

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawaii 96813

January 22, 2021

Chairperson and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Land Board Members:

SUBJECT: REQUEST FOR DELEGATION OF AUTHORITY TO THE
CHAIRPERSON TO ENTER INTO A MEMORANDUM OF
UNDERSTANDING WITH HUI O KO'OLAUPOKO

AND

DECLARATION OF EXEMPTION FROM PREPARATION OF
ENVIRONMENTAL ASSESSMENT UNDER HRS CHAPTER
343 AND HAR CHAPTER 11-200.1

SUMMARY:

This Board Submittal requests approval to enter into a Memorandum of Understanding ("MOU") to establish a written agreement to formalize a partnership between the Department of Land and Natural Resources ("DLNR"), Division of Forestry and Wildlife ("DOFAW"), Oahu Branch and Hui O Ko'olaupoko ("HOK"), a 501(c)(3) nonprofit organization, to manage resources at the Kawainui Marsh State Wildlife Sanctuary.

The draft MOU between DOFAW and HOK is attached as **Exhibit A**.

LOCATION:

Portion of State of Hawai'i lands situated at Kailua, Ko'olaupoko, O'ahu, and identified by Tax Map Key: (1) 4-2-003: 030, (1) 4-2-016: 002, and (1) 4-2-016: 015, as shown on the plat map attached as **Exhibit B**.

AREA:

13 acres, more-or-less.

ZONING:

TMK: (1) 4-2-003: 030
State Land Use District: Urban
City & County of Honolulu LUO: P2

TMK: (1) 4-2-016: 002
State Land Use District: Urban
City & County of Honolulu LUO: R5/P2

TMK: (1) 4-2-016: 015
State Land Use District: Conservation
City & County of Honolulu LUO: P/1

TRUST AND LAND STATUS:

Acquired after Statehood, *i.e.*, non-ceded.

DHHL 30% entitlement lands pursuant to the Hawaii State Constitution: No.

CURRENT USE STATUS:

Parcel 30:

Encumbered by Governor's Executive Order No. 3712 setting aside to the Division of Forestry and Wildlife for State Wildlife Sanctuary.

Parcel 2:

Encumbered by Governor's Executive Order No. 4128 setting aside to the Division of Forestry and Wildlife for Establishment, Preservation, and Protection of Kawainui Marsh as Part of the Kawainui Marsh Resource Management purposes.

BACKGROUND:

On March 11, 2016, the Board of Land and Natural Resources ("BLNR") approved a request to issue a Management Right-of-Entry Permit to the City and County and Honolulu, for mangrove removal along the Kawainui Flood Control Levee.¹ Subsequently, the permit was issued, and a joint project between City and County of Honolulu and the Oahu Division of Forestry and Wildlife to remove all mangroves from the Kawainui Flood Control Levee project area was initiated. The removal of the mangroves was an essential management action in the maintenance of flood control

¹See Minutes for the Meeting of the [BLNR] at Item C-1, PDF p.4 (Mar. 11, 2016), as approved (May 27, 2016), available at <https://dlnr.hawaii.gov/wp-content/uploads/2016/01/160311-minutes.pdf>; and Land Board Staff Submittal for DOFAW Item C-1, "Issuance of Management Right-of-Entry; City and County of Honolulu, Hamakua and Kawainui Marsh Wildlife Sanctuaries, Kailua, Koolaupoko, Oahu, Tax Map Key: (1) 4-2-3:30, (1) 4-2-16:02, and (1) 4-2-16:15, respectively" (Mar. 11, 2016), available at <https://files.hawaii.gov/dlnr/meeting/submittals/160311/C-1.pdf>.

infrastructure and the continued improvement of water quality. In 2019, the project was completed—all mangrove trees were successfully removed from the project area.

One component of the project plan was to boost the local community's involvement in maintenance activities by creating a volunteer workforce for activation in an uncertain fiscal climate. DOFAW staff therefore developed relationships with community members in order to gain access to certain landlocked parts of the project area. Those conversations revealed a need for coordination between staff-and-local community members in order to enhance DOFAW's ability to effectively utilize individual community volunteers. Hui O Ko'oloaupoko (HOK) was recommended to DOFAW as a non-profit and local group that had prior experience with mangrove removal projects in windward Oahu, specifically in the Heeia area. They also were overseeing a native plant garden at the City's Kawainui Neighborhood Park, which is directly adjacent to the Flood Control Levee area targeted for mangrove removal under the proposed MOU. HOK's track record and obvious commitment to watershed restoration work makes them a quality choice to assist DOFAW with community engagement.

