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STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

January 30, 2024 Honolulu, Hawaiʻi

Approval of Stream Channel Alteration Permit (SCAP.6047.3) Application and Special Conditions, City and County of Honolulu, Board of Water Supply Waihe'e Inclined Wells Modification <u>Waihe'e Stream, O'ahu, Tax Map Key(s): (1) 4-7-008:002</u>

<u>APPLICANT</u> Ernest Y.W. Lau, Manager City and County of Honolulu, Board of Water Supply 630 South Beretania Street Honolulu, HI 96843 LANDOWNER Same

SUMMARY OF REQUEST

Approve Stream Channel Alteration Permit (SCAP.6047.3) by the City and County of Honolulu, Board of Water Supply (BWS). The project proposes the replacement of the existing above ground well components including the gate valves, piping, and pipe bends at each of the four (4) existing wells. Well 4 is located adjacent to the Waihe'e Stream and the temporary excavation and barrier for the replacement of this pipe section would take place within the stream channel as bounded by the observed ordinary high water mark.

BACKGROUND

On July 17, 2023, BWS filed a complete stream channel alteration permit application that is available online at <u>https://files.hawaii.gov/dlnr/cwrm/swreview/SCAP_6047_3.pdf</u>.

LOCATION: Waihe'e Stream, O'ahu. See Figure 1.

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Figure 1: Location, Waihe'e Stream O'ahu..



STREAM DESCRIPTION

Both the National Hydrography Dataset and the Division of Aquatic Resources classified the Waihe'e Stream as perennial. The total drainage area is 1.66 square miles with a maximum basin elevation of 2,650 feet. The mean annual precipitation is 137 inches and the longest flow path is approximately two (2) miles. The stream has a constant connection to the ocean.

PROJECT DESCRIPTION

The Waihe'e Inclined Wells consist of four (4) wells drilled approximately 200 feet into the mountain to collect water. The proposed project consists of replacement of the existing aboveground well components including the 4-inch gate valves, 4-inch piping, and 4-inch pipe bends at each of the 4 existing wells (Waihee Incline Wells 1 through 4). Additionally, it is anticipated that excess material built up around the wells will be removed and a temporary fence constructed around wells 1 and 2 to retain material from burying the pipe during construction will remain. Excavation around the base of the pipes will be required to install a new line stop valve to stop the flow of water during replacement of the above-ground valves and pipe sections. Temporary barriers will be used to prevent pollution surrounding the disturbed areas. Well 4 is located adjacent to Waihe'e Stream, and the ordinary high-water mark (OHWM) was observed to be immediately adjacent to the pipe. The temporary excavation and barrier for replacement of this pipe section would take place within the stream channel as bounded by the observed OHWM. Upon completion of the work, the excavation would be backfilled to the pre-construction condition using existing material, and the temporary barriers used to prevent pollution would be removed. Work would likely be done using mostly hand power tools; however, small machinery may also be used if the contractor can transport it to the site. Best management practices will be

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followed before, during, and after construction to minimize adverse effects on the surrounding environment and maintain a safe work zone.



Figure 2: Waihe'e Stream site photos (looking downstream).



AGENCY REVIEW COMMENTS

City and County of Honolulu, Department of Planning and Permitting: No comments received.

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

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

DLNR, Aquatic Resources: The proposed project is not expected to have adverse impacts on the aquatic environment, but may have short-term impacts during the excavation and replacement of the above ground valves and pipes. Based on previous DAR surveys, Waihee Stream provides important habitat for a variety of native gobies (*Awaous hawaiiensis*, *Sicyopterus stimpsoni*, and *Lentipes concolor*) and native shrimp (*Atyoida bisulcata*). These stream species are diadromous, meaning that they rely on both marine and freshwater environments to complete their life cycles. Therefore, it is important that passage through the stream remain unimpeded at all times. To protect aquatic environments directly adjacent to the proposed project as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. DAR requests that the following Best Management Practices (BMPs) or mitigative measures should be implemented during the excavation and construction activities to minimize the potential impacts to the aquatic environment. See **Exhibit 1**.

1) Prevent, minimize and contain to the greatest extent possible all sediment, silt, chemicals, debris, or any other byproducts of the demolition and construction activities from getting into the stream;

- 2) Scheduling work activities during periods of minimal rainfall and instream work during low or no flow stream flow conditions; and
- 3) Provide continuous stream flow in the stream channel.

CWRM Staff Response: Added as a special condition by reference.

DLNR, Engineering: No comments received.

CWRM staff response: The project site is in Zone D, or areas in which flood hazards are undetermined, but possible.

<u>DLNR</u>, 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 seabirdfriendly 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.

State-listed waterbirds such as ae'o or Hawaiian stilt (*Himantopus mexicanus knudseni*), 'alae ke'oke'o or Hawaiian coot (*Fulica alai*), and 'alae 'ula or Hawaiian gallinule (*Gallinula chloropus sandvicensis*), and koloa maoli or Hawaiian Duck (*Anas wyvilliana*) could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species 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 O'ahu Branch DOFAW Office at (808) 973-9778 and establish a buffer zone around the nest.

