

Appendix B. Compatibility Determinations and Appropriate Use Findings

B.1 Introduction

The Compatibility Determinations (CD) developed during the CCP planning process evaluate uses projected to occur at the Keālia Pond NWR over the next 15 years. The evaluation of funds needed for management and implementation of each use also assumes implementation as described in Chapter 2.

B.1.1 Uses Evaluated At This Time

The following CD are included in this CCP.

Table B-1. Summary of Compatibility Determinations.

Refuge Use	Page	Compatible?	Year Due for Reevaluation
Wildlife Observation, Photography, and Interpretation	B-5	Yes	2026
Environmental Education	B-11	Yes	2026
Research, Scientific Collecting, and Surveys	B-17	Yes	2021
Kiawe Tree Harvesting	B-27	Yes	2021

B.1.2 Compatibility – Legal and Historical Context

Compatibility is a tool refuge managers use to ensure that recreational and other uses do not interfere with wildlife conservation, the primary focus of refuges. Compatibility is not new to the Refuge System and dates back to 1918 as a concept. As policy, it has been used since 1962. The Refuge Recreation Act of 1962 directed the Secretary of the Interior to allow only those public uses of Refuge lands that were “compatible with the primary purposes for which the area was established.”

Legally, Refuges outside of Alaska are closed to all public uses until officially opened. Regulations require that adequate funds be available for administration and protection of refuges before opening them to any public uses. However, wildlife-dependent recreational uses (hunting, fishing, wildlife observation and photography, environmental education, and interpretation) are to receive enhanced consideration and cannot be rejected simply for lack of funding resources unless the refuge has made a concerted effort to seek out funds from all potential partners. Once found compatible, wildlife-dependent recreational uses are deemed the priority public uses at the refuge. If a proposed use is found not compatible, the refuge manager is legally precluded from approving it. Economic uses that are conducted by or authorized by the refuge also require CD.

Under compatibility policy, uses are defined as recreational, economic/commercial, or management use of a refuge by the public or a non-Refuge System entity. Uses generally providing an economic return (even if conducted for the purposes of habitat management) are also subject to CD. The Service does not prepare CD for uses when the Service does not have jurisdiction. For example, the Service may have limited jurisdiction over Refuge areas where property rights are vested by others; where legally binding agreements exist; or where there are treaty rights held by tribes. In addition,

aircraft overflights, emergency actions, some activities on navigable waters, and activities by other Federal agencies on “overlay Refuges” are exempt from the compatibility review process.

New compatibility regulations were adopted by the Service in October 2000. The regulations require that a use must be compatible with both the Refuge System mission and the purpose(s) of the individual Refuge. This standard helps to ensure consistency in application across the Refuge System. The Administration Act also requires that CD be in writing and that the public have an opportunity to comment on all use evaluations.

The Refuge System mission emphasizes that the needs of fish, wildlife, and plants must be of primary consideration. The Administration Act defined a compatible use as one that “. . . in the sound professional judgment of the Director, will not materially interfere with or detract from the fulfillment of the mission of the System or the purposes of the Refuge.” Sound professional judgment is defined under the Administration Act as “. . . a finding, determination, or decision, that is consistent with principles of sound fish and wildlife management and administration, available science and resources . . .” Compatibility for wildlife-dependent uses may depend on the level or extent of a use.

Court interpretations of the compatibility standard have found that compatibility is a biological standard and cannot be used to balance or weigh economic, political, or recreational interests against the primary purpose of the refuge (*Defenders of Wildlife v. Andrus*).

The Service recognizes that CD are complex. For this reason, refuge managers are required to consider “principles of sound fish and wildlife management” and “best available science” in making these determinations (House of Representatives Report 105-106). Evaluations of the existing uses on the Keālia Pond NWR are based on the professional judgment of Refuge and planning personnel including observations of Refuge uses and reviews of relevant scientific literature.

B.1.3 Appropriate Use Findings

The Appropriate Refuge Uses policy outlines the process that the Service uses to determine when general public uses on refuges may be considered. Priority public uses previously defined as wildlife-dependent uses (hunting, fishing, wildlife observation and photography and EE and interpretation) under the Administration Act are generally exempt from appropriate use review. Other exempt uses include situations where the Service does not have adequate jurisdiction to control the activity and refuge management activities. In essence, the Appropriate Refuge Use policy, 603 FW 1 (2006), provides refuge managers with a consistent procedure to first screen and then document decisions concerning a public use. When a use is determined to be appropriate, a refuge manager must then decide if the use is compatible before allowing it on a refuge. The policy also requires review of existing public uses. During the CCP process, the refuge manager evaluated all existing and proposed refuge uses at Keālia Pond NWR using the guidelines and criteria as outlined in the appropriate use policy.