In 2020, DOFAW and HOK partnered—unofficially—to set up “community workdays” focusing on mangrove maintenance activities. DOFAW staff led the workdays, and representatives from HOK assisted in coordinating and organizing the community volunteers. The events were so successful that DOFAW began to seek funding to solidify a long-term commitment to this and other related activities from HOK.

DOFAW recently received a grant to conduct wetland restoration at the Kawainui Marsh Wildlife Sanctuary. The grant was awarded from the Department of the Interior via their North American Wetlands Conservation Fund. Part of the grant focused restoration of wetland habitat along the Kawainui Levee, by removing invasive mangroves. HOK was identified as the most appropriate community-based, non-profit organization for an official partnership with DOFAW to continue this work. To demonstrate DOFAW's commitment to the forthcoming partnership, DOFAW proposes that it will pledge a portion of the grant (approximately \$30,000) for use by HOK to support a position to coordinate community involvement in the removal of mangrove along the Kawainui Levee.

CHAPTER 343 ENVIRONMENTAL ASSESSMENT:

Activities anticipated under this agreement are considered to be minor. The removal of mangrove will be done by hand; no machinery or heavy equipment will be used. The low impact operations will have minimal or no significant impact on the environment and therefore should be considered exempt from environmental assessment requirements. The U.S. Fish and Wildlife Service (“USFWS”) has also issued a *Determination of Categorical Exclusion for North American Wetland Conservation Act Small Grant Project Kawainui Marsh Enhancement, USFWS Region 12, Pacific Islands*, in the form of an Environmental Action Memorandum (“EAM”) dated June ##, 2016, which is attached as **Exhibit C**. The EAM concludes that the proposed Kawainui Marsh Enhancement project will have no significant Federal impact.

In accordance with Chapter 343, Hawai'i Revised Statutes ("HRS"), Chapter 11-200.1, Hawaii Administrative Rules ("HAR"), and under the DLNR's revised exemption list dated November 10, 2020, this project is categorized as:

General Exemption Type 1, Part 1, Item 4, "Operation, repair and maintenance, of existing structures and facilities, including baseyards, offices, cabins, sheds and fencing";

General Exemption Type 1, Part 1, Item 28, "Routine pruning, trimming, thinning, and removal of trees, excluding commercial logging"; and

General Exemption Type 4, Part 1, Item 2, "Minor vegetation clearing and management, including mowing, pruning, trimming, and application of federal and state approved herbicides in conformance with label instructions."

RECOMMENDATIONS:

That the Board hereby:

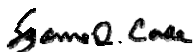
- 1) Declare this project exempt from the requirements in HRS Chapter, 343, Environmental Assessment Requirements.
- 2) Authorize the Chairperson to enter and sign the Memorandum of Understanding, providing that the Attorney General review and approve the contents of the Memorandum of Understanding to ensure compliance with all State requirements.

Respectfully submitted,



David G. Smith, Administrator
Division of Forestry and Wildlife

APPROVED FOR SUBMITTAL:



Suzanne D. Case, Chairperson
Board of Land and Natural Resources

ATTACHMENTS:

- Exhibit A:** Draft Memorandum of Understanding between the DLNR and HOK.
- Exhibit B:** Map of a portion of State of Hawai'i lands situated at Kailua, Ko'olaupoko, O'ahu, and identified by Tax Map Key: (1) 4-2-003: 030, (1) 4-2-016: 002, and (1) 4-2-016: 015.
- Exhibit C:** USFWS Environmental Action Memorandum (June 30, 2020).

MEMORANDUM OF UNDERSTANDING
BETWEEN
HUI O KO'OLAUPOKO
AND THE
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE

This Memorandum of Understanding ("MOU"), made and entered into on this _____ day of _____, 2020, which shall be effective as of the date of the last signature executed below ("Effective Date"), by and between Hui O Ko'olaupoko ("HOK"), a Hawaii Nonprofit Organization and the State of Hawai'i, Department of Land and Natural Resources ("DLNR"), Division of Forestry and Wildlife ("DOFAW"), by its Board of Land and Natural Resources ("BLNR" or "Board").

