

MINUTES  
FOR THE MEETING OF THE  
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: March 17, 2020  
TIME: 10:00 am  
PLACE: (via Teleconference)  
Kalanimoku Building  
DLNR Board Room 132  
1151 Punchbowl Street  
Honolulu, Hawai'i 96813

Chairperson Suzanne D. Case called the meeting of the Commission on Water Resource Management to order at 10:13 a.m.; and stated the supplemental proclamation suspending Chapter 92-HRS with regards to Boards conducting business and meetings, not open to the public in relating to the social distancing practices and mandate issued by Governor Ige.

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

**STAFF:** Dr. Ayron Strauch, Ms. Rebecca Alakai, Mr. Nicholas Ing,  
Ms. Janet, Hsiao, Mr. Doug Kagawa, Ms. Lenore Ohye,  
Ms. Kathy Yoda  
**PHONE-IN:** Deputy M. Kaleo Manuel, Mr. Dean Uyeno

**OTHERS:** Mr. Barry Usagawa (BWS), Ms. Susan Mukai and  
Mr. Dean Nakano (Brown & Caldwell)  
**PHONE-IN:** Mr. & Mrs. John and Linda Hayama, Mr. Andrew Chianese, Esq.,  
(Attorney for the Hayamas), Mr. Justin Josue and  
Mr. Jeffrey Cudiamat (Structural Hawaii, Inc., Inc.), Mr. Paul  
Grable, Esq. (Attorney for Structural Hawaii, Inc.), Dr.  
Jonathan Scheuer (DHHL), Mr. Larry Lau (HH Construction Inc.);  
Ms. Chui Ling Cheng, (USGS Pacific Islands Water Science Ctr.)

**COUNSEL:** Ms. Linda Chow

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

**031720-L 00:14:40**

Chair Case read the standard contested case statement.

**031720-L 00:15:23**

**A. APPROVAL OF MINUTES**

February 18, 2020

Chair Case asked the board for any comments – there were none.

PUBLIC TESTIMONY – None

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

**031720-L 00:16:33**

**B. ACTION ITEMS**

- 1. Request Imposing a Fine Against the Applicant – Structural Hawaii, Inc., Inc., Landowner – John and Linda Hayama, and Contractor – HH Constructions, Inc., for Altering a Stream Channel Without a Permit as Required in HRS §174C-71(3)(A) and HAR §13-169-50; and Approve the After-the-Fact Stream Channel Alteration Permit (SCAP.5136.3) Application for the Installation of a Gabion Retaining Wall, Hayama Residence, Mānoa Stream, Mānoa, O‘ahu, TMK: (1) 2-9-037:085**

PRESENTATION GIVEN BY: Mr. Dean Uyeno, Branch Chief of Stream Protection and Management

Mr. Uyeno read the summary and requested imposing daily fines of up to \$39,500 to the applicant, Structural Hawaii, Inc., Inc. and impose daily fines up to \$13,500 each to the owners, Mr. & Mrs. John and Linda Hayama and the contractor for SCAP violations stemming from 2019-current. Mr. Uyeno also provided background information on the occurrences of the violations and a timeline of the basis of the violations. Since May 25, 2019, there were numerous discussions between CWRM staff, the Deputy AG’s office and the landowners regarding the status and updates of the project and its completion.

Request for comments were sent to various agencies with only (1) one comment received from Division of Aquatic Resources regarding native species found at the lower part of Mānoa Stream and the project does not impose any further impact on such native species. The Commission received one letter from the Owen Miyamoto, P.E., dated July 13, 2019.

Traditional and customary native Hawaiian rights are exercised in the area. The Applicant stated that “Previous reports and studies for adjacent areas along the stream noted that there are no historical or cultural sites on record. Chapter 343 does not apply because the project is based on private property.

There is one (1) violation of HAR §13-169-50, as follows:

*Violation 1: Alteration of a stream channel without a permit issued by the Commission.*

Different components and gravity factors can be applied to each violation per staff recommendations. CWRM staff is not recommending an alternative settlement.

Mr. Uyeno further stated the staff recommendations.

**031720-L 00:32:45**

Chair Case – thanked Dean and asked for a roll-call of the applicants, landowner, and contractor

All were present via teleconference

**031720-L 00:32:45**

Chair Case – asked if the Commissioners had questions for the CWRM staff

## QUESTIONS

Commissioner Hannahs – asked Mr. Uyeno in regards to the duration of the fines imposed with regards to the photos taken (exhibit 6) and that of when Ms. Linda Chow notified CWRM of the violation (project); and suggested to ask the landowners and contractor of when the actual start date of the project began. He also referred to the incomplete SCAP application and drawings.

Mr. Uyeno – referred to the email date of when Ms. Chow emailed the photos to CWRM and says it would be difficult to prove of the actual project start date and referred to the application of the SCAP to the landowner/applicant.

