, we're really looking at the resource right now and how the aquifer is behaving

Commissioner Beamer – if we don't change the boundary, do you think it's at risk?

Mr. Hardy – not according to the water levels, it has been steady, we are doing more outreach as well.

Commissioner Beamer – being a resident and family that have generations here, one big change just in my generation, my great-grandparents were seeing the misty rain come into Waimea almost daily around this time; it has changee where we have periods of drought and some intense periods, and we always probably had the Kona storms, but I think another part of this is in addition to getting professional's input, getting input from the public, what are the paniolo saying and other members about our areas and water systems and how have they changed over time and also climate change.

Mr. Hardy – I think the recharge numbers that are low for Waimea reflect some of that, at least the recent 30 years. I don't know about the future, but we can gage for that.

Chair Case – the 16 is a new number <Mr. Hardy answered yes>, presumably it's a conservative number, so would another approach be to add a little cushion to that number by Commission decision and keep an eye on it? I'm sure you'll get a lot of input on combining the aquifers, but I'm a little puzzled by it because it seems like if you're close to over pumping in one area, you don't want to pump more because it might not be a sustainable number.

Mr. Hardy – that's certainly the problem and we do have some evidence on that (showed a graph with new recharge numbers). The deportation of surface water and about 10mg coming in from Kohala Mountain range into the Waimea area that is not factored that could be part of the percentage. And when the sugar industries dissolved, it affected recharge and other perceived threats.

Chair Case – was this proposal originated with staff of CWRM or was this a request from County or proposed developers?

Mr. Hardy – there were proposals by others to modify the boundaries and also areas down at the coast, but the justification for that is... it's an opinion. CWRM has combined aquifers in the past.

PUBLIC TESTIMONIES:

Mr. Paul Eyre – seven years with Water Commission, thirteen years as a Water System Engineer at Pearl Harbor, and seventeen years with USGS. To my knowledge, fixing the recharge although more difficult to push through the whole system, its fundamentally a better solution; let's enter our recharge correct and this 10mgd that's been pointed out coming into Waimea and not leaving because it infiltrates into the ground would make it an error. Not including that in the recharge is an error. It could be easily fixed by adding it to the sixteen to make it now twenty-six and we have the extra buffer you're talking about. I also think joining the aquifers is perfectly legitimate, I don't see a distinction between the two, so that tells it's a legitimate thing to do. But not to account for recharge when it's there, seems like an oversight but can be fixed at this point and solve the problem in my opinion.

Ms. Shelley Mahi Stephens (Native Protection Council) – in particular, joining the two together as long as it's the same aquifer, personally I don't see a problem with that, but there seems to be a problem with Waimea SY and the recharge, there could be a problem joining them together and buffer it, we're not getting true readings. It might lead to more development in Waimea. I wanted to bring up the issue of the Waimea Aquifer because I believe the CWRM can actually do something about this. It may be a sore subject because it came up at the TMT hearings but basically the Waimea Aquifer was listed as number one at risk for mercury contamination. It's using "French drains" (basically an older gravel pit) on top of Mauna Kea, and when they go to clean the lenses, its sitting on a bed of mercury so that's how the mercury is occurring; you're looking at a real risk right now and I believe a specialist should be bought in. Where is this mercury and what's going on with it? Is it possible to dig it out since its on the rocks and also to close off the French drain until some containment or upgrade can be done. Also, the isotope you are using, do you study the water?

Mr. Hardy – its not radioactive, it's oxygen.

Ms. Mahi Stephens – on the general island wide aquifer water systems, I wanted to bring up the fact that the remnant of C. Brewer et al, they are still claiming they own Makaanau Springs forever, I would think that affects the water systems and diverted streams. You have a lot of rivers that are dry in certain areas; I think that would bring back the ecosystem, bring back the rain and the systems that were dismantled including the iron gate, thank you.

