



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

October 31, 2024
Honolulu, Hawai'i

Approval of the Stipulation and Agreement Between the Parties to the
April 18, 2017 Waimea Watershed Agreement;

Approval of Stream Diversion Works Permit Application (SDWP.6001.2) and Special Conditions
Kekaha Agriculture Association
Kōke'e Ditch Diversion Modifications at Waiakōali (Div. 620),
Kawaikōi (Div. 616), and Kōke'e (Div. 622) Streams, in Accordance with the
Mediation Agreement for the Waimea Watershed Area dated April 18, 2017
Waiakōali, Kawaikōi, Kōke'e Streams, Waimea, Kaua'i, TMK: (4) 1-4-001:003 and 013; and

Transfer of Stream Channel Alteration Permit (SCAP.6002.2) and Special Conditions
From Kaua'i Island Utility Cooperative to Kekaha Agriculture Association

APPLICANT

Mike Faye, Manager
Kekaha Agriculture Association
PO Box 940
Waimea, Kaua'i, HI 96796

LANDOWNER

State of Hawai'i, Department of Land and
Natural Resources, Division of State Parks

Department of Business, Economic Development
& Tourism, Agribusiness Development
Corporation

SUMMARY OF REQUEST

- 1.) Approval of the Stipulation and Agreement Between the Parties to the April 18, 2017 Waimea Watershed Agreement;
- 2.) Approve the Stream Diversion Works Permit (SDWP.6001.2) Application that proposes the following:

EXHIBIT 1

Waiakōali, Kawaikōi, Kōke‘e Tributaries of the Waimea River

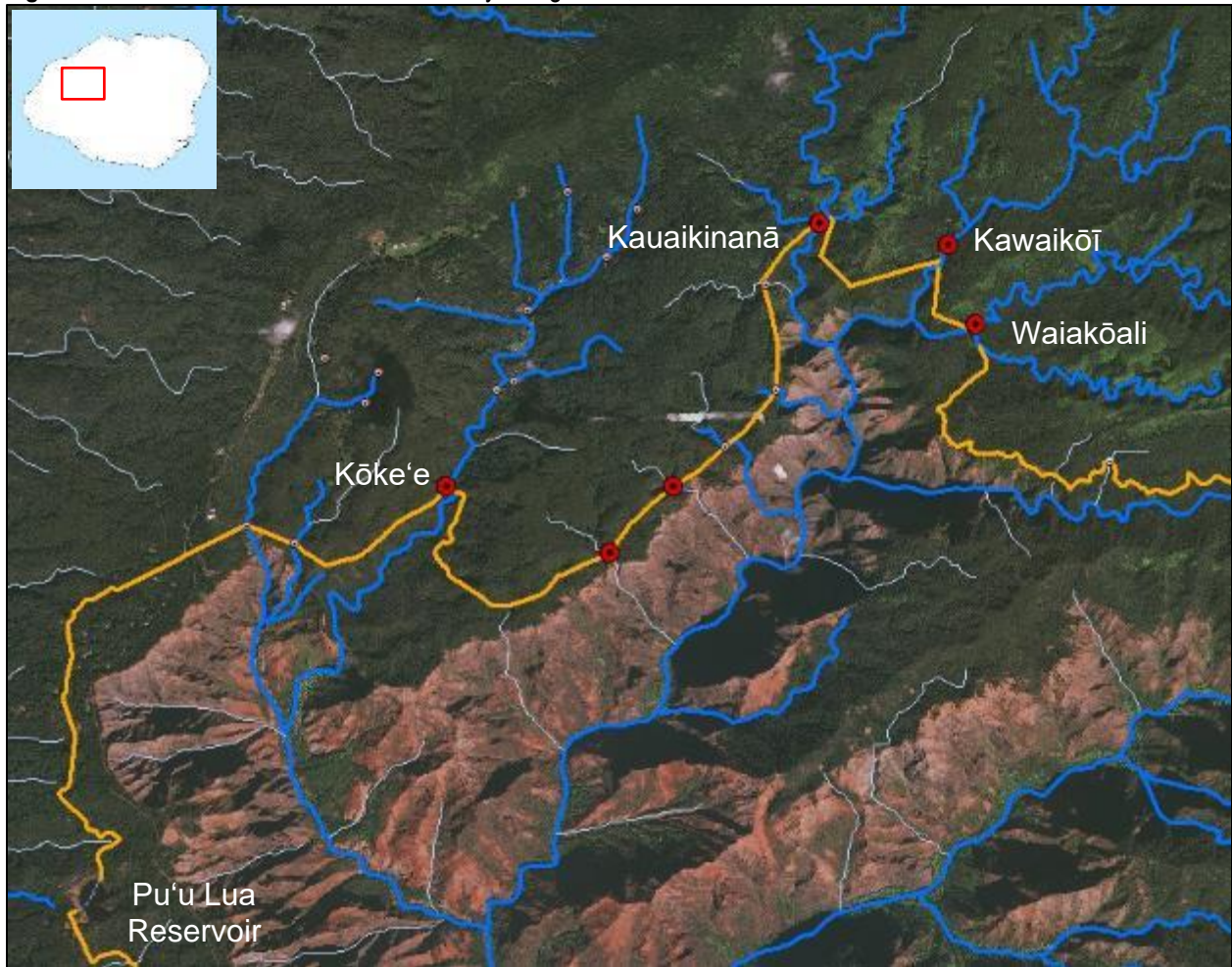
- A. Waiakōali Stream: Replace stoplog bay with remotely controlled sluice gate; Replace release point in top of diversion (invert at 3,423 feet) with stilling well with trash rack and 8-inch diameter hole with invert at 3,421 feet.
- B. Kawaikōi Stream: Redesign for cage-type trash rack (*e.g.*, Koai‘e Stream) with catwalk; Replace proposed coffer dam and culvert and slide gate with remotely controlled sluice gate on down-ditch side of existing concrete headwall and install stilling well and water level sensor in the ditch, gate, and pool; Replace existing gate and screen at tunnel entrance.
- C. Kōke‘e Stream: Install water level sensor and rate section up-ditch from pool; Replace wooden gate with remotely controlled sluice gate with sensor to balance amount of water leaving the pool with the amount entering and install water level sensor.

The proposed changes will result in less water diverted into the ditch and more water retained in the streams. They are intended to address the general requirements for Phase One Interim Instream Flow Standards (IIFS) outlined in the Mediation Agreement for the Waimea Watershed Area approved on April 18, 2017 by the Commission on Water Resource Management (Commission).

- 3.) Transfer the Stream Channel Alteration Permit (SCAP.6002.2) and Special Conditions, issued to Kaua‘i Island Utility Cooperative at the Commission’s January 30, 2024 meeting, to the Kekaha Agriculture Association.

LOCATION: Waimea Surface Water Hydrologic Unit, Kauai. **Figure 1.**

Figure 1. Location, Waimea Surface Water Hydrologic Unit, Kaua'i.



BACKGROUND

On July 24, 2013, Pō‘ai Wai Ola and West Kaua‘i Watershed Alliance, through their attorneys Earthjustice, filed 1) a Complaint for Dispute Resolution; 2) a Petition to Amend Interim Instream Flow Standard; and 3) a Complaint for Declaratory Order Against Waste in the Waimea River and its tributaries, Waimea, Hawai‘i.

On April 18, 2017, the Commission approved a Mediation Agreement for the Waimea Watershed Area (Mediation Agreement). The parties consisted of the petitioners Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance, represented by Earthjustice; the State of Hawai‘i, Agribusiness Development Corporation and Department of Hawaiian Home Lands; Kaua‘i Island Utility Cooperative (KIUC); and the Kekaha Agriculture Association. The Mediation Agreement and chronology of events can be viewed on the Commission website at: <https://dlnr.hawaii.gov/cwrm/surfacewater/ifs/2060-waimea/>

Since 2017, the Commission staff has continued to host regular meetings of the parties involved in the Mediation Agreement to work through specific details in the implementation of the approved IIFS. Phase One of the Mediation Agreement went into effect upon its approval by the Commission, whereby the parties agreed to take immediate steps to restore flows to the maximum extent possible while working on the structural modifications. KIUC submitted its Revised Kōke‘e Ditch Diversion Phase One Flow Release Modification Plan in September 2017. A more detailed plan was submitted in March 2018 as KIUC continued to work through the permitting process with the U.S. Army Corps of Engineers, Department of Health, U.S. Fish and Wildlife Service, State Historic Preservation Division, Office of Conservation and Coastal Lands, and the State Land Division.

On May 31, 2018, KIUC filed a Request for Determination regarding a stream channel alteration permit application for the Kōke‘e Ditch diversion modification project. Phase One of the mediated agreement required flow restoration and IIFS.

On September 27, 2019, upon further review, the Commission restated its response to KIUC’s request for determination. It stated that KIUC needed: 1) a stream channel alteration permit for gage installations and supporting actions on the Waiakōali, Kauaikinanā, and Kōke‘e Streams; and 2) a stream diversion works permit for the headwall and spillway modifications at the Waiakōali Stream diversion; earthen cofferdam installation at the Kawaikōi Stream diversion; and HDPE pipe and ditch bulkhead and tunnel headgate rehabilitation at the Kōke‘e Stream diversion.

On September 15, 2020, SDWP.5321.2 was approved by the Commission but it expired in 2022 with no work being done.

On January 30, 2024, the Commission approved Stream Channel Alteration Permit (SCAP.6002.2) and Special Conditions to Kaua‘i Island Utility Cooperative, for Kōke‘e Ditch Diversions Modifications and Installation of Monitoring Stations at Waiakoali, Kauaikinanā, and Kōke‘e Streams. The Commission was also presented the application for SDWP.6001.2 (a resubmission of SDWP.5321.2). Following extensive discussion, the Commission deferred

action on the application and requested that staff work with the parties and return within 60 days with acceptable revisions to the proposed actions in order to meet the terms of the 2017 Mediation Agreement. The submittal can be viewed at: <https://files.hawaii.gov/dlnr/cwrm/submittal/2024/sb20240130B2.pdf>. In testimony submitted by KAA, they note that in early December 2023 KIUC “announced that it was terminating the part of the [West Kaua‘i Energy Project] project involving Kōke‘e Ditch water.

On February 28, 2024, Commission staff held a mediation meeting following a meeting of the parties’ hydrologists on February 23, 2024. All the parties’ hydrologists were in agreement with the proposed modifications, as presented here, by the Kekaha Agriculture Association (KAA). Earthjustice also indicated that its clients are agreeable to the proposed KAA diversion modifications, but expressed a desire for regular updates by KAA, a need for more ditch and stream gaging, and concerns about habitat connectivity at the points of diversion.

Based on significant concerns regarding KIUC’s proposed design of the diversion modifications, KAA sought to take on the Phase One diversion modifications in consideration of long-term operational efficiencies, while seeking funding compensation from KIUC which offered a payment in the amount of \$500,000 to fulfill KIUC’s Phase One commitment and conclude their participation in the Mediation Agreement. Following the update briefing at the May 2024 Commission meeting and under guidance from the Commissioners, KIUC submitted a revised Phase One cost estimate of \$643,904 and proposed payment of \$650,000. KAA subsequently submitted its Phase One cost estimate of \$1,059,250. Following its review of KAA’s cost estimate, KIUC submitted its final offer of \$775,000 to meet its Phase One obligations.

After months of meetings held with the parties since January 2024, the parties arrived at a mutually agreeable resolution and have prepared the following agreements:

- 1.) Stipulation and Agreement Between The Parties To The April 18, 2017 Waimea Watershed Agreement
- 2.) Agreement To Transfer Of Duties And Responsibilities Related To The April 18, 2017 Waimea Watershed Agreement From The Kaua‘i Island Utility Cooperative To The State Of Hawai‘i Agribusiness Development Corporation
- 3.) Agreement Between The State Of Hawai‘i Agribusiness Development Corporation And The Kekaha Agriculture Association

Should the Commission approve (1) the Stipulation and Agreement Between The Parties To The April 18, 2017 Waimea Watershed Agreement (Stipulation), the Commission must also approve (2) SDWP.6001.2 and Special Conditions to permit KAA to proceed with diversion modifications; and (3) Transfer SCAP.6002.2 from KIUC to KAA implement diversion modifications and installation of monitoring stations as permitted.

STREAM DESCRIPTION

Both the National Hydrography Dataset and the Division of Aquatic Resources classified the Waiakōali, Kawaikōi, and Kōke‘e Streams as perennial. The total drainage area is 85 square miles with a maximum basin elevation of 5,240 feet. The mean annual precipitation is 97 inches and the longest flow path is over 26 miles. The streams have a constant connection to the ocean.

PROJECT DESCRIPTION

Waiakōali Stream

The Waiakōali Stream diversion is the uppermost active diversion structure (See **Figure 2**). It consists of an existing concrete diversion dam about 35-feet wide, 10-feet high, at an elevation of 3,425 feet. The structure impounds a small pool and directs water through a trash rack and into an ungated open ditch 6-feet wide. The diversion currently does not have gates or a low-level outlet and is unregulated. The diversion routes all streamflow into the ditch during low and moderate streamflow situations. The Phase One IIFS value is 1.4 mgd. After proposed work is completed, the estimated diversion flow capacity will range from 0 to 30 mgd.

Figure 2. Proposed modifications to the Waiakōali Stream Diversion.



Comparison of KIUC and KAA Proposed Diversion Modifications at Waiakōali Stream.

KIUC Proposal (from January 30, 2024) application	KAA Proposal
<p><u>Ditch Intake Headwall.</u> A concrete headwall will be constructed in the ditch just downstream of the existing trash rack. The headwall will serve to control both ditch flow and impoundment level. The headwall will be keyed into the ditch walls and will be approximately 7 feet in width, have a height of at least 18 inches above the diversion crest and be designed to take full head pressure. The center of the headwall will contain a 36-inch wide stoplog bay that will have boards set in place to provide a fixed opening. This opening will admit a small amount of water to the ditch to keep it hydrated and make a contribution to the water user’s needs. The opening size and elevation is calculated to work in unison with the IIFS release point design to ensure that IIFS flows are passively maintained.</p>	<p>Replace stoplog bay with remotely controlled sluice gate;</p>
<p><u>Spillway Release Gate.</u> An 18-inch wide by 12-inch deep notch and weir assembly will be cut into the concrete diversion dam. The notch and weir will provide a deeper narrow section that shows stage differences at low-flow volumes. This action is related to SCAP.6002.2 which considers the installation of a flow monitoring device on the concrete diversion dam and adjacent to the spillway release gate. The upstream side of notch will have a steel frame affixed to the concrete to hold boards which can be used to adjust the opening size and invert to adjust the flow release during the calibration process. The release gate is the mechanism that controls how much water is released past the Waiakoali diversion dam to meet the downstream IIFS.</p>	<p>Replace release point in top of diversion (invert at 3,423 feet) with stilling well with trash rack and 8-inch diameter hole with invert at 3,421 feet.</p>

Kawaikōi Stream

The Kawaikōi Stream diversion is the second diversion structure and contributes the majority of the water present in the ditch system (**Figure 3**). The diversion consists of concrete and rubble masonry in several small sections of gaps and holes between large boulders in the stream channel. The open ditch continues downstream paralleling the stream channel for approximately 300 feet where it terminates at a masonry spillway and gated tunnel entrance. The diversion has neither gates nor a low-level outlet and is completely unregulated. However, the tunnel entrance gate can be closed to force water over the ditch sidewall and back into the stream channel. Approximately 75 feet into the tunnel is a large adit that is closed off by stop logs. These stop logs can be removed to gain maintenance access to the tunnel or to sluice material out.

The Phase One IIFS value is 4.8 mgd. After the proposed work is completed, the estimated diversion flow capacity will range from 0 to 32 mgd.

Figure 3. Proposed modifications to the Kawaikōi Stream Diversion.



Comparison of KIUC and KAA Proposed Diversion Modifications at Kawaikōi Stream.

KIUC Proposal (from January 30, 2024) application	KAA Proposal
<p><u>Trash Rack.</u> A new steel trash rack will be installed on the upstream face of the existing ditch intake headwall to prevent stream debris from entering the ditch or blocking the control gate.</p>	<p>Redesign for cage-type trash rack (e.g., Koai‘e Stream) with catwalk;</p>
<p><u>Earthen Cofferdam with Culvert and Slide Gate.</u> A compacted earthen cofferdam will be constructed in the ditch immediately downstream of the existing concrete headwall. The upstream and downstream faces of the cofferdam will be built of boulders and rubble to add stability and lessen the footprint of the cofferdam. The top of the cofferdam will be equal in height to the existing headwall to prevent flood events from overtopping the cofferdam and entering the ditch.</p>	<p>Replace coffer dam and culvert, and slide gate with remotely controlled sluice gate on down-ditch side of existing concrete headwall and install water levels sensors in the ditch, gate, and pool;</p>
<p>A 30-inch diameter culvert will be installed through the cofferdam to allow water to flow into the ditch. A slide gate will be installed on the upstream face of the culvert to allow ditch flows to be adjusted. The gate frame will be braced to the concrete headwall to prevent shifting.</p>	<p>Replace existing gate and screen at tunnel entrance.</p>

Kōke‘e Stream

The Kōke‘e Stream diversion is the fourth main diversion structure. (**Figure 4**). The composite concrete and masonry gravity structure has an overall length of 80 feet, a height of 6 feet with a 24-inch wide stop log bay and two sections of overflow spillway totaling approximately 25 feet. The structure serves as a control point and release point before the accumulated ditch flow leaves the watershed and enters the tunnel towards the Pu‘u Lua reservoir. The tunnel entrance is served by a trash rack and vertical slide gate with a manual hoist.

The Kōke‘e diversion captures streamflow and recaptures ditch discharge and routes the combined flows into the main ditch tunnel adjacent to the west abutment. Like Kauaikinanā, the structure is regulated by both a stop log section in the center of the spillway and the tunnel head gate. From an operational standpoint, this diversion has been used as a flow regulator for the entire ditch by controlling ditch flows through head gate adjustments and by releasing excess flows into the downstream channel through the stop log bay.

Figure 4. Proposed modifications to the Kōke‘e Stream Diversion.



The Phase One IIFS value is the natural flow of the stream. After the proposed work is completed, the estimated diversion flow capacity will be a range of 0 to 10 mgd.

Comparison of KIUC and KAA Proposed Diversion Modifications at Kōke‘e Stream.

KIUC Proposal (from January 30, 2024) application	KAA Proposal
<p><u>Ditch Headwall and Slide Gate.</u> A 36-inch tall timber bulkhead will be installed at the end of the concrete ditch section. This bulkhead will be approximately 24 inches lower than the ditch sidewalls to protect upstream ditch integrity. The bulkhead will be mounted to steel brackets bolted to the ditch sidewalls.</p>	<p>Install water level sensor and rate section up-ditch from pool.</p>
<p><u>HDPE Pipe Flume.</u> An 85-foot long, 24-inch diameter HDPE pipe flume will be installed from the ditch bulkhead, across the stream, upstream of the diversion, and into the bulkhead under the tunnel headgate leaf. The pipe will be partially submerged during all flow conditions and will have supports every 10 feet to secure it in place. The HDPE pipe flume will be capable of conveying up to 10 mgd of combined diverted ditch flow of the three upstream diversions. The inlet to the HDPE pipe will be fitted with a gate to allow dewatering of the downstream tunnel or passing flushing flows for maintenance.</p>	<p>Replace wooden gate with remotely controlled sluice gate to balance amount of water leaving the pool with the amount entering and install water level sensor.</p>
<p><u>Tunnel Head Gate Rehabilitation.</u> The existing wooden gate, gate frame, hoist and operator’s platform will be repaired as needed to restore full reliability and control of its operation. A new 36-inch bulkhead will be installed in the gate slots underneath the gate leaf. The new bulkhead will have a fitting that connects the new HDPE flume and seals out water from Kōke‘e stream.</p>	

AGENCY REVIEW COMMENTS

County of Kauai, Planning Department: Not subject to our regulatory authority and permit.

County of Kauai, Department of Public Works: No objections.

Department of Hawaiian Home Lands (DHHL): No comments received.

Department of Land and Natural Resources (DLNR), Aha Moku: No comments received.

DLNR, Aquatic Resources: Hawaiian streams and estuaries provide habitat for native aquatic biota composed of 5 fish species ‘o‘opu akupa (*Eleotris sandwicensis*), ‘o‘opu naniha (*Stenogobius hawaiiensis*), ‘o‘opu nakea (*Awaous hawaiiensis*), ‘o‘opu nopili (*Sicyopterus stimpsoni*), ‘o‘opu ‘alamo‘o (*Lentipes concolor*); 2 crustacean species ‘opae ‘oeha‘a (*Macrobrachium grandimanus*), ‘opaekala‘ole (*Atyoida bisulcata*); and 2 mollusk species hapawai (*Neritina vespertina*), and hihiwai (*Neritina granosa*) which may occur in the stream diversion locations. However, the proposal indicates that surveys conducted in 2018 for the original permit application found no native aquatic species downstream of each of the diversions. As most of the proposed project will be occurring in the ditch system, is not expected to have adverse impacts on the aquatic environment, but may have short-term impacts during the installation of the earthen coffer dam, headwall modification, and construction of bulkhead with gate and pipe flume. Habitat disturbance and water turbidity are the most probable short-term impacts. Best Management Practices (BMPs) or mitigative measures should be implemented during these activities to minimize the potential for erosion, siltation, pollution, turbidity, and degradation of the aquatic environment.

- 1) Stream bank areas denuded of vegetation should be planted or covered as quickly as possible to prevent erosion and the vegetation cleared along stream banks should be removed and prevented from falling into the stream/estuary environment;
- 2) Scheduling stream maintenance activities during periods of minimal rainfall;
- 3) Use of silt curtains, fiber rolls, silt fencing, etc. to prevent sediments from increasing water turbidity and sediment run-off;
- 4) Prevent construction materials, petroleum products, debris and landscaping products from falling, blowing or leaching into the aquatic environment; and
- 5) Reduce as much as possible the disturbance and impacts to natural stream channel bottom substrate types (cobble, boulders, etc.) as much as possible during the removal of vegetation and sediment from the stream channel. These substrate types are essential components of the habitat for the native stream biota.

CWRM Staff Response: Added as a special condition by reference. See **Exhibit 5**.

DLNR, Engineering: The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards. The owner of the project property

and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zones are designated on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA's Map Service Center (msc.fema.gov). Our Flood Hazard Assessment Tool (FHAT) (fhat.hawaii.gov) could also be used to research flood hazard information. If there are questions regarding the local flood ordinances, please contact the County of Kauai, Department of Public Works.