Commissioner Meyer – questioned item exhibit 12, the certified Department of Health (DOH) Clean Water Branch violation letter sent to Mr. & Mrs. Hayama with regards to the \$40,000 violation fine if it is being pursued by DOH

Mr. Uyeno – referred that question to the landowner/applicant.

Commissioner Katayama – asked how are the gravity components (fines) determined and why are they different for the parties involved

Mr. Uyeno – referred to the penalty policy and fine calculation of the gravity components; i.e. pages 6-10 of the submittal

Commissioner Buck – referred to #5 of the staff recommendations (exhibit 16); questioned if the SCAP application came in at the start of the project, would CWRM have accepted it

Mr. Uyeno – suggested that because staff has been working with the landowner in the past, more than likely would've recommended the approval prior to the start of the project

Commissioner Beamer – referred to the timeline of the violation notices to the landowner and applicant and the communication between all parties

Mr. Uyeno – referred the question to the landowner and applicant and suggested that the flood that occurred in 2018, the landowner could've applied for emergency relief and wasn't sure if the USACE permit was ready (filed)

***031720-L 00:45:50***

Chair Case – called upon Structural Hawaii, Inc., Inc. to comment

#### COMMENTS

Mr. Cudiamat – referred to the timeline of violations; suggested they are engineers and not contractors and did not perform any type of construction work; did not have any say nor give authorization to the contractors to perform work; however, was “dragged” into the violation because they (Structural Hawaii, Inc.) are the applicant of the project. In regards to the inconsistency of the drawings, they noted they worked with City & County of Honolulu Department of Planning and Permitting, Civil Engineering Branch regarding the retaining wall and have noted to fixing any issue along the way when/if it arises by way of agency comments.

He noted that in regards to the penalty mitigation components, specifically M-6, the CWRM staff did not take it into account; the bank (of the stream) collapsed (June 2019) and that the landowners were filing for a USACE permit and got a ruling for the permit due to the collapse and emergency.

Mr. Josue – noted the SCAP application went in before the collapse of the bank and reiterated that construction was never authorized to start by Structural Hawaii, Inc. Inc.

***031720-L 00:52:12***

Chair Case – asked Commissioners for questions to Structural Hawaii, Inc., Inc.

#### QUESTIONS

Commissioner Beamer – asked to explain the difference of the plan submittal to CWRM staff and that of City & County of Honolulu; what has Structural Hawaii, Inc. done to mitigate these type of future violation (repeat) occurrences?

Mr. Cudiamat – says the wall plans slightly differed due to comments and suggestions received from the City & County of Honolulu, while it was still being reviewed (before changes) on the State side. The slight difference was the general location and orientation of the wall with accordance to the Civil Engineering Branch of City & County Department of Planning and Permitting; in regards to mitigation of repeat violations it was hard to control certain instances if mother nature played a role and ultimately it was the decision of the landowner with regards to the aesthetics of the retaining wall. In the future to avoid violations, the SCAP can be applied in the beginning although the final design would not be completed.

Commissioner Buck – asked the date that Structural Hawaii, Inc. was engaged by the landowner on project and the actual start date; and if they disclosed of the other project violation involved in

Mr. Cudiamat – replied that Justin started working with the Hayama's in 2017; as far as the start date of the project need to refer to the contractor; don't recall disclosing to the landowner about a previous violation on another project downstream

Mr. Kawaoka (DOH Rep) – followed up on Commissioner Meyer's question regarding the \$40,000 fine issued by DOH Clean Water Branch and the C&C imposed fines

Mr. Grable – noted that the DOH violation is in contested case hearing and they've been working together with the hearings officer and attorneys towards a solution but no hearing date has been set as of yet; and will follow-up after today's meeting of the SCAP application

The consultants discussed the completed application for the SCAP approval and discussed with one another in regards to the violation and fines from C&C and DOH

Commissioner Katayama – inquired about the scope and deliverables of the project and if there was communication with the contractor and if the approved plans were also delivered to them

Mr. Cudiamat – discussed the drawings and building permits; stated there's no contractual agreement between Structural Hawaii, Inc. and the contractor so there's no admin only to do observation; when landowner's engaged them at the time, the landowner's did not have a contractor for the project.

Mr. Josue – says there were some back and forth discussions with the contractor regarding the design of the wall and nothing has been approved by the City.

Commissioner Hannahs – asked the applicant if Linda Chang-Shimamura has a relationship with the company as it's unclear whom is she; and requested the date of the stream bank collapse. Also noted the risk exposure as the role of the applicant (of the application) and asked if the contract provides recourse

Mr. Cudiamat – noted there was no previous relationship with Ms. Chang-Shimamura; and the date of the stream bank collapse were approximately mid-May or June 2019. Noted the risk factors involved and referred the contract recourse question to its attorney

Mr. Grable – stated there is an indemnity provision that states the owners are responsible for the contractor's activities and have taken that position with the landowners

Chair Case – made a comment regarding that if Structural Hawaii, Inc. did the permitting applications for the landowner it seems that what's missing is the acknowledgement or understanding that a SCAP is required and asked if they inform the landowner of it.