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The State endangered pueo or Hawaiian Short-eared owl (*Asio flammeus sandwichensis*) could potentially occur in the project vicinity. Pueo are most active during dawn and dusk twilights. Remove and exclude non-native mammals such as mongoose, cats, dogs, and ungulates from the nesting area. Minimize habitat alterations and disturbance during pueo breeding season. Before any potentially disturbing activity like clearing vegetation, especially ground-based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours and walk line transects through the area to detect any active pueo nests. If a pueo nest is discovered, notify DOFAW staff, minimize time spent at the nest, and establish a minimum buffer distance of 100 meters from the nest until chicks are capable of flight.

The State and Federally endangered O'ahu 'Elepaio (*Chasiempis ibidis*), a forest bird, is known to occur at or in habitat adjacent to the project site. The species is found in a variety of tall, closed canopy forest types with dense understory, most often in riparian forest in valleys, ranging from 100 m to 850 m (325 ft to 2,775 ft) in elevation. If a project has potential impacts, the immediate recommendation should be to conduct the work outside the nesting season. If a proposed project occurs in critical habitat or in an area where there is an 'elepaio population, or on DOFAW lands, contact DOFAW for their specific recommendations. If an individual or pair are found, surveys should continue until the existence and extent of a territory can be reasonably determined. If an 'elepaio nest is found, a buffer zone of 100 m (330 ft) should be established around it. In both instances, whether territory or nest are determined or found, all disturbance in the vicinity should be ceased and DOFAW staff immediately notified.

The project work on or at Waihe'e Stream could affect endangered native Hawaiian damselflies (*Megalagrion* spp.) particularly *M. nigrohamatum nigrolineatum*, that are likely to occur here. DOFAW therefore recommends a survey be conducted by a qualified entomologist to determine if listed damselflies are present in the project area and to assess any potential impacts and ensure the impacts are avoided and minimized during project operations. If the damselflies are not observed in the survey, DOFAW recommends a habitat suitability assessment regarding likelihood of endangered Hawaiian damselfly species to inhabit this area. If this assessment indicates that the stream is a likely habitat for endangered Hawaiian damselflies, a qualified entomologist should be on site during the project construction to make sure there are no adverse impacts to emergent vegetation (where eggs could be) and trampling of the stream corridor itself (where naiads would be).

This project site is nearby the O'ahu Wet Cliff Unit 8 Critical Habitat Area which is home to endangered plant species including Adenophorus periens, Cyanea acuminata, Cyanea calycina, Cyanea crispa, Cyanea humboldtiana, Cyanea purpurellifolia, Cyanea st.-johnii, Cyanea truncate, Cyrtandra kaulantha, Cyrtandra sessilis, Cyrtandra subumbellata, Cyrtandra viridiflora, Euphorbia deppeana, Euphorbia rockii, Huperzia nutans, Labordia cyrtandrae, Lobelia oahuensis, Lysimachia filifolia, Megalagrion leptodemas, Megalagrion oceanicum, Phyllostegia hirsute, Phyllostegia parviflora, Plantago princeps, Polyscias gymnocarpa, Psychotria hexandra ssp. Oahuensis, Pteralyxia macrocarpa, Sanicula purpurea, Schiedea kaalae, Trematolobelia singularis, and Viola oahuensis. 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

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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. For information on avoidance and minimization measures for plants, please refer to the following link: <u>https://www.fws.gov/media/plant-avoidance-and-minimization-measures-may-2023.</u>

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), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coconut Rhinoceros Beetles, etc.), or invasive plant parts (e.g., Miconia, Pampas Grass, etc.) that could harm our native species and ecosystems. We recommend consulting the O'ahu Invasive Species Committee (OISC) at (808) 266-7994 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: <u>https://cms.ctahr.hawaii.edu/rod</u>.

The invasive Coconut Rhinoceros Beetle (CRB) or Oryctes rhinoceros is known to occur on the island of O'ahu. On July 1, 2022, the Hawai'i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and from the island of O'ahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes a) entire dead trees, b) mulch, compost, trimmings, fruit, and vegetative scraps, and c) decaying stumps. CRB host plants include the live palm plants in the following genera: Washingtonia, Livistona, and Pritchardia (all commonly known as fan palms), Cocos (coconut palms), Phoenix (date palms), and Roystonea (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. For more information regarding CRB, please visit https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/.

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 <u>myrna.girald-perez@hawaii.gov</u>. See **Exhibit 2**.

CWRM Staff Response: Added as a special condition by reference.

<u>DLNR, Historic Preservation (SHPD)</u>: On November 29, 2021, SHPD determined that no historic properties are affected and that project initiation may proceed.

CWRM Staff Response: Concur. See Exhibit 3.

DLNR, Land Division: No comments received.

DLNR, Office of Conservation and Coastal Lands. No comments received.

DLNR, State Parks: No comments received.

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

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.

<u>US Fish and Wildlife Service (FWS):</u> 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: the 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); endangered oceanic Hawaiian damselfly (*Megalagrion oceanicum*), and endangered blackline Hawaiian damselfly (*Megalagrion nigrohamatum nigrolineatum*) (hereafter collectively referred to as Hawaiian damselflies). We provide the following to assist you in preparation of your project.

<u>Hawaiian Seabirds.</u> 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.

