DAVID Y. IGE



STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

P.O. BOX 621 HONOLULU, HAWAII 96809

May 11, 2015

James Nakatani, Executive Director Agribusiness Development Corporation 235 S. Beretania Street, Room 205 Honolulu, HI 96813

Landis Ignacio, Director Kekaha Agriculture Association 8315 Kekaha Road, Suite E Kekaha, HI 96752

Dear Messrs. Nakatani and Ignacio:

Request for Information Regarding and Related to Water Use and Request for Assistance with Monitoring Efforts,

Kokee and Kekaha Ditch Irrigation Systems, Waimea, Kaua'i

As you are well aware, on July 24, 2013, Po'ai Wai Ola/West Kaua'i Watershed Alliance, through its attorney Earthjustice (Complainant), filed a combined Petition to Amend the Interim Instream Flow Standards for Waimea River its headwaters and tributaries (Petition), and a Complaint and Petition for Declaratory Order against Waste (Complaint) with the Commission on Water Resource Management (Commission). The Complaint specifically identifies the Agribusiness Development Corporation (ADC) and the Kekaha Agriculture Association (KAA).

The State Water Code, Chapter 174C, Hawaii Revised Statutes (HRS) and its Hawaii Administrative Rules (HAR), gives the Commission statewide jurisdiction to hear and investigate any dispute regarding water resources.

To aid in its investigation of the Complaint and to help support the information needs for the Petition, the Commission requests that you provide detailed information on the following items as it relates to the combined use of water from the Kokee and Kekaha Ditch Irrigation Systems.

- 1. List of all users that receive water from the Kokee Ditch System and / or the Kekaha Ditch System. For each user, provide the amount of water used, types and acreages of crops cultivated (excluding or breaking out fallow acreage), and details of any other uses, for the last five years (calendar years 2010 to 2014). Indicate how the amount of use was measured or estimated. If this information is not available or cannot be readily determined, please explain why and when that information will be available.
- 2. Estimates of water diverted from each stream that supplies the Kokee Ditch System (Waiakoali, Kawaikoi, Kauaikinana, and Kokee Streams) and the Kekaha Ditch System (Waimea River, Koaie and Kukui Streams), and estimates of water released at each of the

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Kauaikinana and Kokee Stream diversions. Indicate how and when the estimate was obtained, and how and whether diversion flows are routinely monitored.

- 3. Status, condition, and flow of other registered stream diversions on the Kokee Ditch System (Mohihi #1, Mohihi #2, Mohihi #3, Kumuwela #1, Kumuwela #2, Kumuwela #3, Kumuwela #4, Kumuwela #5, Nawaimaka, Halemanu, and Kapue Valley Dam), Kekaha Ditch System (Kukui Trail #1), and the Kikiaola Ditch System. Indicate how and when the information was obtained, and how and whether these diversion flows are routinely monitored.
- 4. Estimate of average daily water released at the Kokee Ditch sluice gate to Kauhao Gulch. Indicate how this information was obtained.
- 5. Estimate of average daily water diverted towards Puu Opae Reservoir at the Puu Moe Ditch Divide. Indicate how this information was obtained.
- 6. Estimate of average daily water released via the white PVC pipe at the end of the Kokee Ditch System (along Hwy 550). Indicate how this information was obtained.
- 7. A brief history of the construction and maintenance of the Kokee Ditch downstream of the Kitano Reservoir.
- 8. Daily amount of water flowing through and electric energy generated from both the Waimea and Waiawa Hydropower Plants, along with the daily amount of water flowing past the Waihulu Dam, Koaie Dam, and Mauka Powerhouse Dam on the Waimea River, for the last five years. Indicate how and when the data were obtained.
- 9. Summary of water quantity and quality data for the Kawaiele and Nohili Pump Stations for the last five years, daily electric energy consumption along with information on the current status of National Pollutant Discharge Elimination System (NPDES) Permit No. 000086.
- 10. Estimated storage capacities, average daily actual water storage, locations of the irrigation pumps at the various storage reservoirs in the Mana Plain that receive water from the Kekaha Ditch. Data should either be provided in latitude and longitude coordinates, GPS, or identified on a hardcopy map.
- 11. Summary of electricity use for last five years and pump capacity (in gallons per minute), and average daily flow, of each individual irrigation pump that draws water from the storage reservoirs on the Mana Plain that receives water from the Kekaha Ditch. Indicate the ownership of the pumps and the users who use the water from each pump.
- 12. Explanation of the association and role of KAA, if any, in the operations of the County of Kauai's Waimea Wastewater Treatment Plant facility.
- 13. Potential modifications or solutions that may help to address waste concerns and dry streams sections raised by the Complainants.