Mr. Cudiamat – iterated they did require the SCAP to be included but didn't obtain the (SCAP) permit yet and that they were awaiting the City-issued permits.

***031720-L 01:13:05***

Chair Case – called upon the landowners

## DISCUSSION

Mr. Chianese (attorney of the Hayama's) – thanked the Chair and Commissioners for the opportunity to state its case and stated a request for a contested case hearing on the matter

Chair Case – noted the discussions will be terminated

Ms. Chow (Deputy AG) – stated that the SCAP permit discussions will also cease and explained the reasoning and procedural matter to Mr. Chianese.

Mr. Grable – asked on behalf of Structural Hawaii, Inc., Inc. that the preferred action is to request a contested case after the decision and if Mr. Chianese is in agreement, he may withdraw his request for a contested case hearing

Mr. Chianese – agreed with the option posed by Mr. Grable as Hayama's want to move forward with the SCAP.

Ms. Chow – noted that if a decision on the permit is made (by the Commission) then a Contested Case Hearing (CCH) is requested, the permit needs to be rescinded and that decision cannot stand and that could be an issue in this case (situation)

Mr. Grable – asked if it was possible to just contest the “fines” portion of submittal

Ms. Chow – asked if admittance of a violation occurred and if they only wanted to contest the fine amount

Mr. Grable – iterated they would be contesting the existence of the violation

Ms. Chow – stated there would be a problem if the violation is not resolved, the Commission would not issue a permit and clarified if a request for CCH is withdrawn any point in time, the Commission can be allowed to make a decision with a fine amount, and a CCH request made prior to the end of the meeting; however, it could result in a rescission of the SCAP permit.

Mr. Chianese – noted (landowners) would be willing to acknowledge the violation

Mr. Grable – requested the hearing to continue and will request a CCH before end of the meeting if necessary

Ms. Chow – referred question also to Mr. Chianese

Mr. Chianese – rescinded CCH request and will do so by the end of the meeting if there's just cause

Chair Case – confirmed the withdrawal of the CCH and asked if the Hayama's wanted to make a statement

Mr. Chianese – stated that some of the mitigation components felt were not considered such as the impact on the resource and the property is in an “emergency” situation. Commented that the Hayama’s were told they would be able to proceed when the USACE permit was obtained and were not notified of violations that would occur otherwise. Mr. Chianese agreed with Mr. Grable regarding the DOH violation cause

***031720-L 01:21:56***

Chair Case – asked the commissioners for any questions to the Hayama’s

## QUESTIONS

Commissioner Hannahs – asked when did construction start at the project and what emergency situation is the reference to request mitigation on; also if the erosion was referred to the 2019 flood occurrence and why action was not taken prior; also referenced why the SCAP permit was not handled in 2012 and Structural Hawaii, Inc. gave notice to the landowner’s on the needed permit approval

Mr. Chianese – referred the first part of the question to Larry Lau (the contractor); and the emergency situation is that the stream bank severely eroded much more from when construction first started and the structure of the house is in danger of falling into the stream if there’s further erosion. There’s a need for current measures to be in place to protect the house and minimize impact of stream alteration. The extreme erosion began in 2018 and it made the situation dire and began seeking approval with the USACE. The client was not aware of all the necessary permits needed for the work done and no documents from Structural Hawaii, Inc. stating it and clients were under the impression it was under an emergency situation and only needed the USACE permit

Commissioner Katayama – asked who’s direction identified the USACE permitting system to be pursued for the project and who’s opinion was it to start construction; also if SH met their deliverables under their agreement

Mr. Chianese – says that Structural Hawaii, Inc. informed landowners’ that it was necessary to get the USACE approval and under impression that it was okay to proceed once that permit was obtained and Structural Hawaii, Inc. have yet to obtain all pertinent permits

***031720-L 01:27:13***

Chair Case – called upon the contractor (HH Construction) for any statements

## DISCUSSION

Mr. Lau – stated the email sent to him by CWRM staff Rebecca Alakai, and of the timeline of project and USACE permit and when the notice of violations occurred; and a few times during the project it took a month for preparations; for instance during the beginning of the wall project; also noted that during discussions with Structural Hawaii, Inc., they would handle all permits and that Mr. Lau was not aware that all permits was not obtained as needed.

Chair Case – asked if Mr. Lau is stating that HH Construction was not responsible for the permits and that the landowner informed it's okay to start the project because the permits have been received

Mr. Lau – noted he met with Justin of Structural Hawaii, Inc.

