

MINUTES
FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: September 19, 2012
TIME: 9:00 am
PLACE: DLNR Board Room
Kalanimoku Bldg.
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813

Chairperson William Aila, Jr. called the meeting of the Commission on Water Resource Management to order at 9:08am.

The following were in attendance:

MEMBERS: Mr. William Aila, Jr., Mr. Neal Fujiwara, Mr. Ted Yamamura,
Mr. William Balfour, Mr. Jonathan Starr

ABSENT: Mr. Sumner Erdman, Ms. Loretta Fuddy

STAFF: William Tam, Lenore Ohye, Roy Hardy, Basil Gomez, Jeremy Kimura,
Neal Fujii, Charley Ice, Paul Eyre, Patrick Casey

COUNSEL: Linda Chow, Esq.

OTHERS: Sherri Hiraoka (Townscape), Kaleo Manuel (DHHL), Jonathan Chun,
Kekoa Willing (HGCSA), Barry Usagawa (HBWS), Joriathan Scheuer,
Kathy Billings (NPS), Paula Cutillo (NPS), Delwyn Oki (USGS), Melia
Lane-Kamahele (NPS), Peter Young

A. APPROVAL OF MINUTES

August 15, 2012

MOTION: (Starr/Fujiwara)
To approve the minutes.
UNANIMOUSLY APPROVED.

B. ANNOUNCEMENTS

The next Commission Meeting will be held on Wednesday, October 10 at 9:00 am at the State Capitol in Room 309. Neil Hannahs, the Director of Land Assets for Kamehameha Schools will be giving a special briefing on Kamehameha Schools' Agricultural Plans for Oahu's North Shore.

The Hawaii Water Works Association (HWWA) annual conference is being held October 17-19 at the Ala Moana Hotel.

C. UPDATES AND BRIEFINGS**1. National Park Service Presentation “Threats to Kona Water Resources from Existing and Proposed Withdrawals”**

PRESENTATION by: Jonathan Scheuer, Kathy Billings, Paula Cutillo and Delwyn Oki

Jonathan Scheuer, speaking on behalf of the National Park Service (NPS) thanked the Commission and introduced representatives from the NPS and the U.S. Geological Survey (USGS).

Since Kaloko-Honokohau National Park was first established, the withdrawal of water has increased significantly and is projected to increase over time. An increase in water withdrawals could have impacts on water resources within the Park and the surrounding coastal areas of the Keauhou Aquifer.

Kathy Billings from the NPS provided background on Kaloko-Honokohau National Park. In 1972 an Advisory Commission was created to assess the feasibility of protecting areas along the Kona coast for Native Hawaiian traditional practices. In 1978 Congress passed the law that established Kaloko-Honokohau National Historical Park. The mission of the Park is to provide a center for preservation, interpretation and perpetuation of traditional Native Hawaiian activities and culture. Cultural demonstrations are practiced every year and subsistence fishing and shoreline gathering are permitted within the Park. Three ancient fishponds, wetlands, tide pools, and over 185 alkaline pools exist within the boundaries of the Park. The near shore marine environment supports a diverse marine life including the endangered Hawaiian monk seal and over 150 species of fish. The Kaloko fish pond wall was completed in 2012 and will be managed as part of the cultural live-in center project. The alkaline pools have many traditional uses (drinking water, bathing, raising traditional fish, and sources of bait) and include habitat for endangered species. The water supply needs to be protected to preserve the fish ponds. Fresh ground water is important to preserve the historical and cultural resources in the Park. The NPS has been working with various agencies and partners to protect these resources.