<u>Hawaiian Hoary Bat</u>. Hawaiian hoary bat 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. Hawaiian hoary bat forages 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 Hawaiian hoary bat, 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 Hawaiian hoary bat, June 1 through September 15.
- Do not use barbed wire for fencing.

<u>Hawaiian Waterbirds</u>. 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

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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 no 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.

Hawaiian Damselflies. Hawaiian damselflies are found in aquatic habitats across the islands, with high species endemism within islands. Breeding habitat includes anchialine pools, perennial streams, marshes, ponds, and even artificial pools and seeps. Specifically, the blackline Hawaiian damselfly occurs in slow sections or pools along mid-reach and headwater sections of upland streams and seep-fed pools and the oceanic Hawaiian damselfly is found in swiftly flowing sections of streams, usually amid rocks and gravel in stream riffles. Naiads can forage out of the stream on wet moss on rocks. Major threats include introduced fish, amphibians, and invertebrates in streams, reduced stream flow from drought and water diversion, small isolated populations, reduced habitat quality from ungulates and nonnative plants, and possibly overcollection. Baseline surveys conducted by the Service were undertaken on November of 2021, in the Waihe'e Stream catchment to determine the presence or absence of Hawaiian damselflies. Such surveys were necessitated by a proposal from Board of Water Supply (BWS), City and County of Honolulu, to rehabilitate existing water delivery infrastructure at various points along Waihe'e Stream. No Hawaiian damselflies were seen in the vicinity of any BWS facilities in Waihe'e Valley; therefore, the proposed inclined well improvements are not anticipated to result in any impacts to these taxa. A re-survey of the valley post-construction, and in the warmer summer months, would be useful to verify the current negative findings. It is still possible that Megalagrion nigrohamatum nigrolineatum may occur at isolated small spring-fed tributaries in the upper valley, but this does not influence the present evaluation for the proposed well rehabilitation project. To avoid and minimize potential project impacts to the endangered Hawaiian damselfly, we recommend you incorporate applicable Service Recommended Standard Best Management Practices (BMPs) into your project design (see enclosure). BMPs should be followed for any construction that may occur within the stream channel, so as to avoid impacts to downstream habitats, which are in good condition. In addition, should construction implementation be delayed, please contact our office for further guidance.

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: <u>Charmian Dang@fws.gov</u>). When referring to this project please include this reference number: 2023-0114069-S7-001. See **Exhibit 4**.

CWRM Staff Response: Added as a special condition by reference.

Public Comments: No comments received.

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 "Well-watered coastal bottomlands near the rich resources of Kāne'ohe Bay were intensively exploited for ponded taro fields (lo'i kalo) in traditional Hawaiian times. Habitation is understood to have been focused in these rich coastal lands. The uplands, near the project site, would have been accessed for the gathering of forest resources and recreational visits to the Waihe'e Waterfall. Archaeologists show no historic period development other than the present BWS infrastructure, understood to date from 1974 or shortly thereafter. Since March 2021, the project area has been closed to the public in order to preserve the freshwater system. The Honolulu BWS manages the land, and no permits are granted to the public for access to the falls and surrounding areas. The watershed is considered a protected area by the City and County of Honolulu. An archaeological Literature Review and Field Inspection (LRFI) was completed at the project site in 2021."

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, "No historic properties were reported in the present Waihe'e Wells I and Waihe'e Inclined Wells project areas. No historic properties have been formally recorded with State Inventory of Historic Places (SIHP) numbers within approximately 1.5 km of the present project areas. Archaeologists note that only a small southeasterly corridor of the larger, makai Waihe'e Wells I project area approaches the stream bank and that while this was evaluated as free of historic properties, there may be historic properties in the neighboring vicinity of the Waihe'e (Hamama) Stream bank. Furthermore, since the Hamama Falls trail leading to the watershed is closed, no impediment to traditional and customary native Hawaiian rights will be sustained since the public is not allowed at the site regardless. Traditional and customary Native Hawaiian rights may be exercised in the surrounding vicinity outside of the project area, which will remain closed to the public after the proposed action finishes. HICRIS number 2021PR01201 was approved by the State Historic Preservation Division (SHPD) as part of a Chapter 6E-8 review on November 29 2021."

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, "Since no historic properties or landmarks are in the project area, and no traditional or customary Native Hawaiian rights are currently practiced in the project area, no feasible action is recommended at this time."

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) Powergenerating facility.

CWRM Staff Response: 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 January 3, 2022, the BWS 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 BWS reviewed and concurred upon by the Environmental Council on April 5, 2022.

STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 6**.

HAR §13-169-52(b) Based upon the findings of fact concerning an application for a stream channel alteration permit, the Commission shall either approve in whole, approve in part, approve with modifications, or reject the application for a permit.

(1) Channel alterations that would adversely affect the quantity and quality of the stream water or the stream ecology should be minimized or not be allowed.

CWRM Staff Response: 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 subchapters 3 and 4, no permit shall be granted for any channel alteration 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, requires the Commission to protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses. The identified instream uses include fish habitat and streamflow contribution to the nearshore waters, among others. The project is not anticipated to impact the status quo interim instream flow standard which was established on May 4, 1992, pursuant to HAR §13-169-49.1.