CWRM staff response: Noted. In addition, the project area is in Zone X, or areas determined to be outside the 0.2% annual chance floodplain. See **Exhibit 6**.

DLNR, Forestry and Wildlife (DOFAW): The State listed 'ōpe'ape'a or Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided for any construction because bats can become ensnared and killed by such fencing material during flight.

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea. If nighttime construction is required during the seabird fledgling season (September 15 to December 15), we recommend that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights should then be turned off. If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting <https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response>.

Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

The State listed nēnē or Hawaiian Goose (*Branta sandvicensis*) could potentially occur in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the Kaua'i Branch DOFAW Office at (808) 274-3433 and establish a buffer zone around the nest.

The endemic pueo or Hawaiian Short-Eared Owl (*Asio flammeus sandwichensis*) could potentially nest in the project area. Before any potential vegetative alteration, especially ground-based disturbance, we recommend that line transect surveys are conducted during crepuscular

hours through the project area. If a pueo nest is discovered, a minimum buffer distance of 100 meters from the nest should be established until chicks are capable of flight.

The proposed project is in proximity to designated Ecosystem Critical Habitat for threatened and endangered plant species. DOFAW recommends that a botanical survey be conducted by a qualified botanist in all proposed affected areas prior to commencing work to determine if any rare or endangered plants are present in the project area. We recommend that the survey consists of a complete species list and is conducted during the wettest time of year when plants are more likely to be visible, especially in drier areas. If any listed species are found, please notify DOFAW at (808) 587-0166.

In addition, DOFAW recommends heavy equipment work to be done greater than 100 m away from listed plants. For information on avoidance and minimization measures for plants, please refer to the following link: <https://www.fws.gov/media/plant-avoidance-and-minimization-measures-may-2023>.

DOFAW recommends using native plant species for landscaping that are appropriate for the area; i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid ‘Ōhi‘a Death, Coffee Leaf Rust), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, Coffee Berry Borer, etc.), or invasive plant parts (e.g., Barbados Gooseberry, False Kava, Giant Reed, etc.) that could harm our native species and ecosystems. We recommend consulting the Kaua‘i Invasive Species Committee (KISC) at (808) 821-1490 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species. To prevent the spread of Rapid ‘Ōhi‘a Death (ROD), DOFAW requests that the information and guidance at the following website be reviewed and followed if ‘ōhi‘a trees are present at the project site that will be removed, trimmed, or potentially injured: <https://cms.ctahr.hawaii.edu/rod>.

We recommend that Best Management Practices are employed during and after construction to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems.

We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions, please contact Myrna N. Girald Pérez,

Protected Species Habitat Conservation Planning Coordinator at (808) 265-3276 or myrna.girald-perez@hawaii.gov.

CWRM Staff Response: Added as a special condition by reference. See **Exhibit 7**.

DLNR, Historic Preservation (SHPD): On March 3, 2022, SHPD determined that no historic properties are affected and that project initiation may proceed.

CWRM Staff Response: Concur. See **Exhibit 8**.

DLNR, Land Division: No comments received.

DLNR, Office of Conservation and Coastal Lands (OCCL): On February 12, 2019, the DLNR Office of Conservation and Coastal Lands considered the direct, cumulative, and potential impacts and declared the actions stated above will have minimal or no significant impact on the environment and exempted it from the preparation of an EA in accordance with HAR, Section 11-200.1 and per its Comprehensive Exemption List for the DLNR reviewed and concurred upon by the Environmental Council on June 5, 2015.

CWRM Staff Response: Noted. See **Exhibit 9**.

DLNR, State Parks: No comments received.

Dept. of Health (DOH), Clean Water Branch: The DOH standard comments can be reviewed on the DOH website at: <https://health.hawaii.gov/cwb/files/2018/05/Memo-CWB-Standard-Comments.pdf>.

CWRM staff response: The lead agency for the protection of water quality is the Department of Health, Clean Water Branch, which administers the Federal Clean Water Act (33 U.S.C. §1251 et seq.) and the State Water Pollution Act (HRS Ch. 342D; HAR Ch. 11-54 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control). HAR §11-54-1 through §11-54-8 defines Best Management Practices and water quality criteria applicable to inland and nearshore waters and are based on the Federal Clean Water Act. HAR Ch. 11-55 Appendix C defines discharges of storm water associated with construction activity. HRS 174C-66 states that the DOH oversees the State’s water quality control program.

Office of Hawaiian Affairs: No comments received.

US Army Corps of Engineers: No comments received.

US Fish and Wildlife Service (FWS): Our letter has been prepared under the authority of and in accordance with provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), as amended (ESA). We have reviewed the information you provided and pertinent information in our files, as it pertains to federally listed species in accordance with section 7 of the ESA. Our data indicate the following species may occur or transit through the vicinity of the proposed

project area: endangered ‘ua‘u (Hawaiian petrel, *Pterodroma sandwichensis*), endangered Hawai‘i distinct population segment (DPS) of the ‘akē‘akē (band-rumped storm-petrel, *Hydrobates castro*), threatened ‘a‘o (Newell’s shearwater, *Puffinus newelli*) (hereafter collectively referred to as Hawaiian seabirds); endangered ‘ōpe‘ape‘a (Hawaiian hoary bat, *Lasiurus cinereus semotus*); endangered koloa maoli (Hawaiian duck, *Anas wyvilliana*), endangered ‘alae ke‘oke‘o (Hawaiian coot, *Fulica alai*), endangered ae‘o (Hawaiian stilt, *Himantopus mexicanus knudseni*), endangered ‘alae ‘ula (Hawaiian gallinule, *Gallinula galeata sandvicensis*) (hereafter collectively referred to as Hawaiian waterbirds); and threatened nēnē (Hawaiian goose, *Branta sandvicensis*). We provide the following to assist you in preparation of your project.

Hawaiian Seabirds. Hawaiian seabirds may traverse the project area at night during the breeding, nesting, and fledging seasons, March 1 through December 15. Outdoor lighting could result in seabird disorientation, fallout, and injury or mortality. Seabirds are attracted to lights and after circling the lights they may become exhausted and collide with nearby wires, buildings, or other structures or they may land on the ground. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. Young birds (fledglings) traversing the project area between September 15 and December 15, in their first flights from their mountain nests to the sea, are particularly vulnerable to light attraction. To avoid and minimize potential project impacts to Hawaiian seabirds we recommend you incorporate the following measures into your project design:

- Fully shielded all outdoor lights so the bulb can only be seen from below.
- Install automatic motion sensor switches and controls on all outdoor lights or turned off lights when human activity is not occurring in the lighted area.
- Avoid nighttime construction during the seabird fledging period, September 15 through December 15.

‘Ōpe‘ape‘a. ‘Ōpe‘ape‘a roosts in woody vegetation across all islands and will leave their young unattended in trees and shrubs when they forage. If trees or shrubs 15 feet or taller are cleared during the pupping season, June 1 through September 15, there is a risk that young bats could inadvertently be harmed or killed, since they are too young to fly or move away from disturbance. ‘Ōpe‘ape‘a forage for insects from as low as 3 feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing. To avoid and minimize potential project impacts to the endangered ‘ōpe‘ape‘a, we recommend you incorporate the following applicable measures into your project design:

- Do not disturb, remove, or trim woody plants greater than 15 feet tall during the birthing and pup rearing season for ‘ōpe‘ape‘a, June 1 through September 15.
- Do not use barbed wire for fencing.

Hawaiian Waterbirds. Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, kalo or taro (*Colocasia esculenta*) lo‘i or patches, irrigation ditches, sewage treatment ponds, and in the case of the koloa maoli, montane streams and marshlands. Ae‘o may also be found wherever ephemeral or persistent standing water may occur. Threats to these species include habitat loss and habitat degradation. To avoid and minimize potential project impacts to Hawaiian waterbirds we recommend you incorporate the following measures into your project design:

- In areas where waterbirds are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.
- If water resources are located within or adjacent to the project area, incorporate applicable best management practices (BMPs) regarding work in aquatic environments into the project design (see enclosure).
- Have a biological monitor that is familiar with the species' biology conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the project site prior to project initiation. Repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest). If a nest or active brood is found:
 - Contact the Service within 48 hours for further guidance.
 - Establish and maintain a 100-foot buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.
- Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.

In addition, your project may result in the creation of standing water or open water that could attract Hawaiian waterbirds to the project site. Hawaiian waterbirds attracted to sub-optimal habitat may suffer adverse impacts, such as predation and reduced reproductive success, and thus the project may create an attractive nuisance. The ae'o is also known to nest in sub-optimal locations (e.g., any ponding water), if water is present. Therefore, we recommend you work with our office during project planning so that we may assist you in developing measures to avoid impacts to listed species (e.g., fencing, vegetation control, predator management).

Nēnē. Nēnē are found on the islands of Hawai'i, Maui, Moloka'i, and Kaua'i. They are observed in a variety of habitats, but prefer open areas, such as pastures, golf courses, wetlands, natural grasslands and shrublands, and lava flows. Threats to the species include introduced mammalian and avian predators, wind facilities, and vehicle strikes. To avoid and minimize potential project impacts to nēnē we recommend you incorporate the following measures into your project design:

- Do not approach, feed, or disturb nēnē.
- If nēnē are observed loafing or foraging within the project area during the breeding season, September through April, have a biologist familiar with nēnē nesting behavior survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).
- Cease all work immediately and contact the Service for further guidance if a nest is discovered within a radius of 150 feet of the proposed project, or a previously undiscovered nest is found within the 150-foot radius after work begins.
- In areas where nēnē are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.

A 4(d) rule was established at the time nēnē was downlisted to threatened status. Under the 4(d) rule, the following actions are not prohibited under the Act, provided the additional measures described in the downlisting rule are adhered to:

- Take by landowners, or their agents, conducting intentional harassment in the form of hazing or other deterrent measures not likely to cause direct injury or mortality, or nēnē surveys.
- Take that is incidental to conducting lawful control of introduced predators or habitat management activities for nēnē.
- Take by authorized law enforcement officers for the purpose of aiding or euthanizing sick, injured, or orphaned nēnē; disposing of dead specimens; and salvaging a dead specimen that may be used for scientific study.

CWRM Staff Response: Added as a special condition by reference. See **Exhibit 10**.

TRADITIONAL AND CUSTOMARY PRACTICES

- 1) The identity and scope of cultural, historical, or natural resources in which traditional and customary native Hawaiian rights are exercised in the area.

The Applicant stated “The proposed work is on the existing Kokee Ditch system, which is actively diverting water for irrigation, recreational fishing and other state facility uses. The proposed work is for the purpose of stream restoration consistent with the IIFS for each stream. During our community and stakeholder outreach for the proposed work, we did not identify any native Hawaiians who access this area for traditional and customary practices. Several people mentioned that due to difficulty of accessing the area, it isn't an ideal location for their purposes. Access is by a rough road, accessible by four wheel drive vehicles only, that terminates in a foot path. The footpath is approximately 1/4 mile in distance, steep and lightly maintained. However, it is possible there are native Hawaiians who do access the area for traditional plant gathering, fishing and ceremonial practices. Based on stream surveys conducted in 2018, no native aquatic species were found in Waiakoali, Kawaikoi and Kokee Streams downstream of each diversion. Flora and fauna surveys in the area indicated the predominant vegetation coverage is alien forest with some scattered remnant native koa and ohia.”

CWRM Staff Response: No comments were received by DLNR Aha Moku. No comments were received from the public. No impacts to traditional and customary native Hawaiian rights which may be exercised in the area are anticipated.

- 2) The extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action.

The Applicant stated, “The sole purpose of the proposed work will result in stream restoration per the IIFS adopted by CWRM as part of the Mediation Agreement for the Waimea Watershed, which was approved by CWRM in April 2017. If any traditional and customary native Hawaiian practices occur in the area, the stream restoration will likely provide for improved aquatic and riparian habitats. Because all

modifications/installations will be within the footprint of the existing ditch system, this proposed work is not expected to negatively impact any traditional and customary Native Hawaiian rights on land around the ditch system or in the streams.”

CWRM Staff Response: There are no anticipated impacts to traditional and customary practices or upstream/downstream movement of native macrofauna.

- 3) What feasible action, if any, could be taken by the Commission in regards to this application to reasonably protect native Hawaiian rights.

The Applicant stated, “As previously mentioned, the purpose of the proposed work is restoring stream flows consistent with the IIFS adopted by CWRM as part of the Mediation Agreement for the Waimea Watershed, which was approved by CWRM in April 2017. DHHL was a party to the mediation and has approved the proposed work.”

CWRM Staff Response: The project BMPs are feasible actions that will be employed during the project period to ensure water and stream resources mauka and makai of the project area are not impacted to the detriment of traditional and customary practices of Native Hawaiians.

HRS CHAPTER 343 – ENVIRONMENTAL ASSESSMENT (EA) COMPLIANCE

Under Hawaii Revised Statutes (HRS) §343-5(a), an EA shall be required for actions, as summarized in part below, that propose:

- (1) use of state land or county lands, or the use of state or county funds;
- (2) use within any land classified as a conservation district;
- (3) use within a shoreline area;
- (4) use within any historic site as designated in the National Register or Hawaii Register;
- (5) use within the Waikiki area of O‘ahu;
- (6) any amendments to existing county general plans where the amendment would result in designations other than agriculture, conservation, or preservation;
- (7) any reclassification of any land classified as a conservation district;
- (8) construction of new or the expansion or modification of existing helicopter facilities within the State, that may affect: (A) any land classified as a conservation district; (B) a shoreline area; or (C) any historic site as designated in the National Register or Hawaii Register;
- (9) any (A) wastewater treatment unit, except an individual wastewater system or a wastewater treatment unit serving fewer than fifty single-family dwellings or the equivalent; (B) Waste-to-energy facility; (C) Landfill; (D) Oil refinery; or (E) Power-generating facility.

The project triggers an EA because it proposes (1) the use of state or county lands or the use of state or county funds and (2) use within the conservation district. On February 12, 2019, the DLNR Office of Conservation and Coastal Lands considered the direct, cumulative, and potential impacts and declared the actions stated above will have minimal or no significant

impact on the environment and exempted it from the preparation of an EA in accordance with HAR, Section 11-200.1 and per its Comprehensive Exemption List for the DLNR reviewed and concurred upon by the Environmental Council on June 5, 2015.

STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 12**.

HAR §13-168-32(d) sets out the general criteria for ruling on SDWP applications.

- (1) The quantity and quality of the stream water or the stream ecology shall not be adversely affected.

CWRM Staff Response: The action is intended to increase streamflow downstream of the diversions per the Mediation Agreement. Upon approval of the construction plans as proposed, the quantity and quality of stream water should not be adversely affected.

- (2) Where instream flow standards or interim instream flow standards have been established pursuant to HAR Chapter 13-169, no permit should be granted for any diversion works which diminishes the quantity or quality of stream water below the minimum established to support identified instream uses, as expressed in the standards.

CWRM Staff Response: HRS §174C-71 and HAR §13-169-36 require the Commission to protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses. The IIFS for the Waimea Watershed Area was approved on April 18, 2017 by the Commission. Upon approval of the proposed work plan, it is anticipated that identified instream uses will be better supported.

- (3) The proposed diversion works shall not interfere substantially and materially with existing instream or non-instream uses or with diversion works previously permitted.

CWRM Staff Response: The proposed work plan should not interfere with instream or non-instream uses. Commission records indicate that there are numerous registered diversions located on the ditch and downstream of the project area. No adverse impacts are anticipated.

RECOMMENDATION

That the Commission:

- 1.) Approve the Stipulation And Agreement Between The Parties To The April 18, 2017 Waimea Watershed Agreement.

- 2.) Approve the Stream Diversion Works Permit (SDWP.6001.2) Application, with issuance to Kekaha Agriculture Association, that proposes the following subject to the standard conditions in **Exhibit 11** and special conditions below.
 1. Waiakōali Stream: Replace stoplog bay with remotely controlled sluice gate; Replace release point in top of diversion (invert at 3,423 feet) with stilling well with trash rack and 8-inch diameter hole with invert at 3,421 ft and install water level recorder in pool; Install water level recorder and rate section.
 2. Kawaikōi Stream: Redesign for cage-type trash rack (*e.g.*, Koai‘e Stream) with catwalk; Install slide gate with remotely controlled sluice gate on down-ditch side of existing concrete headwall and install stilling well and water level sensor in pool; Refurbish existing screw gate and trash guard, install water level recorder and rate section; refurbish existing screw gate down-ditch from tunnel exit, install water level recorder and rate section down-ditch from confluence with Waiakoali branch.
 3. Kōke‘e Stream: Install water level sensor and rate section up-ditch from pool; Replace wooden gate with remotely controlled sluice gate to balance amount of water leaving the pool with the amount entering and install water level sensor; spillway slot - insert 24 inches of stoplogs.
 4. In conformance with the Division of Aquatic Resources’ recommendations, incorporated by reference as **Exhibit 5**, the permittee shall employ best management practices when working in the water.
 5. In conformance with the Division of Forestry and Wildlife recommendations, incorporated by reference as **Exhibit 7**, the permittee shall employ best management practices when working in the area.
 6. In conformance with the US Fish and Wildlife Service recommendations, incorporated by reference as **Exhibit 10**, the permittee shall employ best management practices when working in the area.
- 3.) Transfer the Stream Channel Alteration Permit (SCAP.6002.2) and Special Conditions, approved at the Commission’s January 30, 2024 meeting, from Kaua‘i Island Utility Cooperative to the Kekaha Agriculture Association.

Ola i ka wai,



CIARA W. K. KAHAHANE
Deputy Director

Exhibits:

1. Kekaha Agriculture Association, Proposed Modifications to Kokee Ditch Diversions, Waimea Watershed Agreement Phase 1, October 4, 2024.
2. Stipulation And Agreement Between The Parties To The April 18, 2017 Waimea Watershed Agreement.
3. Agreement To Transfer Of Duties And Responsibilities Related To The April 18, 2017 Waimea Watershed Agreement From The Kaua‘i Island Utility Cooperative To The State Of Hawai‘i Agribusiness Development Corporation
4. Agreement Between The State Of Hawai‘i Agribusiness Development Corporation And The Kekaha Agriculture Association
5. DLNR, Division of Aquatic Resources letter, dated November 22, 2023.
6. DLNR, Engineering Division letter, dated November 21, 2023.
7. DLNR, Division of Forestry and Wildlife letter, dated November 28, 2023.
8. DLNR, Historic Preservation letter, dated March 3, 2022.
9. DLNR, Office of Conservation and Coastal Lands letter, dated February 12, 2019.
10. US Fish and Wildlife Service letter, dated November 30, 2023.
11. Standard Stream Diversion Works Permit Conditions.
12. Legal Authorities.

APPROVED FOR SUBMITTAL:



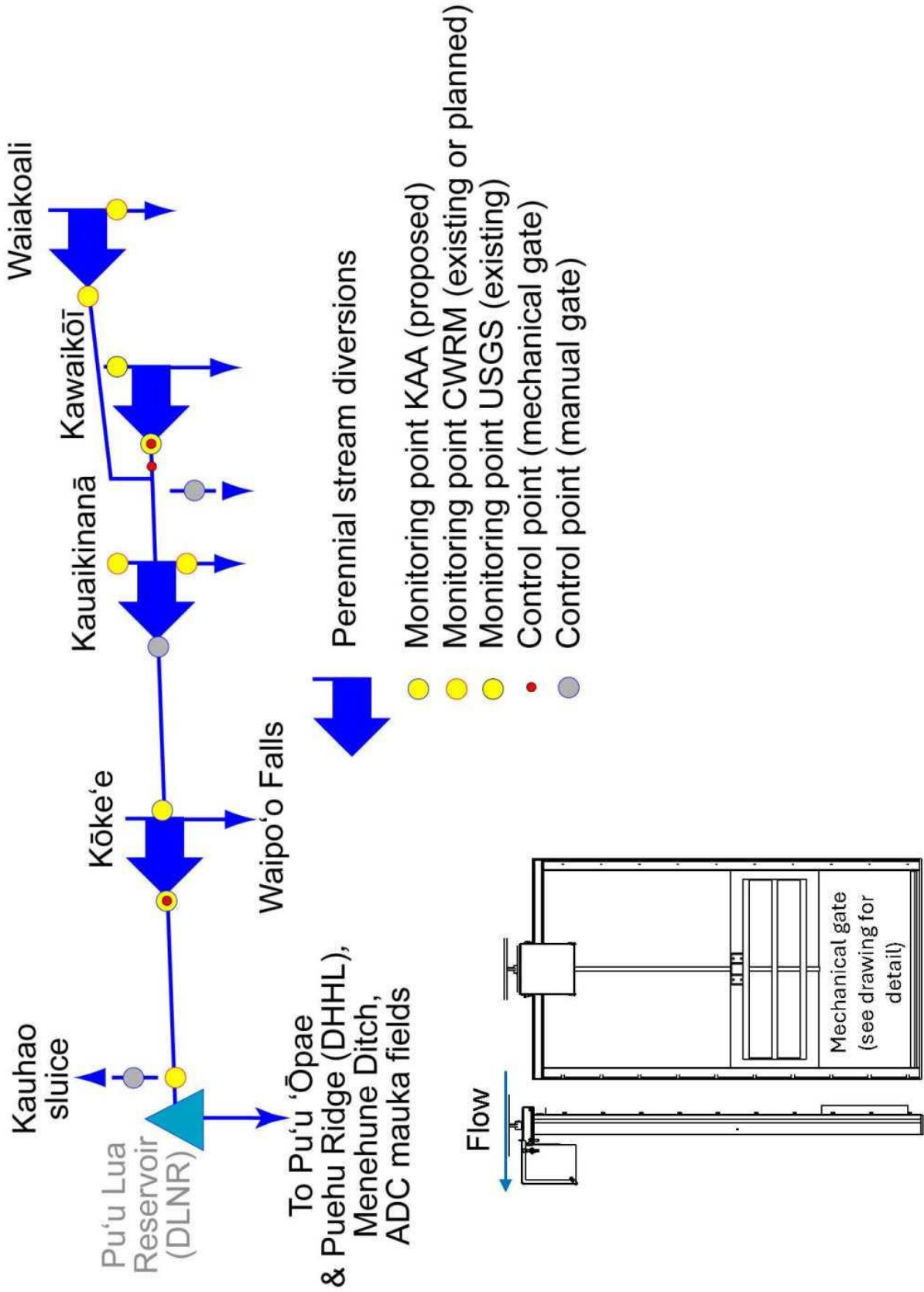
DAWN N. S. CHANG
Chairperson

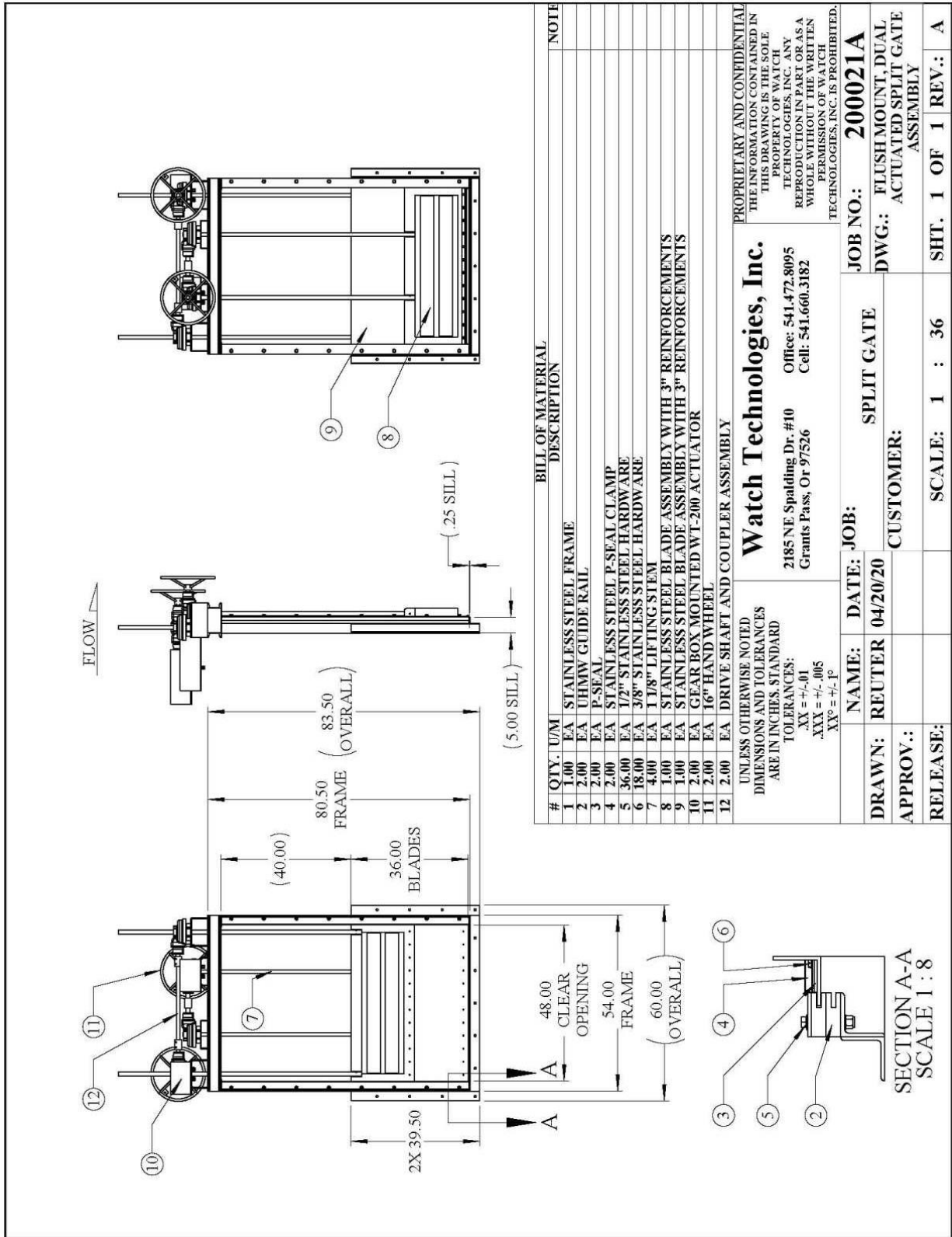
Kekaha Agriculture Association

Proposed Modifications to Kokee Ditch Diversions

Waimea Watershed Agreement
Phase 1

October 4, 2024





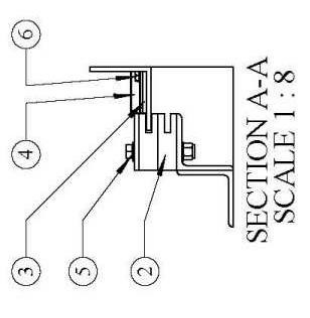
#	QTY.	U/M	DESCRIPTION	NOTE
1	1.00	EA	STAINLESS STEEL FRAME	
2	2.00	EA	UHMW GUIDE RAIL	
3	2.00	EA	P-SEAL	
4	2.00	EA	STAINLESS STEEL P-SEAL CLAMP	
5	36.00	EA	1/2" STAINLESS STEEL HARDWARE	
6	18.00	EA	3/8" STAINLESS STEEL HARDWARE	
7	4.00	EA	1 1/8" LIFTING STEM	
8	1.00	EA	STAINLESS STEEL BLADE ASSEMBLY WITH 3" REINFORCEMENTS	
9	1.00	EA	STAINLESS STEEL BLADE ASSEMBLY WITH 3" REINFORCEMENTS	
10	2.00	EA	GEAR BOX MOUNTED W/T-200 ACTUATOR	
11	2.00	EA	16" HAND WHEEL	
12	2.00	EA	DRIVE SHAFT AND COUPLER ASSEMBLY	

UNLESS OTHERWISE NOTED DIMENSIONS AND TOLERANCES ARE IN INCHES. STANDARD TOLERANCES:
 XX = +/- .01
 XXX = +/- .005
 XX^o = +/- 1^o

Watch Technologies, Inc.
 2185 NE Spalding Dr. #10 Office: 541.472.8095
 Grants Pass, Or 97526 Cell: 541.660.3182

PROPRIETARY AND CONFIDENTIAL
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DRAWN:	REUTER	DATE:	04/20/20	JOB:	SPLIT GATE	JOB NO.:	200021A
APPROV.:		CUSTOMER:		DWG.:	FLUSH MOUNT, DUAL ASSEMBLY		
RELEASE:		SCALE:	1 : 36	SHT.	1 OF 1	REV.:	A



Modifications to Kōke'e Diversions

Waiakoali Stream



KIUC

KAA

New Ditch Intake Headwall with 36" wide stoplog bay

Replace stoplog bay with remotely controlled sluice gate

Spillway Release Gate with 18" wide by 12" deep release point cut in top of diversion

Replace release point in top of diversion (invert at 3423.46 ft) with stilling well with trash rack and 8" diameter hole with invert at 3421 ft

New Weir for Flow Measurement in ditch

Previously installed by CWRM in ditch

CWRM gage in steam below diversion

Kawaikōi Stream



KIUC

KAA

New Trash Rack

Redesign for cage-type trash rack with catwalk

Earthen Cofferdam with 30" diameter culvert and slide gate braced to down-ditch side of existing concrete headwall

Install remotely controlled sluice gate on down-ditch side of existing concrete headwall and sensors in ditch, gate and pool

Replace existing slide gate with stop logs and install water level recorder in ditch

Replace existing gate and screen at tunnel entrance

Kauaikinanā Stream



KIUC

KAA

Tunnel Head Gate, rehabilitate existing wooden gate, frame and hoist

Pending availability of future funding

Spillway Slot Insert fabricate new steel bulkhead

Spillway stoplogs previously converted to underflow by KAA

CWRM gage above confluence of ditch and, gage below diversion

Purchase Gate Assy with other gates

Future KAA Improvements
~Install remote control gate
~Sensor at gate, pond, KKoi flow

Kōke'e Stream



KIUC

KAA

New Ditch Bulkhead, HDPE Pipe Flume and Flow Measurement

Install water level sensor and rate section up-ditch from pool

Tunnel Head Gate, rehabilitate existing wooden gate, frame and hoist

Replace wooden gate with remotely controlled sluice gate with sensor to balance amount of water leaving the pool with the amount entering and install water level sensor

Spillway Slot, insert Twenty-four inches (24") of stoplogs

Spillway stoplogs previously adjusted by KAA

Pu'u Lua



KIUC

KA

Reestablish former (USGS) ditch gauge site, rehabilitate control weir and install new measurement equipment

Previously installed by CWRM

Cost summary and prioritization for KODIS modifications						Alternative to KIUC P1 modification	Included in KIUC P1 modifications	Redundant KIUC P1 modification
Priority	Location	Task / Item(s)	Cost*	Total cost	Completed**			
	Kawaikoi							
1		Clear and prep area	\$ 18,192		Q2 2025		X	
1		Install screen at headwall / concrete footing	\$ 67,794		Q3 2025		X	
1		Install gate at headwall / concrete supports	\$ 95,200		Q3 2025	X		
1		New screen at tunnel gate	\$ 25,790		Q3 2025	X		
1		New gate at tunnel	\$ 101,059		Q3 2025	X		
		Replace existing tunnel gate with stop logs						X
1		Install sensors in ditch, gate & pool	\$ 26,300		Q3 2025		X	
		Earthen Cofferdam						X
				\$334,335				
	Waiakoali							
2		Clear and prep area	\$ 3,080		Q2 2026		X	
2		Cut hole in diversion	\$ 8,080		Q2 2025	X		
		Spillway Release Gate						X
		Ditch intake headwall with stoplog bay						X
4		Install trash screen at hole	\$ 17,080		Q2 2026	X		
4		Install new screen in ditch	\$ 22,510		Q2 2026	X		
4		Install gate and solar panel	\$ 91,125		Q2 2026	X	X	
		Install sensor in ditch			Previously installed by CWRM		X	
		Install sensor in stream below diversion			Previously installed by CWRM	X		
				\$141,874				
	Kokee							
3		Clear and prep area and mobilize	\$ 20,040		Q2 2025		X	
		Install ditch headwall and HDPE pipe						X
3		Remove existing gate and replace with new	\$ 97,949		Q3 2025	X		
		Rehabilitate existing gate						X
3		Install sensor in ditch before pond	\$ 17,800		Q3 2025		X	
		Adjust height of stoplogs in spillway			Previously implemented by KAA		X	
3		Install sensor in tunnel	\$ 13,440		Q3 2025	X		
				\$149,229				
	Kauaikinana							
1		Purchase gate assembly and sensors		\$50,000	Q2 2025			
				\$50,000				
		Total Direct Cost	\$675,438					
		Contingency @ 12.8%		\$99,562				
				\$ 775,000				
	Puu Lua gauge	Install sensor in Ditch			Previously installed by CWRM		X	
	Kauhao	Refurbish existing gate		\$ 30,000			NO	
	Kauaikinana	Clear and prep area		\$ 6,160			X	
		Refurbish screen		\$ 7,080			X	
		Install gate and solar panel		\$ 46,100			X	
		Install sensor in pond		\$ 15,440			X	
		Install sensors in tunnel and gate		\$ 18,940		X		
CFF***				\$ 93,719				
		Adjust height of stoplogs in spillway			Previously implemented by KAA		X	
		Install sensor in stream below diversion			Previously installed by CWRM	X		

*2024 pricing **Estimated baring unforeseen circumstances ***Contingent on future funding

Waiakoali, Kawaikōi, Kōke‘e Tributaries of the Waimea River

KAA timeline and actions for KODIS modifications

	2024				2025				2026		Accomplishes P1 modifications	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1		Q2
Kawaikoi	Place order for gates		Clear and prep area	Install headwall screen Install headwall gate Install tunnel screen Install tunnel gate Install monitoring devices	Test monitoring devices	Ongoing monitoring by USGS	KAA begins reporting					YES
Waiakoali		Clear and prep area Cut hole in diversion		Install screen over hole Install screen in ditch Install gate Secure existing monitoring equipment		Ongoing monitoring & reporting by CWRM				Scheduled for work not completed in 2025		YES
Kōke‘e		Clear and prep area		Install tunnel gate Install monitoring devices	Test monitoring devices							YES
Kauaikinana				Ongoing monitoring & reporting by CWRM								YES
Kahhao				KAA / ADC to develop proposal(s) for funding new tunnel gate and monitoring								Additional
Puu Lua gauge				Clear and prep area Rebuild screw gate								YES
Puu Lua reservoir				Ongoing monitoring & reporting by CWRM								Additional
												KAA / ADC to develop proposal(s) for funding to replace outlet valve

STIPULATION AND AGREEMENT BETWEEN THE PARTIES
TO THE APRIL 18, 2017 WAIMEA WATERSHED AGREEMENT

Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance (Pō‘ai Wai Ola); the State of Hawai‘i, Agribusiness Development Corporation (ADC); the State of Hawai‘i, Department of Hawaiian Home Lands (DHHL); the Kekaha Agriculture Association (KAA), as licensee of ADC pursuant to the “Restated and Amended Memorandum of Agreement Between the State of Hawaii Agribusiness Development Corporation and Kekaha Agriculture Association” entered into on August 29, 2008, amending the Agreement dated April 1, 2007 (MOA); and the Kaua‘i Island Utility Cooperative (KIUC), as the “Parties” to the April 18, 2017 Waimea Watershed Agreement (WWA), approved by the Order Approving the Mediation Agreement for the Waimea Watershed Area by the State of Hawai‘i, Department of Land and Natural Resources, Commission on Water Resource Management (CWRM) on May 16, 2017, attached hereto as Exhibit A and incorporated herein by reference,

DO HEREBY STIPULATE AND AGREE as follows:

1. Pursuant to the WWA, KIUC submitted initial modification plans and gaging plans to CWRM and the Parties on September 1, 2017 and September 6, 2017. In March 2018, KIUC submitted its Kōke‘e Diversion Modification Project plan (KIUC’s Phase One Plan) to the Parties. In May 2018, after multiple rounds of comments from the Parties and CWRM, KIUC received approval from the Parties to proceed with KIUC’s Phase One Plan.
2. Pursuant to the WWA, Phase Two would go into effect if and when a KIUC renewable energy project supported by the Kōke‘e Ditch began service. Phase Two established different duties and responsibilities for the Parties, including for KIUC.
3. On December 13, 2023, KIUC gave notice to the Parties that it would “discontinue active development of the flow-through hydroelectric portions of” the energy project known as the West Kauai Energy Project (WKEP), which would have been supported by the Kōke‘e Ditch. *See Exhibit B*, attached hereto and incorporated herein by reference.
4. The Parties agree that KIUC’s duties and responsibilities pursuant to Phase One of the WWA have not yet been fulfilled and that KIUC has not yet received all the permits and approvals required to implement KIUC’s Phase One Plan.
5. In exchange for a full release from the Parties of all claims arising from its duties and responsibilities pursuant to the WWA, KIUC shall pay SEVEN HUNDRED SEVENTY-FIVE THOUSAND AND 00/100 DOLLARS (\$775,000.00) to KAA, as ADC’s licensee, within 10 days of the date this Stipulation and Agreement is approved by CWRM.
6. ADC, KAA as ADC’s licensee, DHHL, and Pō‘ai Wai Ola have met and agreed that KAA’s Phase One Plan, as attached hereto as Exhibit C and incorporated herein by reference (KAA’s Phase One Plan) when fully implemented will meet the Phase One obligations under the WWA. The Parties accordingly desire to replace KIUC’s Phase One Plan with

KAA’s Phase One Plan, and do hereby collectively approve the implementation of KAA’s Phase One Plan.

7. KAA, as ADC’s licensee, shall utilize the \$775,000 monetary compensation from KIUC to implement KAA’s Phase One Plan. If KIUC’s monetary contribution is insufficient to complete the scope of work in KAA’s Phase One Plan, ADC shall actively pursue the additional funding necessary to complete KAA’s Phase One Plan by seeking legislative appropriations, grants, or other state-sanctioned methods of obtaining funding.
8. KIUC remains liable for its duties and responsibilities under the WWA until the date this Stipulation and Agreement is approved by CWRM and payment of \$775,000 is made to KAA, as ADC’s licensee.
9. As of the date this Stipulation and Agreement is approved by CWRM and payment of \$775,000 is made to KAA, as ADC’s licensee, ADC accepts responsibility for KIUC’s duties and responsibilities under the WWA. ADC, either itself or through its licensee KAA, will implement the requirements previously assigned to KIUC in Phase One of the WWA, which eliminates KIUC’s duties and responsibilities under the WWA.
10. Based upon ADC’s assumption of KIUC’s duties and responsibilities under Phase One of the WWA, as amended by KAA’s Phase One Plan, the Parties hereto stipulate and agree that KIUC may withdraw from the WWA effective on the date this Stipulation and Agreement is approved by CWRM and payment of \$775,000 is made to KAA, as ADC’s licensee.
11. This Stipulation and Agreement was approved by the ADC Board of Directors at its meeting on or about October 24, 2024, and will become effective upon approval by CWRM.
12. The timetable for completion of KAA’s Phase One Plan will be completed in accordance with the deadlines set forth in Exhibit C. If it becomes apparent that any of the deliverables in KAA’s Phase One Plan will not be completed by the deadlines set forth in Exhibit C, ADC, or its licensee KAA, will provide written notice to the Parties, including Commission staff, detailing the cause for delay, ADC or KAA’s good faith efforts to meet the agreed-upon deadline, and the plan and expected timeframe for completion. ADC, or its licensee KAA, shall provide updates to the Parties regarding their progress implementing KAA’s Phase One Plan. ADC, or its licensee KAA, shall also provide the Parties with itemized statements regarding expenditure of the \$775,000 consistent with the level of detail in the cost summary included in Exhibit C.
13. The Parties acknowledge and agree that nothing herein shall abridge or otherwise limit the rights of DHHL under the WWA, including DHHL’s water reservation for existing and future uses.
14. This Stipulation and Agreement may be executed in multiple counterparts, each of which shall be deemed a duplicate original, but all of which taken together shall constitute one

and the same instrument. The Parties agree that this Stipulation and Agreement may be executed by original signature or electronic signature, and the signature pages transmitted by facsimile, scan and email, or other electronic transmission. The delivery of such electronic signature pages shall constitute effective execution and delivery. The effectiveness of this Stipulation and Agreement shall not be affected by the non-electronic delivery of any manually signed signature page.

15. The Parties represent and warrant that the person executing this Agreement on behalf of each respective Party is duly authorized to do so.

[Remainder of this page intentionally left blank; signature page follows.]

STIPULATED AND AGREED TO BY:

Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance

State of Hawai‘i, Agribusiness Development Corporation

By: 
Its: Vice President
Dated: October 24, 2024

By: _____
Its: Executive Director
Dated: _____

State of Hawai‘i, Department of Hawaiian Home Lands

Kekaha Agriculture Association

By: _____
Its: Chairperson of the Hawaiian Homes Commission
Dated: _____

By: _____
Its: President, Board of Directors
Dated: _____

Kauai Island Utility Cooperative

By: _____
Its: _____
Dated: _____

Withdrawal of KIUC from the WWA and substitution of KAA’s Plan for Phase One
Approved by the Commission on Water Resource Management:

By: _____
Its: _____
Dated: _____

Effective Date: _____

STIPULATED AND AGREED TO BY:

Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance

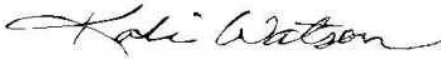
State of Hawai‘i, Agribusiness Development Corporation

By: _____
Its: _____
Dated: _____

By: _____
Its: Executive Director
Dated: _____

State of Hawai‘i, Department of Hawaiian Home Lands

Kekaha Agriculture Association

By: 
Its: Chairperson of the Hawaiian Homes Commission
Dated: Oct 24, 2024

By: _____
Its: President, Board of Directors
Dated: _____

Kauai Island Utility Cooperative

By: _____
Its: _____
Dated: _____

Withdrawal of KIUC from the WWA and substitution of KAA’s Plan for Phase One
Approved by the Commission on Water Resource Management:

By: _____
Its: _____
Dated: _____

Effective Date: _____

STIPULATED AND AGREED TO BY:

Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance

By: _____
Its: _____
Dated: _____

State of Hawai‘i, Agribusiness Development Corporation

By: _____
Its: **Executive Director**
Dated: _____

State of Hawai‘i, Department of Hawaiian Home Lands

By: _____
Its: **Chairperson of the Hawaiian Homes Commission**
Dated: _____

Kekaha Agriculture Association

By: _____
Its: **President, Board of Directors**
Dated: _____

Kauai Island Utility Cooperative

By: *David J. Russell*
Its: **CEO**
Dated: **10/24/24**

**Withdrawal of KIUC from the WWA and substitution of KAA’s Plan for Phase One
Approved by the Commission on Water Resource Management:**

By: _____
Its: _____
Dated: _____

Effective Date: _____

STIPULATED AND AGREED TO BY:

Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance

By: _____
Its: _____
Dated: _____

State of Hawai‘i, Agribusiness Development Corporation

Signed by:
By: 
Its: Executive Director
Dated: _____

State of Hawai‘i, Department of Hawaiian Home Lands

By: _____
Its: Chairperson of the Hawaiian Homes Commission
Dated: _____

Kekaha Agriculture Association

By: _____
Its: President, Board of Directors
Dated: _____

Kauai Island Utility Cooperative

By: _____
Its: _____
Dated: _____

Withdrawal of KIUC from the WWA and substitution of KAA’s Plan for Phase One
Approved by the Commission on Water Resource Management:

By: _____
Its: _____
Dated: _____

Effective Date: _____

STIPULATED AND AGREED TO BY:

Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance

State of Hawai‘i, Agribusiness Development Corporation

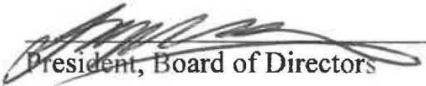
By: _____
Its: _____
Dated: _____

By: _____
Its: Executive Director
Dated: _____

State of Hawai‘i, Department of Hawaiian Home Lands

Kekaha Agriculture Association

By: _____
Its: Chairperson of the Hawaiian Homes Commission
Dated: _____

By:  _____
Its: President, Board of Directors
Dated: _____

Kauai Island Utility Cooperative

By: _____
Its: _____
Dated: _____

Withdrawal of KIUC from the WWA and substitution of KAA’s Plan for Phase One
Approved by the Commission on Water Resource Management:

By: _____
Its: _____
Dated: _____

Effective Date: _____

**MEDIATION AGREEMENT
FOR THE WAIMEA WATERSHED AREA**

This Mediation Agreement is entered into this 18th day of April, 2017, by and between the parties hereto to present reasonable interim instream flow standards to the Commission on Water Resource Management (“Commission”) for its consideration in an effort to resolve disputes arising out of the diversion of water from the Waimea River and its tributaries, and to avoid protracted and time and resource consuming litigation.