2. Briefing on the November 8-9, 2018 Adaptive Management Symposium on Groundwater Dependent Ecosystems at Kaloko-Honokōhau National Historical Park (KHNHP)

PRESENTATION GIVEN BY: Roy Hardy

Mr. Hardy – gave a power point presentation and provided updates of the Symposium on the Ground Water Dependent Ecosystems (GDE) and Adaptive Management Framework (AMF) for Keauhou Aquifer System Area, Hawai'i Isle. The initial petition brought up in 2013 followed by the 2017 CWRM denial, but with recommendations for CWRM to investigate coastal leakage impacts for consideration in setting or adjusting sustainable yields in the upcoming WRPP 2018 update. The framework stemmed from NGWA in

which the adaptive management feedback framework occurred and in seven stages and supported a “learning by doing” strategy that utilizes ongoing monitoring and research to inform management decisions. There were forty-four professionals that included cultural, technical and scientific experts which participated and assisted in categorizing and prioritizing, followed by takeaways and next steps. The top priorities were: the fresh water flow essentiality for public trust resource, invasive threats and sea level rise, local knowledge from practitioners, pumping impacts to GDEs, continue to develop AMFP for Keauhou, and recognize the draft Keauhou WUDP. Two of the big things came from the WUDP is the Counties have said they will not drill in the Keauhou basal aquifer anymore and would recommend that others don’t; however they don’t have the authority to tell them they can’t, it is our prerogative; they’ve also said they would develop their wells in the Southern portion of the high-level aquifer, away from the park (KHNP), which is in their draft plan.

DISCUSSION:

Commissioner Beamer – the overall goal, is this an on-going symposium or we convene this entity to help inform our draft plan?

Mr. Hardy – we’re more into the stage of “how are we going to develop this AMF”? Some of that is in the report and what are the important key indicators and how do we keep on top of it; who/where measurements and how often? We asked the park for suggestions and have gone back and forth with them and they mentioned DWS; and also including more stakeholders. We’re in this process of developing this framework and to prioritize what we need to look at and how. We talked about creating a repository for all the data; Ike Wai is trying to that, so there are parts and we’re just trying to get more symposium participants participating in it.

Chair Case – climate change and sea level rise does have indirect relevance; with sea-level rise you have more salt water coming into the ponds and with drought you have less recharge; so that’s where you would have an important role in making sure we got balance.

Mr. Hardy – yes and other threats we have is to the water quality; wastewater like the Kealakehe WWTP, we had a big discussion on that; the building of the harbor had a big change in the water-flow patterns in which I don’t know if we can change that, but now have become a threat.

Chair Case – are you applying this thinking now to other decisions like the Waimea Aquifer with GDE and ‘Anaeho‘omalu?

Mr. Hardy – I’m sure that you do; we’re trying to use Keauhou as the pilot case. The GDE’s is very localized especially if the practices maybe different.

Chair Case – but if affects the sustainable yields on the coast

Mr. Hardy – right, if we can get a good handle with the report then Keauhou could expand it state-wide.

Chair Case – wouldn't you rather apply that thinking as you go along rather than wait for a perfect model in Keauhou, before applying that thinking to other areas?

Mr. Hardy – yes, we could but it's all about resources and priorities.

PUBLIC TESTIMONIES:

Dr. Jonathan Scheuer (on behalf of KHNP) – <comments in regards the symposium report> The symposium report was provided to NPS during the government shutdown, with an initial deadline to comment during the shutdown. As a consultant I wasn't furloughed and prevented from working and I did communicate and at the very minimum commenting right at shutdown. The comments NPS provided in a letter to the CWRM was that we recognize some factual errors regarding park service resources, what percentage of anchialine pools have invasives in them was over stated in the report. Our focus was sincerely to move forward cooperatively with the matter in pushing staff on an Adaptive Management Plan, so we didn't want to spend the time in going page by page of the report and say whether or not all these statements were technically correct. We did ask if the report is posted online whether the consultant or NPS or by the CWRM, that a disclaimer be placed on it, that said this has not actually been reviewed. This is truthful of all agencies like Fish and Wildlife and USGS.

Ms. Mahi Stephens – when does the WUDP go before the County of Hawai'i?

Mr. Hardy – don't know.

3. Presentation by the National Park Service on Adaptive Management Planning, Framework, Concepts, Tools, and Considerations

PRESENTATION GIVEN BY: Peter Fahmy, NPS

Mr. Fahmy – gave a power point presentation on Adaptive Management and how it can be applied to Groundwater Management. The NPS is committed to helping the Water Resource Managers (like CWRM) find lasting and collaborative solutions to water resource allocation and managing issues for the benefit of all state's, owners, local communities, and cultural, historical and natural resources, that parks were established to protect and preserve. What Adaptive Management is, it's about feedback and how you improve your ability to achieve your objectives through that feedback. AMA can be applied to groundwater management by helping to reduce uncertainty by providing a process through data to make informed decisions. Groundwater is being adaptively managed in Australia, British Columbia, California, and the most advanced use is in Nevada.