(3) The proposed channel alteration should not interfere substantially and materially with existing instream or non-instream uses or with channel alterations previously permitted.

CWRM Staff Response: The proposed work plan is limited to the project area and should not interfere with instream or non-instream uses, including existing diversions. Commission records indicate that there are four (4) active diversions located approximately 1.5 to 2.0 miles downstream of the project area. No adverse impacts are anticipated.

RECOMMENDATION

That the Commission:

1. Approve Stream Channel Alteration Permit (SCAP.6047.3) Application that proposes the replacement of the existing above ground well components including the gate valves, piping, and pipe bends at each of the four (4) existing wells. Well 4 is located adjacent to the Waihe'e Stream and the temporary excavation and barrier for the replacement of this pipe section would take place within the stream channel subject to the standard conditions in **Exhibit 5** and the special conditions below.

- a. In conformance with the Division of Aquatic Resources' recommendations, incorporated by reference as **Exhibit 1**, to protect aquatic environments directly adjacent to the proposed project as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. DAR requests that the following Best Management Practices (BMPs) or mitigative measures shall be implemented during the excavation and construction activities to minimize the potential impacts to the aquatic environment: Prevent, minimize and contain to the greatest extent possible all sediment, silt, chemicals, debris, or any other byproducts of the demolition and construction activities from getting into the stream; Scheduling work activities during periods of minimal rainfall and instream work during low or no flow stream flow conditions; and Provide continuous stream flow in the stream channel.
- b. In conformance with the Division of Forestry and Wildlife's recommendations, incorporated by reference as **Exhibit 2**, the permittee shall employ best management practices when working near Hawaiian seabirds, waterbirds, bats, and damselflies.
- c. In conformance with the US Fish and Wildlife's recommendations, incorporated by reference as **Exhibit 4**, the permittee shall employ best management practices when working near Hawaiian seabirds, waterbirds, bats, and damselflies.

Ola i ka wai,

Danlynn

DEAN D. UYENO Acting Deputy Director

Exhibits:

- 1. DLNR, Division of Aquatic Resources letter, dated November 20, 2023.
- 2. DLNR, Division of Forestry and Wildlife's letter, dated December 13, 2023.
- 3. DLNR, Historic Preservation letter, dated November 29, 2021.
- 4. US Fish and Wildlife letter, dated November 30, 2023.
- 5. Standard Stream Channel Alteration Permit Conditions.
- 6. Legal Authorities.

APPROVED FOR SUBMITTAL:

DAWN N. S. CHANG Chairperson

	STATE OF HAWAI'I I KA MOKU'AINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF AQUATIC RESOURCES 1151 PUNCHBOWL STREET, ROOM 330 HONOLULU, HAWAII 96813 Date: November 13, 2023 DAR #6497	DAWN N.S. CHANG CHARDON AND NATURAL RESOURCES COMPSISION ON WATER RESOURCES MANAGEMENT CARE TO CANAGEMENT MILLIO MANUEL DEPUTY DREICTOR - WATER EDATE OR AUTOR RESOURCES BOATING AND COMPTANCES DURING DURING COMPTANCES DURING DURING DURING DURING DURING COMPTANCES DURING DURING DURING DURING DURING DURING DURING
<u>MEMORAND</u> TO:	<u>UM</u> Brian J. Neilson DAR Administrator	
FROM:	Glenn Higashi IN , Aquatic Biologist	
SUBJECT:	Request for Comments, Stream Channel Alteration Permit (SCAP.6047.3) Application, City and County of Honolulu, Board of Water Supply, Waihe'e Inclined Wells Modification	
Request Submitted by: M. Kaleo Manuel, Deputy Director		
Waihe'e Stream, Oahu, Tax Map Key(s) (1) 4-7-008:002		
Location of Pr	oject:	
Brief Descript The specific a modifications to collect wat iron pipe and flow down the valley. The e	ion of Project: activity included in this permit application is for the Waihee which consist of four (4) wells drilled approximately 200 fe er. The existing wells consist of ductile iron pipes which da 4" isolation valves, and combine into a common 12" head e xisting above-ground 4" pipe, valves, and 8" header pipe a	e Inclined Wells eet into the mountain aylight with 4" ductile ler that conveys the are supported by 4
short concret this permit ap four (4) section function. <u>Comments:</u>	e posts and a rectangular concrete slab base. The specific oplication is for modifications of the existing system which ons of 4" above-ground pipe and valves, which have aged	c activity included in include replacing the and no longer

No Comments I 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.

Th.J.M

_____Date: _____Nov 20, 2023

Comments Approved: Brian J. Neilson

DAR Administrator

EXHIBIT 1

DAR# 6497

Brief Description of Project

'The proposed project consists of replacement of the existing above-ground well components including the 4" gate valves, 4" piping, and 4" pipe bends at each of the 4 existing wells (wells no. 1 through 4). Additionally, it is anticipated that excess material built up around the wells will be removed and a temporary fence constructed around wells no. 1 and 2 to retain material from burying the pipe during construction will remain. Excavation around the base of the pipes will be required to install a new line stop valve to stop the flow of water during replacement of the above-ground valves and pipe sections. Temporary barriers will be used to prevent pollution surrounding the disturbed areas. Well no. 4 is located adjacent to Waihee Stream, and the ordinary high-water mark (OHWM) was observed to be immediately adjacent to the pipe. The temporary excavation and barrier for replacement of this pipe section would take place within the stream area as bounded by the observed OHWM. Upon completion of the work, the excavation would be backfilled to the pre-construction condition using existing material, and the temporary barriers used to prevent pollution would be removed.