RECITALS

WHEREAS, pursuant to section 183D-2(1) & (9), Hawai'i Revised Statutes ("HRS"), DLNR is required to "manage and administer the wildlife and wildlife resources of the State" of Hawai'i and "manage and regulate all lands which may be set apart as game management areas, public hunting areas, and wildlife sanctuaries"; and

WHEREAS, pursuant to section 195D-1, HRS, DLNR is charged with the responsibility of ensuring "the continued perpetuation of indigenous aquatic life, wildlife, and land plants, and their habitats for human enjoyment, for scientific purposes, and as members of ecosystems"; and

WHEREAS, Kawainui Marsh State Wildlife Sanctuary, which is located in Kailua, O'ahu and identified by Tax Map Key: (1) 4-2-003: 030, (1) 4-2-016: 002, and (1) 4-2-016: 015, comprises the largest remaining wetland in the State of Hawai'i and serves as a critical flood control basin to protect the developed, lower-lying areas of urban Kailua and the water quality of Kailua Bay; and moreover, the marsh's aesthetic open space is of high value to the State, providing a variety of recreational and educational opportunities; and

WHEREAS, Kawainui Marsh supports a variety of aquatic wildlife and provides important habitat for migratory bird species and four endangered Hawaiian waterbird species; and moreover the U.S. Fish and Wildlife Service has identified Kawainui Marsh as a priority waterbird-recovery area¹; and

WHEREAS, HOK is a 501(c)-3 non-profit organization incorporated in the State of Hawai'i, whose purpose is to proactively improve, watershed health, including water

¹See U.S. Fish and Wildlife Service. 2011. Recovery Plan for Hawaiian Waterbirds, Second Revision. U.S. Fish and Wildlife Service, Portland, Oregon. 233 pp.

quality and watershed processes, in the Ko‘olaupoko region of O‘ahu, State of Hawai‘i (mauka to makai, Makapu‘u to Kualoa), working with a diverse group of community partners; and

WHEREAS, HOK implements projects that address watershed and water quality issues and has over ten years of experience in recruiting and engaging citizen stakeholders in riparian restoration activities; and

WHEREAS, HOK will bring its educational and community engagement expertise to the project, while DLNR/DOFAW has limited staff and funding for such activities; and

WHEREAS, extending information to the public about appreciating, understanding and protecting natural resources is a priority of DLNR/DOFAW, and any increase in public involvement would help to facilitate proper management of these resources; and

WHEREAS, a Memorandum of Understanding that clarifies the relationship between DOFAW and HOK would greatly benefit both parties and the general public by enabling DOFAW to expand its restoration activities through mobilization of community volunteers coordinated and trained by HOK, now therefore, in order to accomplish the foregoing, both parties hereto deem it mutually advantageous and desirable to cooperate and hereby agree, as described below.

TERMS OF AGREEMENT

NOW, THEREFORE, the parties hereto agree as follows:

A. General Provisions

1. Subject to Approval. This MOU and all of its terms are subject to approval by the BLNR.
2. Governing Law. This MOU shall be construed, interpreted, and applied in accordance with the laws of the State of Hawai‘i.
3. Modifications. This MOU may be amended only by written agreement of the parties hereto.
4. Cooperation and Good Faith. The parties shall cooperate and negotiate in good faith the terms to complete and execute the definitive documents and instruments necessary to accomplish the intended goals. The terms and conditions of any future agreement shall be consistent with this MOU and upon such other terms as the parties may agree in writing.

B. DOFAW agrees to:

1. Work with HOK to restore wetland habitat in Kawainui Marsh State Wildlife Sanctuary, for the benefit of the public and the operational interests of both parties, on such projects as may be mutually agreed upon and as resources permit;
2. Support HOK in restoration projects on DOFAW lands using vehicles, heavy equipment, and labor as needed and as resources permit;
3. Contribute \$30,000 to support HOK's recruitment and management of volunteers during volunteer work events; and
4. Notify HOK within two working days upon discovering any hazardous or unsafe conditions on or within DOFAW lands that are eventually permitted for HOK use pursuant to this MOU and any subsequent project agreements between the parties.
5. Be responsible to HOK or any affiliates thereof (including any official, representative, agent, director, or officer thereof; collectively, the "Indemnified Parties"), from and against all claims, liabilities, damages, or legal actions of any kind or nature whatsoever arising out of, because of, or due to the breach of any condition or responsibility under this MOU by DOFAW, its employees, agents, and/or representative, or due to any act or occurrence of omission of DOFAW, including but not limited to reasonable costs and reasonable attorney's fees if found by a court of law and appropriated by the Legislature. In lawsuits against an Indemnified Party arising out of official duties under the MOU, the Indemnified Party, at its sole option, may defend itself or request the State to provide the defense.

C. HOK agrees to:

1. Consult with DOFAW regarding general programs of restoration and maintenance of lands under DOFAW management;
2. Coordinate and supervise volunteer services for wetland restoration activities at various locations in Kawainui Marsh State Wildlife Sanctuary, as may be mutually agreed upon;
3. Assist DOFAW by providing general information regarding the status of restoration projects and areas, in writing, as will be identified; and
4. Notify DOFAW within two working days whenever HOK becomes aware of unsafe conditions, damage to, or disrepair on DLNR/DOFAW lands.