Paula Cutillo (NPS) thanked the CWRM staff for their help. Reducing ground water discharge could adversely impact coastal ecosystems and increasing salinity could impact individual organisms. The Park is located in the Keauhou Aquifer and sustainable yield is set at 38 million gallons per day (mgd). When the Park was established in 1978, water use was 3 mgd. North Kona drinking water came from a source 8 miles away from the Park. Salt water intrusion into these wells led to the development of the high level aquifer. Wells currently surround the Park and water use is at least 13 mgd. The NPS estimates that an additional 21 mgd will be needed to accommodate the proposed developments around the Park. In 1999 the USGS developed a model that indicated potential impacts from wells located up-gradient from the Park. Wells continue to be drilled and permitted up-gradient and adjacent to the Park. Competition for high-level water has led to interest in desalinating brackish water. Since 2007, five desalination plants have been proposed in the area around the Park. One existing plant is permitted to pump up to 2 mgd to irrigate a golf course. The byproduct is re-injected into the basal aquifer directly next to the

Park. The County of Hawaii is recommending desalination to meet growing water demands. Declining rainfall also threatens natural resources and pumping has increased. Future water demands, based on the Hawaii Water Use and Development Plan, population growth and land use, exceed the sustainable yield for the Keauhou Aquifer. The estimates based on population growth are thought to be low. The NPS argues that when the sustainable yield was determined it did not consider the quantity of water needed to preserve and perpetuate traditional and customary practices or public trust resources. It also did not consider declining rainfall. Limiting pumping will not protect ground water dependent natural and cultural resources in the Park. The conceptual model used to set the sustainable yield assumes that all of the ground water recharge in the high-level aquifer discharges into the basal lens. However, new information suggests that this may not be the case. Other models have been proposed, including a draft Environmental Impact Statement (EIS) for 5,000 homes. Even if the model were correct, water resources and the basal lens would still be vulnerable to pumping and injection because it would be relying solely on local precipitation for recharge. The NPS recognizes the uncertainties with future water demand, but argues that ground water dependent natural and cultural resources are vulnerable to pumping wells, especially wells that are permitted adjacent to and up-gradient of the Park. USGS studies indicate that pumping will lower water levels, increase salinity, and reduce ground water discharge in the Kaloko-Honokohau National Historical Park. In 1999 the USGS tried to quantify the changes and developed a model. The model indicated that if all permitted wells were pumped to capacity, ground water discharge and water levels in the Park would decrease by half. The NPS would like to maintain the natural fluctuations in salinity and preserve the threshold and optimal growing conditions for various native species of limu and damselfly. A long term increase in salinity could reduce the productivity, distribution and habitat of indicator and keystone species. The NPS *must* act to minimize the potential impact to Park resources. Gathering rights begin with preservation of the shoreline.

Jonathan Scheuer reminded the Commission that mauka to makai stream flow is critically important for ecological functioning as well as the exercising of traditional and customary practices.

Dr. Delwyn Oki (USGS) gave a brief overview of the coastal and high water-level systems and showed some preliminary modeling results. The wells along the coast are approximately 3 feet above sea level, whereas wells further inland can be between 40 and several hundred feet above sea level. The coastal ground water system consists of seaward flowing brackish water, floating above salt water. Salt water will enter into the aquifer and mix with the fresh water. There is not a lot of potable fresh drinking water along the Kona coast. Most of it is brackish water. The cause of high water levels further inland is still unknown. USGS has conceptualized 3 different causes that could be related to faults along the coast, low permeability layers of volcanic ash, or weathering. New data collected by Tom Nance shows how salinity varies within the aquifer (Kamakana Well). Near the top, water is relatively fresh. As you move down in depth salinity gradually increases. At a certain depth (1100 feet below sea level) Mr. Nance encountered a fresh water zone. Drilling through that zone, he encountered salt water. The fresh water zone could be caused by confining units but it is not clear why the fresh water zone occurs. The salinity profile for the Kamakana Well gradually increases over the course of 500 feet, versus other wells (i.e. a BWS well on the North Shore of Oahu) which encounters salt water more quickly. The water table will drop as you

increase withdrawals. As pumping occurs, the water table falls and salinity increases. The models are preliminary and should be viewed qualitatively as an example of what could occur as ground water withdrawals increase. Future plans include an ongoing study designed to resolve the degree of connection between the high and low level systems. The goal is to determine how much of the fresh water from the high level system is seen in the coastal system. The ground water model needs to be refined with additional data. Additional monitoring wells are needed to provide further information on how these two systems are connected.

(DISCUSSION)

Commissioner Starr asked if the Big Island Recharge Model shows a trend for this area.

