

MINUTES
FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

Approved by Commission on
Water Resource Management
at the meeting held on
5.21.14

DATE: April 17, 2014
TIME: 10:00 am
PLACE: DLNR Board Room
Kalanimoku Bldg.
1151 Punchbowl St., Room 132
Honolulu, Hawaii 96813

Chairperson William J. Aila, Jr. called the meeting of the Commission on Water Resource Management to order at 10:15 am.

The following were in attendance:

MEMBERS: Mr. William J. Aila Jr., Mr. William Balfour, Mr. Milton Pavao,
Mr. Kamana Beamer, Mr. Jonathan Starr, Ms. Linda Rosen

ABSENT: Mr. Ted Yamamura

STAFF: William Tam, Roy Hardy, Dean Uyeno, Paul Eyre, Jonas Burgon,
Rebecca Alakai, Charley Ice, Robert Chenet, Neal Fujii, Malie Beach-
Smith, Patrick Casey

COUNSEL: Cindy Young, Esq.

OTHERS: Dan Purcell, Chips Everhart, Dave Robinchaux, Sinead Sims, Jordan
Inafuku, Philip Tumbaga, Glenn O., Clifford K., Jonathan Scheuer,
Shannon Wood, Julie Sven, Ronald Rodriguez, Daylin Gibson, Earl
Matsukawa, Lauren Yasaka, Dante Carpenter, Marta Robben, Myra
Kaichi

A. APPROVAL OF MINUTES

March 19, 2014

MOTION: (Balfour / Pavao)
To approve the minutes.
UNANIMOUSLY APPROVED.

B. ANNOUNCEMENTS

Deputy Director, William Tam commented on the April 15, 2014 Ascent Event with Senator Brian Schatz and the nexus between water and energy.

Commissioner Pavao asked about hydropower.

Deputy Tam said Senator Schatz is interested in alternative energy. Hydropower and wastewater reuse are topics that will come up again.

C. GROUND WATER REGULATION

1. Villa Rose Farm, Inc., Application for a Water Use Permit, Villa Rose Farm (Well No. 3-3104-004), TMK (1) 6-5-002:005, WUP No. 00986, New Potable Use for 0.315 mgd, Wahiawa Ground Water Management Area, Oahu

SUBMITTAL PRESENTATION by: Charley Ice

Villa Rose Farm is seeking water to help raise up to one million hens. There is water available in the Wahiawa Aquifer system for this permit. The water would be used to support egg production including sanitation and amenities for up to 100 workers. No water will be used for landscaping or irrigation. The purpose is consistent with the Water Code and the applicant request is based upon industry standards. The operation will be as water-efficient as possible. Alternative water sources such as the Poamoho well are not located nearby and municipal water services would require additional infrastructure at an added cost. There is occasional intermittent surface water from Kaukonahua Stream. However, it is not satisfactory for commercial food operations. There is one other well nearby that was recently transferred from Dole to the Agribusiness Development Corporation ("ADC"). The proposed well should not interfere with the ADC well. The proposed agricultural use is consistent with approved land use. Villa Rose Farm will limit the amount of pesticides used and recycle reclaimed wastewater for energy. No traditional and customary practices have been identified. The Division of Aquatic Resources ("DAR") recommended best management practices to prevent wind or water-borne detritus from the poultry operations escaping into the Kaukonahua Stream environment. These concerns have been incorporated into the special conditions. There is public support for more locally-based food operations. Both the Department of Hawaiian Home Lands ("DHHL") and the Office of Hawaiian Affairs ("OHA") have no objections to the application. DHHL anticipates requesting additional reservations of water from the Wahiawa Aquifer in the future. Chapter 343 is not triggered by this application.

RECOMMENDATION:

Staff recommends that the Commission:

Approve a ground water use permit No. 00986 to Villa Rose Farm, Inc. for the reasonable and beneficial use of 0.315 million gallons per day of potable water from the Villa Rose Farm (Well No. 3-3104-004), subject to the standard water use permit conditions listed in Attachment B and the following special conditions:

1. 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.
2. The permittee shall use Best Management Practices to prevent the escape of wind- or water-borne detritus from project operations into the adjacent stream

environment.