5. Indemnify and hold harmless DOFAW or any affiliates thereof (including any official representative, agent, director, or officer thereof; collectively, the "Indemnified Parties") from and against all claims, liabilities, damages, or legal actions of any kind or nature whatsoever arising out of, because of, or due to the breach of any condition or responsibility under this MOU by the HOK site manager, HOK employees, agents, and/or representatives, or due to any act or occurrence of omission of the site manager, including but not limited to reasonable costs and reasonable attorney's fees. In lawsuits against the Indemnified Party arising out of official duties under this MOU, the Indemnified Party, at its sole option, may defend itself or require the site manager to provide the defense.

D. Miscellaneous Provisions

1. Partial Invalidity. If any provision of the MOU or its application to any person or circumstance shall to any extent be invalid or unenforceable, the remaining provisions of this MOU, or the application of such provision to person or circumstances other than those as to which it is invalid or unenforceable, shall not be affected.
2. Duration. This MOU will remain in effect as long as both parties abide by the conditions stated herein.
3. Termination. This MOU may be terminated by HOK or DOFAW upon Thirty (30) Days written notice to the other party, effective as of the expiration of the notice period.
4. No Third-Party Beneficiaries. No term or provision of the MOU is intended to be, or shall it be, for the benefit of any person, firm, organization, or corporation not a party hereto, and no such other person, firm, organization, or corporation shall have any right or cause of action hereunder.
5. No Partnership. Any intention to create a joint venture or partnership relation between the parties hereto is expressly disclaimed.
6. Binding on and Inuring to Benefit of Successors and Assigns. This MOU shall be binding upon and shall inure to the benefit of the parties, and their respective successors and assigns.
7. Notices. All notices, bills, demands, payments, accounting or other communications that any party desires or is required to give under the provisions of this MOU shall be given in writing and shall be deemed to have been received by a party when actually received in the case of hand delivery, facsimile transmission, e-mail, or internationally recognized courier services, or three (3) days after being sent by United States mail,

as the case may be, prepaid to the party or parties at the address noted below provided, however, that any and all notices under Section 19, shall be delivered by Certified Mail:

HOK: Hui o Ko'olaupoko
1051 Keolu Drive #208
Kailua, Hawai'i 96734
Facsimile No.: (808) 381-7202

DLNR: Division of Forestry and Wildlife
Department of Land and Natural Resources
2135 Makiki Heights Drive
Honolulu, Hawai'i 96822
Facsimile No.: (808) 973-9781

8. Counterparts; Facsimile Execution. The parties hereto agree that this instrument may be executed in counterparts, each of which shall be deemed an original, and said counterparts shall together constitute one and the same agreement, binding upon all of the parties hereto, notwithstanding that all of the parties are not signatory to the original or the same counterparts. For all purposes, including, without limitation, recordation, filing and delivery of the instrument, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded, and the remaining pages assembled as one document. An executed counterpart of this instrument transmitted and received by facsimile or email shall be deemed for all purposes to be an original, executed counterpart thereof.

IN WITNESS WHEREOF, Hui o Ko‘olaupoko, and the State of Hawaii, Department of Land and Natural Resources’ Division of Forestry and Wildlife agree to the execution of this Memorandum of Understanding as of the date herein written with the signatures below.

FOR HUI O KO‘OLAUPOKO

By: _____
(Signature) (Date)

(Printed Name)

(Title)

*Approved by the Board
of Land and Natural Resources
at its meeting on:

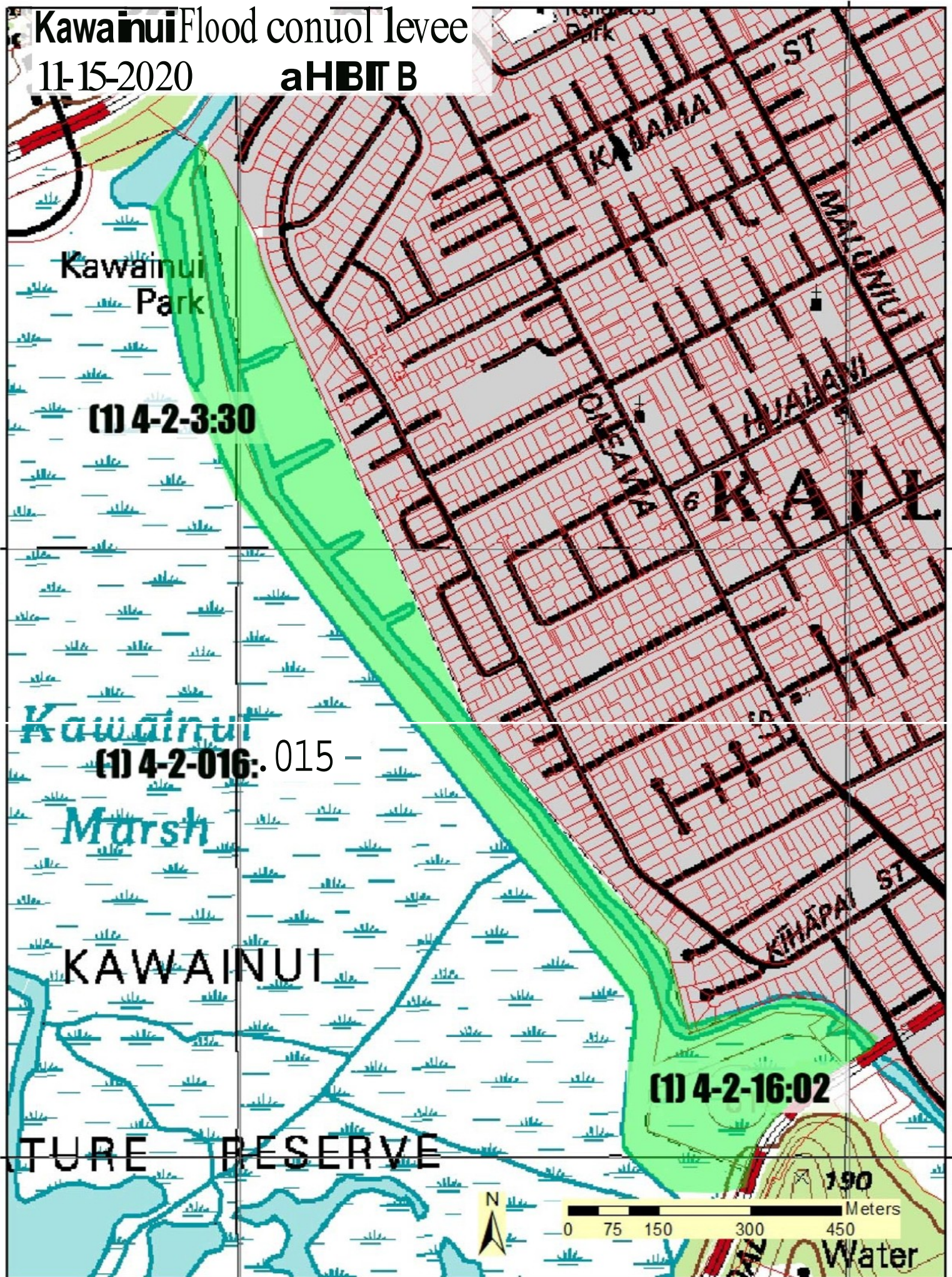
FOR THE STATE OF HAWAII,
DEPARTMENT OF LAND AND
NATURAL RESOURCES

By: _____
Suzanne D. Case (Date)
Chairperson,
Board of Land & Natural Resources

APPROVED AS TO FORM:

Melissa D. Goldman (Date)
Deputy Attorney General,
State of Hawai‘i

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

911 NE 11th Avenue
Portland, Oregon 97232-4181



In Reply Refer to:
FWS/IR09/121MBHP

Memorandum

To: Chief, Division of Bird Habitat Conservation
Washington, DC

From: Chief (acting), Migratory Birds and Habitat Program, Columbia-Pacific
Northwest & Pacific Islands Regions (Interior Regions 9 & 12) MICHAEL GREEN Digitally signed by MICHAEL
Date: 2020.01.21 09:35:46 .0700

Subject: Endangered Species Act Section 7 Compliance regarding the United States Fish
and Wildlife Service's Issuance of a North American Wetlands Conservation Act
Grant to Hawaii Department of Land and Natural Resources for the Kawainui
Marsh Enhancement in Honolulu County, Hawaii

The U.S. Fish and Wildlife Service's Division of Bird Habitat Conservation has issued a North American Wetlands Conservation Act grant to Hawaii Department of Land and Natural Resources (HDLNR) with the intent of funding a wetland habitat improvement project in Honolulu County, Hawai'i. In its capacity as the designated non-Federal representative for the purposes of completing this consultation, HDLNR has prepared a Biological Evaluation (BE) for the proposed project. The BE is attached. At issue are effects of this project on threatened or endangered species. For reasons presented in sections 4-7 and 9 of the attached BE, which are herein incorporated by reference, I concur with the findings that implementation of the enhancement project **may affect but is not likely to adversely affect** the following species and associated habitats: Hawaiian Coot (*Fulica alai*), Hawaiian Gallinule (*Gallinula galeata sandvicensis*), Hawaiian Stilt (*Himantopus mexicanus knudseni*), and Hawaiian Duck (*Anas wyvilliana*).