Hamama Falls and a rocky stream are located at the Inclined Wells site. This site has four inclined potable water wells on top of a concrete pad. Hamama Falls is located to the west of the wells, and Waihee Stream is northwest of the site. The cascading waterfall is about 50 feet high over a bedrock face, transitioning down nstream to a steadily dropping, rocky bed with numerous small cascades and flowing pools.

The Waihee Stream is a perennial stream within a few meters of the BWS project area. The maximum monthly average discharge of Waihee Stream occurs in January with approximately 23 ft3/s, while the minimum discharge occurs in September with 11 ft3/s. The drainage area of the stream is about 2.26 square miles total.

DAR#_6497

Comments

The proposed project is not expected to have adverse impacts on the aquatic environment, but may have short-term impacts during the excavation and replacement of the above ground valves and pipes.

Based on previous DAR surveys, Waihee Stream provides important habitat for a variety of native gobies (Awaous hawaiiensis, Sicyopterus stimpsoni, and Lentipes concolor) and native shrimp (Atyoida bisulcata). These stream species are diadromous, meaning that they rely on both marine and freshwater environments to complete their life cycles. Therefore, it is important that passage through the stream remain unimpeded at all times.

To protect aquatic environments directly adjacent to the proposed project as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. DAR requests that the following Best Management Practices (BMPs) or mitigative measures should be implemented during the excavation and construction activities to minimize the potential impacts to the aquatic environment.

 Prevent, minimize and contain to the greatest extent possible all sediment, silt, chemicals,

debris, or any other byproducts of the demolition and construction activities from getting

into the stream;

 Scheduling work activities during periods of minimal rainfall and instream work during low

or no flow stream flow conditions; and

Provide continuous stream flow in the stream channel.

JOSH GREEN, M.D. GOVERNOR | KE KAANA SYLMA LUKE LIEUTENWIT GOVERNOR | KA HOPE KAANAA



STATE OF HAWAI'I | KA MOKU'ÁINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES KA 'OIHANA KUMUWAIWAI 'ÁINA

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

December 13, 2023

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

FIRST DEPUTY

M. KALEO MANUEL DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN RECERTION BUREAU OF COMMERCIPACES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT ENFORCEMENT ENFORCEMENT ENFORCEMENT HISTORIC PRESERVATION KOHROLIANE ISLAND RESERVE COMMISSION LAND STATE PARKS

Log no. 4302

MEMORANDUM

- TO: M. KALEO MANUEL, Deputy Director Commission on Water Resource Management
- FROM: AFSHEEN A. SIDDIQI, Acting Wildlife Program Manager Division of Forestry and Wildlife
- SUBJECT: Request for Comments on the Stream Channel Alteration Permit (SCAP.6047.3) Application, Waihe'e Inclined Wells Modification, Waihe'e Stream, O'ahu.

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for comments on the Stream Channel Alteration permit (SCAP.6047.3) for the Waihe'e Inclined Wells Modification on Waihe'e Stream on the island of O'ahu; TMK (1) 4-7-008:002. The proposed project seeks to replace the existing above ground well components of the four existing wells. The components to be replaced include the gate valves, piping, and pipe bends at each of the four existing wells. Well No. 4 is located adjacent to the Waihe'e Stream, and the temporary excavation and barrier for the replacement of the pipe section would take place within the stream area as bounded by the observed ordinary high-water mark. Excess material built up around the wells will be removed and a temporary fence will be constructed around wells no. 1 and 2 to retain material from burying the pipe during the remaining construction. Temporary barriers will be used to prevent pollution surrounding the disturbed areas. Upon completion, the excavation will be backfilled to the preconstruction condition using existing material, and the temporary barriers used will be removed.

DOFAW provides the following recommendations to be utilized for the project scope of work.

The State listed 'ope'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

EXHIBIT 2

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.

State-listed waterbirds such as ae'o or Hawaiian stilt (*Himantopus mexicanus knudseni*), 'alae ke'oke'o or Hawaiian coot (*Fulica alai*), and 'alae 'ula or Hawaiian gallinule (*Gallinula chloropus sandvicensis*), and koloa maoli or Hawaiian Duck (*Anas wyvilliana*) could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species 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 O'ahu Branch DOFAW Office at (808) 973-9778 and establish a buffer zone around the nest.

The State endangered pueo or Hawaiian Short-eared owl (*Asio flammeus sandwichensis*) could potentially occur in the project vicinity. Pueo are most active during dawn and dusk twilights. Remove and exclude non-native mammals such as mongoose, cats, dogs, and ungulates from the nesting area. Minimize habitat alterations and disturbance during pueo breeding season. Before any potentially disturbing activity like clearing vegetation, especially ground-based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours and walk line transects through the area to detect any active pueo nests. If a pueo nest is discovered, notify DOFAW staff, minimize time spent at the nest, and establish a minimum buffer distance of 100 meters from the nest until chicks are capable of flight.