PRESENTATION GIVEN BY: Paula Cutillo, NPS

Ms. Cutillo – gave a follow-up power point presentation to Mr. Fahmy's presentation and provided information on groundwater sustainability, and WRPPU to cover the dependent ecosystems and sustainable yields and develop a pilot adaptive management plan for

Kaloko-Honokōhau NHP to protect GDEs. KHNHP objective is lifecycle stewardship, preserving anchialine pools of freshwater so native species can survive, thrive and reproduce in their habitats. NPS believes that additional groundwater withdrawals in this area, pose the highest risk to GDEs in the park. Pumping wells surround the park and there are eleven wells within the sub-area. The DWS has identified a well development area in the southern portion of the aquifer system. DWS proposed to meet future demands and to replace the basal sources of water supply with new wells in this well development area. CWRM has proposed to refer new applications for wells to the Commission for decision making; these are examples of management actions that could be incorporated into an adaptive management plan for GDEs in the park. NPS is proposing that additional salinity monitoring be implemented in this area to provide feedback on management actions. NPS wants to reiterate that collection of the same type of data be gathered (with groundwater monitoring) but with deeper wells from the park.

Commissioner Beamer – in terms of difficulty in gathering this data on these deeper existing wells, can you talk about the process, is it just dropping a monitor into the well, what's the feasibility in accomplishing that?

Ms. Cutillo – I talked with USGS staff who helps collect the data, and what he recommended for deeper wells, is the same type of setup. The wells in the park, they hang a transducer in the well and its set to take a measurement in the well every ten minutes; and they go out quarterly and download the data, do quality control and assurance, then it's posted online made available to the public. For a deeper well, you may do the same but in two locations and hang two transducers in a well; one at the midpoint and one at bottom of the well. Would be the same process, collecting data at a certain interval and download data on a periodic basis. I believe this type of data is very valuable and better than monthly chloride because you get a better idea of what the noise is environmentally versus pumping.

<continued with slide presentation>

Ms. Cutillo – I want to reiterate that NPS support the WRPPU recommendations and would like to hear from (Commission) CWRM, if NPS is headed in the right direction, if so when would you like to see a draft plan, or what you think the next steps should be? Thank you.

DISCUSSION:

Commissioner Beamer – being involved as you have for a long period of time, how do you feel we're working; sounds like you've commended our staff and seems like parties are talking and meeting more, and we have to address these issues of getting a plan based for adaptive management and having triggers; I appreciate your suggestion with the deeper monitoring wells; so how is your perspective?

Ms. Cutillo – It's difficult and hard work to collaborate but I think we're making progress. In my opinion we need to narrow the scope of an adaptive management plant from all of the things that were discussed at the symposium and narrow it to focus on the risk that pumping poses, and what's within your jurisdiction you can control. There's only a few things you can tweak; that's pumping rate, location and depth of the well. It doesn't have to be complicated, we could start simple. I think the starting point for adaptive management is

where we're farthest apart. If you support the efforts, we would put the time in, work and collaborate to come up with something that could really protect these resources.

Mr. Fahmy – I'd like to add that it's important to have a synced well-defined objective (adaptive management plan). What are you seeking to achieve? Is it to protect the groundwater dependent ecosystems, and is it all GWDE within the park? The more specific (CWRM) you can be, the better plan you're going to have, otherwise its ambiguous, there needs to be a focus to achieve success. If this is going to be a pilot that you can potentially apply elsewhere, you want as much as possible to succeed.

Chair Case – so this is basically measuring salinity. Are there other factors that you consider would have an impact in terms of the water and do you have your own indicators like the damselfly health that you're tracking within the park?

Ms. Cutillo – yes. I've suggested using pumping and salinity together as the monitoring data that will inform; monitor invasive species, water quality and habitat in the anchialine pools. There's ongoing research for the damselfly which hasn't been published yet and we're working with USGS to look at how different anchialine pool habitat effect the populations. We're committed to protecting those resources and I think right now salinity is the best indicator of health of the resources and the easiest thing to measure. The fact that these species are endangered shows that there is habitat loss and these remaining habitat needs to be protected.