Commissioner Beamer – asked if Structural Hawaii, Inc. provide HH Construction with plans and if HH Construction was notified if the permits were in place with CWRM

Mr. Lau – answered that plans were given however HH Construction only dealt with the City & County Department of Planning and Permitting permit

Chair Case – asked if building permits were posted at project sites and if he (Mr. Lau) was aware that all permits needed to be posted at sites before construction starts

Mr. Lau – replied yes however the emergency permit is only a letter permit

Mr. Kawaoka – requested to leave the meeting and stated will call back into it

Commissioner Katayama – asked if Mr. Lau considers the construction completed and what work is left to do; and inquired on the plans and asked who gave the order to proceed

Mr. Lau – replied it's not completed, it's only a temporary barrier and they did not start on the actual wall as of yet and is using the latest plans obtained; and Justin gave okay to start

Commissioner Katayama – asked (Dean) if the USACE permit/letter was available and what was stated in it and feels that written letter/permit is important of how the Commission may rule in the matter

Mr. Uyeno – stated the letter is not in the (submittal) exhibit(s) and deferred to the landowner or applicant of the written language stated in USACE issued letter; iterated the USACE covers the federal side for private landowners the State laws still apply

Commissioner Hannahs – inquired about the communication with Ms. Alakai of CWRM and that back in 2017 Ms. Alakai was in communication with Kip Asato of Structural Hawaii, Inc. Informing that a SCAP would be necessary; inquired also of the sandbags in the stream

Mr. Lau – stated the dates of the email contact and wasn't aware of the contact between Structural Hawaii Inc. and CWRM staff and the sandbags were placed recently (within the past few months)

**031720-L 01:43:19**

Chair Case – asked for any public testimony

PUBLIC TESTIMONY – None



**031720-L 01:43:50**

Chair Case – asked Commissioners for follow up questions to CWRM staff

Commissioner Buck – asked Dean if CWRM was contacted at any time of an issuance of an Army Corps Engineering emergency permit and if it's their normal procedure and if further communication by the applicant, landowner or contractor was given of the emergency permit status

Mr. Uyeno – replied that he never came across this same scenario and that CWRM was given notice of the USACE emergency permit once the landowner and applicant knew that a SCAP was also needed for the project around May/June 2019

**031720-L 01:45:18**

Chair Case – asked for a motion

**MOTION: (BUCK/KATAYAMA)**

**To approve B-1 as submitted**

**DISCUSSION**

Commissioner Katayama – inquired on how the parties, specifically Structural Hawaii, Inc., interpreted that the USACE permit was sufficient to proceed on the project knowing that other permits were needed; also inquired if Structural Hawaii, Inc. gave the order to proceed and by observing the work site if there was concern of any occurrence of a violation

Mr. Cudiamat – replied that with the Kaloaluiki project downstream, which is a similar project, they followed suit in obtaining the USACE permit and getting the other permits; also stated Structural Hawaii, Inc. did not authorize to begin work on the project; Justin met with the homeowners with Mr. Lau present and was given the drawings and was made aware that permits were not obtained yet

Mr. Josue – stated he met with the Hayamas and with Mr. Lau and gave the plans to review and discussed the proposed location of the wall

Commissioner Hannahs – referred to Mr. Hayama if Ms. Chang-Shimamura under his employee or contract and referred to timeline of her involvement

Mr. Hayama – replied that Ms. Chang-Shimamura was an architect on a project next door

Mrs. Hayama – stated they were not aware of the extent of the situation and relied on the expertise of both the applicant and contractor in getting the work completed properly

**031720-L 01:54:10**

Chair Case – suggested to proceed with the staff recommendations of the submittal as is and called for a roll-call vote

Commissioner Beamer – stated to the contractors to be transparent

**MOTION:****Unanimously approved**

Chair Case – reminded applicant, homeowner and contractor of the need to request for Contested Case Hearing by the end of this meeting and a written request must be received by CWRM in (10) ten days by way of the Contested Case Hearing form

Commissioner Buck – requested clarification by the staff attorney on the SCAP if a Contested Case Hearing occurs and if a separate case can be given to an after-the-fact alteration permit

Ms. Chow – gave an example of the Mauna Kea case and it may have slight similarities, but the difference is that a violation is attached in the CWRM matter; and it is possible to have a separate case for the matters of the permits itself. The decision will be up to the Commission.

***031720-L 01:58:13***

Mr. Grable – requested a Contested Case Hearing for sanction against Structural Hawaii, Inc.