The State and Federally endangered O'ahu 'Elepaio (*Chasiempis ibidis*), a forest bird, is known to occur at or in habitat adjacent to the project site. The species is found in a variety of tall, closed canopy forest types with dense understory, most often in riparian forest in valleys, ranging from 100 m to 850 m (325 ft to 2,775 ft) in elevation¹. If a project has potential impacts, the immediate recommendation should be to conduct the work outside the nesting season. If a proposed project occurs in critical habitat or in an area where there is an 'elepaio population, or on DOFAW lands, contact DOFAW for their specific recommendations. If an

individual or pair are found, surveys should continue until the existence and extent of a territory can be reasonably determined. If an 'elepaio nest is found, a buffer zone of 100 m (330 ft) should be established around it. In both instances, whether territory or nest are determined or found, all disturbance in the vicinity should be ceased and DOFAW staff immediately notified.

The project work on or at Waihe'e Stream could affect endangered native Hawaiian damselflies (*Megalagrion* spp.) particularly *M. nigrohamatum nigrolineatum*, that are likely to occur here. DOFAW therefore recommends a survey be conducted by a qualified entomologist to determine if listed damselflies are present in the project area and to assess any potential impacts and ensure the impacts are avoided and minimized during project operations. If the damselflies are not observed in the survey, DOFAW recommends a habitat suitability assessment regarding likelihood of endangered Hawaiian damselfly species to inhabit this area. If this assessment indicates that the stream is a likely habitat for endangered Hawaiian damselflies, a qualified entomologist should be on site during the project construction to make sure there are no adverse impacts to emergent vegetation (where eggs could be) and trampling of the stream corridor itself (where naiads would be).

This project site is nearby the O'ahu Wet Cliff Unit 8 Critical Habitat Area which is home to endangered plant species including Adenophorus periens, Cyanea acuminata, Cyanea calycina, Cyanea crispa, Cyanea humboldtiana, Cyanea purpurellifolia, Cyanea st.-johnii, Cyanea truncate, Cyrtandra kaulantha, Cyrtandra sessilis, Cyrtandra subumbellata, Cyrtandra viridiflora, Euphorbia deppeana, Euphorbia rockii, Huperzia nutans, Labordia cyrtandrae, Lobelia oahuensis, Lysimachia filifolia, Megalagrion leptodemas, Megalagrion oceanicum, Phyllostegia hirsute, Phyllostegia parviflora, Plantago princeps, Polyscias gymnocarpa, Psychotria hexandra ssp. Oahuensis, Pteralyxia macrocarpa, Sanicula purpurea, Schiedea kaalae, Trematolobelia singularis, and Viola oahuensis, 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. 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), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coconut Rhinoceros Beetles, etc.), or invasive plant parts (e.g., Miconia, Pampas Grass, etc.) that could harm our native species and ecosystems. We recommend consulting the O'ahu Invasive Species Committee (OISC) at (808) 266-7994 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,

¹Vanderwerf, E.A., MT. Lohr, A.J. Titmus, P.E. Taylor, and M.D. Burt. 2013. Current distribution and abundance of the O'ahu 'Elepaio (*Chasiempis ibidis*). Wilson Journal of Omithology 125: 600-608. 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: <u>https://cms.ctahr.hawaii.edu/rod</u>.

The invasive Coconut Rhinoceros Beetle (CRB) or Oryctes rhinoceros is known to occur on the island of O'ahu. On July 1, 2022, the Hawai'i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and from the island of O'ahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes a) entire dead trees, b) mulch, compost, trimmings, fruit, and vegetative scraps, and c) decaying stumps. CRB host plants include the live palm plants in the following genera: Washingtonia, Livistona, and Pritchardia (all commonly known as fan palms), Cocos (coconut palms), Phoenix (date palms), and Roystonea (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. For more information regarding CRB, please visit https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/.

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,

Afekeen Siddigi

AFSHEEN A. SIDDIQI Acting Wildlife Program Manager

Staff Submittal SCAP.6047.3 BWS Waihe'e Stream, O'ahu

DAVID Y. IGE GOVERNOR OF HAWAE





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAII 96707

November 29, 2021

Jason Takaki, Program Administrator Capital Projects Division Honolulu Board of Water Supply 630 South Beretania St. Honolulu, HI 96843 c/o Raymondo Remigio rremigio@hbws.org

Dear Mr. Takaki:

SUBJECT: Chapter 6E-8 Historic Preservation Review – Request Concurrence with Project Effect Determination Board of Water Supply, Waihee Wells I Renovation – Conversion to Chlorinator Archaeological Literature Review and Field Inspection Report 47-550 Waihee Rd., Kaneohe Waihe'e Ahupua'a, Ko'olaupoko District, Island of O'ahu TMK: (1) 4-7-006:023 por., and (1) 4-8-008:002 por.