3. Should reused waste water, reclaimed stormwater, or other non-potable water become available for use on or near this property, the Applicant shall investigate and report to the Commission on the feasibility of using such alternative sources. If alternative sources are feasible, the Commission reserves the right to require the Applicant to change its use under this permit and employ the alternative sources.

(DISCUSSION)

Commissioner Pavao asked about the water elevation.

Mr. Ice said the ground elevation is approximately 1,000 feet. The high-level ground water level is around 250 ft.

Commissioner Balfour commented on the number of wells that are *not* being pumped. He pointed out the importance of reporting.

Deputy Tam said the Water Commission has taken action against permit holders who are not currently pumping and could do so again.

Commissioner Pavao suggested that the table in the submittal be revised to reflect "current balance" instead of "sub-total."

Mr. Ice agreed and said the template could be revised.

The applicant, Chips Everhart (Rose Acre Farms) said he looked forward to producing eggs for the people of Hawaii.

Commissioner Starr asked what would be done with the chicken waste and manure.

Mr. Everhart said the farm plans to build an "anaerobic digester" and use it in a closed loop process. Through the digestive process the carbon will be used up and the pathogens will be consumed. The end product could be used or sold for compost.

**MOTION: (Starr / Beamer)
To approve staff's recommendation.
UNANIMOUSLY APPROVED.**

Commissioner Starr expressed his hopes for non-potable water planning in Central Oahu and to make use of reclaimed water.

Commissioner Beamer asked if staff could investigate the wells that are not pumping.

D. STREAM PROTECTION AND MANAGEMENT**1. Application for a Stream Channel Alteration Permit (SCAP.3918.3), City and County of Honolulu, Department of Design and Construction, Kāneʻohe/Kailua Wastewater Conveyance and Treatment Facilities, Kawa Stream, Kāneʻohe, Oʻahu (TMK:1-4-5-030:001 por.)**

SUBMITTAL PRESENTATION by: Rebecca Alakai

The City and County of Honolulu is seeking to construct a 10 foot gravity tunnel under the Kawa Stream in Kāneʻohe. The project is being undertaken in order to comply with a U.S. Environmental Protection Agency ("EPA") consent decree. An Environmental Impact Statement ("EIS") was completed in 2011. Kawa Stream is a 2-mile long perennial stream that runs through the urban district. Previously the stream was dredged and straightened, but the bed and banks remain unhardened. The channel is 10-15 feet wide and up to 6 feet deep. The bed and banks are primarily mangroves and there are few native fish. The City and County plan to jet grout the area under the stream in an effort to harden the soil where it is soft. The gravity tunnel will be drilled through the concrete. DAR does not anticipate the project to have any significant impact on the aquatic resources. The project involves drilling temporary holes in the stream bed, but they will fill-in over time. The stream ecology will remain unchanged and there is no impact on the interim instream flow standards ("IIFS").

RECOMMENDATION:

Staff recommends that the Commission:

Approve the Stream Channel Alteration Permit (SCAP.3918.3) for the City and County of Honolulu, Department of Design and Construction's Kāneʻohe/Kailua Wastewater Conveyance and Treatment Facilities for the construction of a 10-foot gravity tunnel and 30-inch diversion pipeline located under the Kawa Stream in Kāneʻohe, Oahu, TMK (1) 4-5-030:001 por., subject to the standard conditions in Exhibit 7.

(DISCUSSION)

Commissioner Starr asked about drop shaft in Exhibit 3.

Earl Matsukawa (Wilson Okamoto Corporation) replied that the drop shaft is part of the Kāneʻohe Wastewater Treatment Facility. The sewage is pumped to Kailua for treatment. There is no ocean discharge at Kāneʻohe. The treated effluent is discharged at Kailua. The consent decree required the City and County to construct the gravity flow tunnel to replace the force main and connect Kāneʻohe and Kailua.

Commissioner Starr asked if the treated waste is discharged into the ocean.

Mr. Matsukawa replied "yes."

Commissioner Pavao asked about the impact of the jet grout on the stream channel.

Mr. Matsukawa said the jet grout will be 35 feet below the stream. Commissioner Pavao asked if the tunnel would be lined.

Mr. Matsukawa replied "yes."

Commissioner Starr asked how much wastewater is pumped into the ocean in Kailua. Mr. Matsukawa said the total design flow is 80 million gallons per day ("mgd"). The plant can treat 37 mgd at any given time.