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- 14. Any information regarding the past, current, or future potential for use of groundwater resources and pumping in the Mana Plain for uses currently served by water from the Kokee and Kekaha Ditch Irrigation Systems.
- 15. Any other information that would be helpful to determine whether or not the water in the Kokee and Kekaha Ditch Irrigation Systems is being put to reasonable-beneficial use.

The Commission asks that you provide the above information within 60 days of the date of this letter.

The Commission also asks for your consent and cooperation in the following monitoring efforts by its principal investigator, Steve Spengler of Element Environmental, LLC.

1. Installation of a pressure transducer at the existing concrete flume structure located within the Kekaha Ditch (Coordinates: N 21.9766°, W -159.68298°). The transducer will be anchored to the wall of the flume stilling well with a secured lid (to be installed by KAA) to prevent tampering. The transducer will be programmed to measure water depth and temperature at 15 minute intervals.

A rating curve will be established for the flume by making a series of ditch flow measurements using a pygmy meter (applying standard U.S. Geological Survey methods) over a range of ditch flow rates and identifying corresponding gage heights.

We ask for the assistance of KAA in the development of the rating curve through the manual manipulation of flow rates within the Kekaha Ditch by temporarily diverting water from the ditch back into the Waimea River at up-gradient release points.

2. Installation of a pressure transducer at the existing ditch flow monitoring structure located within the Kokee Ditch (Coordinates: N 22.09313°, W -159.67614°). Some minor alterations to the existing stilling well may be necessary to allow for measurement of the current low flow volumes. The transducer will be programmed to measure water depth and temperature at 15 minute intervals.

A rating curve will be established for the flume by making a series of ditch flow measurements using a pygmy meter (applying standard U.S. Geological Survey methods) over a range of ditch flow rates and identifying corresponding gage heights.

We ask for the assistance of KAA in the development of the rating curve through the manual manipulation of flow rates within the Kokee Ditch, if possible, by temporarily diverting water from the ditch at up-gradient release points.

- 3. Conducting a series of synoptic ditch flow measurements in the lower portion of the Kekaha Ditch system downstream of the Waiawa Hydropower Plant for the purpose of measuring the major diversions to reservoirs and open canals within the Mana Plain.
- 4. Estimating the evaporative losses from the storage reservoirs receiving water from Kekaha Ditch on the Mana Plain.

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Mr. Spengler will be asked to initiate the above proposed work as soon as the Commission staff receives an affirmative response from KAA via mail or electronic mail within 30 days of the date of this letter. Mr. Spengler will coordinate with Mr. Landis Ignacio directly for access as needed and any work that must be completed by KAA.

Lastly, the Commission asks that if you are willing to participate in mediation for this matter, as provided for under HRS §174C-11 and HAR §13-167-23(d), that you also respond in the affirmative within **30 days** of this letter. Commission staff will contact Earthjustice, Department of Hawaiian Home Lands, and Kauai Island Utility Cooperative to discuss their consideration of mediation as well.

The Commission and its staff appreciate your continued cooperation in this matter and looks forward to hearing from you.

If you have any questions, please contact Dean Uyeno of the Stream Protection and Management Branch at 587-0249 or dean.d.uyeno@hawaii.gov.

Sincerely.

SUZÁNNE D. CASE

Chairperson

c: Myra Kaichi, Esq., Department of the Attorney General Doug Codiga, Esq., Attorney for Kekaha Agriculture Association David Henkin and Isaac Moriwake, Esq., Earthjustice William Aila & Kaleo Manuel, Department of Hawaiian Home Lands David Bissell, Kauai Island Utility Cooperative Yvonne Izu, Esq., Attorney for Kauai Island Utility Cooperative Jason Hines and Dawn Huff, Joule Group, Kauai Island Utility Cooperative Steve Spengler, Element Environmental, LLC