Mr. Oki responded "not exactly." The water budget model documented changes from 1980 to 2009. There were some very dry years within this 30 year period. He did not know if there was a consistent trend with recharge and no long-term data is available to evaluate such trends.

Commissioner Starr commented that there was a dramatic decrease in recharge.

Mr. Oki acknowledged that there were dry years, but no long-term ground water data currently exists. County wells may provide the best source of data.

Commissioner Starr said there were 6.5 mgd of discharge into the brackish pools and fishponds. He asked if there was a quantitative and/or qualitative number for salinity differences.

Mr. Oki responded that 6.5 mgd came out of early work conducted in the mid-1990s. It was based on a crude approach. The more recent work is more detailed and the new numbers indicate recharge on the same order of magnitude. When comparing the numbers, recharge appears to be higher.

Commissioner Starr asked about the on-ground observations with regards to the fishponds.

Ms. Cutillo said there is evidence of increased salinity since the Park was established. It is difficult to look at conditions over time due to the condition of the seawall surrounding the fishpond. There is data from the adjacent golf course that indicates cumulative impacts from pumping and discharge. There are still some uncertainties about long-term trends.

Commissioner Starr asked Mr. Scheuer if the issue pertains to appurtenant rights.

Mr. Scheuer explained that appurtenant rights refer to fresh water flows from streams and are protected uses associated with the Great Mahele of 1848. There are historically established traditional and customary practices associated with the Park including drinking fresh water from the alkaline pools, uses of fresh water for ritual purposes, and the gathering of resources for traditional and customary practices. The water is not directly associated with appurtenant rights, but has significant protections under the Water Code and judicial rulings.

Commissioner Starr asked if Mr. Scheuer saw these protections as endangered.

Mr. Scheuer said there is evidence that harm could result from existing and projected withdrawals. Under the Water Code's provisions for designation, an investigation is warranted if current and projected uses could harm the resource. Currently the CWRM has no process or practice to look at the impacts to traditional and customary rights in non-designated areas.

Chairperson Aila asked if the county system would have jurisdiction.

Mr. Scheuer said the county gets funding from private developers to drill wells.

Commissioner Starr asked Deputy Tam about the mechanisms (outside of designation) that could protect these resources for traditional and customary uses.

Deputy Tam responded that the CWRM could review a petition to designate and investigate to determine proactive measures.

Commissioner Starr asked Chairperson Aila if staff could look into the issue to designate and suggest ways to move forward.

Deputy Tam said there have been roundtable discussions between CWRM staff, the USGS and hydrologists in the Kona area. Staff will continue to look into the issue.

Commissioner Starr suggested that the Commission investigate the issue and asked for a mechanism to proceed toward a future action, which might include designation.

Chairperson Aila asked if Commissioner Starr would be satisfied by a follow-up briefing based on the information presented.

Commissioner Starr responded "yes."

Deputy Tam said more data could be collected from a new monitoring well and staff could generate a report on the scope of work.

Commissioner Starr said he was concerned about the increase in pumpage and the desalinization projects.

Roy Hardy (Commission on Water Resource Management) said the Department of Health (DOH) requires the brine to be injected in deep water so it does not affect the brackish area.

Chairperson Aila asked how the NPS facilitates traditional and customary practices. He asked if harvesting permits were issued to Native Hawaiians.

Kathy Billings responded that no permits are required. People are allowed to come in to do shoreline gathering and fishing. There is no prohibition against use. However, an increase in use could necessitate future restrictions.

Mr. Scheuer said traditional and customary practices also occur outside the Park boundaries.

Peter Young commented on the precautionary principle and explained that the Commission is responsible for establishing sustainable yields. Based on recharge data, the Keauhou Aquifer has an estimated sustainable yield of 38 mgd. Since the sustainable yield was established, recent studies indicate that the aquifer has a sustainable yield 77 percent greater

than the existing. A sustainable yield of 38 mgd is most likely low. Presently, the aquifer draws close to 12 mgd. Future demand into the year 2025 is estimated at 15.8 mgd. The NPS is reporting 34 mgd. There are conflicting reports about future water use and reaching the sustainable yield. The NPS is concerned about the change in salinity and temperature within the alkaline pools. However, water levels in the Park fluctuate daily due to ocean tides. Mr. Young asked if the Commission could invite hydrologists to come in and speak about their findings in order to get a broader sense of the issue and future impacts. He recommended Tom Nance and Steve Bowles.