WITNESSETH:

WHEREAS, on July 24, 2013, Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance filed a Combined Petition to Amend the Interim Instream Flow Standards for Waimea River and Its Headwaters and Tributaries, and Complaint and Petition for Declaratory Order Against Waste, which concerns the Waimea Watershed in Waimea, Island of Kaua‘i, Hawai‘i;

WHEREAS, on May 27, 2014, the Commission engaged Element Environmental, LLC to develop an inventory of the stream system, water uses, and water users of the Waimea River and its headwaters and tributaries, and to conduct an appropriate investigation of the water systems and the water resources in the area;

WHEREAS, during 2015, the Commission sought and received information on water uses from the agricultural interests and the Department of Hawaiian Home Lands (“DHHL”);

WHEREAS, in October, 2015, the Commissioners, Commission staff, and interested parties familiarized themselves with the stream system and non-stream uses by visiting the area over two days;

WHEREAS, on November 17, 2015, DHHL filed with the Commission a Petition for Reservation of Surface Water of 33.145 MGD;

WHEREAS, also during 2015, in light of the fact that similar petitions have historically taken decades to resolve, the Commission staff approached various parties having an interest in this area and its waters to consider participating in a mediation of the issues involved;

WHEREAS, in December, 2015, the Commission approved engaging a mediator to assist in reaching an agreement between the parties that would be acceptable to the Commission to resolve the issues in the Waimea watershed;

WHEREAS, at its February 16, 2016 duly-noticed meeting, the Commission approved the terms of reference for the mediation, and subsequently, the services of the Collaborative Leaders Network were engaged to conduct the mediation, led by its President, Robert Alm; and

WHEREAS, during November, 2016, a set of controlled releases of water was undertaken by the Commission staff and the parties to assist in the resolution of the issues in this matter.

EXHIBIT A

NOW, THEREFORE, the parties have reached the following points of agreement for consideration and approval by the Commission to guide the Commission staff and these parties in their respective and cooperative handling of the area's water resources in the coming years, and to amend the current interim instream flow standards of the Waimea River, its headwaters and its tributaries:

1. The Waimea Watershed Agreement which is attached hereto as Exhibit A.
2. In light of this agreement, it is also agreed that:
 - A. Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance’s Combined Petition to Amend the Interim Stream Flow Standards for Waimea River and Its Headwaters and Tributaries, and Complaint and Petition for Declaratory Order Against Waste (filed July 24, 2013) will be considered to be resolved.
 - B. DHHL will, within thirty days (30) of the approval of this agreement, submit a modified petition to provide for a water reservation of 6.903 MGD from the Kokee Streams, and request that the Commission consider and act on the modified petition within sixty (60) days of its filing. DHHL maintains the right to file, at later dates, additional water reservations for the Waimea Watershed.
3. The terms of this Agreement are submitted to the Commission for consideration and approval. By executing this Agreement, each party represents to the Commission its acknowledgement that, based upon the information obtained to date on stream flows, ditch flows, beneficial in-stream uses and non-stream uses, each party has weighed the importance of the present and potential uses of water, including the economic impact of restricting such uses.
4. The parties recognize and respect the intent of the Water Code, Chapter 174C, H.R.S., and the Commission, including to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses, as long as there is adequate provision for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation.
5. Mediation communications and confidential information protected by the Commission’s mediation rules, H.A.R. § 13-167-90, and the Uniform Mediation Act, H.R.S. ch. 658H, shall remain confidential regardless of the Commission’s decision on this Agreement.
6. This Agreement shall be effective, and interim instream flows shall be established, if at all, upon approval of its terms by the Commission.

Wherefore, the parties affix their signatures to this agreement to evidence their acknowledgment, contribution, and agreement to each of the terms set forth above.

PŌ'AI WAI OLAI
WEST KAUAI WATERSHED ALLIANCE

STATE OF HAWAII, AGRIBUSINESS
DEVELOPMENT CORPORATION

By: *Yuhua J. Kimura*
Its

By: _____
Its

STATE OF HAWAII, DEPT. OF
HAWAIIAN HOME LANDS

KEKAHA AGRICULTURE
ASSOCIATION

By: _____
Its

By: _____
Its

KAUAI ISLAND UTILITY
COOPERATIVE

By: _____
Its

Wherefore, the parties affix their signatures to this agreement to evidence their acknowledgement, contribution, and agreement to each of the terms set forth above.

PŌ'AI WAI OLA/WEST KAUA'I
WATERSHED ALLIANCE

STATE OF HAWAI'I, AGRIBUSINESS
DEVELOPMENT CORPORATION

By: _____
Its

By:  _____
Its

STATE OF HAWAI'I, DEPT OF
HAWAIIAN HOME LANDS

KEKAHA AGRICULTURE ASSOCIATION

By: _____
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Its

KAUA'I ISLAND UTILITY
COOPERATIVE

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PŌ‘AI WAI OLA/WEST KAUA‘I
WATERSHED ALLIANCE

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DEVELOPMENT CORPORATION

By: _____
Its

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STATE OF HAWAI‘I, DEPT OF
HAWAIIAN HOME LANDS

KEKAHA AGRICULTURE ASSOCIATION

By: 
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KAUA‘I ISLAND UTILITY
COOPERATIVE

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PŌ'AI WAI OLA/WEST KAUA'I
WATERSHED ALLIANCE

STATE OF HAWAI'I, AGRIBUSINESS
DEVELOPMENT CORPORATION

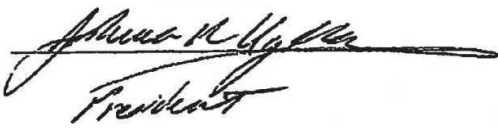
By: _____
Its

By: _____
Its

STATE OF HAWAI'I, DEPT OF
HAWAIIAN HOME LANDS

KEKAHA AGRICULTURE ASSOCIATION

By: _____
Its

By: 
Its
President

KAUA'I ISLAND UTILITY
COOPERATIVE

By: _____
Its

Wherefore, the parties affix their signatures to this agreement to evidence their acknowledgement, contribution, and agreement to each of the terms set forth above.

PŌ‘AI WAIOLA/WEST KAUA‘I
WATERSHED ALLIANCE

STATE OF HAWAI‘I, AGRIBUSINESS
DEVELOPMENT CORPORATION

By: _____
Its

By: _____
Its

STATE OF HAWAI‘I, DEPT OF
HAWAIIAN HOME LANDS

KEKAHA AGRICULTURE ASSOCIATION

By: _____
Its

By: _____
Its

KAUA‘I ISLAND UTILITY
COOPERATIVE

By: David J. Bissell
Its CEO

WAIMEA WATERSHED AGREEMENT

- A. Statement of Guiding Principles**
- B. Modification of Diversions**
- C. Permits and Approval**
- D. IIFS Numbers**
- E. Monitoring Stations**
- F. Operating Protocols**
- G. Infrastructure Agreements**

A. STATEMENT OF GUIDING PRINCIPLES

The following guiding principles underlie this agreement and all phases of its execution:

1. All streams will be allowed to run from the mountain to the sea and no diversion will ever be a total diversion again.
2. Any diversion of water from a stream must be justified with no more water taken than is needed for other beneficial uses, and even then, the health of the stream must be preserved at all times. All waters not needed at any given time belong in the stream and the IIFS numbers are the minimum amounts to be provided.
3. Agriculture and renewable energy are beneficial uses of water diverted from these streams.
4. DHHL will, within thirty days (30) of the approval of this agreement, submit a modified petition to provide for a water reservation of 6.903 MGD from the Kokee Streams, and request that the Commission consider and act on the modified petition within sixty (60) days of its filing. DHHL maintains the right to file, at later dates, additional water reservations for the Waimea Watershed. The parties acknowledge DHHL’s rights to water as set forth in the Hawaiian Homes Commission Act, the Hawaii Constitution, and Haw. Rev. Stat. chapter 174C, the State Water Code.
5. The ditch systems owned by the State of Hawaii’s Agribusiness Development Corporation (ADC), and currently operated by the Kekaha Agriculture Association (KAA), will continue to be maintained to allow for both present and future uses.
6. Kaua‘i Island Utility Cooperative (KIUC) will be allowed to complete due diligence on a set of energy projects supported by the Kokee Ditch System, and, if the energy projects are built, will receive from the Kokee ditch system a rolling average of 11 mgd to support both (1) the Puu Opae project and (2) DHHL’s water needs under any water reservation the Commission may grant to DHHL (see A.4, supra) that are to be served by the project infrastructure, with the understanding that the KIUC project is intended to serve both energy and agricultural uses which will enable the Commission to review the water needs of both systems with the goal of reducing the diversion of water into the Kekaha Ditch system. This means that KIUC will be able to take an average of 11 mgd within each year and over the course of the life of the project, assuming the IIFSs are met first. The term “rolling average” as used in this agreement means an average to account for intra and inter annual fluctuation.
7. If KIUC does build the energy projects, it will assume substantial responsibility for much of the Kokee ditch system and related facilities as specified in this agreement.

B. MODIFICATIONS OF THE DIVERSIONS

Throughout this Agreement, all references to days are to calendar days.

All plans for the modification of any diversion shall be subject to review and approval by the Commission or its staff prior to any modification taking place. When plans are submitted to the Commission, a copy will be provided to each other party to this agreement.

KIUC will modify all diversions in the Kokee Ditch necessary to ensure the stream flow provided for in this agreement, as follows: KIUC will file with the Commission and any other pertinent regulatory agency its modification plans within one hundred thirty-five (135) days of the approval of this agreement by the Commission. Work on the modifications will begin within forty-five (45) days of approval of the modification plans or any other approval required by the modification proposal, whichever comes last.

If KIUC does not receive (1) the understandings from ADC set forth in Section C by April 30, 2017, and/or (2) the understandings from DHHL set forth in Section C within ninety (90) days of the Commission’s approval of this agreement, KIUC shall have the option to withdraw from its responsibilities and obligations under this agreement. If KIUC opts to withdraw, it will notify the Commission and all the parties to this agreement. If KIUC does not exercise its option to withdraw within one-hundred (100) days after the approval of this agreement by the Commission, KIUC shall proceed with the modification plans in accordance with the paragraph immediately above.

ADC (either itself or through its licensee KAA) will modify all other diversions relating to the Kekaha Ditch system and specifically those associated with the Koaie and Waiahulu streams and the Waimea diversion necessary to ensure the stream flow provided for in this agreement, as follows: ADC (either itself or through its licensee KAA) will file with the Commission and any other pertinent regulatory agency its modification plans within forty-five (45) days of the approval of this agreement by the Commission. Work on the modifications will begin within forty-five (45) days of approval of the modification plans or any other approval required by the modification proposal, whichever comes last.

All modifications will be done in a manner that provides for water flowing over it, provides for a wetted path upstream and downstream such that adult forms can migrate upstream and larval forms can migrate downstream, and minimizes entrainment of native species to the maximum extent practicable.

If any modification requires an Environmental Assessment, an Environmental Impact Statement or other permitting or approvals, the filing of those must occur within ninety (90) days of notification by the Commission or other pertinent regulatory agency of the need for such actions.

If KIUC exercises its option to withdraw within one-hundred (100) days after the approval of this agreement by the Commission, ADC (either itself or through its licensee KAA) will be responsible for the modifications to the Kokee Ditch diversions necessary to comply with this agreement, as follows: ADC (either itself or through its licensee KAA) will file with the Commission and any other pertinent regulatory agency its modification plans for the Kokee Ditch

diversions within forty-five (45) days of KIUC’s notice of withdrawal. Work on the modifications will begin within forty-five (45) days of approval of the modification plans or any other approval required by the modification proposal, whichever comes last.

C. PERMITS AND APPROVALS

In order to develop its renewable energy project(s), KIUC will need to obtain a number of permits and approvals from various governmental agencies, and compliance with the requirements of HRS Chapter 343 will be necessary prior to agency action on those permits and approvals. Nothing in this agreement obliges any government agency to grant any of those permits or approvals. Each permitting and approving agency needs to exercise its discretion without regard to this agreement. None of the signatory governmental agencies to this agreement issue the permits and approvals that KIUC will need for this project other than those provided for in this agreement.

In order to allow KIUC to move forward with its project(s), KIUC needs to know that it will have the ability to perform its due diligence (engineering, biological, and archaeological) on the project; that infrastructure for the project(s) will be available in the event that KIUC ultimately receives the permits and approvals necessary for its project(s); and the financial terms for access to and use of that infrastructure in the event that KIUC ultimately receives the permits and approvals necessary for its project(s).

If KIUC does not have in place (1) the understandings from ADC set forth below by April 30, 2017, and/or (2) the understandings from DHHL set forth below within ninety (90) days of the Commission’s approval of this agreement, KIUC reserves the right to withdraw from its responsibilities and obligations under this agreement. If KIUC chooses to do so, it will notify the Commission, and all the parties to this agreement, that it is doing so and will then be relieved of all obligations under this agreement, subject to KIUC’s duty to proceed with the diversion modification plans in accordance with Section B if KIUC does not exercise its option to withdraw within one-hundred (100) days after the approval of this agreement by the Commission.

It is understood that, in order to facilitate this agreement, Pō‘ai Wai Ola/West Kaua‘i Watershed Alliance will forbear from contesting or challenging ADC’s or DHHL’s decisions with respect to the understandings described in this section.

THE UNDERSTANDINGS ARE AS FOLLOWS:

From ADC to KIUC:

1. A license, with an option for a lease, for the following infrastructure:
 - a. The diversions on the Kokee Ditch at Waiakoali, Kawaikoi; Kauaikinana and Kokee and all the ephemeral diversions on the Kokee ditch system.
 - b. The Kokee Ditch from the diversions to the Puu Moe Divide.

- c. The Mana Reservoir.
- d. The land needed for construction of the Mana powerhouse located adjacent to the Mana Reservoir.

The license or lease shall provide for the water for KIUC under this agreement and approved by the Commission subject to approval of a water lease application by KIUC to be filed with the Board of Land and Natural Resources pursuant to Haw. Rev. Stat. § 171-58.

The financial terms of the license/leases shall be binding on KIUC and ADC if the required permits and approval are issued and the project is developed.

2. Easements as follows:

- a. The Kokee Ditch access roads for the purposes of ditch access and maintenance.
- b. The Mana Reservoir access road for the purpose of access to the Mana Reservoir, powerhouse and substation.
- c. A short-term easement for the construction of a pressurized pipeline segment on the Mana Plain with a long-term easement for maintenance of the pipeline.
- d. A short-term easement for the construction of the Puu Opae project powerhouse and substation adjacent to the Mana reservoir.
- e. A long-term easement for the Puu Opae project electrical transmission lines and pressurized pipeline.

From DHHL to KIUC:

1. A right of entry (“ROE”) to be issued to conduct all engineering, biological and archaeological studies necessary to support regulatory requirements for the project.
2. Within ninety days (90) of the approval of this agreement by the Commission, the DHHL will notify KIUC as to whether it will issue a 65-year lease for the land and infrastructure (Puu Opae Reservoir) to KIUC subject to HRS § 171-95.3, the Hawaiian Homes Commission Act, as amended, and Hawaiian Homes Commission policies, if KIUC complies with HRS Chapter 343 and receives the necessary approvals and permits for the construction of the Puu Opae project. Once approved, and subject to the above, the financial terms and conditions will be binding on KIUC and DHHL.
3. If the lease to KIUC described above is issued by the DHHL, it will

- a. include the provision of a rolling average of 11 mgd of water subject to approval of a water lease application by KIUC to be filed with the Board of Land and Natural Resources pursuant to Haw. Rev. Stat. § 171-58 and subject to meeting the water needs of DHHL as set forth in any water reservation the Commission may grant.
- b. grant a short-term easement for the pressurized pipeline and a buried transmission line construction and the rehabilitation of the Puu Opae Reservoir.
- c. grant a long-term easement for the maintenance of the pipeline, the buried transmission line and the access roads.
- d. will include the Puu Opae Reservoir and land adjacent to the reservoir (less than three acres) for the project powerhouse.

D. IIFS NUMBERS

Based on the submissions by the parties and the analysis by the Commission staff, the following IIFS numbers are agreed to in two phases.

Phase One will go into effect upon the approval of this agreement by the Commission. As part of Phase One, the parties agree to immediately take steps to restore flows to the maximum extent possible (e.g., by removing a board or lifting a gate) while working on the structural modifications pursuant to the deadlines set forth in Section B.

Phase Two goes into effect if and when the KIUC energy project goes into service.

PHASE ONE:

Kokee Irrigation System

1. The existing natural flow in the Kokee Stream is permitted to flow past the Kokee Ditch.
2. For the Kauaikinana, Kawaikoi, and Waiakoali streams, the IIFS below each diversion is the following:

<u>Stream</u>	<u>IIFS</u>
Kokee	natural flow
Kauaikinana	0.7 mgd
Kawaikoi	4.9 mgd
Waiakoali	1.4 mgd

Kekaha Irrigation System

1. The IIFS for the Koaie Stream below the Koaie Diversion will be 2 mgd.

2. The IIFS for the Waimea Stream below the Waiahulu Diversion will be 8 mgd.
3. The IIFS for the Waimea Stream at USGS 16031000 will be 25 mgd with a minimum flow at all times through the Kekaha Ditch of 6 mgd measured at the Hukipo Flume.

PHASE TWO:

Kokee Irrigation System

1. The existing natural flow in the Kokee Stream is permitted to flow past the Kokee Ditch except for flows greater than 1.2 mgd, in which the IIFS is 1.2 mgd.
2. For the Kauaikinana, Kawaikoi, and Waiakoali streams, for flows less than or equal to the established values listed in the table below, the IIFS below each diversion is two-thirds (66.6%) of the flow in the stream; for flows greater than the established values listed below, the IIFS below each diversion is the value given.

Stream	Established value	IIFS	IIFS if stream flow is below or equal to established value	IIFS if streamflow is above the established value
Kokee	0.2	Natural flow up to 1.2	n/a	n/a
Kauaikinana	1.2		2/3 of stream flow	0.6
Kawaikoi	6.4		2/3 of stream flow	4.0
Waiakoali	1.3		2/3 of stream flow	0.8

All water flows above these numbers may be used by KIUC in support of its project.

Kekaha Irrigation System

1. The IIFS for Koaie Stream below the Koaie Diversion will be 2 mgd.
2. The IIFS for Waimea Stream below the Waiahulu Diversion will be 8 mgd.
3. The IIFS for the Waimea Stream at USGS 16031000 will be 25 mgd with a minimum flow at all times through the Kekaha Ditch of 6 mgd measured at the Hukipo Flume subject to Commission review of its ongoing need based on the water coming to the plain through the KIUC project as provided in paragraph 10 of the Operating Protocols section, infra.

If Phase Two goes into operation, the Commission will examine the amounts being diverted at Koaie and at Waiahulu with goal of increasing the total IIFS numbers for these two streams.

E. MONITORING STATIONS

Monitoring stations will be put in place to measure the amount of water coming into the ditches and the amount of water going into the streams below the diversions on a continuous real-time basis.

KIUC, assuming that it receives the understandings called for in the Permits and Approvals section of this agreement, will install and maintain monitoring equipment at the existing flow gauging location immediately above the Puu Lua Reservoir and for the following streams:

Waiakoali

Kawaikoi

Kauaikinana

Kokee

ADC (either itself or through its licensee KAA), if the Commission approves this agreement, will install and maintain monitoring equipment for the following streams:

Waiahulu

Koaie

Waimea at the Mauka hydroelectric plant

The information gathered by these stations shall be made available to all parties at the same time.

The Commission and the U.S. Geological Survey may install and maintain its own monitoring equipment along the streams and/or ditches in the watershed.

If the KIUC project does not receive the understandings called for in the Permits and Approvals section, the monitoring equipment will be installed and maintained by ADC (either itself or through its licensee KAA). If the KIUC project ultimately does not proceed, ADC (either itself or through its licensee KAA) will assume responsibility for the monitoring equipment.

F. OPERATING PROTOCOLS

The goal of the Waimea water systems is to preserve the life of the streams and their aquatic resources while allowing for agricultural and renewable energy uses to co-exist with the streams.

In the operation of these systems the intent is to have instantaneous daily decisions made on where the water in any given stream would go between the streams and the ditches:

1. Flow in the stream has the highest priority and water should flow at the highest possible level with diversions only as needed for other uses with the IIFS numbers being the minimum amounts to be provided.
2. Stated otherwise, when water is not presently needed for other uses such as expanded agricultural uses or future energy projects, the water must remain in the streams.
3. Current agricultural uses by ADC (and its licensees) will continue to be provided with the water needed for their operations. Each month, ADC (either itself or through its licensee KAA) will report monthly water usage volumes for agricultural and non-agricultural uses, monthly total cultivated acres, and a list of crop types. Each year, ADC (by itself or through its licensee KAA) will report annual cultivated acres by crop type.
4. Water for the kalo farmers on the Menehune Ditch will continue to be provided by one or both ditch systems.
5. Water for agricultural uses by ADC (and its licensees) and water for uses by the DHHL (and its lessees and licensees) in accordance with DHHL’s rights to water as set forth in the Hawaiian Homes Commission Act, the Hawaii Constitution, and Haw. Rev. Stat. chapter 174C, the State Water Code will be provided so long as the amounts involved are reasonable in their consumption levels and in relation to the water provided to the streams. In that regard, the need to plant less water intensive crops and the importance of using efficient water delivery methods will be taken into account as well as the availability of R-1 water and well water.
6. If one or more hydro projects are developed by KIUC on the Kokee Ditch System, KIUC will receive from the Kokee ditch a rolling average of 11 mgd to support both (1) the Puu Opae project and (2) DHHL’s water needs under any water reservation the Commission may grant to DHHL (see A.4, supra) that are to be served by the project infrastructure. This means that KIUC will be able to take an average of 11 mgd within each year and over the course of the life of the project, assuming the IIFSs are met first. In its project, KIUC will leave enough water in the ditch past the Puu Moe Divide to meet the needs of users of ditch water below that point.

7. Controlled releases and biological studies will be part of any protocol to help determine the best ongoing uses of water.
8. To the extent not otherwise provided by the above uses, the Commission may consider a request to allow a minimum flow of water to maintain the ditch systems to the extent necessary to ensure their ongoing structural integrity.
9. The Waiawa power plant will be allowed to operate in its current manner for no more than three years from the approval of this agreement after which it must be either decommissioned or repowered to operate using such waters as are reasonably related to agricultural (as opposed to energy) uses. Specifically, after three years, no more than 10 mgd can be diverted in the Kekaha Ditch at Hukipo Flume unless reasonable agricultural uses require more water and the Commission finds that such additional waters can be provided consistent with the IIFS numbers it has set.