Please contact Joseph Sands at (503) 231-6729, if you have any questions regarding this matter.

Attachment

INTERIOR REGION 9
COLUMBIA-PACIFIC NORTHWEST

IDAHO, MONTANA, OREGON*, WASHINGTON

"PARTIAL

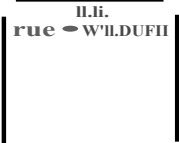
INTERIOR REGION 12
PACIFIC ISLANDS

AMERICAN SAMOA, GUAM, HAWAII, NORTHERN
MARIANAS ISLANDS



United States Department of the Interior

FISH AND WILDLIFE SERVICE
911 NE 11th Avenue
Portland, Oregon 97232-4181



In Reply Refer to:
FWS/MBHP/R9&12/072151

Memorandum

To: Chief, Division of Bird Habitat Conservation
Washington, DC

From: Chief, Migratory Birds and Habitat Program, Columbia-Pacific Northwest
& Pacific Islands Regions (Interior Regions 9 & 12) **NANETTE SETO**
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Subject: Determination of Categorical Exclusion for North American Wetland Conservation Act
Small Grant Project Kawainui Marsh Enhancement, USFWS Region 12, Pacific Islands

We have attached the subject Determination of Categorical Exclusion in the form of an Environmental Action Memorandum (EAM). This EAM covers the Kawainui Marsh Enhancement in Honolulu County, Hawaii. This action satisfies the compliance requirement for funding of the project through a North American Wetland Conservation Act (NAWCA) grant.

National Environmental Protection Act Compliance

Based on our review of information provided to this office concerning the proposed action, we have determined that the proposed action fits within the specific class of action, the other regulatory requirements are in compliance, and the proposed action is categorically excluded from further requirements of National Environmental Policy Act (NEPA) review.

National Historic Preservation Act Compliance

This memo also confirms that the applicants for this project will coordinate with the Interior Region 9 and 12 Cultural Resources Team (CRT) to ensure Section 106 compliance is conducted satisfactorily. Cultural resource compliance will be initiated by the applicant and facilitated by this office for planned restoration actions and details for each individual tract will be identified. If required, a field survey and report will be completed either by a qualified CRT archaeologist or contracted to a certified archaeological consulting firm. The CRT will notify the applicant and regional NAWCA coordinator when Section 106 compliance has been completed, and will submit appropriate documentation to the State Historic Preservation Office. This agreement is to ensure that cultural resources are considered as part of the NAWCA funding distribution process.

Endangered Species Act Section 7 Compliance

An Endangered Species Act review will be completed as part of the NEPA review for the proposed project. A Biological Assessment for the project will be prepared by a biologist and submitted to our office for concurrence.

If you have any questions, please contact Joe Sands, Migratory Birds and Habitat Program, at (503) 231 - 6729.

Attachments

INTERIOR. REGION 9
COLUMBIA-PACIFIC NORTHWEST

IDAHO, MONTANA*, OREGON*, WASHINGTON

*F...RTIAL

INTERIOR. REGION 12
PACIFIC ISLANDS

AMERICAN SAMOA, GUAM, HAWAII, NORTHERN
MARJANA ISLANDS

WSFR Section 7 Evaluation Form - PHASE 1

To be completed by Grantee

[Note: If more space is needed for responses, attach additional sheets, or set up this form to accommodate your responses. Space provided after each evaluation element will expand as needed. After the evaluation is completed and signed, submit a pdf copy with the grant application.]

Originating Person: Afsheen Siddiqi
Date: 6/16/2020

State/Agency: HI DLNR DOFAW

1. Grant Number and Project Title: Kawainui Marsh Enhancement

Grant Start Date: FY 2020

Grant End Date: FY2022

2. County project(s) will occur in: Honolulu

3. Section, township, and range (or latitude and longitude):

Latitude: 21.392535,

Longitude: -157.747981

4. Federally Listed/Proposed/Candidate species and critical habitat present and occurring **within 1 mile of the project(s) area:** (If the list is extensive you may attach a table.)

Federally listed species occurring within the project area are:

- Hawaiian Coot (*Fulica alai*)
- Hawaiian Gallinule (*Gallinula galeata sandvicensis*)
- Hawaiian Stilt (*Himantopus mexicanus knudseni*)
- Hawaiian Duck (*Anas wyvilliana*)

There is not any critical habitat within 1 mile of the project area.