Kama Hopkins testified on behalf of Robert K. Lindsey Jr., the resident trustee for the Office of Hawaiian Affairs (OHA) for Hawaii Island. He shared Mr. Lindsey's concerns about designation. He recommended further discussion and engagement between landowners, scientists and the NPS about a water management plan before moving ahead with designation.

Commissioner Starr asked about DHHL's interest in water use in the Keauhou Aquifer.

Mr. Hopkins said he was not authorized to speak on behalf of the Commission.

Kaleo Manuel (Department of Hawaiian Home Lands) said DHHL has a Hawaii Island Plan that was developed in 2002 and amended in 2006 to specifically address West Hawaii. Mr. Manuel could not comment on total land and projected land uses, but said a large residential development (~ 2,000 homes) is planned for the mauka area. Several future planning projects are designated for commercial and revenue generating purposes.

Commissioner Yamamura thanked Mr. Young and Mr. Hopkins for their testimony.

D. GROUND WATER REGULATION

1. Application for a Water Use Permit, Thurston 2011 Well (Well No. 3605-30), TMK (1) 6-2-002:003, WUP No. 955, Future (Agricultural) Use for 0.024 mgd, Kawaihoa Ground Water Management Area, Oahu

SUBMITTAL PRESENTATION by: Charley Ice

The water use permit is requested to irrigate 10 acres of agriculture land. The review yielded no objections. The Aquifer has a sustainable yield of 29 mgd. Existing use is estimated at 2 mgd. The applicant is requesting 2,355 gallons per acre per day (gad) to irrigate organic crops including asparagus, eggplant, long beans, cherry tomatoes, grapefruits, and limes. The Irrigation Water Requirement Estimate Decision Support System (IWREDSS) incorporates rainfall and soil types. The model indicates that generic crops of this sort would require closer to 4,000 gad. The applicant's estimate is conservative. There are no practical alternatives for organic farming. The DHHL commented that their homesteading program will require future reservations in this area. There are a number of planning efforts underway and future reservations are likely. The Division of Forestry and Wildlife (DOFAW) has a habitat conservation plan but did not object to the applicant's request.

RECOMMENDATION:

That the Commission approve the issuance of water use permit no. 955 to Ted Nakamura for the reasonable and beneficial use of 0.024 mgd of potable water for Agricultural from the Thurston 2011 well (Well No. 3605-30), subject to the standard water use permit conditions listed in Attachment B and following special conditions:

1. The permittee shall observe best land management practices to avoid creating any short-term or cumulatively adverse effect on the conservation habitat at Ukoa Pond. Independent observation wells are in place to monitor some effects, and the permittee shall coordinate and cooperate with the Division of Forestry administration of the Kawaioloa Wind Power Habitat Conservation Plan.
2. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.
3. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.
4. In accordance with well construction permit Standard Condition 7 and water use permit Standard Conditions 4 and 9, if pumpage from this well is found to adversely impact the Habitat Conservation Plan, pumpage is subject to revocation, after a hearing.

(DISCUSSION)

Commissioner Yamamura asked if there are any reporting requirements for crops.

Mr. Ice said "no." Water use reporting is the only requirement.

Commissioner Fujiwara asked why the ditch systems were not appropriated for organic farming.

Mr. Ice said the applicant came to that conclusion.

Deputy Tam explained that the applicant may have meant that a ditch system was not available and they did not have access.