This letter provides the State Historic Preservation Division's (SHPD's) review on the City and County of Honolulu, Board of Water Supply's (BWS's) proposed project titled, Waihee Wells I Renovation. The SHPD received this submittal on September 28, 2021. The project area totals 0.33 acres. The project submittal includes:

- [X] BWS letter dated September 24, 2021 initiating consultation, providing a project overview, and a request for the SHPD's concurrence with a project effect determination of "No historic properties affected;"
- [X] SHPD HRS 6E Submittal Form, construction plans, TMK plat map and photographs; and
- [X] An Archaeological Literature Review and Field Inspection (LRFI) report titled, Archaeological Literature Review and Field Inspection for the Waihe'e Wells I Conversion to Chlorinator Project, Job 728W-R (Shideler et al., 2021).

Project Description

The proposed includes at the Waihe'e Wells I site: abandonment of the existing wells; and renovation and conversion of the existing control building to a chlorination facility including associated pumps, piping, valving and equipment, and installation of a new emergency generator and a fire pump. Proposed work at the Waihe'e Inclined Wells site: installation of a new flow meter and a new manual flow throttling valve, including installation of a new 24-inch waterline to a maximum of 4 ft. below grade. Ground disturbance is anticipated to including grading, filling above existing grade, and site work in the immediate vicinity of the current infrastructure.

Findings

The Waihe'e Wells I site, the Waihe'e Inclined Wells site, and related structures are less than 50 years old and, thus, are not historic properties, as defined in HRS §6E-2. The LRFI report (Shideler et al., 2021) and both historical aerial and recent project photos indicate the project area has been extensively disturbed by prior agricultural activities and development and ongoing maintenance of the BWS facility.

SUZANNE D. CASE CRAEFFERSON BOARD OF LAND AND NATIRAL REPORTCES BOARD OF WATER RESOLUCE MASAGEMENT

ROBERT K. MASUDA

M. KALEO MANUEL DEPUTY DREUTOR - WATER

AGUATE DEBORTECES BRATTES AND ACES AN DESSAN TRON BREEND OF COMMYANES COMPASSED OF WATTER BROOME MANAGEMENT CONSERVATION AND COASTALLANDS CONSERVATION AND ROASTALLANDS CONSERVATION AND REALING DESCRIPTION OF MEDICAL DEST DOUBLING DESCRIPTION ENDOLOGIES DEVOLUTION ENDOLLAND BLAND BROOME COMMENSION LAND STATE PARKS

IN REPLY REFER TO: Project No. 2021PR01201 Doc. No. 2111LS08 Archaeology

EXHIBIT 3

Mr. Takaki November 29, 2021 Page 2

Determination

Based on the information provided, SHPD concurs with the BWS's effect determination of "No historic properties affected" for the current project. Pursuant to HAR §13-275-7(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 HRS 6E-8 historic preservation review process is ended.

Although the LRFI report does not fulfill the requirements of an archaeological inventory survey as specified in Hawai'i Administrative Rules (HAR) §13-276, it serves to facilitate project planning and supports the historic preservation review process. Please send one hard copy of the LRFI report, clearly marked FINAL, along with a copy of this review letter and a text-searchable PDF copy to the Kapolei SHPD office, attention SHPD Library. Also upload a text-searchable PDF copy, marked Final, to <u>HICRIS Project No. 2021PR01201</u> using the project supplement option, and a send a PDF copy to Lehua.K.Soares@hawaii.gov.

SHPD hereby notifies BWS that the HRS 6E historic preservation review process is concluded. Project initiation may proceed.

Please attach to construction permits: In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808) 692-8015.

Please contact Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov for any questions regarding this letter.

Aloha,

Alan Downer

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

cc: Jadine Urasaki, jurasaki@hbws.org Jordan Oue, joue@hbws.org Scott Belluomini, <u>sbellumini@culturalsurveys.com</u> David Shideler, <u>dshideler@culturalsurveys.com</u>



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



November 30, 2023

In Reply Refer To: 2023-0114069-S7-001

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

Subject: Technical Assistance for the Proposed Waihe'e Inclined Wells Modification Project, O'ahu

Dear Mr. Manuel:

Thank you for your October 19, 2023 letter, requesting technical assistance for the proposed Waihe'e Incline Wells Modification project (SCAP.6047.3) located on the island of O'ahu [TMK: (1) 4-7-008:002]. The project consists of the replacement of the existing above-ground well components which include the 4-inch gate valves, 4-inch piping, and 4-inch pipe bends at each of the four (4) existing wells (Well Number 1 through 4). Additionally, it is anticipated that excess material built up around the wells will be removed and a temporary fence constructed around Well Number 1 and 2 to retain material from burying the pipe during construction will remain. Excavation around the base of the pipes will require the installment of a new line stop valve to stop the flow of water during the replacement of the above-ground valves and pipe sections. Temporary barriers will be used to prevent pollution surrounding the disturbed areas. Well Number 4 is located adjacent to Waihe'e Stream and the ordinary high-water mark (OHWM) was observed to be immediately adjacent to the pipe. The temporary excavation and barrier for the replacement of this pipe section would take place within the stream area as bounded by the observed OHWM. Upon completion of the work, the excavation would be backfilled to the pre-construction condition using existing material, and the temporary barriers used to prevent pollution would be removed.