Using this process, and as documented on the following pages, the refuge manager determined the following uses appropriate: “Research, Scientific Collecting, and Surveys” and “Kiawe Tree Harvesting.”

B.1.4 References

Compatibility regulations, adopted by the Service in October 2000:

<http://Refuges.fws.gov/policymakers/nwrpolicies.html>

Defenders of Wildlife v. Andrus (Ruby Lake Refuge I). 11 Env'tl. Rptr. Case 2098 (D.D.C. 1978), p. 873.

Fish and Wildlife Service. 2011. Keālia Pond National Wildlife Refuge: *Draft Comprehensive Conservation Plan and Environmental Assessment*.

House of Representatives Report 105-106

<http://refuges.fws.gov/policyMakers/mandates/HR1420/part1.html>

B.2 Compatibility Determination for Wildlife Observation, Photography, and Interpretation

Refuge Name(s): Keālia Pond National Wildlife Refuge

County and State: Maui County, Hawai‘i

Establishing and Acquisition Authority(ies):

Keālia Pond NWR was established in 1992 under the authority of the:

- Fish and Wildlife Coordination Act of 1956, as amended (16 U.S.C. 742a – 742j)
- Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1544)

Refuge Purpose(s):

“...to conserve (A) fish and wildlife which, are listed as endangered or threatened species... or (B) Plants ...” 16 U.S.C. 1534, Endangered Species Act of 1973.

National Wildlife Refuge System Mission:

“The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Administration Act).

Description of Use(s):

The National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997 identifies wildlife observation and photography among wildlife-dependent public uses which, when compatible with the purpose(s) of the refuge, are priority public uses and receive special consideration in planning for and management of the Refuge System.

Wildlife observation, photography and interpretation are non-consumptive, wildlife-dependent public uses with similar elements and so are considered together in this CD. Keālia Pond NWR is open to the public 5 days a week (closed on weekends), excluding Federal holidays. Public use activities take place at two areas on the Refuge, the Kanuimanu Ponds and the Keālia Coastal Boardwalk, with the goal of minimizing wildlife disturbance throughout the wetlands. The majority of use is self-guided. The Refuge has improved the public use facilities at these locations and the new visitor center will provide more formal learning opportunities and enhance their experience on the trails.

Most of the wildlife observation, photography, and interpretation activities occur at the Kanuimanu Ponds. The 20 acres of constructed ponds are remnant of the previous aquaculture facility that was in full operation before the Refuge was established. The five ponds comprising this area are interconnected with levees that serve as the hiking trail. These earthen levees have been widened and compacted sufficiently to allow access for wheelchairs for most of the route. Wheelchairs, defined as a device specifically designed to be used indoors and outdoors by a person with a disability, are the

only motorized vehicles permitted on the trails. Pets are not allowed on the Refuge because of the openness of the area and close proximity to waterbirds.

The Kanuimanu Ponds area is flat and open with no trees along the levees. Vegetation is limited to ground cover and grasses, mostly for waterbird use and access, and maintenance reasons. A visitor shelter is planned for future construction; this three-sided structure will be placed in the footprint of the previous office trailer next to the eight-stall parking lot.

The Keālia Coastal Boardwalk is accessible from N. Kīhei Rd.; however, entry and exit into the parking area is only when traveling from Mā‘alaea (west side) to Kīhei (east side). This configuration allows safe sight distance when entering and exiting the lot due to the road’s alignment and adjacent curves. The Boardwalk gates are opened at 6:00 a.m. and closed at 7:00 p.m. throughout the year (including weekends).