**MOTION: (Fujiwara/Starr)
To approve the submittal.
UNANIMOUSLY APPROVED.**

[BREAK]

2. Request for Authorization to Initiate Rule-Making Proceedings to Amend Hawaii Administrative Rules §13-168-12(a), §13-168-32(a), §13-169-51(c), and §13-171-12(c) to Replace the \$25 Permit Application Filing Fees with Fee Schedules to be Adopted by the Commission

SUBMITTAL PRESENTATION by: Roy Hardy

A table in the submittal explains the various administrative rules in place since 1988. Staff has been reviewing the administrative costs associated with various applications and permitting processes and came up with average ranges between \$300.00 to several thousand dollars. The goal is to change the administrative rules to adopt a fee schedule, which would allow for greater flexibility. The proposed changes are included in the submittal.

RECOMMENDATION:

That the Commission:

1. Authorize the initiation of rule-making proceedings to amend its Hawaii Administrative Rules, including but not limited to HAR §13-168-12(a), §13-168-32(a), §13-169-51(c), and §13-171-12(c) to replace the \$25 permit application filing fees with fee schedules to be adopted by the Commission at a noticed meeting (and which may be amended by the Commission from time to time).
2. Request approval from the Governor to conduct public hearing on proposed rules.

(DISCUSSION)

Commissioner Yamamura asked if staff was also preparing a request regarding civil penalties.

Mr. Hardy replied "yes."

Commissioner Fujiwara asked why a request was needed prior to coming out with a fee schedule.

Deputy Tam explained that the Administrative Rule must be changed first.

Commissioner Balfour asked about the time frame.

Deputy Tam said possibly November. Also in the works is a penalty schedule regarding civil enforcement, which would be consistent across the entire Department.

MOTION: (Starr/Fujiwara)

To approve the submittal.

UNANIMOUSLY APPROVED.

E. STREAM PROTECTION AND MANAGEMENT

1. **Application for Stream Channel Alteration Permit (SCAP.3528.2), Streambank Stabilization, Moloa'a Stream, Declaratory Ruling No. DEC-ADM12-01, Moloa'a, Kauai (TMK: (4) 4-9-014:021)**

SUBMITTAL PRESENTATION by: Basil Gomez

Deputy AG, Linda Chow said she had some concerns regarding the Declaratory Ruling because the agenda did not adequately notify the public.

Deputy Tam suggested that the submittal be treated as a briefing.

AG Chow reiterated her concerns about the item not being properly noticed on the agenda.

Deputy Tam proposed that the Declaratory Ruling not be discussed at this time.

AG Chow said "that would be fine."

Basil Gomez (Commission on Water Resource Management) introduced the Stream Channel Alteration Permit (SCAP) for a parcel located on Moloa'a Stream on Kauai. On April 18, 2012 Honua Engineering requested an emergency authorization to stabilize the stream bank. During the March 2012 rain storms, the bank was cut back effectively removing one of the supporting piers from the applicant's house. On May 9, 2012 the Commission issued an emergency authorization for the stream bank stabilization project. On June 25, 2012 staff followed-up to see if the work had been completed. Staff was informed that the project had not started because it was still under review by the U.S. Army Corps of Engineers (USACE). USACE informed staff that the project was not classified as an "emergency" because the applicant had been asked to apply for a similar permit in 2010. Subsequently, staff asked the applicant to apply for a SCAP. On August 20, 2012 staff conducted a site visit with USACE and Honua Engineering personnel. The section of the stream bank affected by erosion extended over 170 feet. Staff also observed existing controls on the stream channel, including footing to bridges to access neighboring properties and un-permitted hardening downstream. The lower reaches of Moloa'a Stream are intermittently inundated and the potential for flooding is very high. The banks in the vicinity of the applicant's property are 5-6 feet high and composed of unconsolidated sediment with a vertical drop-off of about 5 feet. The stream supports a variety of endemic and indigenous species. Photographs submitted by the applicant prior to the March 2012 storm show a heavily vegetated vertical bank line.

The applicant proposes to stabilize the section of stream bank crossing his property with 200 cubic yards of 18 inch boulder rip rap. The applicant noted that bioengineered slope treatments may better conform to the environment, but may not provide the protection of hard rip rap from major storm events and could be more expensive to install. Staff did not comment on those assertions, but comments were provided by the USACE, U.S. Fish and Wildlife Service (USFWS) and the University of Hawaii (UH) Environmental Center. Concerns included setting a

precedent for neighboring property owners to follow-up with requests to install stream bank armor, a possible increase in erosion from hardening, and potential impacts to the opposite bank.