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

PACIFIC REGION 1

Idaho, Oregon*, Washington, American Samoa, Guam, Hawai'i, Northern Mariana Islands

*PARTIAL

EXHIBIT 4

Mr. M. Kaleo Manuel

2

may occur or transit through the vicinity of the proposed project area: the 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); endangered oceanic Hawaiian damselfly (*Megalagrion oceanicum*), and endangered blackline Hawaiian damselfly (*Megalagrion nigrohamatum nigrolineatum*) (hereafter collectively referred to as Hawaiian damselfly ou as sist 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.

Hawaiian Hoary Bat

Hawaiian hoary bat 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. Hawaiian hoary bat forages 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 Hawaiian hoary bat, 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 Hawaiian hoary bat, June 1 through September 15.
- Do not use barbed wire for fencing.

Mr. M. Kaleo Manuel

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 no 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.

Hawaiian Damselflies

Hawaiian damselflies are found in aquatic habitats across the islands, with high species endemism within islands. Breeding habitat includes anchialine pools, perennial streams, marshes, ponds, and even artificial pools and seeps. Specifically, the blackline Hawaiian damselfly occurs in slow sections or pools along mid-reach and headwater sections of upland streams and seep-fed pools and the oceanic Hawaiian damselfly is found in swiftly flowing sections of streams, usually amid rocks and gravel in stream riffles. Naiads can forage out of the stream on wet moss on rocks. Major threats include introduced fish, amphibians, and invertebrates in streams, reduced stream flow from drought and water diversion, small isolated populations, reduced habitat quality from ungulates and nonnative plants, and possibly over-collection.

Baseline surveys conducted by the Service were undertaken on November of 2021, in the Waihe'e Stream catchment to determine the presence or absence of Hawaiian damselflies. Such surveys were necessitated by a proposal from Board of Water Supply (BWS), City and County of Honolulu, to rehabilitate existing water delivery infrastructure at various points along Waihe'e Stream. No Hawaiian damselflies were seen in the vicinity of any BWS facilities in Waihe'e

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Mr. M. Kaleo Manuel

Valley; therefore, the proposed inclined well improvements are not anticipated to result in any impacts to these taxa. A re-survey of the valley post-construction, and in the warmer summer months, would be useful to verify the current negative findings. It is still possible that *Megalagrion nigrohamatum nigrolineatum* may occur at isolated small spring-fed tributaries in the upper valley, but this does not influence the present evaluation for the proposed well rehabilitation project.

To avoid and minimize potential project impacts to the endangered Hawaiian damselfly, we recommend you incorporate applicable Service Recommended Standard Best Management Practices (BMPs) into your project design (see enclosure). BMPs should be followed for any construction that may occur within the stream channel, so as to avoid impacts to downstream habitats, which are in good condition. In addition, should construction implementation be delayed, please contact our office for further guidance.

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: <u>Charmian Dang@fws.gov</u>). When referring to this project please include this reference number: 2023-0114069-S7-001.

Sincerely,

JINY KIM

Island Team Manager Oʻahu, Kauaʻi, Northwest Hawaiian Islands and American Samoa

Digitally signed by JINY KIM

Date: 2023.11.30

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Enclosure: Service Recommended Standard BMP

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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.

 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.

 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 noninvasive vegetation matting, hydro-seeding, etc.

STREAM CHANNEL ALTERATION PERMIT STANDARD 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. 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.

EXHIBIT 5

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. Waiahole I, 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 <u>Protection of instream uses.</u> 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 non-instream 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;

HAR §13-169-2 Definitions.

"Channel alteration" means to obstruct, diminish, destroy, modify, or relocate a stream channel; to change the direction of flow of water in a stream channel; to place any material or structures in a stream channel; or to remove any material or structures from a stream channel.

"Stream channel" means a natural or artificial watercourse with a definite bed and banks which periodically or continuously contains flowing water.

HAR §13-169-49.1 Interim instream flow standard for Windward Oahu. The Interim Instream Flow Standard for all streams on Leeward Oahu, as adopted by the commission on water resource management on April 19, 1989, 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.

EXHIBIT 6

HAR §13-169-50 <u>Permit required</u>. (a) Stream channels shall be protected from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses. No stream channel shall be altered until an application for a permit to undertake the work has been filed and a permit is issued by the commission; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit.

HAR §13-169-52 <u>Criteria for ruling on application</u>. (a) The commission shall act upon an application within ninety calendar days after acceptance of the application.

(b) Based upon the findings of fact concerning an application for a stream channel alteration permit, the commission shall either approve in whole, approve in part, approve with modifications, or reject the application for a permit.

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

- (1) Channel alterations that would adversely affect the quantity and quality of the stream water or the stream ecology should be minimized or not be allowed.
- (2) Where instream flow standards or interim instream flow standards have been established pursuant to subchapters 3 and 4, no permit shall be granted for any channel alteration 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 channel alteration should not interfere substantially and materially with existing instream or non-instream uses or with channel alterations previously permitted.

(c) Notwithstanding subparagraph (b) above, the commission may approve a permit pursuant to subparagraph (a) above in those situations where it is clear that the best interest of the public will be served, as determined by the commission.

HAR §13-169-53 <u>Term of permit</u>. (a) Every permit approved and issued by the commission shall be for a specified period, not to exceed two years, unless otherwise specified in the permit.