5. CHARACTERIZE THE FULL RANGE OF ACTIONS THAT WILL BE CONDUCTED (Be as specific as possible.)

Describe the project actions. Provide a map (or maps) of the project location, and include (overlay/mark) **site-specific species and critical habitat occurrences**. When describing project actions, here are some factors to consider: area size (acres, miles) of the project footprint; timing of activity (what months of the year; what's the frequency and intensity [how many visits; duration per visit]; what is the full duration of the project; will there be machinery used (helicopters, ground vehicles, mechanized tools and gear, etc.); will action result in modification of the area (e.g., cutting/removal of vegetation for trails or survey lanes) and to what extent; state if and what herbicide will be used and the application regime. For in-water work, consider the types, frequency and duration, and schedule [timing] of activities, number of persons in the water, gear/equipment that may be used (including boats), depths at which activities will occur, is work in water column only or will it also be on underlying substrate. If there are no field-based activities, what is the nature of the proposed actions?

This project will enhance wetland habitat for endangered Hawaiian waterbirds (Hawaiian Coot, Hawaiian Gallinule, Hawaiian Stilt, Hawaiian Duck). Project activities involve removing invasive vegetation using mechanical and chemical methods on 18.82 acres. In **tract 1** (12.98 acres, Fig. 1), invasive bulrush (*Schoenoplectus californicus*) and California grass (*Urochloa mutica*) will be mowed biweekly for 2 months to deplete rhizome energy stores using a Marsh Master 2XL with brush-cutter attachment. The area will then be chemically treated with a single application of 5% glyphosate (for bulrush) and 1% imazapyr (for California grass). Following control of all emergent invasive vegetation, mechanical manipulation using a Marsh Master 2XL with roller/chopper attachment will be repeatedly

applied biweekly for 3-4 months to expose bare mineral soil. This final mechanical manipulation stage will be timed to the start of the wet season to encourage germination of beneficial sedges present in the native seed bank. Follow-up treatments using mechanical (mowing, roller/chopping) and/or chemical (spot-spraying of 2% imazapyr) methods over the following 12-18 months will occur at the project officer's discretion. In **tract 2** (2.69 acres, Fig. 1), invasive red mangrove seedlings (*Rhizophora mangle*), cattail (*Typha latifolia*) and umbrella sedge (*Cyperus involucratus*) will be removed by hand during 10 volunteer events per year. Bulrush and California grass will be controlled as described above for tract 1. In **tract 3** (3.15 acres, Fig. 1), water lettuce (*Pistia stratiotes*) and water hyacinth (*Eichhornia crassipes*) will be controlled mechanically by removing floating mats of vegetation from the water using hand tools such as rakes, pool nets, and grappling hooks. Work will occur only in the water column (i.e. skimming the plants from the surface) by people in the water and/or from small, unmotorized craft such as kayaks. Vegetation will be allowed to dry before being transported to a waste facility. Treatments will occur during 12 volunteer events per year and will be maintained by installation of bird-friendly floating booms designed to prevent reintroduction of floating propagules. Waterbirds will be able to walk or hop over the booms to reach adjacent habitat.