If Phase Two goes into operation, the Commission will reexamine the amounts diverted to reduce them to take into account the energy and agricultural uses served by the KIUC project.

The execution of these protocols will be the responsibility of ADC (either itself or through its licensee KAA), and of KIUC. KIUC, if it receives the understandings provided for in the Permits and Approvals section above, may contract with other entities to carry out its responsibilities under this agreement.

If there is any dispute in the operation of the protocols, it shall be brought to the Commission for resolution.

G. INFRASTRUCTURE AGREEMENTS

PHASE ONE: CURRENT OPERATIONS

Unless and until the energy projects proposed by KIUC receive all required approvals and Phase Two is implemented, the current system will be maintained by the ADC, and its licensee KAA, and the State agencies involved in the case of the impacted dams and reservoirs, subject to the provisions of this agreement, including those pertaining to the modification of diversions and the installation of monitoring equipment.

PHASE TWO: THE ENERGY PROJECTS

If KIUC receives the understandings required in the Permits and Approvals section; finds that the project is feasible to undertake and finance; and gets the approval of the Public Utilities Commission for the energy projects, KIUC may build and/or rehabilitate one or more energy projects in the Waimea Watershed area.

If KIUC proceeds, it will assume significant responsibility for the infrastructure on the systems involved. This section sets forth the infrastructure for which KIUC (and any firms it employs) will be responsible:

1. The Ditches

KIUC will operate, upgrade, alter or repair as appropriate, and maintain:

- a. The Kokee Ditch including the ditch, flumes and tunnels, beginning at the Waiakoali Intake to the Puu Moe Divide, including the Kauhao sluice gate and the weir gate at the Divide; and any pressurized piping KIUC installs involving the ditch and the reservoirs named below including between the Divide and the Puu Opae Reservoir. (KIUC will not be responsible for the ditch from the Divide to the Kitano Reservoir.)

2. Diversions

KIUC will operate, repair and maintain the following diversions:

- a. Waiakoali
- b. Kawaikoi
- c. Kuaikinana
- d. Kokee
- e. All active ephemeral stream diversions. Kumuela 1-5, Nawaiamaka and Halemanu on the Kokee Ditch.

ADC (either itself or through its licensee KAA) will operate, repair and maintain the following diversions:

- f. Waiahulu
- g. Koaie
- h. Waimea

3. Roadways

KIUC will repair and maintain the roadways which pertain to the operations of the Kokee Ditch.

- a. The jeep roadway extending from the Kokee Highway to the Puu Lua Reservoir;

- b. The jeep road extending from the Kokee Highway to the Puu Opae Reservoir;
- c. The jeep road extending from the DHHL/DLNR gate on the Mana Plain to the Puu Opae Reservoir;
- d. Ditch maintenance roads along the Kokee Ditch;
- e. All other jeep roads and ditch trails necessary to access, maintain and operate the ditch systems that are under KIUC's control.

The assumption of responsibility for the roadways by KIUC does not change existing access rights or in any way alter their status as public or private roads.

In carrying out the operation, upgrade, repair and maintenance to the ditches, diversions and roadways as described above in this section, KIUC and ADC (and any other firm employed by the same) shall not interfere with the quiet enjoyment of the DHHL lessees and licensees.

4. Control Equipment

KIUC will operate the Puu Opae Energy Project(s), the streamflow gauging equipment on the Kokee Ditch and pertinent streams, the Puu Lua Reservoir, the Puu Opae Reservoir and the Mana Reservoir.

5. Hydroelectric Plants

KIUC will operate, repair and maintain the hydro plants developed as part of the Puu Opae energy project:

6. Dams and Reservoirs

KIUC will rehabilitate the following reservoirs pursuant to the State of Hawaii dam safety standards and undertake the operation and maintenance of each through the life of the Puu Opae project.

- a. Puu Lua Reservoir
- b. Puu Opae Reservoir
- c. Mana Reservoir

7. Pressurized Piping

KIUC will construct and maintain the following segments of pressurized pipeline:

- a. Between the Puu Moe Divide and the Puu Opae Reservoir;
- b. Between the Puu Opae and Mana Reservoirs.

8. **Pumping Stations**

ADC will continue to operate and maintain the Kawaiele and Nohili Pumping Stations.

9. **Monitoring Stations**

KIUC will operate and maintain the equipment discussed in the Monitoring Stations section above.

10. **Agreements to Operate**

The cost of all of KIUC's undertakings pursuant to this agreement will be negotiated directly between KIUC and the agencies involved.

11. **Infrastructure Covered**

Any infrastructure not covered by this agreement will be presumed to be handled by whoever is handling it today. This agreement covers only the specific infrastructure discussed in it.



---, ---, ----
Contact: Beth Amaro
808.246.4348
bamaro@kiuc.coop

Project Delays Jeopardize West Kaua‘i Energy Project
Scaled-Back Version of WKEP Under Evaluation

Līhu‘e, Kaua‘i, HI – 12/13/2023 – Kaua‘i Island Utility Cooperative (KIUC) and its partner AES will discontinue active development of the flow-through hydroelectric portions of its West Kaua‘i Energy Project (WKEP) due to litigation-caused delays, project uncertainty, and cost increases. KIUC will consider the feasibility of a scaled-back design including only the solar pumped storage hydro portion of the proposed renewable project, but that portion of the more than \$250 million project is also at risk of cancellation. The fallback project would reduce power production by roughly 25% and eliminate water delivery for agriculture on lands owned by the Department of Hawaiian Home Lands (DHHL) and the Agribusiness Development Corporation (ADC). It would also significantly slow KIUC’s movement toward its goal of 100% renewable energy production by 2033.

Delays caused by lawsuits filed by Earthjustice have resulted in critical project deadlines being missed due to continued project uncertainty. The latest lawsuit, filed in February, challenges environmental approvals obtained for the project. Previously, Earthjustice filed a lawsuit challenging the Hawai‘i Public Utility Commission’s approval of the purchase power agreement related to the project.

WKEP has been studied and pursued by KIUC since 2012. It is being developed by AES, which will build and operate the project if the solar pumped storage hydro portion proceeds. Electricity produced by WKEP would be purchased by KIUC under a power purchase agreement (PPA). As originally proposed, WKEP would have used both flow-through and pumped storage hydro technology to bring KIUC to more than 80% renewable generation.

The flow-through portion of the project was dependent on diverting water from four streams in Kōke‘e via a rehabilitated Kōke‘e ditch irrigation system. KIUC committed to complete Phase 1 modifications to the diversions in accordance with the landmark 2017 Waimea Mediation Agreement (WMA). Those modifications at the Waiakōali, Kawaikōi, Kaua‘ikinanā and Kōke‘e intakes will be performed whether or not the WKEP project proceeds. However, Phase 2 diversion modifications will not be implemented.

EXHIBIT B

DECEMBER 15, 2023

Page 2

Without the flow-through hydroelectric portion, development efforts will no longer include:

1. Rehabilitation of Pu‘u Lua Reservoir, which was to provide additional storage for the project.
2. Rehabilitation of the Kōke‘e Ditch System.
3. Delivery of water for irrigation and other purposes to users along the Kōke‘e Ditch, including the Department of Hawaiian Homelands (Mauka Village, Mauka Pastoral tenants and Pu‘u ‘Ōpae tenants), ADC (Mauka and Mānā Plain tenants), and DLNR.

Whether or not the remaining solar pumped storage hydro portion of WKEP moves forward will depend on continued interest in participating in the project from DHHL and ADC, and financial feasibility based on cost increases as a result of changes in market conditions and the delayed implementation. In the reduced configuration, energy generation would be accomplished by utilizing solar to pump water uphill from Mānā Reservoir (located on ADC land) to Pu‘u ‘Ōpae Reservoir (located on DHHL land) during the day, allowing for controlled discharge downhill at night and during non-solar periods. A 20-megawatt powerhouse to be constructed at Mānā Reservoir would be the project’s primary generation source.

“While it’s unfortunate that the full potential of the environmental, social and economic benefits of WKEP will not be realized, we retain hope WKEP will still be an important piece of KIUC’s renewable portfolio,” said KIUC’s President and Chief Executive Officer, David Bissell.

###

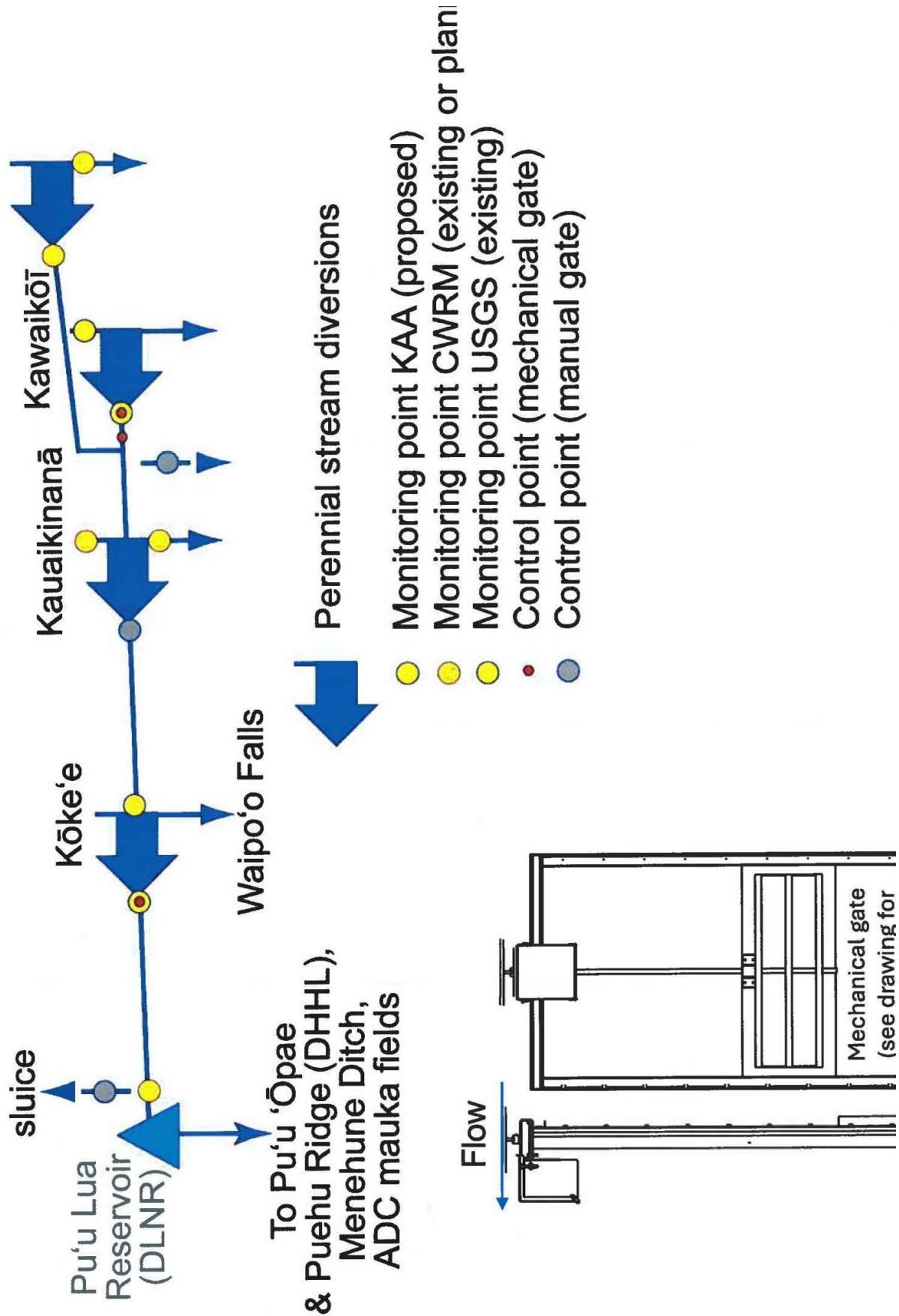
Kekaha Agriculture Association

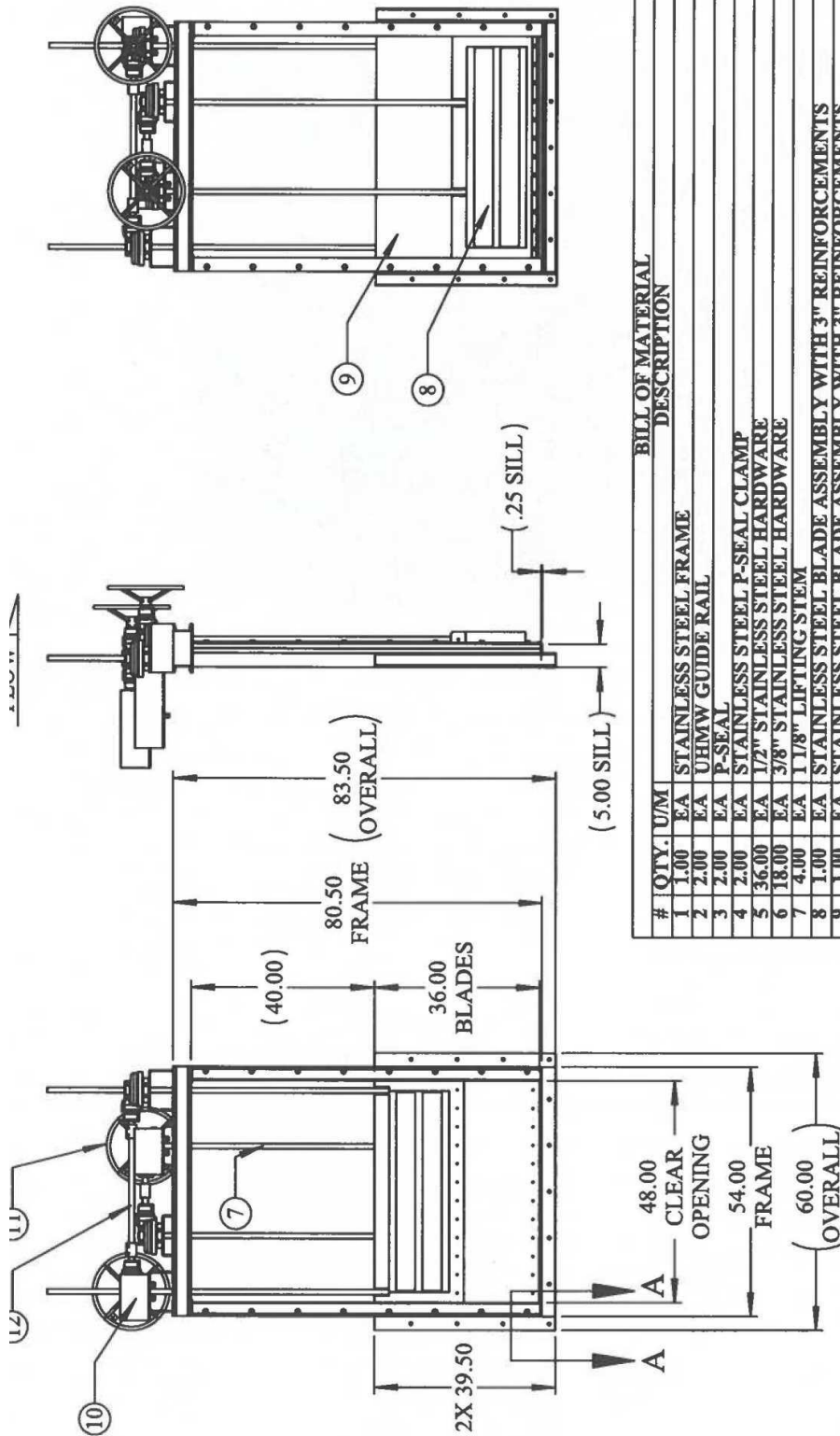
Proposed Modifications to Kokee Ditch Diversions

**Waimea Watershed Agreement
Phase 1**

October 4, 2024

EXHIBIT C





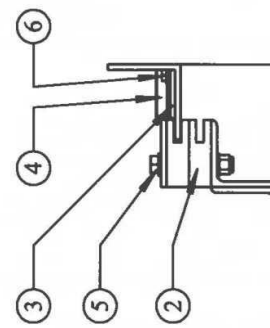
#	QTY.	U/M	DESCRIPTION
1	1.00	EA	STAINLESS STEEL FRAME
2	2.00	EA	UHMW GUIDE RAIL
3	2.00	EA	P-SEAL
4	2.00	EA	STAINLESS STEEL P-SEAL CLAMP
5	36.00	EA	1/2" STAINLESS STEEL HARDWARE
6	18.00	EA	3/8" STAINLESS STEEL HARDWARE
7	4.00	EA	1 1/8" LIFTING STEM
8	1.00	EA	STAINLESS STEEL BLADE ASSEMBLY WITH 3" REINFORCEMENTS
9	1.00	EA	STAINLESS STEEL BLADE ASSEMBLY WITH 3" REINFORCEMENTS
10	2.00	EA	GEAR BOX MOUNTED WT-200 ACTUATOR
11	2.00	EA	16" HAND WHEEL
12	2.00	EA	DRIVE SHAFT AND COUPLER ASSEMBLY

UNLESS OTHERWISE NOTED DIMENSIONS AND TOLERANCES ARE IN INCHES. STANDARD TOLERANCES:
 .XX = +/- .01
 .XXX = +/- .005
 XXX° = +/- 1°

Watch Technologies, Inc.
 2185 NE Spalding Dr. #10 Office: 541.472.8095
 Grants Pass, Or 97526 Cell: 541.660.3182

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DRAWN: DELETED DATE: 04/20/20 **JOB: SPLIT GATE** **JOB NO.: 20007**



Modifications to Kōke'e Diversions

Waiakoali Stream



KIUC

KAA

New Ditch Intake Headwall with 36" wide stoplog bay

Replace stoplog bay with remotely controlled sluice gate

Spillway Release Gate with 18" wide by 12" deep release point cut in top of diversion

Replace release point in top of diversion (invert at 3423.46 ft) with stilling well with trash rack and 8" diameter hole with invert at 3421 ft

New Weir for Flow Measurement in ditch

Previously installed by CWRM in ditch

CWRM gage in steam below diversion

Kawaikōi Stream



KIUC

KAA

New Trash Rack

Redesign for cage-type trash rack with catwalk

Earthen Cofferdam with 30" diameter culvert and slide gate braced to down-ditch side of existing concrete headwall

Install remotely controlled sluice gate on down-ditch side of existing concrete headwall and sensors in ditch, gate and pool

Replace existing slide gate with stop logs and install water level recorder in ditch

Replace existing gate and screen at tunnel entrance

Kauaikinanā Stream



KIUC

KAA

Tunnel Head Gate, rehabilitate existing wooden gate, frame and hoist

Pending availability of future funding

Spillway Slot Insert fabricate new steel bulkhead

Spillway stoplogs previously converted to underflow by KAA

CWRM gage above confluence of ditch and, gage below diversion

Purchase Gate Assy with other gates

Future KAA Improvements
~Install remote control gate
~Sensor at gate, pond, KKoi flow

Kōke'e Stream



KIUC

KAA

New Ditch Bulkhead, HDPE Pipe Flume and Flow Measurement

Tunnel Head Gate, rehabilitate existing wooden gate, frame and hoist

Spillway Slot, insert Twenty-four inches (24") of stoplogs

Install water level sensor and rate section up-ditch from pool

Replace wooden gate with remotely controlled sluice gate with sensor to balance amount of water leaving the pool with the amount entering and install water level sensor

Spillway stoplogs previously adjusted by KAA

Pu'u Lua



KIUC

KAA

Reestablish former (USGS) ditch gauge site, rehabilitate control weir and install new measurement equipment

Previously installed by CWRM

KAA timeline and actions for KODIS modifications							Accomplishes P1 modifications
2024	2025		2026				
Q4	Q1	Q2	Q3	Q4	Q1	Q2	
	Place order for gates						
Kawaikoi		Clear and prep area	Install headwall screen Install headwall gate Install tunnel screen Install tunnel gate Install monitoring devices	Test monitoring devices			YES
			Ongoing monitoring by USGS				
Waiaikoali	Clear and prep area Cut hole in diversion		Install screen over hole Install screen in ditch Install gate Secure existing monitoring equipment			Scheduled for work not completed in 2025	YES
			Ongoing monitoring & reporting by CWRM				
Kōke‘e	Clear and prep area		Install tunnel gate Install monitoring devices	Test monitoring devices			YES
			Ongoing monitoring & reporting by CWRM				
Kauaikinana							YES
			KAA / ADC to develop proposal(s) for funding new tunnel gate and monitoring				
Kahhao				Clear and prep area Rebuild screw gate			Additional
Puu Lua gauge							YES
			Ongoing monitoring & reporting by CWRM				
Puu Lua reservoir						KAA / ADC to develop proposal(s) for funding to replace outlet valve	Additional

Cost summary and prioritization for KODIS modifications						Alternative to KIUC P1 modification	Included in KIUC P1 modifications	Redundant KIUC P1 modification
Priority	Location	Task / Item(s)	Cost*	Total cost	Completed**			
Kawaikoi								
1		Clear and prep area	\$ 18,192		Q2 2025		X	
1		Install screen at headwall / concrete footing	\$ 67,794		Q3 2025		X	
1		Install gate at headwall / concrete supports	\$ 95,200		Q3 2025	X		
1		New screen at tunnel gate	\$ 25,790		Q3 2025	X		
1		New gate at tunnel	\$ 101,059		Q3 2025	X		
		Replace existing tunnel gate with stop logs						X
1		Install sensors in ditch, gate & pool	\$ 26,300		Q3 2025		X	
		Earthen Cofferdam						X
				\$334,335				
Waiakoali								
2		Clear and prep area	\$ 3,080		Q2 2026		X	
2		Cut hole in diversion	\$ 8,080		Q2 2025	X		
		Spillway Release Gate						X
		Ditch intake headwall with stoplog bay						X
4		Install trash screen at hole	\$ 17,080		Q2 2026	X		
4		Install new screen in ditch	\$ 22,510		Q2 2026	X		
4		Install gate and solar panel	\$ 91,125		Q2 2026	X	X	
		Install sensor in ditch		Previously installed by CWRM			X	
		Install sensor in stream below diversion		Previously installed by CWRM		X		
				\$141,874				
Kokee								
3		Clear and prep area and mobilize	\$ 20,040		Q2 2025		X	
		Install ditch headwall and HDPE pipe						X
3		Remove existing gate and replace with new	\$ 97,949		Q3 2025	X		
		Rehabilitate existing gate						X
3		Install sensor in ditch before pond	\$ 17,800		Q3 2025		X	
		Adjust height of stoplogs in spillway		Previously implemented by KAA			X	
3		Install sensor in tunnel	\$ 13,440		Q3 2025	X		
				\$149,229				
Kauaikinana								
1		Purchase gate assembly and sensors		\$50,000	Q2 2025			
				\$50,000				
Total Direct Cost			\$675,438					
Contingency @ 12.8%				\$99,562				
				\$ 775,000				
Puu Lua gauge								
		Install sensor in Ditch					X	
Kauhao								
		Refurbish existing gate		\$ 30,000			NO	
Kauaikinana								
		Clear and prep area		\$ 6,160			X	
		Refurbish screen		\$ 7,080			X	
		Install gate and solar panel		\$ 46,100			X	
		Install sensor in pond		\$ 15,440			X	
		Install sensors in tunnel and gate		\$ 18,940		X		
CFF***					\$ 93,719			
		Adjust height of stoplogs in spillway			Previously implemented by KAA		X	
		Install sensor in stream below diversion			Previously installed by CWRM	X		