Staff noted that the stream had migrated 120 feet across the floodplain over the last 76 year period. This is the result of a natural process. Bank erosion is generally beneficial to stream ecology because it creates a range of habitats that contribute to ecological diversity. As the stream adjusts to the hardened area, the locus of erosion tends to shift, which could require the installation of successive generations of rip rap and bank erosion control infrastructure. The actual size of the rip rap exceeded the diameters specified in the application. Other inconsistencies were also noted by staff. Armoring this section of stream bank could cause the locus of erosion to shift and have cumulative impacts on neighboring properties.

AMENDED RECOMMENDATION:

That the Commission:

1. Deny the applicant's request for a Stream Channel Alteration Permit without prejudice because the applicant's proposal for stream bank stabilization does not involve the use of bio-engineered materials, and the proposed use of rip rap to harden the bank of Moloa'a Stream will most likely create adverse impacts on neighboring properties.

(DISCUSSION)

Jonathan Chun, representing the applicant, commented that the applicant had received comments from the USACE and CWRM staff. Mr. Chun asked for a deferral so the applicant can incorporate more bioengineered materials and processes into the current plan. The construction plans will be amended. The applicant needs to work with the engineer and consult with the USACE. Mr. Chun could not say when the amended plans would be complete but requested a 30-day extension.

Commissioner Balfour commented about the need for protection especially with the rainy season upon us. He emphasized the need to stabilize the bank sooner rather than later.

Commissioner Starr asked Dr. Gomez about the armoring of streams and asked for an overview on stream movement and how it influences the riparian habitat.

Dr. Gomez gave a brief explanation about erosion near the apex of streams.

Commissioner Yamamura asked Mr. Chun if he was asking for a deferral on the agenda item.

Mr. Chun responded "yes."

Dr. Gomez asked if the applicant is allowed to amend the application or will he have to resubmit.

Mr. Chun said the application is not complete and would not trigger the 90-day action rule. He suggested that the applicant resubmit a new application.

Dr. Gomez argued that it was a complete application. He suggested that the applicant withdraw and submit a new application, or defer.

Deputy Tam agreed that it was a complete application but the 90-day action rule could be waived.

Mr. Chun said they would file within 60 days, before the November 21, 2012 meeting.

MOTION: (Yamamura/Starr)

To defer the submittal.

UNANIMOUSLY APPROVED FOR DEFERRAL.

F. PLANNING

1. Adoption of the 2012 Koolaupoko Watershed Management Plan to Update the City and County of Honolulu's Water Use and Development Plan for Incorporation into the Hawaii Water Plan

SUBMITTAL PRESENTATION by: Lenore Ohye

Item F1 is a recommendation to adopt the Koolaupoko Watershed Management Plan (WMP) which is an update to the City and County of Honolulu's 1990 Water Use and Development Plan (WUDP). The WUDP is the component of the Hawaii Water Plan that is prepared by each of the 4 counties to guide the allocation of water to land use. Honolulu is updating their WUDP regionally by land use districts, to further tie and integrate water and land use planning and support respective DP/SCPs. Application of a regional approach allows in-depth community outreach, and Honolulu has gone beyond the mandate of water supply and development planning to also incorporate sustainable watershed management planning. CWRM approved the project description for doing the Koolaupoko district on August 28, 2008. The approach is similar to that taken in the development of the Waianae and Koolauloa WMPs, which were adopted by CWRM on March 16, 2011. The plan is consistent with and meets the requirements in the Water Code and Framework.

Comments were received at a public hearing which was held on July 18, 2012. Staff received questions regarding the impact of the Maunawili ditch system efficiency improvements on the Kawainui Marsh, whether windward water would be used to supplement leeward developments, and the regulatory approvals that would be needed should a new large development be proposed. We also received a number of comments related to the Kawainui Marsh Master Plan Update, which is currently ongoing and spearheaded by State Parks and DOFAW. They are receiving similar comments through their community outreach and recommend that the comments be addressed in their master plan update process.