Mr. Chianese – requested a Contested Case Hearing for the Hayamas

Chair Case asked Mr. Lau if he is also requesting a Contested Case Hearing in which Mr. Lau replied yes then Chair Case explained the follow-up procedure of the 10-day written notice to DLNR CWRM using the Contested Case Hearing form

Ms. Chow notified the parties if they were satisfied with their request it is okay to end the conference call

***031720-L 01:59:21***

BREAK

***031720-L 02:09:19***

RECONVENE

**2. Approval of a Surface Water Reservation of 1.60 Million Gallons per Day for the Department of Hawaiian Home Lands and Establishment of Interim Instream Flow Standards for Four Tributaries of Wailuku River, ‘Āwehi, Aale, Laualu, and Kapehu Streams, in the Surface Water Hydrologic Unit of Wailuku (8138), Hilo, Hawai‘i**

PRESENTATION GIVEN BY: Dr. Ayrton Strauch, Stream Protection and Management

Dr. Strauch presented the submittal item and touched on the legal authority portion and the State Water Code 174C HRS. He also explained the stream boundaries and currently, DHHL has no registered diversions on their parcel yet. The water reservation will be heavily concentrated on the Lower Pi‘ihonua area of the DHHL 1,882 acre parcel with an estimated water amount use of 1.6 mgd.

There was discussion with Commissioner Buck regarding the parcel and stream use and discussion with Commissioner Katayama regarding the crops and irrigation use. It was stated that when it stops raining or are in a drought, stream flows decline rapidly.

Dr. Strauch reviewed and commented about the various stream gages and the different characteristics of the various streams. Different irrigation types will also be used for the various crops. Under the current planning framework, the State Water Projects Plan outlines the water needs for State projects (in this case for DHHL), identifies potential supply options, and feeds into the County Water Use and Development Plans. This enables State water needs to be integrated with the needs of all other use sectors (i.e., military, municipal, private, and agriculture) within each county into a comprehensive resource development strategy and implementation plan

The Lower Pi‘ihonua area is located on the northern portion of the Wailuku surface water hydrologic unit and the closest sources of non-potable water. Thus, no modifications to the existing interim IFS for the Wailuku and Kalohewahewa streams currently in use by the hydropower facility are needed.

Wailuku River naturally provides mauka-to-makai streamflow year-round and as such, provides substantial habitat for a variety of freshwater fauna. Previous surveys by the Division of Aquatic Resources (DAR) have identified many native aquatic species,

Should the Commission approve this water reservation, the water reservation will be documented in the Water Resource Protection Plan, along with the prior-approved water reservations. The utilization of 1.60 mgd of surface water from the Wailuku surface water hydrologic unit will have no long-term negative implications for instream uses, as defined by the HRS §174C-3,

***031720-L 02:30:32***

Chair Case asked Commissioners for any questions to the presenter

**QUESTIONS**

Commissioner Beamer – asked why are the water reservation and Interim Instream Flow Standards (IIFS) both recommended during the same instance; a chance for more public comment would be helpful; and to explain the trigger of HELCO request of water reservation; and is concerned on the amount of the IIFS established to ensure T&C is protected in that area.

Dr. Strauch – explained the process was triggered by a water lease but the water reservation was a request from DHHL in 2018 and as part of that process wanted the Interim Instream Flow Standards established and deferred to DHHL for further comment but felt like the

reservation and IIFS could be done together. In discussions with DHHL, it was felt the reservation could be met without impacting instream practices and IIFS can also be amended in the future.

Commissioner Buck – inquired what is the time table of HELCO’s lease and noted on insufficient data amount to set the IIFS

Dr. Strauch – noted if it’s not agreed/voted on, we could wait another two (2) years for the statewide low-flow study to be completed, however, DHHL requested CWRM set the IIFS in coordination with their water reservation request.

Ms. Chow – replied that before the Board can issue a lease, they need to know how much water will be available for off-stream use. The HELCO lease would potentially come up before the board first because of the anticipated non-consumptive use. If the amendment of the IIFS gets held up, it could hold up the leasing process for them.

Dr. Strauch – commented that the diversions of interest to HELCO are not impacted by these interim instream flow standards but are small tributaries and will not have an effect on their water lease issue.

***031720-L 02:38:42***

Mr. Kawaoka rejoined the teleconference

Commissioner Katayama – inquired on the IWREDSS table pertaining to the crops in relation to the water use and drought scenarios and asked if it’s a 20-year horizon; also inquired on the current usage

Dr. Strauch – explained CWRM’s crop model with various scenarios and irrigation methods against a reasonable drought scenario water demand for different crops and upon averaging all scenarios the 1:5 year drought ag water demand would be at 1.8 mgd, without taking into account any system losses. This model was used to verify the reasonableness of the State’s water use estimates and the 20-year plan. The current usage is mostly pastoral use.

Commissioner Meyer – asked what provisions were made for public review and comment for both IIFS and water reservation and if any received from HELCO and the County due to their long-range (water) planning

Dr. Strauch – noted the only comments received were from DHHL; the Kapehu registration by Hawai‘i County was for a backup water supply that was active in the 1930s. No infrastructure is currently in place at this location. The County has another backup source on a tributary of the Wailuku that’s not affected by this decision. In discussions with HELCO, during low-flow periods, they shut-down their hydropower because a minimum flow is needed to operate.