*2024 pricing **Estimated barring unforeseen circumstances ***Contingent on future funding

AGREEMENT TO TRANSFER OF DUTIES AND
RESPONSIBILITIES RELATED TO THE APRIL 18, 2017 WAIMEA WATERSHED
AGREEMENT FROM THE KAUA‘I ISLAND UTILITY COOPERATIVE TO THE
STATE OF HAWAI‘I, AGRIBUSINESS DEVELOPMENT CORPORATION

This “Agreement” is between the Kaua‘i Island Utility Cooperative (KIUC) and the State of Hawai‘i Agribusiness Development Corporation (ADC). KIUC wishes to transfer its duties and responsibilities under the April 18, 2017 Waimea Watershed Agreement (WWA) and ADC is willing to assume such duties and responsibilities from KIUC. As such, KIUC and ADC do hereby agree as follows:

1. Upon approval by the State of Hawai‘i, Department of Land and Natural Resources, Commission on Water Resource Management (CWRM), of the “Stipulation and Agreement Between the Parties to the April 18, 2017 Waimea Watershed Agreement” (Stipulation) whereby the Parties to the WWA did stipulate and agree to allow KIUC to withdraw from its duties and responsibilities under the WWA upon payment of reasonable compensation, ADC does agree to assume KIUC’s duties and responsibilities as identified below:

- (a) ADC, either itself or through its licensee the Kekaha Agriculture Association (KAA), will modify all diversions in the Kōke‘e Ditch in a manner consistent with the requirements of the WWA.
- (b) KIUC shall transfer to ADC and/or its licensee KAA any applicable permits and/or permit applications obtained or submitted in preparation for implementing its duties and responsibilities under Phase One of the WWA.
- (c) KIUC will transfer to ADC and/or its licensee KAA any applicable engineering plans necessary to allow ADC to fully implement KIUC’s Phase One duties and responsibilities.
- (d) ADC, either itself or through its licensee KAA, will place monitoring stations to measure the amount of water coming into the ditches and the amount of water going into the streams below the diversions on a continuous basis, and will install and maintain monitoring equipment at the existing flow gauging location immediately above the Pu‘u Lua Reservoir and for the following streams:

Waiakoali,

Kawaikoi,

Kauaikinana,

Kōke‘e,

Waiiahulu,

Koaie, and

Waimea at the Mauka hydroelectric plant.

2. KIUC shall pay to KAA, as ADC’s licensee, reasonable compensation in the amount of seven hundred seventy-five thousand dollars (\$775,000) (Compensation) within ten calendar days following CWRM’s approval of the Stipulation by means mutually agreed upon, as a one-time, lump sum payment in exchange for the transfer of KIUC’s duties and responsibilities under the WWA to ADC.
3. KIUC, ADC, and/or its licensee KAA, shall be responsible for their own respective tax obligations, if any, resulting from or payable in connection with the Compensation paid by KIUC pursuant to the Agreement.
4. The transfer of KIUC’s duties and responsibilities under the WWA to ADC will be effective as of the date the Stipulation is approved by CWRM and upon receipt of the Compensation by KAA, at which time KIUC, ADC and KAA, as ADC’s licensee, agree that KIUC has no other duties and responsibilities under the WWA.
5. This Agreement is subject to independent approval of the ADC Board of Directors.
6. This Agreement contains the entire agreement and understanding of KIUC and ADC pertaining to the subject matter hereof, supersedes all prior agreements and understandings relating to the subject matter hereof, and shall not be amended except by written agreement signed by KIUC and ADC.
7. The validity and construction of this Agreement shall be governed by the laws of the State of Hawai‘i, and KIUC and ADC hereby submit to the jurisdiction of the courts of the State of Hawai‘i.
8. This Agreement shall be binding upon and inure to the benefit of the heirs, successors and permitted assigns of KIUC and ADC. Neither this Agreement nor the responsibilities and obligations of any party hereunder shall be assignable or transferable by such party without the prior written consent of the other party hereto.
9. This Agreement may be executed in multiple counterparts, each of which shall be deemed a duplicate original, but all of which taken together shall constitute one and the same instrument. KIUC and ADC agree that this Agreement may be executed by original signature or electronic signature, and the signature pages transmitted by facsimile, scan and email, or other electronic transmission. The delivery of such electronic signature pages

shall constitute effective execution and delivery. The effectiveness of this Agreement shall not be affected by the non-electronic delivery of any manually signed signature page.

10. KIUC, ADC, and ADC’s licensee KAA represent and warrant that the person executing this Agreement on its behalf is duly authorized to do so.

[Remainder of page intentionally left blank; signature page follows.]

IN WITNESS WHEREOF, and intending to be legally bound hereby, the parties hereto have caused this Agreement to be duly executed as of the date(s) written below and effective as of the date CWRM approves the Stipulation and KIUC delivers the Compensation to KAA, as ADC’s licensee:

Kaua‘i Island Utility Cooperative

By:  _____
Its:
Dated:

State of Hawai‘i, Agribusiness Development Corporation

By: _____
Its: Executive Director
Dated:

Kekaha Agriculture Association

By: _____
Its: President, Board of Directors
Dated:

Date of CWRM’s approval of the Stipulation and effective date of this Agreement:
_____.

IN WITNESS WHEREOF, and intending to be legally bound hereby, the parties hereto have caused this Agreement to be duly executed as of the date(s) written below and effective as of the date CWRM approves the Stipulation and KIUC delivers the Compensation to KAA, as ADC’s licensee:

Kaua’i Island Utility Cooperative

By: _____
Its:
Dated:

State of Hawai‘i, Agribusiness Development Corporation

By:  _____
Its: Executive Director
Dated:

Kekaha Agriculture Association

By: _____
Its: President, Board of Directors
Dated:

Date of CWRM’s approval of the Stipulation and effective date of this Agreement:
_____.

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Kaua‘i Island Utility Cooperative

By: _____
Its:
Dated:

State of Hawai‘i, Agribusiness Development Corporation

By: _____
Its: Executive Director
Dated:

Kekaha Agriculture Association

By: _____
Its: President, Board of Directors
Dated:

Date of CWRM’s approval of the Stipulation and effective date of this Agreement:

_____.

AGREEMENT BETWEEN THE STATE OF HAWAI‘I AGRIBUSINESS DEVELOPMENT CORPORATION AND THE KEKAHA AGRICULTURE ASSOCIATION

This Agreement, effective on the Effective Date as described below, between the State of Hawai‘i Agribusiness Development Corporation (ADC), and the Kekaha Agriculture Association (KAA), as a licensee of ADC, and pursuant to the “Restated and Amended Memorandum of Agreement Between the State of Hawaii Agribusiness Development Corporation and Kekaha Agriculture Association” entered into on August 29, 2008, amending the Agreement dated April 1, 2007 (MOA), each a Party and collectively as Parties, do hereby agree that:

1. The State of Hawai‘i, Department of Land and Natural Resources, Commission on Water Resource Management (CWRM) approved the Stipulation and Agreement Between the Parties to the April 18, 2017 Waimea Watershed Agreement on October 31, 2024, or on such other date as CWRM may grant approval, (“Effective Date”), which allowed the Kauai Island Utility Cooperative (KIUC) to withdraw from its duties and responsibilities under Phase One of the Waimea Watershed Agreement (WWA); and
2. ADC and KIUC have come to an agreement on the monetary compensation to be provided by KIUC in recognition of ADC assuming responsibility for KIUC’s Phase One duties and responsibilities under the WWA, as modified by KAA’s Plan, attached hereto and incorporated herein by reference as Exhibit A; and
3. That the KAA created Plan, was designed to achieve the WWA Phase One requirements, without construction of elements of the previously approved plans that were rendered unnecessary due to the elimination of Phase Two of the WWA; and
4. KAA, on behalf of ADC, has agreed to perform KIUC’s duties and responsibilities with regard to Phase One of the WWA as modified by KAA’s Plan; and
5. ADC pursuant to Section 3c of the MOA, authorizes KAA as ADC’s licensee to accept such third-party revenues from KIUC, provided that KAA as ADC’s licensee applies such third party revenues obtained from KIUC to help defray the costs associated with operating, managing, and maintaining the common infrastructure improvements as necessary to contribute toward accomplishing KIUC’s Phase One obligations under the WWA in accordance with KAA’s Plan, which is attached hereto as Exhibit A.
6. The monetary compensation received by KAA as ADC’s licensee from KIUC shall be treated by KAA as ADC’s licensee as income from a third party pursuant to the MOA and KAA as ADC’s licensee shall be responsible for prompt payment of any taxes owed by KAA, and not by any other party, resulting from this income.
7. This Agreement was approved by the ADC Board of Directors at its meeting held on October 24, 2024.

THE PARTIES HERETO HAVE REVIEWED, AGREED TO, AND EXECUTED THIS AGREEMENT EFFECTIVE ON THE DATE FIRST NOTED ABOVE:

State of Hawai‘i, Agribusiness Development Corporation

By: _____
Its: Executive Director
Dated:

Kekaha Agriculture Association

By: _____
Its: President, Board of Directors
Dated:

THE PARTIES HERETO HAVE REVIEWED, AGREED TO, AND EXECUTED THIS AGREEMENT EFFECTIVE ON THE DATE FIRST NOTED ABOVE:

State of Hawai‘i, Agribusiness Development Corporation

Signed by:
By: Wendy Gady
E5BDE95A6F85472...
Its: Executive Director
Dated:

Kekaha Agriculture Association

By: _____
Its: President, Board of Directors
Dated:

THE PARTIES HERETO HAVE REVIEWED, AGREED TO, AND EXECUTED THIS AGREEMENT EFFECTIVE ON THE DATE FIRST NOTED ABOVE:

State of Hawai‘i, Agribusiness Development Corporation

By: _____
Its: Executive Director
Dated:

Kekaha Agriculture Association

By: 
Its: President, Board of Directors
Dated:

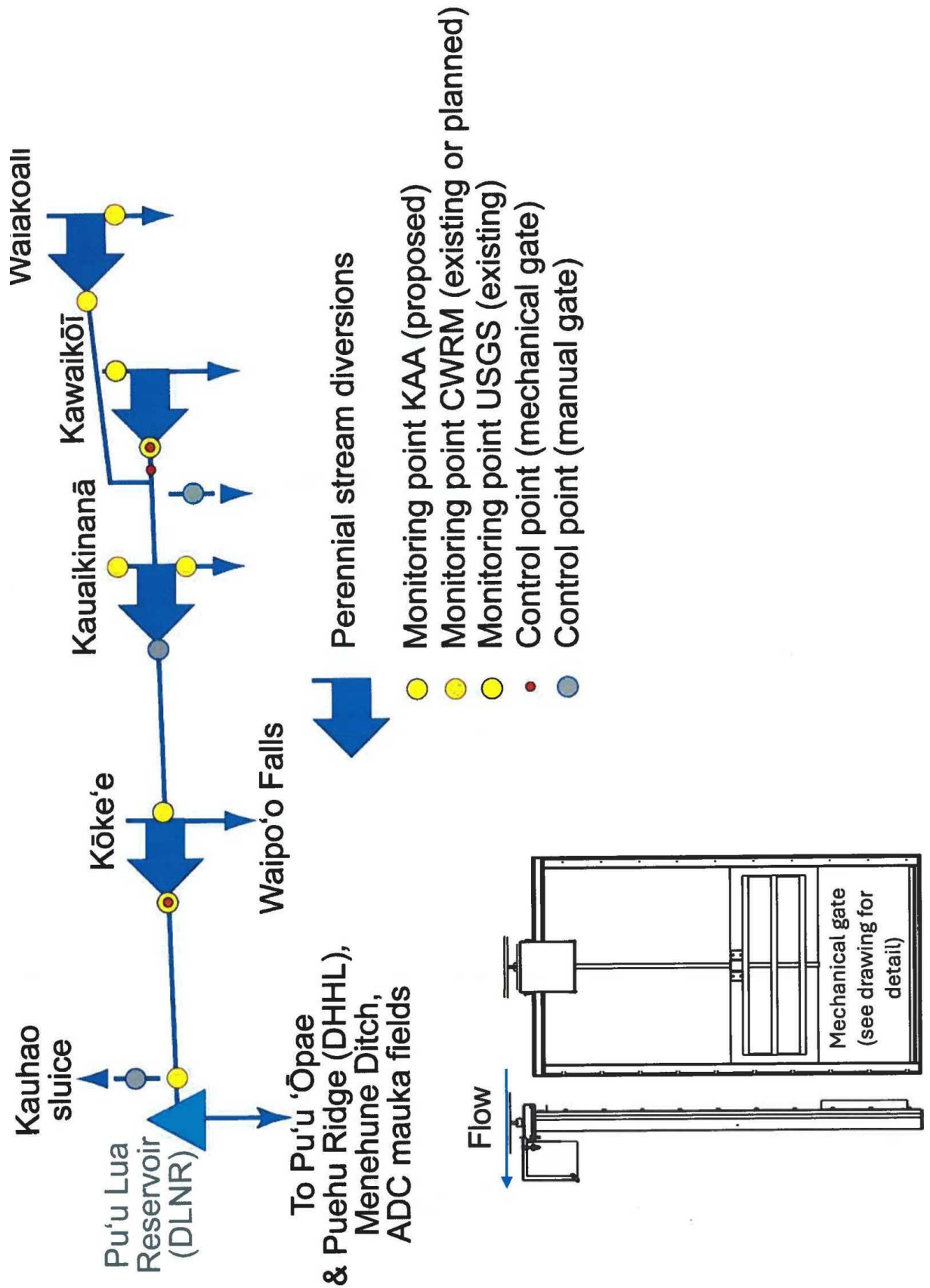
Kekaha Agriculture Association

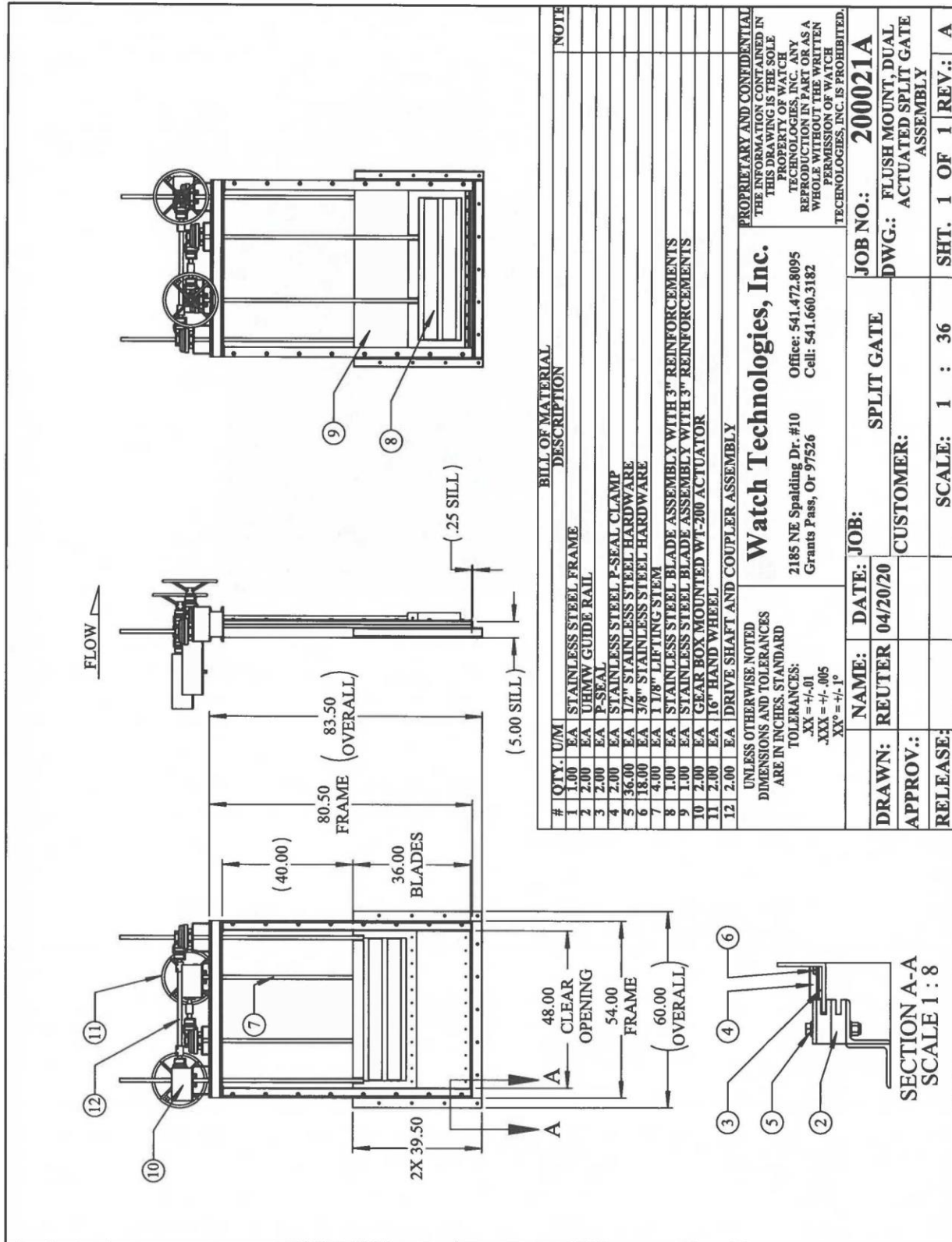
Proposed Modifications to Kokee Ditch Diversions

**Waimea Watershed Agreement
Phase 1**

October 4, 2024

EXHIBIT A





BILL OF MATERIAL		NOTE
#	QTY. U/M	DESCRIPTION
1	1.00 EA	STAINLESS STEEL FRAME
2	2.00 EA	UHMW GUIDE RAIL
3	2.00 EA	P-SEAL
4	2.00 EA	STAINLESS STEEL P-SEAL CLAMP
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12	2.00 EA	UNLESS OTHERWISE NOTED DIMENSIONS AND TOLERANCES ARE IN INCHES, STANDARD TOLERANCES: .XX = +/- .01 .XXX = +/- .005 XX° = +/- 1°

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JOB NO.: 200021A
DWG.: FLUSH MOUNT, DUAL ACTUATED SPLIT GATE ASSEMBLY
NAME: REUTER **DATE: 04/20/20**
CUSTOMER:
SCALE: 1 : 36
SHT. 1 OF 1 REV.: A

SECTION A-A
SCALE 1 : 8

Modifications to Kōke'e Diversions

Waiakoali Stream



KIUC

KAA

New Ditch Intake Headwall with 36" wide stoplog bay

Replace stoplog bay with remotely controlled sluice gate

Spillway Release Gate with 18" wide by 12" deep release point cut in top of diversion

Replace release point in top of diversion (invert at 3423.46 ft) with stilling well with trash rack and 8" diameter hole with invert at 3421 ft

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Previously installed by CWRM in ditch

CWRM gage in stream below diversion

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KIUC

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Redesign for cage-type trash rack with catwalk

Earthen Cofferdam with 30" diameter culvert and slide gate braced to down-ditch side of existing concrete headwall

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Kauaikinanā Stream



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KAA

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Pending availability of future finding

Spillway Slot Insert fabricate new steel bulkhead

Spillway stoplogs previously converted to underflow by KAA

CWRM gage above confluence of ditch and, gage below diversion

Purchase Gate Assy with other gates

Future KAA Improvements
~Install remote control gate
~Sensor at gate, pond, KKoi flow

Kōke'e Stream



KIUC

KAA

New Ditch Bulkhead, HDPE Pipe Flume and Flow Measurement

Tunnel Head Gate,
rehabilitate existing wooden gate, frame and hoist

Spillway Slot, insert Twenty-four inches (24") of stoplogs

Install water level sensor and rate section up-ditch from pool

Replace wooden gate with remotely controlled sluice gate with sensor to balance amount of water leaving the pool with the amount entering and install water level sensor