Commissioner Starr lamented that 37 mgd is being wasted and pumped into nearshore waters instead of being reused.

Chair Aila mentioned that the wastewater could potentially be reused.

Commissioner Beamer asked if there were other examples of jet grouting.

Mr. Matsukawa said it is commonly used to stiffen soft soils.

Commissioner Pavao asked about the estimated cost of the project.

Mr. Matsukawa answered \$200 million for the entire project.

Deputy Tam commented that force mains tend to be the culprit behind major leaks and clean water violations. This approach helps solve that problem and is more cost-effective.

Commissioner Starr asked if smaller wastewater plants were considered in the overall design rather than moving the wastewater over long distances.

Mr. Matsukawa said that in the past there were three separate plants. However, concerns about discharge into Kaneohe Bay led to decentralization.

Commissioner Starr reiterated his thoughts about reusing the treated waste water, rather than discharging it into the ocean.

Commissioner Pavao asked why fiberglass was being used.

Mr. Matsukawa said concrete is more expensive. The fiberglass has been designed with a certain thickness and will be locked in with grout, surrounded by solid basalt, which will help increase its strength. The anticipated lifecycle of the pipe is 100 years.

**MOTION: (Pavao / Starr)
To approve staff's recommendation.
UNANIMOUSLY APPROVED.**

2. Authorize the Chairperson to Enter into a Contract for Goods and Services for Maintenance and Enhancement of the Commission on Water Resource Management's Water Resource Information Management System (WRIMS)

SUBMITTAL PRESENTATION by: Dean Uyeno

The WRIMS project began in August 2008 and was implemented in 2012. Staff would like to enhance the software to include additional databases, data fields, tables, reports, etc. Preliminary quotes would include enhancements to the groundwater database, improvements to the surface water reporting tools, and one year of software support.

RECOMMENDATION:

Staff recommends that the Commission:

Authorize the Chairperson to enter into a Contract for Goods and Services, not to exceed \$150,000, to provide for maintenance and further enhancements to the Commission's Water Resource Information Management System.

The agreement will be subject to the approval of the Chairperson and the Attorney General.

(DISCUSSION)

Commissioner Starr asked about user experience and satisfaction among staff.

Mr. Uyeno replied that overall the system has been beneficial. User-ability has been greatly improved. CWRM is seeking to hire an IT Technology Specialist to assist with in-house maintenance.

Commissioner Beamer thanked the staff for the improvements made to the system. Water use reporting is imperative to the mission and goals of the Water Commission.

Commissioner Pavao commented that an IT specialist could help reduce spending on contracts for maintenance and future development of the system. He congratulated staff on their efforts to improve online reporting.

Deputy Tam announced Mr. Uyeno as the new Branch Chief for Stream Protection and Management.

**MOTION: (Pavao / Beamer)
To approve staff's recommendation.
UNANIMOUSLY APPROVED.**

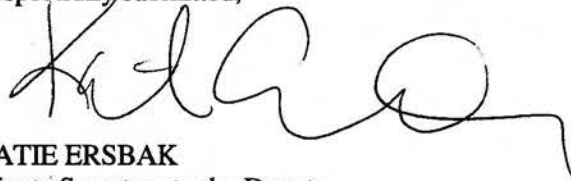
Deputy Tam requested that the Waiahole contested case briefing be postponed in the interest of time.

Commissioner Starr asked if staff could arrange an evening informational session on Hawaii water law.

Deputy Tam said the staff would consider the idea and try to post more information to the website. He commented on the misrepresentation of information in the news. It is a challenge to translate the information into something that the public can easily understand.

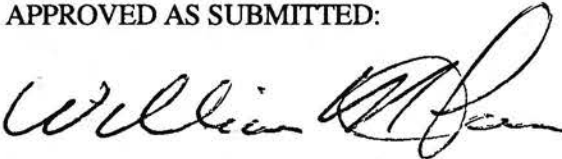
Chairperson William J. Aila, Jr. adjourned the meeting at 11:12 am.

Respectfully submitted,



KATIE ERSBAK
Private Secretary to the Deputy

APPROVED AS SUBMITTED:



WILLIAM M. TAM
Deputy Director