Commissioner Hannahs – referred to pages 8, 9 & 15 of submittal regarding the calculations between 1.6-1.8 mgd and asked the difference of the land characteristics from other models used in other studies like Na Wai ‘Eha as an example

Dr. Strauch – the calculations were based on the acreage and usage and described the general land area and notated the numbers were based on the States’ Water Projects Plan from DHHL

Deputy Manuel – explained that the quantity is from the Ag Water Use and Development Plan and has already been approved by the Commission via policy; the rate of 3,400 gallons per acre per day, as recommended by the Department of Agriculture’s Agricultural Water Use and Development Plan.

***031720-L 02:49:17***

Chair Case called upon DHHL to comment and noted the written testimony received from DHHL

Dr. Jonathan Scheuer (DHHL Representative) – thanked Chair Case in noting the written testimony supporting both matters and touched on the water leases and abundance of water in that particular area and noted that DHHL has been working with DLNR Land Division regarding the water leases, and pointed out the community outreach for feedback from the community and homesteaders; with presentations given by HELCO Land Division and DWS-HI County on their proposals for the area. Discussions included water usage and quantity and residential homestead lot build-outs. Requested the Commission take some action as both the IIFS and reservation request falls in the scope of a public trust use (of water). For this area, because of the limited data, DHHL will be using the standard reservation calculation of water use of 3,400 gal per acre per day which has already been set via policy through the Dept. of Ag Agricultural WUDP. DHHL feels this to be a sufficient amount of use for the long-term, i.e. 20-year plan for this parcel.

Chair Case – commented how the submittal represents a good analysis of best available information and it’s timely for both the reservation and IIFS and favor moving forward with the understanding the IIFS can be amended in the future if/when more data is available

***031720-L 02:57:39***

Chair Case asked Commissioners for questions to DHHL

Commissioner Hannahs – commended Jonathan on being a great support for water projects for DHHL

The rest of the Commissioners commented they were comfortable with the presentation and thanked the presenter and DHHL.

***031720-L 02:58:40***

Chair Case asked for public testimony and a motion

PUBLIC TESTIMONY – None

**MOTION: (BEAMER/BUCK)  
To approve B-2 as submitted  
UNANIMOUSLY APPROVED**

**031720-L 02:59:53**

**3. Authorize the Chairperson to Enter into a Joint Funding Agreement with the U.S. Geological Survey to Conduct Seepage Runs on Various Streams to Improve Understanding of Surface Water and Groundwater Interaction, State of Hawai‘i**

PRESENTATION GIVEN BY: Dr. Ayron Strauch, Stream Protection and Management

Dr. Strauch presented the submittal item, gave the background information and explained the seepage analysis. The proposal seeks to complete seepage-analysis discharge measurements on seven (7) high-priority streams, including Honokōhau, Honokōwai, Kahoma, Kanahā, and Olowalu Streams and Ukumehame Gulch on West Maui, and Waikoloa Stream on Hawai‘i island. The pre-flow-restoration seepage-analysis measurements are available for the six (6) West Maui streams and additional seepage-analysis measurements are needed to assess post-flow-restoration conditions

With the scope of services and funding, one (1) year is required to complete the seepage analyses for the six (6) West Maui streams and document results of seven (7) seepage analyses (including Waikoloa Stream). The total cost of these seepage analyses is \$111,662 (Commission (\$99,622) and USGS (\$12,000)). Every effort will be made to plan seepage-analysis discharge measurements during dry-weather, low-flow conditions. The funds for the Commission is (\$99,622) available from the Department’s FY 2020 Budget, LNR 404, Water Resources Program. Funding for the seepage analyses work will come from the Commission’s general fund, special fund, or a combination of both, depending upon available funding. There is a contingency built into this project and if field work follows as planned, there will be additional funding for an eighth stream analysis.

Hawai‘i Revised Statutes (HRS) Chapter 343 is triggered due to the use of State funds; however, Chapter 343 does not apply because this is a data collection and research study. Hawai‘i Administrative Rule §11-200.1-15(c)(5) exempts classes of action including, “Basic data collection, research, experimental management, and resource...”

**031720-L 03:08:57**

Chair Case asked Commissioners for any questions to the presenter

Commissioner Meyer – asked if the measurement points have been identified in the various streams; when will it be commissioned and how long will it take; and if the IIFS would be reviewed during the study. Also inquired on the different flow conditions in the varying streams, especially low-flow periods and the disposition of USGS with regards to it.