Chair Case – I was just thinking that you want some sort of feedback on the side of where it is you are trying to protect; what you made progress on is identifying these thresholds and this would measure how close we are to those thresholds and along the way you want to double check if that's having impact one way or the other?

Ms. Cutillo – yes. we have an inventory monitoring program that does surveys of species in the pools and that data is published in the reports as it becomes available; if Bill or Jeff have anything to add about the other monitoring that is done by other programs funded by the NPS. We have ongoing programs that achieve what you're talking about, but we could better describe them in a plan so that its obvious that these surveys are conducted on a regular basis.

Commissioner Katayama – Paula, thank you for your presentation. You have three levels of agencies operating here, the County, State and Federal government; from your view point, who do you view as a champion to develop the action triggers and a suite of management action plans because it integrates outside of your scope of the park.

Ms. Cutillo – it's a collaborative effort. What we proposed to CWRM staff is that the CWRM, NPS and DWS, all be signatories to an agreement on the AMP. DWS only control their wells so you have to involve the Commission to regulate pumping from other wells. CWRM staff has to buy into the plan and something they believe in and agree with. I would like to stand shoulder-to-shoulder with your staff and present you with a draft plan.

Commissioner Katayama – the key issues are what is the objectives in all of this and does each of these agencies agree that, that is the best outcome for their population they service?

<Ms. Cutillo replied, I can share our objective> is it shared or contemplated with the County as well as the State and in developing that mission statement, how have that been done?

Ms. Cutillo – we have proposed adaptive management plan with the goal in maintaining existing flows to Commission staff and we gave some feedback; I don't know if we share that objective at this point. *<referred to Peter, do you have anything to add?>*

Mr. Fahmy – I understand your concern, this issue about how we collaborate and who's the champion? But fundamentally, we see the objective as being parallel. The State and County both have in their documents (that's usually a charter or constitution); especially the mandates are very similar to NPS, with regards to public trust resources to traditional and customary practices. We can work together to put together a successful climate adaptive management plan to meet those objectives and goals we all share. We just need to get it down on paper and understand the WRPP as its proposed (but not adopted); but talks about the task of establishing a pilot AMP. That's what we're recommending you for and think it should be adopted; and start the process of determining, what's the objective of that plan? Is it to protect GDEs and preserving coastal leakage and what mechanisms we can use to do that?

Ms. Cutillo – I want to add that maintaining existing flows is consistent with your approach to instream flows; we think is a reasonable starting point for adaptive management; its precautionary, protective and prioritizes resource protection. DWS doesn't have any plans to develop more water in the southern area; I don't anticipate them having too much disagreement over that objective.

Commissioner Beamer – I want to thank you folks for the presentation and updates. Being on island, I feel we have come a long way to honor this process; I don't think a lot of people have been thinking about GDEs and feel that now that County and everyone using some of the same language, I want to commend the attempts of putting together a draft AMP. I think we should be able to monitor salinity better and would encourage Roy and others to try and follow the efforts she has so we can have common data sets. In some ways what we discussed in the Waimea Aquifer, the RAM model not taking into account chlorides, maybe this helps us to get a better snapshot and enable us to apply to Waimea and other cases as well as we should be; and thinking about GDEs in areas on Hawai'i Island where we know there is a cap rock and they are dependent. I'm in full support and in addition if there are proposals for future wells in these areas as suggested having them come to Commission would be helpful and look forward to it.

PUBLIC TESTIMONIES:

Ms. Mahi Stephens – commend CWRM and staff in protecting the GDEs. The native Hawaiians are also dependent on the groundwater, their customs and usage. One thing I noticed in the slides and also in other projects in restoring ponds, is the removal of the reeds. In my studies at UH, what we are told to look for is what part does the plant play in the ecosystem? What I've noticed about the reeds is that they collect and crystalize salt. The kanaka maoli use the reeds for weaving fish baskets and many other things they use the reeds for. When the reeds were removed from a pond in Ka'u they had a lot of inundation

of sand clogging and these reeds were what the dragonflies were clinging too and also the fish were having a hard time because they could not hide in the reeds, which are a part of its ecosystem. It's a native plant and has cultural uses, so I believe you should not be removing the reeds, unless there's a real emergency for that. With the salinity, I think if the reeds are removed, you will see an increase in salinity in the ponds as well. I wanted to note that I was a student of Dr. Peter Mills, and under section 106 technically this is all a Federal undertaking so you need to have direct consultation with kanaka maoli and cultural practitioners. I've noticed you brought in cultural practitioners on this site which is commendable, however there is a problem that NATSO that the "native Hawaiians" (kanaka maoli) actually do not meet the criteria for being a native American under DOI; so if it's possible in your draft plan to look at this issue and to possibly amend the documents so far as to being a tribe, elders or kupuna with regards to receiving federal funding.