The 2,200-foot long elevated Boardwalk is for pedestrians to access the sensitive coastal habitat without impacting (trampling) the dunes for the purpose of wildlife observation and photography. Wildlife viewing (bird watching) activity is best during winter months when the coastal flats are flooded and with future capability of maintaining water on the flats, the opportunities would be year-round. This highly visible facility is well used for wildlife observation; however, the trail is also used by beach walkers since the three Boardwalk ramps were intended to provide a loop trail. In general, all Boardwalk users, whether intentionally observing wildlife or not, have the opportunity to learn about the wetlands and wildlife from the interpretive panels placed along the length. Since the opening of the Boardwalk in September 2009, there has been an average of 15-20 people per day. The Boardwalk is intended for pedestrian traffic only, excluding pets, bicycles, skateboards, and bikes. The Boardwalk was constructed for access by persons with disabilities and is the best place on the Refuge for wheelchairs because of the smoother surface on the decking (compared with earthen levees).

The new headquarters/visitor center (HQ/VC) at Keālia Pond NWR will be staffed by trained volunteers for direct contact with visitors that will enhance their wildlife observation and interpretation experiences. In addition, the exhibit hall has interpretive panels to introduce visitors to the wetland and the resources for their outdoor observations.

Availability of Resources:

Category and Itemization	One-time \$	Annual \$/yr
Administration and management:	\$0	\$800
Maintenance:	\$0	\$5,400
Monitoring costs:	\$0	\$3,600
Special equipment, facilities, or improvements:	\$0	\$0
Offsetting revenues:	\$0	\$0

The Refuge has sufficient budget and staff to manage this use. Wildlife observation, photography, and interpretation on the Refuge require minimal resources because the public is on their own; however, indirectly, resources in the form of facilities maintenance and wetland restoration to maintain viewing opportunities do exist. The HQ/VC is intended to prepare visitors with the basic ecology and biology of the Refuge to supplement their experience on the trails.

Anticipated Impacts of the Use(s):

There are different types of human-wildlife conflicts (direct or indirect; human-caused or wildlife-caused) that occur when people are in nature. Public use activities at Keālia Pond NWR are designed to eliminate direct conflicts (e.g., harassment, direct mortality) and minimize indirect conflicts (disturbance as defined by a change in the wildlife's behavior), as a rule. Wildlife observation and photography is identified as a priority use because of the importance of sharing what is being protected and opportunities to increase visitor awareness of, appreciation for, and stewardship towards the natural resources. A balance needs to be attained in order for human activities to coexist with waterbird needs. This can be accomplished by minimizing activities and designing public use facilities that allow birds to engage in their natural behaviors.

Human activities on unconfined trails may result in direct effects on wildlife through harassment, a form of disturbance that can cause physiological effects or varying levels of behavioral modifications (Smith and Hunt 1995). Studies have shown that the severity of the effects depends upon the distance to the disturbance and its duration, frequency, predictability, and visibility to wildlife (Knight and Cole 1991). The variables found to have the greatest influence on wildlife behavior are: a) the distance from the animal to the disturbance, b) duration of the disturbance, and c) the amount and kind of vegetative cover. In addition, the type of movement by people elicits different responses; for examples, birds show a greater flight response from a human moving quickly and unpredictably (erratic) than to humans moving slowly following a distinct path. Excessive human noises, especially with erratic behavior, are also a factor in bird disturbance by humans.

Keālia Pond NWR has two areas where the public engages in wildlife observation and photography: the Kanuimanu Ponds and the Keālia Coastal Boardwalk.

Short-term impacts: Keālia Pond NWR has been open to the public for approximately 17 years during which time the staff has observed and monitored public use and waterbird behavior to formalize general rules and conditions for public access onto the Kanuimanu Pond levees. Based on this history, the Refuge will continue offering wildlife observation and photography opportunities because the short-term impacts are offset by minimizing or eliminating human disturbance. Activities are limited to pedestrian access only. Vehicles and bikes are not allowed on the levees or Boardwalk and pets (even on leashes) are not permitted. The presence of people observing or photographing wildlife has potential to cause short-term disturbances to wildlife. However, a majority of the visitors are in small groups (1-5) that create minimal disturbance of birds. Large tours or groups are typically birdwatchers that are goal-oriented and intent on minimal disturbance. Large non-wildlife-dependent activity groups are not the norm; however, if excessive disturbance is observed, the Refuge would mitigate through group education and interpretation. The staff will continue to monitor public use of the Refuge, identify when birds are most susceptible to human disturbance, and implement measures to eliminate and/or minimize the human activities for the benefit of endangered waterbirds.