Dr. Strauch – commented (on behalf of USGS) that USGS has previously identified measurement locations for four of the seepage runs so reconnaissance of new measurement locations will be limited to the areas with uncertainty and is built into the budget. The project will start during the next dry season, the month of September/October, depending on

weather conditions and the IIFS would be reviewed as more data is collected; especially where there are new diversions and flow availability, with the goal of characterizing low flow conditions.

Commissioner Katayama – inquired on the frequency of sampling of interim instream flow standards

Dr. Strauch – stated that the IIFS are based on low-flow characteristics developed based on more than a single point in time measurement, however the seepage analysis is designed for characteristics moving from upstream and down, and how stream characteristics translates from a mauka to makai location. The 57 priority streams identified for seepage analysis by the State Water Resource Monitoring Needs Assessment will hopefully be funded on a rotating basis so a stream will have seepage run once every 5-8 year interval, depending on funding availability. This project is the initial set of seepage runs and we hope to continue to do more analyses in the future.

Commissioner Buck – inquired of the context in the contract if the State will have ability to use the analysis information as soon as its available and hopes that CWRM will have access to its data; also asked on the communication with stakeholders near/around the streams prior to the studies and as data is collected; and commented on the funding source as the State is funding 90% of project.

Dr. Strauch – noted there is continued communication with the Maui and Hawaii Island communities and that a benefit of the study is that it would be released not through a publication and deferred the question to USGS for further explanation

Commissioner Beamer – commented that stream connectivity and its resource is vital and key as well as constant communication with the community at large and looks forward to continued integrated groundwater and surface water management for the Commission as a whole

***031720-L 03:19:50***

Chair Case asked for comments from USGS

Ms. Chui Cheng, USGS PIWSC Representative – clarified that a data release is more lenient on the review process and would be quicker to publish than the traditional scientific investigations report

Commissioner Buck – inquired of the director at USGS with the recent retirement of Dr. Stephen Anthony

Ms. Chang – replied that Mr. John Hoffman is the interim Director at the USGS PIWSC

***031720-L 03:21:00***

Chair Case asked for public testimony and a motion

PUBLIC TESTIMONY – None

**MOTION: (BEAMER/MEYER)  
To approve B-3 as submitted  
UNANIMOUSLY APPROVED**

*031720-L 03:22:15*  
BREAK

*031720-L 03:29:12*  
RECONVENE

## C. PRESENTATIONS

### 1. Briefing on the Central O‘ahu Watershed Management Plan

PRESENTATION GIVEN BY: Mr. Barry Usagawa; Honolulu Board of Water Supply (BWS) & Ms. Susan Mukai; Brown & Caldwell

Mr. Usagawa presented a power point presentation which focused on water supply and demand with climate change, next steps and status. The watershed management, watershed protection projects has been completed for the rural areas of Wai‘anae, North Shore, Ko‘olau and Ko‘olaupoko. The five Watershed Management Plan (WMP) objectives were highlighted briefly in which the primary goal is water protection and use. The ahupua‘a concept is applied with the understanding of mauka to makai connectivity for ground and surface water. There were over twenty stakeholder outreach meetings, five (5) neighborhood board meetings, and planning four (4) community meetings of which we have had three (3) so far in the series, and we are putting together the public review draft being the last one.

Ms. Susan Mukai presented on the watershed profile. Central O‘ahu contains 18% of O‘ahu population. Applicable Central O‘ahu Sustainable Community Plan Vision and Policies:

- Preservation, conservation, and enhancement of community resources
- Protect open space outside the Community Growth Boundary by limiting development within that boundary
- Efficient use of all water supplies through conservation measures, distribution system leak repair, and reclaiming non-potable water from wastewater, where feasible.

To ensure adequacy of water supply for new developments and for agriculture

Commissioner Katayama – asked if any of the agricultural lands in boundaries are IAL as any other lands may be subject to higher density of development

Ms. Mukai – replied that some lands are but not all of it

Mr. Usagawa – noted the purpose of the community growth boundary is to contain urban and protect Ag and conservation lands outside the boundaries to limit urban sprawl

The main aquifers that service Central O‘ahu are the Waipahu-Waiawa and the Wahiawa Aquifer System Areas. They commented on the ‘Ewa Aquifer pumpage versus sustainable



yield and that brackish water may be interfering with the numbers, but there is a balance of what's being allocated versus pumpage. There are 30.56 mgd being withdrawn through permitted diversions which some are for golf courses and Ag irrigation. Within central O'ahu there are 6.851 mgd allocated from Waiahole Ditch. The two Wastewater Treatment Plants in the area that are currently producing recycled water are Wahiawa which produces R-2 and Schofield which produces R-1, for a total of 3.9 mgd.

BWS has always been looking for other water source options such as recycled water, stormwater, trying to find different ways to maintain sustainability and supply reliability. Also been looking at a potential R-1 water recycling facility in Mililani area that could potentially produce 0.5-1 mgd. Stormwater and stormwater channels could also be used for capture and reuse. Opportunities for stormwater reclamation and reuse discussed in a 2008 CWRM.