4. Presentation by Department of Hawaiian Home Lands (DHHL) Water Projects and Issues in West Hawai'i

PRESENTATION GIVEN BY: Dr. Jonathan Likeke Scheuer (Consultant for DHHL)

Dr. Scheuer – noted that because HHC meeting was on same day, he is giving the presentation on behalf of DHHL. Wanted CWRM to think about at the end of the presentation, the large amount of 'āina that DHHL has in this part of Hawai'i and the challenges have in getting water to it, I want you to think about "what is a water reservation and what does it actually mean?" The short video conceptualized some of the issues around Keauhou which the first that CWRM granted to DHHL a water reservation outside of a water management area. In WMAs, everyone has to get permits and those permits say, "your use of water is subject to the rights of DHHL". If an area is designated and runs out of water, the State can assert, DHHL will have water available for its needs. What is the enforcement mechanism or making that water available in non-designated areas will be part of what I'll talk about today; Jerry Seinfeld addressed this issue <showed a short video clip of a Seinfeld episode" in which Seinfeld did not have a car issued to him despite making a "reservation" to have a car available> The concern for DHHL is we have a reservation, great, and we have revenues from the State to drill a well and build a pipeline and tank; but will the water actually be available to us or so far away, or for instance the SY on the aquifer has gone down so much and on a practical level, we won't be able to get that water.

Commissioner Meyer – what is the acreage in Kawaihae?

Dr. Scheuer – sorry, don't have that number but I can get that to you, but I believe it's about 4,000 acres.

<continued with the slide presentation>

DISCUSSION:

Commissioner Hannahs – thank you Jonathan for the humor as well. Through my discussions with the Kohala Community Center, I heard that Kailapa Community

Association is working with the center to think about doing a major reforestation project mauka section of the coast, I think that's an awesome commitment to watershed protection that's over and above your goal four that was in your presentation. Can you stick a little bit to that and across the board of all Hawaiian Home Lands, if you want wet water it would be nice if it was there and you're helping to contribute to the recharge, so that it is there.

Dr. Scheuer – the Kailapa Community is incredibly organized. They do want to see extensive reforestation and they're partnering with the Kohala Center and others and their actual interest in the Kehena ditch; they want that water source as a way to drive reforestation and then build recharge in their communities. This is something various homestead communities are concerned with across Hawai'i.

Commissioner Hannahs – you said they want the water resource to drive reforestation; I wondered do you want the reforestation to drive the water resource?

Dr. Scheuer – both, they know that and believe they will have more abundant water resources in that community if that mauka area is foresting. They believe they cannot successfully forest without water to irrigate and establish that forest.

Commissioner Hannahs – I was very impressed by visiting one of your lessees, Pomai Bertelmann's lot here; where she said with the reforestation she could do cattle and she's made a decision to reforest that lot, in that area we could use a lot more trees. Is the DHHL working with its lessees to encourage that reforestation (not just cattle) but also to encourage recharge?

Dr. Scheuer – I appreciate the example of that homesteader and there's other lessees who are taking steps on their own. The Act (Hawaiian Homes Commission Act) itself is somewhat restrictive in what is considered to be agricultural and pastoral activities, the current or long-term policies of HHC are not always the most flexible, I know that DHHL on agricultural leases has been trying to think beyond the idea of just crops on their set TMK. In the human lifecycle, sadly (because of funding short-falls) if it takes you fifty years to get an Ag lease, the eighteen-year old who wanted to farm is not necessarily the sixty-eight-year old who's ready to farm. If we can develop agricultural homesteading that clusters housing and provide different levels of land tenure, we can work more with the lessee's that are ready to care for the lands. The point is trying to think more flexibly recognizing the natural resources and qualities to the lands it has under stewardship as well as the needs of its beneficiaries.

Commissioner Hannahs – does DHHL have a strategy for gorse, is gorse helping our watershed and what is the strategy for the rapid spread of gorse on your property at Humu'ula?