Long-term impacts: Short-term impacts can have cumulative effects on waterbirds. During nesting season, trails are closed to public access to eliminate disturbance to waterbirds incubating eggs and rearing young. In the past, this closure has occurred during 'alae ke'oke'o nesting period (January-February); however, this is not necessary every year, due to the location of their nests in emergent vegetation in the Main Pond hidden from view. During brood rearing, the young have the capability of swimming into the vegetation away from people. In contrast, closures are more typical during ae'o nesting season (May-June) because of the location of their nests on the ground (adjacent

to water), low tolerance to disturbance, and the chicks' limited ability to escape. In general, visitors' responses to these closures appear to be acceptable, especially since the bird observations are still available from the parking area or areas adjacent to the Boardwalk.

Wildlife disturbances can also be minimized when planning the restoration of wetlands. The Kanuimanu Ponds is the primary area for public use; however, this was only by convenience: the ponds were pre-existing as aquaculture ponds before the Refuge was established. When the ponds were restored, one of the primary objectives was to enhance habitat for endangered waterbirds; the use was not expected to create prime nesting habitat more so than foraging habitat because the area was open to the public. Instead, the ponds were designed to attract a diversity of waterbirds throughout the year for wildlife observation and photography. The vegetation along the slope and in the ponds in addition to combining small ponds into larger ponds created habitat away from trails for waterbirds to seek shelter, if necessary. This type of planning is expected to minimize short- and long-term effects to waterbirds.

Refuge staff will continue to monitor public use activities and evaluate potential disturbances in future planning and design of public use facilities. Future planning will also include methods to provide a high-quality experience to the public (e.g., bird observation or photo blinds). With the opening of a visitor center and the expected increase in public use, attention to this balance between waterbird use and public use will be essential to retain a quality wildlife observation and photography program.

Cumulative impacts: The level and type of use from activities described in this CD is not expected to result in any significant cumulative impacts.

Public Review and Comment:

Public review and comments were solicited in conjunction with release of the draft Keālia Pond NWR Draft CCP/ EA (2011) in order to comply with the National Environmental Policy Act and Service policy. This CD was released as integral part of the CCP and received the same level of public review and comments as the CCP, in accordance with Service planning policy.

Determination: (check one below)

Use is Not Compatible

Use is Compatible With Following Stipulations

Stipulations Necessary to Ensure Compatibility:

- Visitors are required to stay on trails and designated paths throughout the year;
- Use is restricted to daylight hours only; and
- Pets are not allowed.
- Regulations will be available to the public through a Refuge brochure and interpretive panels;
- Directional, informational, and interpretive signs will be available and maintained to help keep visitors on the trails and help educate the public on minimizing wildlife and habitat disturbances;
- Human use levels will be monitored; and
- Trails will be temporarily closed during waterbird nesting season, if necessary, to eliminate disturbance.

Justification:

Wildlife observation, photography, and interpretation are three of the six wildlife-dependent recreational uses of the Refuge System identified in the Administration Act as legitimate and appropriate priority general public uses. They receive enhanced consideration in the CCP process, and are considered priority public uses when determined compatible. Although these activities can result in disturbance to wildlife, these activities would occur on a small percentage of Refuge acres. There is a sufficient amount of undisturbed habitat available to Refuge wildlife for escape and cover, and wildlife populations will find sufficient food resources and resting places. The relatively limited number of individual plants and animals expected to be adversely affected will not cause wildlife populations to materially decline, the physiological condition and production of refuge species will not be impaired, their behavior and normal activity patterns will not be altered dramatically, and their overall welfare will not be negatively impacted. Thus, allowing wildlife observation, photography, and interpretation to occur under the stipulations described above will not materially detract or interfere with the purposes for which the Refuge was established or the Refuge System mission. Wildlife observation, photography, and interpretation programs complement the Refuge purpose, vision, and goals, and help fulfill the mission of the Refuge System.

Mandatory Reevaluation Date:

September

2026 Mandatory 15-year reevaluation date (for wildlife-dependent public uses)

_____ Mandatory 10-year reevaluation date (for all uses other than wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision: (check one below)

_____ Categorical Exclusion without Environmental Action Statement

_____ Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

_____ Environmental Impact Statement and Record of Decision

Keālia Pond National Wildlife Refuge Comprehensive Conservation Plan

Refuge Determination:

Prepared by:

Refuge Planner,
Hawaiian and Pacific Islands NWRC

Laura Beaugard 9-20-11
(Signature) (Date)

Project Leader,
Maui National Wildlife Refuge Complex
Approval:

Quinn Nakai 09-20-11
(Signature) (Date)

Concurrence:

Project Leader,
Hawaiian and Pacific Islands NWRC

Barry W. Steg 9/22/11
(Signature) (Date)

Regional Chief,
National Wildlife Refuge System:

L. S. West 9/23/11
(Signature) (Date)

B.3 Compatibility Determination for Environmental Education

Refuge Name(s): Keālia Pond National Wildlife Refuge

County and State: Maui County, Hawai‘i

Establishing and Acquisition Authority(ies):

Keālia Pond NWR was established in 1992 under the authority of the:

- Fish and Wildlife Coordination Act of 1956, as amended (16 U.S.C. 742a – 742j)
- Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1544)

Refuge Purpose(s):

“...to conserve (A) fish and wildlife which, are listed as endangered or threatened species... or (B) Plants ...” 16 U.S.C. 1534, Endangered Species Act of 1973.

National Wildlife Refuge System Mission:

“The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Administration Act).

Description of Use(s):

The National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997 identifies environmental education (EE) and interpretation among wildlife-dependent public uses which, when compatible with the purpose(s) of the refuge, are priority public uses and receive special consideration in planning for and management of the National Wildlife Refuge System.

Environmental education is a non-consumptive, wildlife-dependent public use. Environmental education programs at Keālia Pond NWR are currently conducted by nongovernmental organizations (Hawai‘i Nature Center, Maui Digital Bus) under a Special Use Permit. All outdoor classes are held at the Kanuimanu Ponds and are coordinated to not impact the Refuge’s management programs (e.g., monthly bird censuses, maintenance). Hawai‘i Nature Center’s 3rd grade wetland curriculum is held January-February each year. This time period is preferred because the ponds have water, vegetation, and high bird use for their observations and hands-on explorations. The Maui Digital Bus conducts their program throughout the year and is dependent on teachers’ inquiries. Both programs have been successful in reaching a high number (1,500-2,000 students) and diversity of Maui’s school children, and engages them in activities emphasizing the value of wetlands, endangered species, and ecological concepts (food chains, waterbird adaptations, invertebrate life cycles) all of which include hands-on activities. The Refuge’s role for these programs is to provide the site where a variety of waterbird species are present and active learning is available in an outdoor setting.

Availability of Resources:

Category and Itemization	One-time \$	Annual \$/yr
Administration and management:	\$0	\$1,000
Maintenance:	\$0	\$900
Materials:	\$0	\$1,000
Special equipment, facilities, or improvements:	\$0	\$1,000
Offsetting revenues:	\$0	\$

Minimal costs of EE will be covered by Refuge visitor services funding provided in the annual Refuge budget.

Anticipated Impacts of the Use(s):

Short-term impacts: Under the current program, the number of school groups and students visiting the Refuge may vary from year to year but this variation is already considered in the guidelines and structure established for the program. The primary impacts come from temporary disturbance to individual animals (primarily birds) due to the presence and activity of the students as they are guided around the wetlands. The animals may flush, swim away, or seek cover and hide in vegetation. These impacts are mitigated by restricting the days, maximum number of students, and routes that EE activities take place. This allows the students to participate in the EE experience while causing temporary disturbance over the smallest area and to the fewest birds.

This program has been in place for more than 12 years and has not had a noticeable impact on bird populations using the Refuge.

Long-term impacts: The current, ongoing EE program covered by this CD will not cause any significant long-term impacts. The EE program is expected to increase with the development of a formal program designed to meet DOE requirements; however, a thorough evaluation of the impacts to existing resources and capability of the site to withstand additional groups will be reviewed in a Visitor Services Plan within 5 years. With the park ranger staff position to oversee public use facilities, wildlife-dependent activities, and new VC, we will likely attract more teachers and other educators to the site. Alternative sites such as the Keālia Coastal Boardwalk will also be evaluated as a potential EE site, thereby relieving the Kanuimanu Ponds for other wildlife-dependent activities.

Cumulative impacts: This EE program has been conducted in the current manner for more than 12 years and no cumulative impacts to wildlife resources on the Refuge have been observed or are anticipated.

Public Review and Comment:

Public review and comments were solicited in conjunction with release of the Draft CCP/EA (2011) in order to comply with the NEPA and Service policy.

Determination: (check one below)

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

User stipulations:

- Groups are required to stay on trails and designated paths throughout the year.
- Use is restricted to daylight hours only.
- Groups are limited to a certain number of students and teachers.