Commissioner Buck – asked in regards to stormwater capture and retention, what is the potential mgd?

Mr. Usagawa – replied the numbers would be in the 2008 CWRM U.S. Bureau of Reclamation report and stormwater could be a supplemental option

Mr. Usagawa discussed BWS water conservation strategies, which have currently reduced pumping island-wide by 10% since 1990.

Ms. Mukai explained that the water demands are split into five categories: potable, Ag, landscape/park irrigation, golf course, and industrial with low, mid, high, and ultimate growth scenarios. There are three potable water demand scenarios which are, military, private and municipal. The agricultural growth scenarios are also based on the 2,500 gpd stemming from the Waiahole Contested Case as opposed to using 3,400 gpd. Golf courses are using recycled water, Waiahole Ditch water, and ground water. Leilehua right now, is using groundwater; Mililani is using Waiahole Ditch water, Waikele uses from Waikele Gulch, Royal Kunia has their own irrigation well, same with Hawai'i Country Club, and Ted Makalena Golf Course uses an old plantation stream diversion from Waikele Stream. Graphs of existing water use and future demand strategies were shown.

BWS and the Water Research Foundation completed and collaborated with CWRM on a climate change adaptation and mitigation study to assess the effects of climate change on the water supply and to prepare for the effects of sea level rise: coastal erosion, marine inundation, and groundwater inundation on coastal infrastructure. The impacts of rainfall with scenarios of a wet and dry season were taken into consideration. The 2018 sustainable yield measures were compared with the SY of future climate forecasts using the recharge data from USGS. Also touched base on the future water demand scenarios forecasted to 2100 using both high and low. Some supply adaptation strategies included: aggressive water conservation, like dual plumbing with recycled water; storm water capture in Nu'uuanu, and on-site for new development, also expanded reuse. Lastly, is the public review draft and approvals before finalization projected at the end of 2020.

**031720-L 03:59:55**

Chair Case asked the Commissioners for any questions

Commissioner Buck – commended BWS and Brown & Caldwell for the thorough presentation

Commissioner Hannahs – commented on slide 38, regarding the low SY, if we encounter any of those scenarios due to climate change, which areas (of O‘ahu) will be most at risk and what shall the Commission be considering when the matter comes before it, look for to enhance its options for the future

Mr. Usagawa – noted the areas most at risk with the lower rainfall projections are Wai‘anae; as such we (BWS) need to transfer more water into there as the sources there become depleted. That is why BWS is trying to diversify ‘Ewa because it has the largest recycled water plant and currently working on a seawater desalination project, with a lot of potential for recycle and reuse. Also, the Leeward Aquifer could be affected with the reduction of rainfall. We had a researchers stakeholder group meeting with University of Hawaii, and BWS feels they should update the rainfall models and would be good if the two climate models could converge, for stability in the supplies; and by more monitoring, BWS will know which track its on. BWS doesn’t want to miss the opportunity for diversifying reuse, efficiencies and new development along the transit-oriented development areas and don’t want to wait to see what future supply is going to be.

Chair Case – commented on the difference how the term watershed is used and questioned how is BWS addressing its participation in the resource itself that’s collecting the water, the forest protection and wanted to ensure it is part of the plan

Mr. Usagawa – noted that BWS has completed the watershed protection and management pieces of the plan and supporting watershed partnerships with DLNR DOFAW division, 4% of BWS CIP funds support conservation, participates on the Fresh Water Council, and have been looking on restoration efforts with community groups as well as encourage the education portion.

Commissioner Beamer – echoed Commissioner Buck’s commendations, appreciates the One Water approach and applaud BWS on its programs. Also inquired on storm water capture, silos and authorities on managing it; also recognized the down-side of desalinization may create more problems for future scenarios.

Mr. Usgawa – BWS has been interacting with the C&C Honolulu Department of Facility Maintenance which is proposing a draft ordinance to City Council to create Storm Water Utility with incentives for storm water capture and also reuse. In terms of silos, BWS is working on an ordinance creating a One Water framework model, a panel of different agencies working together on its annual CIP budgets, to support conservation and climate change efforts as priority projects.

Chair Case – asked for public testimony; commended the great efforts by BWS and value its partnership with DLNR also thanked the Commissioners and everyone for their participation and patience in the remote (teleconference) meeting.

PUBLIC TESTIMONY – None

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

~~April 21, 2020 (TUESDAY)~~ – *(Cancelled due to COVID-19 social distancing mandate)*  
May 19, 2020 (TUESDAY)

This meeting was adjourned at 2:15 pm.

Respectfully submitted,



RAE ANN HYATT  
Secretary

OLA I KA WAI:



M. KALEO MANUEL  
Deputy Director