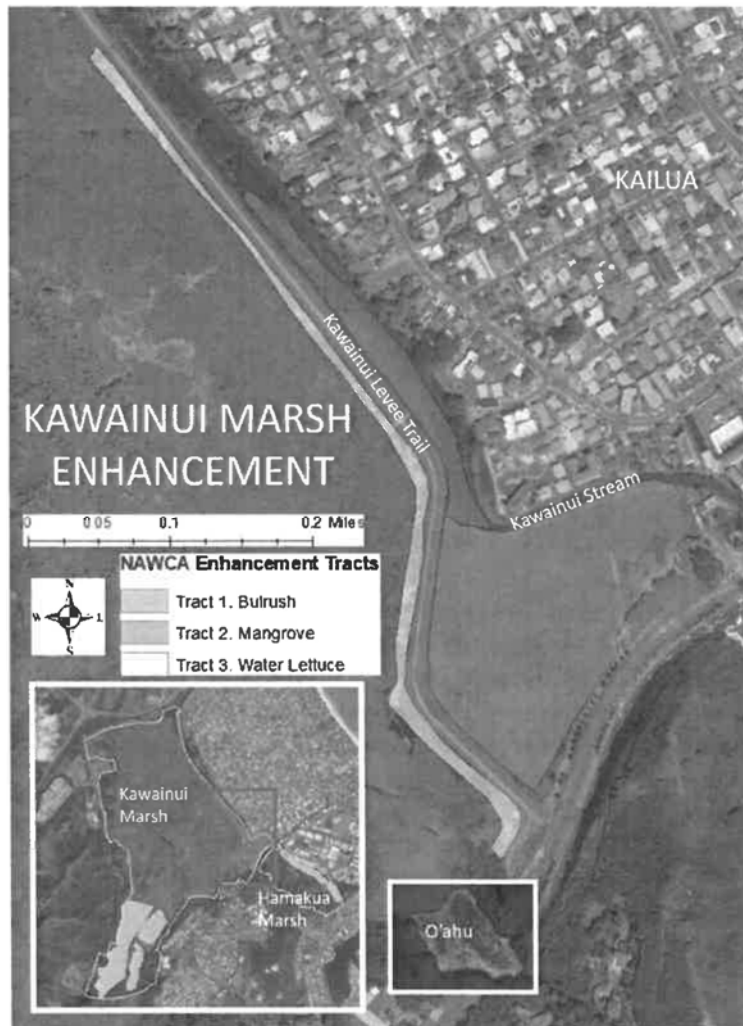


Figure 1. Map of the project area (green highlighted areas) within Kawainui Marsh State Wildlife Sanctuary and Hamakua Marsh State Wildlife Sanctuary. Hawaiian Coot, Hawaiian Gallinule, Hawaiian Stilt and Hawaiian Duck are all federally listed species that occur within the project area.

6. DESCRIBE WHAT THE PROJECT AIMS TO ACCOMPLISH

(Will there be (direct or indirect) benefits and of what nature to listed or candidate species or designated critical habitat?)

There will be direct benefits to the listed waterbird species (coot, gallinule, stilt, duck), since the project will transform a wetland overrun with thick cover of invasive plants into a mosaic of open water, mudflats and emergent wetland plants preferred by these birds for breeding, foraging and loafing. The U.S. Fish and Wildlife Service (USFWS) Recovery Plan for these four waterbird species lists 'control undesirable plant species' and 'encourage desirable plant species' as priority 1 and 3 actions, respectively (USFWS 2011). Combined with the fact that the project area is listed as a 'core' wetland in the recovery plan (i.e., capable of supporting the large numbers of breeding waterbirds necessary for recovery and delisting), this project is directly aligned with federal recovery goals for these species.

7. EVALUATE/DISCUSS THE POTENTIAL EFFECT OF PROJECT ACTIONS ON CANDIDATE/LISTED SPECIES AND TO CRITICAL HABITAT

Always present the potential adverse effects and then (conversely) what benefits may accrue. Consider the types of disturbance or stressors that will be generated or created by each project action and what effects they may have on federally listed and candidate species and any designated critical habitat.

This project **may affect but is not likely to adversely affect** endangered waterbirds. Potential adverse effects are stress to endangered waterbirds caused by machinery and vegetation removal activities and destruction of nests (unlikely). The only species that occurs regularly and breeds in the project area is the Hawaiian Gallinule. However, as habitat is created following mechanical and chemical control of invasive plants, coots and stilts may start to use the area as well. See question 9 below for our mitigation strategies.

The benefits to endangered waterbirds are creation of improved habitat for breeding, foraging and loafing. We have successfully restored nearby Hamakua Marsh (23 acres, <0.25 miles from the project area), which now supports ~69 gallinules, ~23 coots, ~38 stilts. We expect similar numbers of endangered waterbirds to use the project area in the coming years (currently, the project area only supports ~8 gallinules). The location of Hamakua Marsh along the same waterway as the project area (Kawainui Stream) will facilitate dispersal of wetland birds to the project area.

8. List any federal permits and/or biological opinions (and their permit/tracing numbers), exemptions under ESA Section 4(d), or other permit authorizations (e.g., state or Corps permits) that may apply to this project(s):

N/A

9. List the mitigation (avoidance &/or minimization) measures associated with the project(s) that will be taken to reduce adverse effects on listed, proposed, or candidate species and critical habitat:

The following measures will be taken to reduce adverse effects to Hawaiian waterbirds:

- All work will occur July-November or during dry conditions, when the chances of encountering breeding birds is lowest
- Prior to any project activity in a given area, a nest survey will be conducted by a qualified wildlife biologist in that area. Nest surveys will be conducted no earlier than three days prior to the start of work in a given area, to minimize the chance that a nest is initiated between the survey and the start of work.
- If a nest is found, project activities will cease for 60 days within 100 ft of the nest.
- All equipment operators will be trained in endangered waterbird identification. If an operator sees a waterbird during equipment operation, the bird will be given a buffer of 100 ft where no manipulation of habitat will occur.