Spillway stoplogs previously adjusted by KAA

Pu'u Lua



KIUC

KAA

**Reestablish former (USGS)
ditch gauge site, rehabilitate
control weir and install new
measurement equipment**

Previously installed by CWRM

Cost summary and prioritization for KODIS modifications

Priority	Location	Task / Item(s)	Cost*	Total cost	Completed**	Alternative to KIUC P1 modification	Included in KIUC P1 modifications	Redundant KIUC P1 modification
Kawaikoi								
1		Clear and prep area	\$ 18,192		Q2 2025		X	
1		Install screen at headwall / concrete footing	\$ 67,794		Q3 2025		X	
1		Install gate at headwall / concrete supports	\$ 95,200		Q3 2025	X		
1		New screen at tunnel gate	\$ 25,790		Q3 2025	X		
1		New gate at tunnel	\$ 101,059		Q3 2025	X		
		Replace existing tunnel gate with stop logs						X
1		Install sensors in ditch, gate & pool	\$ 26,300		Q3 2025		X	
		Earthen Cofferdam						X
				\$334,335				
Waiakoali								
2		Clear and prep area	\$ 3,080		Q2 2026		X	
2		Cut hole in diversion	\$ 8,080		Q2 2025	X		
		Spillway Release Gate						X
		Ditch intake headwall with stoplog bay						X
4		Install trash screen at hole	\$ 17,080		Q2 2026	X		
4		Install new screen in ditch	\$ 22,510		Q2 2026	X		
4		Install gate and solar panel	\$ 91,125		Q2 2026	X	X	
		Install sensor in ditch			Previously installed by CWRM		X	
		Install sensor in stream below diversion			Previously installed by CWRM	X		
				\$141,874				
Kokee								
3		Clear and prep area and mobilize	\$ 20,040		Q2 2025		X	
		Install ditch headwall and HDPE pipe						X
3		Remove existing gate and replace with new	\$ 97,949		Q3 2025	X		
		Rehabilitate existing gate						X
3		Install sensor in ditch before pond	\$ 17,800		Q3 2025		X	
		Adjust height of stoplogs in spillway			Previously implemented by KAA		X	
3		Install sensor in tunnel	\$ 13,440		Q3 2025	X		
				\$149,229				
Kauaikinana								
1		Purchase gate assembly and sensors		\$50,000	Q2 2025			
				\$50,000				
Total Direct Cost			\$675,438					
Contingency @ 12.8%				\$99,562				
				\$ 775,000				
Puu Lua gauge								
		Install sensor in Ditch					X	
Kauhao								
		Refurbish existing gate		\$ 30,000			NO	
Kauaikinana								
		Clear and prep area		\$ 6,160			X	
		Refurbish screen		\$ 7,080			X	
		Install gate and solar panel		\$ 46,100			X	
		Install sensor in pond		\$ 15,440			X	
		Install sensors in tunnel and gate		\$ 18,940		X		
CFF***				\$ 93,719				
		Adjust height of stoplogs in spillway					X	
		Install sensor in stream below diversion				X		

*2024 pricing **Estimated barring unforeseen circumstances ***Contingent on future funding

KAA timeline and actions for KODIS modifications							Accomplishes P1 modifications	
	2024	2025			2026			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
	Place order for gates		Clear and prep area	Install headwall screen Install headwall gate Install tunnel screen Install tunnel gate Install monitoring devices	Test monitoring devices		AAA begins reporting	
Kawaikoi				Ongoing monitoring by USGS				YES
		Clear and prep area Cut hole in diversion		Install screen over hole Install screen in ditch Install gate Secure existing monitoring equipment			Scheduled for work not completed in 2025	
Waiakoali				Ongoing monitoring & reporting by CWRM				YES
		Clear and prep area		Install tunnel gate Install monitoring devices	Test monitoring devices		AAA begins reporting	
Kōke'e				Ongoing monitoring & reporting by CWRM				YES
Kauaikinana				KAA / ADC to develop proposal(s) for funding new tunnel gate and monitoring				YES
Kahhao					Clear and prep area Rebuild screw gate			
Puu Lua gauge				Ongoing monitoring & reporting by CWRM				Additional
Puu Lua reservoir				KAA / ADC to develop proposal(s) for funding to replace outlet valve				YES
								Additional

JOSH GREEN, MD.
GOVERNOR | KE KA'ĀINA
SYLVA LUKE
LIEUTENANT GOVERNOR | KA HOPE KA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL
RESOURCES DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

Date: 11/21/23
DAR # AR6505

DARRIN H.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
LAURA H.E. KAUKUA
FIRST DEPUTY
M. KALEO MANUEL
DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
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MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

MEMORANDUM

TO: Brian J. Neilson
DAR Administrator

FROM: Heather Ylitalo-Ward, Aquatic Biologist

SUBJECT: Request for Comments, Stream Diversion Works Permit Application
(SDWP.6001.2)

Request Submitted by: M. Kaleo Manuel, Deputy Director CWRM
Location of Project: Waiakōali, Kawaikōi, Kōke'e Streams, Waimea, Kauai, Tax Map Key: (4) 1-4-001:003
and 013

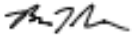
Brief Description of Project:

The proposed work includes the following diversion modifications:
1. Waiakōali Stream: Installation of a concrete diversion headwall with a control gate.
2. Kawaikōi Stream: Construction of a gravel cofferdam with a gated pipe and trash rack.
3. Kōke'e Stream: Construction of a 36-inch bulkhead with gate and 85-foot long, 24-inch HDPE pipe flume.

Comments:

No Comments Comments Attached

Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plan, DAR requests the opportunity to review and comment on those changes.

Comments Approved:  Date: Nov 22, 2023
Brian J. Neilson
DAR Administrator

DAR# AR6505

Comments

Thank you for the opportunity to comment on the proposed permit application.

Hawaiian streams and estuaries provide habitat for native aquatic biota composed of 5 fish species 'o'opu akupa (*Eleotris sandwicensis*), 'o'opu naniha (*Stenogobius hawaiiensis*), 'o'opu nakea (*Awaous hawaiiensis*), 'o'opu nopili (*Sicyopterus stimpsoni*), 'o'opu 'alamo'o (*Lentipes concolor*); 2 crustacean species 'opae 'oeha'a (*Macrobrachium grandimanus*), 'opaekala'ole (*Atyoida bisulcata*); and 2 mollusk species hapawai (*Neritina vespertina*), and hihiwai (*Neritina granosa*) which may occur in the stream diversion locations. However, the proposal indicates that surveys conducted in 2018 for the original permit application found no native aquatic species downstream of each of the diversions.

As most of the proposed project will be occurring in the ditch system, is not expected to have adverse impacts on the aquatic environment, but may have short-term impacts during the installation of the earthen coffer dam, headwall modification, and construction of bulkhead with gate and pipe flume. Habitat disturbance and water turbidity are the most probable short-term impacts.

Best Management Practices (BMPs) or mitigative measures should be implemented during these activities to minimize the potential for erosion, siltation, pollution, turbidity, and degradation of the aquatic environment.

1) Stream bank areas denuded of vegetation should be planted or covered as quickly as

possible to prevent erosion and the vegetation cleared along stream banks should be removed and prevented from falling into the stream/estuary environment;

2) Scheduling stream maintenance activities during periods of minimal rainfall;

3) Use of silt curtains, fiber rolls, silt fencing, etc. to prevent sediments from increasing water turbidity and sediment run-off;

4) Prevent construction materials, petroleum products, debris and landscaping products from

falling, blowing or leaching into the aquatic environment; and

5) Reduce as much as possible the disturbance and impacts to natural stream channel bottom substrate types (cobble, boulders, etc.) as much as possible during the removal of vegetation and sediment from the stream channel. These substrate types are essential components of the habitat for the native stream biota.

JOSH GREEN, M.D.
SCIENTIST



DAWN N. S. CHANG
CHAIRPERSON

KENNETH S. FINK, M.D., MGA, MPH
NEEL J. HANNAHS
AURORA KAGAWA-VIVIANI, PH.D.
WAYNE K. KATAYAMA
PAUL J. MEYER
LAWRENCE H. MIKE, M.D., J.D.

M. KALEO MANUEL
DEPUTY DIRECTOR

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'ŌHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 1521
HONOLULU, HAWAII 96809

October 26, 2023

Ref: SDWP.6001.2

FROM: ~~TO:~~ Aha Moku
Aquatic Resources
Engineering Division
Forestry and Wildlife
Land Division
Office of Conservation and Coastal Lands
State Parks

TO: ~~FROM:~~ M. Kaleo Manuel, Deputy Director *M. Manuel*
Commission on Water Resource Management

SUBJECT: Request for Comments, Stream Diversion Works Permit Application
(SDWP.6001.2), Kaua'i Island Utility Cooperative, Kōke'e Ditch Diversion
Modification and Monitoring, Waiakōali, Kawaikōi, Kōke'e Streams, Waimea,
Kaua'i, Tax Map Key: (4) 1-4-001:003 and 013

We would appreciate your review and comment on the subject permit application within 30 days from the date of this memo. Previously, Stream Diversion Works Permit (SDWP.5321.2) for this project was issued on September 15, 2020, but expired. There have been no changes to the project design since the previous approval. The proposed work includes the following diversion modifications:

1. Waiakōali Stream: Installation of a concrete diversion headwall with a control gate.
2. Kawaikōi Stream: Construction of a gravel cofferdam with a gated pipe and trash rack.
3. Kōke'e Stream: Construction of a 36-inch bulkhead with gate and 85-foot long, 24-inch HDPE pipe flume.

The application is online at <http://dlnr.hawaii.gov/cwrm/surfacewater/review/>. If you have any questions, contact Rebecca Alakai at (808) 587-0266, or rebecca.r.alakai@hawaii.gov.

Response:

- | | |
|---|---|
| <input type="checkbox"/> We have no objections | <input type="checkbox"/> Additional information requested |
| <input type="checkbox"/> Not subject to our regulatory authority and permit | <input type="checkbox"/> Extended review period requested |
| <input checked="" type="checkbox"/> Comments attached | <input type="checkbox"/> EA / EIS is required |

Contact Person: *Carty S. Chang* Date: Nov 21, 2023
Carty S. Chang, Chief Engineer

**DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION**

CWRM/M Kaleo Manuel

**Ref: Request for Comments, Stream Diversion Works Permit Application
(SDWP.6001.2), Kaua‘i Island Utility Cooperative, Kōke‘e Ditch Diversion
Modification and Monitoring
Location: Waiakōali, Kawaikōi, Kōke‘e Streams, Waimea, Kaua‘i
TMK(s): (4) 1-4-001:003 and 013**


COMMENTS

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zones are designated on FEMA’s Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA’s Map Service Center (msc.fema.gov). Our Flood Hazard Assessment Tool (FHAT) (fhaw.hawaii.gov) could also be used to research flood hazard information.

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7139.
- Kauai: County of Kauai, Department of Public Works (808) 241-4896.

Signed: 
CARTY S. CHANG, CHIEF ENGINEER

Date: Nov 21, 2023

JOSH GREEN, M.D.
GOVERNOR | KE KAĀNA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KAĀNA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

November 28, 2023

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

LAURA H.E. KAARUA
FIRST DEPUTY

M. KALEO MANUEL
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Log no. 4311/SDWP.6001.2

MEMORANDUM

TO: M. KALEO MANUEL, Deputy Director
Commission on Water Resource Management

FROM: JASON D. OMICK, Acting Wildlife Program Manager
Division of Forestry and Wildlife

SUBJECT: Request for Comments on the Stream Diversion Works Permit Application (SDWP.6001.2) Kaua'i Island Utility Cooperative, Kōke'e Ditch Diversion Modification and Monitoring, Waiakoali, Kauaikinana, Kōke'e Streams, Waimea, Kaua'i island

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for comments on the Kōke'e Ditch Diversion Modification and Monitoring permit application (SDWP.6001.2) located along the Waiakoali, Kauaikinana, and Kōke'e Streams, on the island of Kaua'i; TMK: (4)1-4-001:003 and 013. The sole purpose for the proposed project is for stream restoration per the IIFS adopted by the Commission on Water Resource Management (CWRM) as part of the Mediation Agreement for the Waimea Watershed, approved in April 2017. The proposed work is on the existing Kōke'e Ditch system, which actively diverts water for irrigation, recreational fishing, and other state facility uses. The proposed work will result in restored stream flows at the Kōke'e Diversion, which is consistent with the IIFS for each stream and Kaua'i General Plan's Vision for Kaua'i 2020. At Waiakoali, the proposed work includes the installation of a concrete diversion headwall with a control gate with the purpose of increasing high stream flow to facilitate water release and to control diversion volumes. At Kawaikoi, streamflow restoration will be addressed by installing an earthen coffer dam with a gated pipe and trash rack. And at Kōke'e stream the restoration work will include installation of one 36- inch bulkhead with gate and one 85-foot long 24-inch HDPE pipe flume to retain all natural flows in the stream, which requires the ditch flows to pass across the stream without comingling. The proposed changes will result in less water diverted into the ditch and more water retained in the streams. A previous Stream Diversion Works Permit (SDWP.5321.2) was issued on September 15, 2020, but has expired. There have been no changes to the project design.

DOFAW provides the following comments regarding the potential for the proposed work to affect listed species in the vicinity of the project area.

The State listed 'ōpe'ape'a or Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided for any construction because bats can become ensnared and killed by such fencing material during flight.

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.

If nighttime construction is required during the seabird fledging season (September 15 to December 15), we recommend that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights should then be turned off. If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting <https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response>.

Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

The State listed nēnē or Hawaiian Goose (*Branta sandvicensis*) could potentially occur in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the Kaua'i Branch DOFAW Office at (808) 274-3433 and establish a buffer zone around the nest.

The endemic pueo or Hawaiian Short-Eared Owl (*Asio flammeus sandwichensis*) could potentially nest in the project area. Before any potential vegetative alteration, especially ground-based disturbance, we recommend that line transect surveys are conducted during crepuscular hours through the project area. If a pueo nest is discovered, a minimum buffer distance of 100 meters from the nest should be established until chicks are capable of flight.

The proposed project is in proximity to designated Ecosystem Critical Habitat for threatened and endangered plant species. DOFAW recommends that a botanical survey be conducted by a qualified botanist in all proposed affected areas prior to commencing work to determine if any rare or endangered plants are present in the project area. We recommend that the survey consists of a complete species list and is conducted during the wettest time of year when

plants are more likely to be visible, especially in drier areas. If any listed species are found, please notify DOFAW at (808) 587-0166.

In addition, DOFAW recommends heavy equipment work to be done greater than 100 m away from listed plants. For information on avoidance and minimization measures for plants, please refer to the following link: <https://www.fws.gov/media/plant-avoidance-and-minimization-measures-may-2023>.

DOFAW recommends using native plant species for landscaping that are appropriate for the area; i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid 'Ōhi'a Death, Coffee Leaf Rust), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, Coffee Berry Borer, etc.), or invasive plant parts (e.g., Barbados Gooseberry, False Kava, Giant Reed, etc.) that could harm our native species and ecosystems. We recommend consulting the Kaua'i Invasive Species Committee (KISC) at (808) 821-1490 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

To prevent the spread of Rapid 'Ōhi'a Death (ROD), DOFAW requests that the information and guidance at the following website be reviewed and followed if 'ōhi'a trees are present at the project site that will be removed, trimmed, or potentially injured: <https://cms.ctahr.hawaii.edu/rod>.

We recommend that Best Management Practices are employed during and after construction to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems.

We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions, please contact Myrna N. Girald Pérez, Protected Species Habitat Conservation Planning Coordinator at (808) 265-3276 or myrna.girald-perez@hawaii.gov.

Sincerely,



JASON D. OMICK
Acting Wildlife Program Manager



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD., STE 555
KAPOLEI, HI 96707

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
ROBERT K. MASUDA
FIRST DEPUTY
M. KALEO MANUEL
DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENDORSEMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAOLOAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

March 3, 2022

Michael Cain, Acting Administrator
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
1151 Punchbowl Street, Room 131
Honolulu, Hawai'i 96813
michael.cain@hawaii.gov

IN REPLY REFER TO:
Project No. 2019PR30706
Doc. No. 2203DB01
Archaeology
Architecture

Dear Mr. Cain:

**SUBJECT: HRS Chapter 6E-42 Historic Preservation Review –
Kaua'i Island Utility Cooperative – Kōke'e Ditch Diversion Modification Project
Flow Release and Monitoring Plans – OCCL – Site Plan Approval
Kona and Waimea Ahupua'a, Kona District, Island of Kaua'i
TMK: (4) 1-4-001, 002, 003, 013**

This letter provides the State Historic Preservation Division's (SHPD's) HRS §6E-42 updated review of the Kaua'i Island Utility Cooperative (KIUC) – Kōke'e Ditch Diversion Modification Project. The Kaua'i Island Utility Cooperative proposes the installation of gauging stations and to release water in the stream channel at each diversion. The project requires Department of Land and Natural Resources (DLNR) Office of Conservation and Coastal Lands (OCCL) site plan approval. In a letter dated May 17, 2021 (Project No. 2019PR30706, Doc. No. 2104DB08), SHPD requested additional information for the proposed project, including requesting an SIHP Site number for the Kōke'e Ditch System, providing assessment of integrity and site significance of the ditch and reservoir, providing a project effect determination (if necessary), and if warranted, providing potential mitigation commitments for potential impacts related to the current project.

The SHPD received the latest project submittals on November 11, 2021 (Submission No. 2019PR30706.002) that included cover letter for submittal of the revised LRFI report (Belluomini and Hammatt, October 2021), document titled *Archaeological Literature Review and Field Inspection Report for the Kōke'e Diversion Modification Project, Waimea Ahupua'a, Waimea District, Kaua'i, TMK: (4) 1-4-001* (Belluomini and Hammatt, October 2021), and on November 30, 2021 (Submission No. 2019PR30706.003) that included email correspondence for SIHP Site # request. The property acreage totals approximately 0.486 acres (21,160.813 sq. ft.).

The four primary Kōke'e Ditch diversion locations are Waiakoali, Kawaikoi, Kauaikinana, and Kōke'e streams. According to the Kōke'e Ditch System landowner (Agribusiness Development Corporation), the Waiakoali and Kawaikoi diversions are located in the Na Pali Kona Forest Reserve and the Kauaikinana and Kōke'e diversions are located in Kōke'e State Parks. DLNR Division of Forest and Wildlife (DOFAW) manages the land surrounding the Waiakoali and Kawaikoi diversions while DLNR Division of State Parks manages the land surrounding the Kauaikinana and Kōke'e diversions. Puu Moe Divide and Upper Pipeline are located within the Kōke'e State Parks and Pu'u Ka Pele Forest Reserve. Additionally, DOFAW and State Parks manage portions of the upper pipeline.

The proposed project scope of work is based upon a Mediation Agreement for the Waimea Watershed, which was approved by Commission on Water Resource Management (CWRM) in April 2017 and involves modifications to the existing ditch structure to install gauging stations and to release water in the stream channel at each diversion.

There are two types of minor ground disturbance involved with the project. The first involves the installation of 3 concrete pads measuring 3 ft. by 4 ft. at three diversion sites and less than a foot in depth. The second type of ground

Mr. Michael Cain
March 3, 2022
Page 2

disturbance is the widening of a 2-foot-wide footpath at Kawaikoi diversion between an access road and the ditch. Ground disturbance would be caused by removal of ginger and small gauva with an excavator. The path after clearing will be approximately 10 ft. wide. The ditch is currently in use and maintained on a regular basis.

The Kōke‘e Ditch (SIHP Site #50-30-02-02417) was originally constructed between 1906-1907 by the Kekaha Sugar Company, and expanded between 1923 and 1926 into the Kōke‘e Ditch system which includes the Waiakoali Diversion, Kawaikoi Diversion, Kawaikinana Diversion, Kōke‘e Diversion (1924), and Pu‘u Lua Reservoir (1927). The ditch system is defined as a historic property, per §6E-2, HAR. Each diversion structure is comprised of man-made tunnels, basalt and mortar constructed walls, and concrete masonry walls.

The proposed project is limited in spatial extent and will not adversely affect the character defining features of Kōke‘e Ditch, and the minimal ground disturbance has low potential to impact intact subsurface historic properties. Within the revised LRFI, the Kōke‘e Ditch System was assessed for integrity and significance per HAR §13-275-6. It was determined to sufficiently retain all seven elements of integrity for location, design, setting, materials, workmanship, feeling and association, although modern modifications, current lack of commercial agricultural use of the area and ditch, and abandonment of portions of the ditch has slightly diminished its integrity. The ditch system was also determined significant under criteria a, c, and d.

SHPD requests that the Belluomini and Hammatt (October 2021) LRFI be revised to indicate the project is subject only as a §6E-42 project, and pursuant to HAR §13-284. Once revised, please upload final document to HICRIS under Project No. 2019PR30706, as well as two hard copies and a text searchable pdf copy transmitted to the SHPD Kapolei office and to [Lehua K. Soare@hawaii.gov](mailto:Lehua.K.Soare@hawaii.gov), respectively.

Based on the updated information provided by the applicant, SHPD’s determination is “No Historic Properties Affected” for the current project. Pursuant to HAR §13-284-7(e), when the SHPD agrees that the action will not affect any significant historic properties, this is the SHPD’s written concurrence and historic preservation review ends. The historic preservation review process is ended. The permitting and/or project initiation process may continue.

Please contact Julia Flauaus, Architectural Historian, at Julia.Flauaus@hawaii.gov for any concerns regarding architectural resources, and David Buckley, Kaua‘i Lead Archaeologist, at (808) 462-3225 or at David.Buckley@hawaii.gov for questions regarding this letter.

Mahalo,

Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Jason Hines, Joule Group, jhines@joulegroup.com
Dawn Huff, Joule Group, dhuff@joulegroup.com
David Bissell, President and CEO KIUC, dbissell@kiuc.coop
Hal Hammatt, CSH, hhammatt@culturalsurveys.com
Scott Belluomini, CSH, sbelluomini@culturalsurveys.com



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

SUZANNE B. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
ROBERT K. MASUDA
FIRST DEPUTY
N. KALEO MANUEL
DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF FORESTWORKS
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
DIVISION
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAIKOLAWE ISLAND RESERVE COMMISSION
LAND
STATE FARMS

REF:OCCL:TM

Correspondence: KA 19-117

Galen Nakamura
Shiramiu Loo & Nakamura
4357 Rice St., Suite 102
Lihue, HI 96766

FEB 12 2019

SUBJECT: Kōke'e Ditch Diversion Modification and Monitoring Proposal Located at Napali-Kona Forest Reserve, Kaua'i, Vicinity of TMKs: (4) 1-4-001:003 & 013

Dear Mr. Nakamura:

The Office of Conservation and Coastal Lands (OCCL) has reviewed your information regarding the subject matter. According to your information the Waimea Watershed Area Mediation Agreement approved by the Commission on Water Resource Management calls for modifications to several existing diversion structures on the Ditch system and the installation of flow measurement equipment on the ditch and on diverted streams.

For this particular request, Kaua'i Island Utility Cooperative (KIUC) is proposing to: 1) Modify four diversions on the Ditch system to increase the natural flows of Waiakoali, Kawaikōi, Kawaikinanā, and Kōke'e streams to satisfy interim instream flow standards adopted by CWRM and 2) install flow measurement equipment in the noted streams and/or associated ditch.

In addition, KIUC is requesting a determination as to what type of authorization would be required for the proposed project and also if the proposed project could be exempt from HRS, Chapter 343.

The OCCL notes the subject area lies within the Resource subzone of the Conservation District. The Kōke'e Ditch system is a nonconforming land use as it was created [1926] prior to the advent of the Conservation District.