Dr. Scheuer – I'm not the best qualified person, because I've not been actively involved in that, but DHHL fully recognizes it. Part of it was the result of management by Parker Ranch for decades before that land was returned to active control by DHHL. It recognizes gorse as a significant and serious problem and has been undertaking various efforts to control it. Issues with management at Mauna Kea (with the State) has stalled other plans.

Commissioner Beamer – Jonathan I appreciate your presentation and want to commend DHHL. I've seen their water planning initiatives grow and become more strategic, at least from when I started on the Commission and seeing your presentation how important that is. On a less jovial note, these are serious issues were talking about it. I think if we're to be truthful, the real Hawaiian experience is you don't get the reservation and someone else behind you "gets the car". When we look at places like Kailapa or Pu'ukapu, we need to tell these stories, how did it happen? How is it that water is piped to Kawaihae and Kohala Ranch and everything in between is completely dry? These are truly unacceptable conditions for native Hawaiian people and I commend your efforts to recognize and to get from paper water to wet water. I want to thank you and our present Commissioners; I think our Water Commission is working collaboratively and trying to address these issues.

Dr. Scheuer – thank you Commissioner Beamer and thank you for finding the humor as an educational tool; I didn't mean to at all diminish the actual and generational suffering in the lack of water to these lands. In the HAR 101 section you'll see a reference to a law school article nearly three decades ago, on reservations for DHHL and its breach of trust (by HHC) and the Water Commission did not adequately reserve water for DHHL. After three decades and now recently eight years of work, we're getting reservations for groundwater and surface water around the State; and now that we have it, what does it mean if we actually can't turn it into wet water, is it yet another failed promise, so we continue to aggressively advocate to your staff and is what we feel is our obligation in serving HHC and the beneficiaries.

PUBLIC TESTIMONIES:

Mr. Bill Moore (Kohala Ranch Water Co. and former Executive Assistant to former DHHL Chair Ilima Piiaina) – I wanted to clear some things. The Kohala Ranch wells were built in the mid 80's; Kailapa was an accelerated lot and was developed without water, an agreement was worked out to provide water to them. They were there without water until Kohala Ranch agreed to provide water. The water rates are set by the PUC, it's a high elevation well and the rates are the rates; water is free but everything else is expensive. It has 400 customers and HHL is one. We do not restrict irrigation as a matter for clarification. We did talk about sharing infrastructure and the key issue there was they want to give us an irrigation well; Kohala Ranch is a potable water well; it's a whole lot more complex than given. The other need is a whole separate set of infrastructure for irrigation, completely different from your potable wells, so the issues are a lot more complex. We also talked about desalinization the irrigation well; building our reservoir at the same elevation so we can cross pollenate. Right now, if you have your own system and build your reservoir at our system, if we have a problem you can put water in our system, if you have a problem we can put water in yours, so we're more than willing to work. I want to give the impression that we're not the bad guys in this, we're trying to work and continue to do what we can. Thank you.

Dr. Scheuer – I agree with what Bill has said.

Ms. Mahi Stephens (Native Tenant Protection Council) – have spoken with the Attorney General and Lieutenant Governor's Office regarding state-wide policy on native tenants. The problem was and still is, there is no policy on native tenants. What does it mean and

what are their rights? Basically, it means that every square inch of Hawai'i is subject to native tenant rights. In HRS 174(c)-101 refers to native Hawaiian rights and that they do not need a permit to access their own family spring or resource as well as to restore their own family lo'i. There are other issues also with the Pohakuloa lease, on page five states they are to avoid pollution or contaminations on all ground and surface waters, on page 10 it gives the budget for the removal of UXO's in the area which affects the use of water; and under section 203(b) under 'Āina ho'opulapula states no sugar cane lands are to be used for DHHL. Under HRS 172-11 the appurtenant water rights should come into play regarding kuleana lands.

C. NEXT COMMISSION MEETINGS (TENTATIVE)

July 16, 2019 (TUESDAY)
August 29, 2019 (THURSDAY)

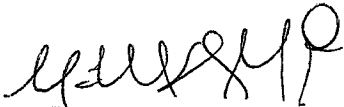
This meeting was adjourned at 3:52 pm.

Respectfully submitted,



RAE ANN HYATT
Secretary

OLA I KA WAI:



M. KALEO MANUEL
Deputy Director