RECOMMENDATION:

That the Commission:

1. Adopt the Koolaupoko Watershed Management Plan as an update to the City and County of Honolulu's Water Use and Development Plan for incorporation into the Hawaii Water Plan.

(DISCUSSION)

Barry Usagawa (Honolulu Board of Water Supply) said HBWS supports the staff's recommendation to adopt the plan.

Sherri Hiraoka (Townscape) said the Koolaupoko WMP is a regional plan and is part of the City's update to the Oahu Water Management Plan. She elaborated on the goals and objectives of the plan, including current water use, projected demand, and strategies for watershed management. The Oahu Water Management Plan provides an overall framework for each district's water needs. The island-wide plan is updated regularly. Uncertainties are also taken into account.

Deputy Tam commented that the area has a lot of water flow with multiple projects and groups working together to restore wetlands and the fishpond. The area has also been designated by the U.S. Department of the Interior.

Mr. Usagawa commented on the reduction in water use, which will increase stream flow throughout the system.

Ms. Hiraoka gave an overview of the implementation phase and said it would be a group effort dictated by budgets and funding.

Commissioner Starr said he was impressed by the last public meeting in Waimanalo. He asked about the projected decrease in population and questioned whether this was correct, especially with the expected influx in military presence.

Ms. Hiraoka said the projections are based on data from the City and County of Honolulu's Department of Planning and Permitting. The population in Koolaupoko is not expected to increase.

Commissioner Starr asked what would happen if the projections are incorrect.

Ms. Hiraoka referenced the multiple scenario portion of the plan.

Mr. Usagawa commented that household size is getting smaller. Projected growth will be concentrated in south Oahu. The urban growth boundaries in Koolaupoko are intended to direct the growth.

**MOTION: (Starr/Fujiwara)
To approve the submittal.
UNANIMOUSLY APPROVED.**

2. Request to Enter into a Joint Funding Agreement with U.S. Geological Survey For Statewide Hydrologic Data Collection and Water Resource Monitoring for Federal Fiscal Year (FFY) 2013

SUBMITTAL PRESENTATION by: Jeremy Kimura

The request is to renew an agreement with the USGS to cooperatively monitor the water resources in Hawaii. The USGS has been working with the State since 1909. USGS gauges monitor stream flow, water quality and water levels. The data is made public and the cooperative monitoring program helps facilitate various studies. The cost per gauge has decreased due to an increase in cost share from the USGS. A continuous record stream flow gauge in Moanalua Stream has been added to support the DLNR's "Rain Follows the Forest" initiative. The gauge will look at baseline data to see how forest restoration can benefit the water resources in the area. Exhibit 4 has a complete list of gauges. The action is exempt from an Environmental Assessment (EA).

RECOMMENDATION:

That the Commission:

1. Authorize the Chairperson to enter into a joint funding agreement with the U.S. Geological Survey in FFY 2013 to undertake the specified monitoring activities subject to the availability of funds, and
2. Authorize the Chairperson to amend or modify the joint funding agreement provided that such amendment or modification does not require additional Commission funding.

(DISCUSSION)

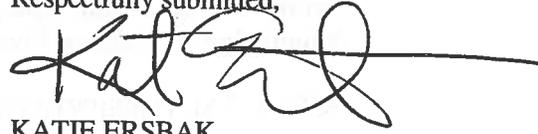
Commissioner Starr asked about the cost of adding more gauges.

Mr. Kimura informed the Commission that a meeting was arranged between the USGS and DOFAW to look at preparing a proposal to add more gauges to help support efforts toward watershed restoration.

**MOTION: (Fujiwara/Yamamura)
To approve the submittal.
UNANIMOUSLY APPROVED.**

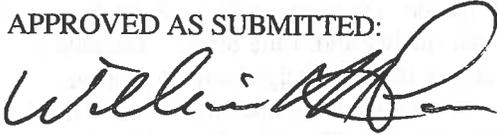
Chairperson Aila, Jr. adjourned the meeting at 12:00pm.

Respectfully submitted,



KATIE ERSBAK

APPROVED AS SUBMITTED:



WILLIAM M. TAM
Deputy Director