What is being proposed are identified land uses in the Conservation District pursuant to the Hawai'i Administrative Rules, Chapter 13-5, §13-5-22 P-1 DATA COLLECTION (B-1) Basic data collection, research, education, and resource evaluation that results in a minor disturbance to natural resources or land; P-8 STRUCTURES AND LAND USES, EXISTING (B-1) Demolition, removal, or minor alteration of existing structures, facilities, land, and equipment. Any historic property shall be evaluated by the department for historical significance; and P-9 STRUCTURES, ACCESSORY (B-1) Construction or placement of structures accessory to existing facilities or uses.

The proposed land uses would require the filing of a Site Plan Approval (SPA) that can be authorized administratively by the OCCL. The SPA application should focus on describing the proposed land uses in detailed layman terms, the construction methodology, best management practices and any proposed mitigation. The SPA application can be found on our website at dlnr.hawaii.gov/occl under applications.

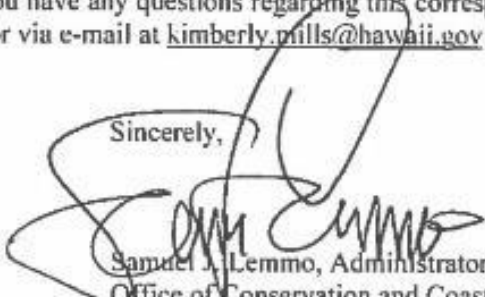
Galen Nakamura
Shiramiu Loo & Nakamura

Correspondence: KA 19-117

At this time, the OCCL believes that the proposed modifications and monitoring improvements may be considered an exempt action pursuant to Hawaii Revised Statutes (HRS), Chapter 343 as amended, HAR, Chapter 11-200, and pursuant to the Exemption List for the Department, specifically exemption class 1- Operations, repairs or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing; DLNR exemption 1-22) Repair and maintenance of existing water diversions and intake structures, including valves, gates, intake boxes, and lines, in order to collect or improve the collection at the location of the existing water source diversion works; 1-42) Actions that are intended to maintain or support the sustainability of those natural resources under the jurisdiction of the Department, including law enforcement, regulation compliance, resources and environmental monitoring, debris or property removal, and other administrative and management measures; Exemption Class 3 Construction and location of single new, small facilities or structures and the alteration and modification of same and installation of new, small, equipment and facilities and the alteration and modification of same; DLNR exemptions 3-13) Installation of new, small groundwater, surface water, or climatological monitoring and data collection equipment, structures that house or protect this equipment, and installation of electrical, telemetry, or communications systems to service this equipment; Exemption Class 4 Minor alteration in the conditions of land, water, or vegetation; Exemption Class 5 Basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource; DLNR exemption 5-5) Installation of climatological stations and equipment and streamflow gaging stations and equipment, and other similar equipment necessary to measure environmental factors and collect data; and Exemption Class 6 Construction or placement of minor structures accessory to existing facilities. When processing the SPA application, the OCCL shall seek concurrence with another State agency to hopefully exempt the proposed improvements from HRS, Chapter 343.

In addition, as the Koke‘e Ditch Irrigation System is considered a historic feature, the State agency that has oversight of the entire system should submit the HRS 6E Submittal Form on behalf of KIUC in regards to historic properties. This form can be found on the State Historic Preservation Division website under FORMS.

The OCCL notes the plans for Documentations and Modifications of Four Koke‘e Diversions has the wrong tax map key. OCCL staff has deduced the subject location’s TMKs. Please include the proper location, preferably a TMK. Should you have any questions regarding this correspondence, contact Tiger Mills of our Office at (808) 587-0382 or via e-mail at kimberly.mills@hawaii.gov.

Sincerely,

Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

C: CWRM/HP/KDLO
DOA
County of Kaua‘i
-Planning



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawai‘i 96850



In Reply Refer To:
2024-0004962-S7-001

November 30, 2023

Mr. M. Kaleo Mamuel
Attn: Ms. Rebecca Alakai
Commission on Water Resource Management
State of Hawai‘i
Honolulu, Hawai‘i 96809

Subject: Technical Assistance for the Proposed KIUC Kōke‘e Ditch Diversion
Modification and Monitoring Project, Kaua‘i

Dear Mr. Mamuel:

Thank you for your October 20 and October 26, 2023 letters, requesting technical assistance for the proposed KIUC Kōke‘e Ditch Diversion Modification and Monitoring project. There are two sections to this proposed project. The section under the SDWP.6001.2 application is located at Waiakōali, Kawaikōi, and Kōke‘e Streams and the section under the SCAP.6002.2 application is located at Waiakōali, Kauaikinana, and Kōke‘e Streams. Both sections of the project are in Waimea, on the island of Kaua‘i [TMKs: (4) 1-4-001:003 and 013].

The proposed work for SDWP.6001.2 includes the following diversion modifications:

1. Waiakōali Stream: Installation of a concrete diversion headwall with a control gate.
2. Kawaikōi Stream: Construction of a gravel coffer dam with a gated pipe and trash rack.
3. Kōke‘e Stream: Construction of a 36-inch bulkhead with a gate and a 85-foot long, 24-inch HDPE pipe flume.

At Waiakōali, the headwall modification will serve to control ditch flow and impoundment level. The new headwall will be keyed into the ditch walls and have a height of at least 18-inch above the diversion crest. The center of the headwall bulkhead will contain a 36-inch wide stoplog bay that will have boards set in place to provide a fixed opening. A new release point will be cut into the concrete crest wall of the existing spillway and will be located at the west end of the spillway crest and measure 18-inch wide and 12-inch deep. The proposed work will take place primarily in the ditch and not in the stream channel. The stream channel at the point of diversion is

PACIFIC REGION 1

IDAHO, OREGON*, WASHINGTON,
AMERICAN SAMOA, GUAM, HAWAII, NORTHERN MARIANA ISLANDS

*PARTIAL

Mr. M. Kaleo Manuel

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approximately 35 feet in width above the existing diversion structure and 15 feet in width below the diversion.

At Kawaikōi, an earthen coffer dam will be installed in the ditch immediately below the diversion. The coffer dam will contain a gated culvert to allow ditch flows to be regulated and thereby keep water in the stream during periods of natural low flows. The proposed work will take place primarily in the ditch and not in the stream channel. The stream channel at the point of diversion is approximately 80 feet in width above the existing diversion structure and 30 feet in width below the diversion.

At Kōke‘e Stream, the goal of the modifications is to retain all natural flows in the stream, which requires the ditch flows to pass across the stream without comingling. The ditch flow will be conveyed in a 24-inch HPDE flume pipe from the end of the ditch across the stream and into the downstream ditch tunnel. The pipe will be partially submerged during all flow conditions and will have supports every 10 feet. A new 36-inch tall bulkhead will be installed at the end of the concrete ditch section. The existing ditch gate, gate frame, hoist, and operator’s platform will be repaired and modified to accept the new flume pipe. The proposed work will take place in both the ditch and the impounded stream channel behind the existing diversion structure. The Kōke‘e stream channel upstream of the diversion is comprised of small braided channels two to six feet in width with a total width of 10 to 15 feet. The stream channel below the diversion varies from four to 12 feet in width.

The proposed work for SCAP.6002.2 includes the following diversion modifications:

1. Waiakōali Stream: Construction of a stream gate, two pressure transducers, a staff gate, an equipment enclosure, and a gage weir.
2. Kauaikinana Stream: Installation of a pressure transducer, two staff gages, a spillway insert, a modified ditch gate leaf, and an electrical enclosure.
3. Kōke‘e Stream: Installation of a pressure transducer, a staff gage, an acoustic Doppler, a HDPE ditch water flume pipe and control gate, a stoplog slot insert, and an equipment enclosure.

The proposed work includes the installation of flow monitoring equipment to measure stream and ditch flows. The goals for the gauging station installation includes gaining a better understanding of natural stream flow on the currently ungauged streams, measuring what is diverted into the ditch, and measuring flow in the stream channel below each diversion.

Our letter has been prepared under the authority of and in accordance with provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*), as amended (ESA). We have reviewed the information you provided and pertinent information in our files, as it pertains to federally listed species in accordance with section 7 of the ESA. Our data indicate the following species may occur or transit through the vicinity of the proposed project area: endangered ‘ua‘u (Hawaiian petrel, *Pterodroma sandwichensis*), endangered Hawai‘i distinct population segment (DPS) of the ‘akē‘akē (band-rumped storm-petrel, *Hydrobates castro*), threatened ‘a‘o (Newell’s shearwater, *Puffinus newelli*) (hereafter collectively referred to as Hawaiian seabirds); endangered ‘ōpe‘ape‘a (Hawaiian hoary bat, *Lasiurus cinereus semotus*); endangered koloa maoli (Hawaiian duck, *Anas wyvilliana*), endangered ‘alae ke‘oke‘o (Hawaiian coot, *Fulica*

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alae), endangered ae‘o (Hawaiian stilt, *Himantopus mexicanus knudseni*), endangered ‘alae ‘ula (Hawaiian gallinule, *Gallinula galeata sandvicensis*) (hereafter collectively referred to as Hawaiian waterbirds); and threatened nēnē (Hawaiian goose, *Branta sandvicensis*). We provide the following to assist you in preparation of your project.

Hawaiian Seabirds

Hawaiian seabirds may traverse the project area at night during the breeding, nesting, and fledging seasons, March 1 through December 15. Outdoor lighting could result in seabird disorientation, fallout, and injury or mortality. Seabirds are attracted to lights and after circling the lights they may become exhausted and collide with nearby wires, buildings, or other structures or they may land on the ground. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. Young birds (fledglings) traversing the project area between September 15 and December 15, in their first flights from their mountain nests to the sea, are particularly vulnerable to light attraction.

To avoid and minimize potential project impacts to Hawaiian seabirds we recommend you incorporate the following measures into your project design:

- Fully shielded all outdoor lights so the bulb can only be seen from below.
- Install automatic motion sensor switches and controls on all outdoor lights or turned off lights when human activity is not occurring in the lighted area.
- Avoid nighttime construction during the seabird fledging period, September 15 through December 15.

‘Ōpe‘ape‘a

‘Ōpe‘ape‘a roosts in woody vegetation across all islands and will leave their young unattended in trees and shrubs when they forage. If trees or shrubs 15 feet or taller are cleared during the pupping season, June 1 through September 15, there is a risk that young bats could inadvertently be harmed or killed, since they are too young to fly or move away from disturbance. ‘Ōpe‘ape‘a forage for insects from as low as 3 feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing.

To avoid and minimize potential project impacts to the endangered ‘ōpe‘ape‘a, we recommend you incorporate the following applicable measures into your project design:

- Do not disturb, remove, or trim woody plants greater than 15 feet tall during the birthing and pup rearing season for ‘ōpe‘ape‘a, June 1 through September 15.
- Do not use barbed wire for fencing.

Hawaiian Waterbirds

Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, kalo or taro (*Colocasia esculenta*) lo‘i or patches, irrigation ditches, sewage treatment ponds, and in the case of the koloa maoli, montane streams and marshlands. Ae‘o may also be found wherever ephemeral or persistent standing water may occur. Threats to these species include habitat loss and habitat degradation.

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To avoid and minimize potential project impacts to Hawaiian waterbirds we recommend you incorporate the following measures into your project design:

- In areas where waterbirds are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.
- If water resources are located within or adjacent to the project area, incorporate applicable best management practices (BMPs) regarding work in aquatic environments into the project design (see enclosure).
- Have a biological monitor that is familiar with the species' biology conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the project site prior to project initiation. Repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest). If a nest or active brood is found:
 - Contact the Service within 48 hours for further guidance.
 - Establish and maintain a 100-foot buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.
 - Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.

In addition, your project may result in the creation of standing water or open water that could attract Hawaiian waterbirds to the project site. Hawaiian waterbirds attracted to sub-optimal habitat may suffer adverse impacts, such as predation and reduced reproductive success, and thus the project may create an attractive nuisance. The ae‘o is also known to nest in sub-optimal locations (e.g., any ponding water), if water is present. Therefore, we recommend you work with our office during project planning so that we may assist you in developing measures to avoid impacts to listed species (e.g., fencing, vegetation control, predator management).

Nēnē

Nēnē are found on the islands of Hawai‘i, Maui, Moloka‘i, and Kaua‘i. They are observed in a variety of habitats, but prefer open areas, such as pastures, golf courses, wetlands, natural grasslands and shrublands, and lava flows. Threats to the species include introduced mammalian and avian predators, wind facilities, and vehicle strikes.

To avoid and minimize potential project impacts to nēnē we recommend you incorporate the following measures into your project design:

- Do not approach, feed, or disturb nēnē.
- If nēnē are observed loafing or foraging within the project area during the breeding season, September through April, have a biologist familiar with nēnē nesting behavior survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).

Mr. M. Kaleo Manuel

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- Cease all work immediately and contact the Service for further guidance if a nest is discovered within a radius of 150 feet of the proposed project, or a previously undiscovered nest is found within the 150-foot radius after work begins.
- In areas where nēnē are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.

A 4(d) rule was established at the time nēnē was downlisted to threatened status. Under the 4(d) rule, the following actions are not prohibited under the Act, provided the additional measures described in the downlisting rule are adhered to:

- Take by landowners, or their agents, conducting intentional harassment in the form of hazing or other deterrent measures not likely to cause direct injury or mortality, or nēnē surveys.
- Take that is incidental to conducting lawful control of introduced predators or habitat management activities for nēnē.
- Take by authorized law enforcement officers for the purpose of aiding or euthanizing sick, injured, or orphaned nēnē; disposing of dead specimens; and salvaging a dead specimen that may be used for scientific study.

We appreciate your efforts to conserve protected species. If you have questions regarding this response, please contact Charmian Dang, Fish and Wildlife Biologist (phone 808-792-9400, email: Charmian_Dang@fws.gov). When referring to this project please include this reference number: 2023-0004962-S7-001.

Sincerely,

JINY
KIM

Digitally signed
by JINY KIM
Date:
2023.11.30
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Island Team Manager
Oʻahu, Kauaʻi, Northwest Hawaiian Islands and
American Samoa

Enclosure: Service Recommended Standard BMP

U.S. Fish and Wildlife Service Recommended Standard Best Management Practices

The U.S. Fish and Wildlife Service (Service) recommends the following measures to be incorporated into project planning to avoid or minimize impacts to fish and wildlife resources. Best Management Practices (BMPs) include the incorporation of procedures or materials that may be used to reduce either direct or indirect negative impacts to aquatic habitats that result from project construction-related activities. These BMPs are recommended in addition to, and do not over-ride any terms, conditions, or other recommendations prepared by the Service, other federal, state or local agencies. If you have questions concerning these BMPs, please contact the Service’s Aquatic Ecosystems Conservation Program at 808-792-9400.

1. Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats beyond the planned project area.
2. Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods are variable throughout the Pacific islands, we recommend contacting the relevant local, state, or federal fish and wildlife resource agency for site specific guidance.
3. Turbidity and siltation from project-related work should be minimized and contained within the project area by silt containment devices and curtailing work during flooding or adverse tidal and weather conditions. BMPs should be maintained for the life of the construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.
4. All project construction-related materials and equipment (dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to; marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see <http://www.haccp-nrm.org/Wizard/default.asp>) can help to prevent attraction and introduction of non-native species.
5. Project construction-related materials (fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (e.g., with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.
6. Fueling of project-related vehicles and equipment should take place away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project should be developed. The plan should be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of accidental petroleum releases.
7. All deliberately exposed soil or under-layer materials used in the project near water should be protected from erosion and stabilized as soon as possible with geotextile, filter fabric or native or non-invasive vegetation matting, hydro-seeding, etc.

STANDARD STREAM DIVERSION WORKS PERMIT CONDITIONS
(Revised December 15, 2020)

1. The permit application and staff submittal approved by the Commission at its meeting on the above date shall be incorporated herein by reference.
2. The project may require other agency approvals regarding wetlands, water quality, grading, stockpiling, endangered species, and floodways. The permittee shall comply with all other applicable statutes, ordinances, and regulations of the Federal, State and county governments, including, but not limited to, instream flow standards.
3. The permittee, his successors, assigns, officers, employees, contractors, agents, and representatives, shall indemnify, defend, and hold the State of Hawaii harmless from and against any claim or demand for loss, liability, or damage including claims for property damage, personal injury, or death arising out of any act or omission of the permittee or his successors, assigns, officers, employees, contractors, and agents under this permit or related to the granting of this permit.
4. The permittee shall notify the Commission, by letter, of the actual dates of project initiation and completion. The permittee shall submit a set of as-built plans and photos in pdf format of the completed work to the Commission upon completion of this project. This permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The proposed work under this stream channel alteration permit shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.
5. Before proceeding with any work authorized by the Commission, the permittee shall submit one set of construction plans and specifications in PDF format to determine consistency with the conditions of the permit and the declarations set forth in the permit application.
6. The permittee shall implement site-specific, construction Best Management Practices in consultation with the DOH Clean Water Branch and other agencies as applicable, that are designed, implemented, operated, and maintained by the permittee and its contractor to properly isolate and confine activities and to contain and prevent any potential pollutant(s) discharges from adversely impacting State waters per HRS Ch. 342D Water Pollution; HAR §11-54-1 through §11-54-8 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control, Appendix C.
7. The permittee shall protect and preserve the natural character of the stream bank and stream bed to the greatest extent possible. The permittee shall plant or cover lands denuded of vegetation as quickly as possible to prevent erosion and use native plant species common to riparian environments to improve the habitat quality of the stream environment.
8. The permittee, owner and/or operator of the stream diversion works shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage on a monthly (calendar or work schedule) basis to the Commission per HAR §13-168-7 Report of Water Use.
9. In the event that subsurface cultural remains such as artifacts, burials or deposits of shells or charcoal are encountered during excavation work, the permittee shall stop work in the area of the find and contact the Department's Historic Preservation Division immediately. Work may commence only after written concurrence by the State Historic Preservation Division.

LEGAL AUTHORITIES

Water as a Public Trust. The four public trust purposes are:

1. Maintenance of waters in their natural state.
2. Domestic water use of the general public, particularly drinking water.
3. The exercise of Native Hawaiian and traditional and customary rights, including appurtenant rights. Waiāhole, 94 Hawaii 97; 9 P.3d 409 (2000).
4. Reservations of water for use on Hawaiian home lands. Waiola O Molokai, Inc., 103 Hawaii 401; 83 P.3d 664 (2004).

Activities on undeveloped lands. Public Access Shoreline Hawaii v. Hawaii County Planning Commission (PASH I), 79 Hawaii 246 (1993).

HRS §174C-71 Protection of instream uses. The commission shall establish and administer a statewide instream use protection program. In carrying out this part, the commission shall cooperate with the United States government or any of its agencies, other state agencies, and the county governments and any of their agencies. In the performance of its duties the commission shall:

* * *

- (2) Establish interim instream flow standards;

* * *

- (D) In considering a petition to adopt an interim instream flow standard, the commission shall weigh the importance of the present or potential instream values with the importance of the present or potential uses of water for noninstream purposes, including the economic impact of restricting such uses;

* * *

- (3) Protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses;

- (A) The commission shall require persons to obtain a permit from the commission prior to undertaking a stream channel alteration; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit;

* * *

- (C) The commission shall establish guidelines for processing and considering applications for stream channel alterations consistent with section 174C-93[.]

HRS §174C-93 Permits for construction or alteration. No person shall construct or alter a stream diversion works, other than in the course of normal maintenance, without first obtaining a permit from the commission.

HAR §13-168-2 Definitions.

“Instream flow standard” means a quantity or flow of water or depth of water which is required to be present at a specific location in a stream system at certain specified times of the year to protect aquatic life, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses.

“Instream use” means beneficial uses of stream water for significant purposes which are located in the stream and which are achieved by leaving the water in the stream. Instream uses include, but are not limited to:

- (1) Maintenance of aquatic life and wildlife habitats;
- (2) Outdoor recreational activities;
- (3) Maintenance of ecosystems such as estuaries, wetlands, and stream vegetation;
- (4) Aesthetic values such as waterfalls and scenic waterways;
- (5) Navigation;
- (6) Instream hydropower generation;
- (7) Maintenance of water quality;
- (8) The conveyance of irrigation and domestic water supplies to downstream points of diversion; and
- (9) The protection of traditional and customary Hawaiian rights.

“Stream diversion” means the act of diverting, pumping or otherwise removing water from a stream into a channel, ditch, pipeline, or other conduit.

“Stream diversion works” means any artificial structure, excavation, pipeline, or other conduit constructed singly or in combination, for the purpose of diverting or otherwise removing water from a stream into a channel, ditch, tunnel, pipeline, etc.

HAR §13-168-7 Report of water use. (a) The owner or operator of any well or stream diversion works from which water is being used shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage on a monthly (calendar or work schedule) basis.

HAR §13-168-32 Stream diversion permits. (a) No person shall construct or alter a stream diversion works, other than in the course of normal maintenance, without first obtaining a stream diversion permit from the commission...

(b) Each application for a stream diversion permit shall be made on forms provided by the commission and shall contain the following:

- (1) Name and address of the applicant;
- (2) Name and address of the owner or owners of the land upon which the works are to be constructed and a legal description of such land;
- (3) Location of the works;
- (4) Engineering drawings showing the detailed plans of construction;
- (5) Detailed specifications of construction;
- (6) Name and address of the person who prepared the plans and specifications for construction;
- (7) Name and address of the person who will construct the proposed work;
- (8) General purpose of the proposed works; and
- (9) Such other information as the commission may require.

(c) The commission may issue or cause to be issued a stream diversion permit if the proposed construction complies with all applicable laws, rules, and standards. The commission shall approve or disapprove an acceptably completed application within ninety calendar days of receipt by the commission. The commission may approve in whole, approve in part, approve with modifications, or disapprove an application for a stream diversion permit.

(d) In reviewing an application for a permit, the commission shall cooperate with persons having direct interest in the stream diversion works and be guided by the following general considerations:

- (1) The quantity and quality of the stream water or the stream ecology shall not be adversely affected.
- (2) Where instream flow standards or interim instream flow standards have been established pursuant to chapter 13-169, no permit should be granted for any diversion works which diminishes the quantity or quality of stream water below the minimum established to support identified instream uses, as expressed in the standards.
- (3) The proposed diversion works shall not interfere substantially and materially with existing instream or non-instream uses or with diversion works previously permitted.

HAR §13-169-45 Interim instream flow standard for Kauai. The Interim Instream Flow Standard for all streams on Kauai, as adopted by the commission on water resource management on June 15, 1988, shall be that amount of water flowing in each stream on the effective date of this standard, and as that flow may naturally vary throughout the year and from year to year without further amounts of water being diverted offstream through new or expanded diversions, and under the stream conditions existing on the effective date of the standard.