Administrative stipulations:

- Specific regulations and allowances are outlined in the Special Use Permits.
- Refuge-specific requirements are put in place to direct groups to staging areas and routes that do not impede normal refuge operations and are safe for students.
- Use levels will be monitored
- Trails will be temporarily closed during waterbird nesting season, if necessary, to eliminate disturbance.
- Refuge staff periodically participates with the group to ensure compliance with Refuge's conditions and accuracy of information is maintained.

Justification:

Environmental education is one of the six wildlife-dependent recreational uses of the Refuge System as stated in the Administration Act. Environmental education receives enhanced consideration in the CCP process, and is considered a priority public use when determined compatible. By limiting the size of groups, providing structured activities, and providing closed areas for wildlife away from human disturbance, this program would limit disturbances to wildlife. There is a sufficient amount of undisturbed habitat available to Refuge wildlife for escape and cover, and wildlife populations will find sufficient food resources and resting places. The relatively limited number of individual plants and animals expected to be adversely affected will not cause wildlife populations to materially decline, the physiological condition and production of refuge species will not be impaired, their behavior and normal activity patterns will not be altered dramatically, and their overall welfare will not be negatively impacted. Thus, allowing EE to occur under the stipulations described above will not materially detract or interfere with the purpose for which the Refuge was established or the Refuge System mission. Environmental education contributes to the mission of the Refuge System by providing wildlife-related educational benefits to visitors. Environmental education programs on Refuge lands are inherently valuable to the Service because they will enhance the public's knowledge of the Refuge and its resources, and expand the number of visitors who engage in the Refuge's conservation mission.

Mandatory Reevaluation Date: (provide month and year for "allowed" uses only)

September

2026 Mandatory 15-year reevaluation date (for wildlife-dependent public uses)

_____ Mandatory 10-year reevaluation date (for uses other than wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision: (check one below)

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

Keālia Pond National Wildlife Refuge Comprehensive Conservation Plan

Refuge Determination:

Prepared by:

Refuge Planner,
Hawaiian and Pacific Islands NWRC

Laura Beauregard 9-20-11
(Signature) (Date)

Project Leader,
Maui National Wildlife Refuge Complex
Approval:

Amyus Nakai 09-20-11
(Signature) (Date)

Concurrence:

Project Leader,
Hawaiian and Pacific Islands NWRC

Barry W. Steg 9/22/11
(Signature) (Date)

Regional Chief,
National Wildlife Refuge System:

Lot S. West 9/25/11
(Signature) (Date)

B.4 Compatibility Determination for Research, Scientific Collecting, and Surveys

CD Terminology:

Research: Planned, organized, and systematic investigation of a scientific nature.

Scientific collecting: Gathering of Refuge natural resources or cultural artifacts for scientific purposes.

Surveys: Scientific inventory or monitoring.

Refuge Name(s): Keālia Pond National Wildlife Refuge

County and State: Maui County, Hawai‘i

Establishing and Acquisition Authority(ies):

Keālia Pond NWR was established in 1992 under the authority of the:

- Fish and Wildlife Coordination Act of 1956, as amended (16 U.S.C. 742a – 742j)
- Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1544)

Refuge Purpose(s):

“...to conserve (A) fish and wildlife which, are listed as endangered or threatened species... or (B) Plants ...” 16 U.S.C. 1534, Endangered Species Act of 1973.

National Wildlife Refuge System Mission:

“The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Administration Act).

Description of Use(s):

We receive periodic requests from non-Service entities (e.g., universities, State agencies, other Federal agencies, nongovernmental organizations) to conduct research, scientific collecting, and surveys on Refuge lands. These project requests can involve a wide range of natural and cultural resources as well as public use management issues, including basic absence/presence surveys, collection of new species for identification, habitat use and life-history requirements for specific species/species groups, practical methods for habitat restoration, extent and severity of environmental contaminants, techniques to control or eradicate pest species, effects of climate change on environmental conditions and associated habitat/wildlife response, identification and analyses of paleontological specimens, modeling wildlife populations, and assessing response of habitat/wildlife to disturbance from public uses. Projects may be species-specific, Refuge-specific, or evaluate the relative contribution of the Refuge lands to larger landscapes (e.g., eco-region, region, flyway, national, international) issues and trends.

The Service’s research and management and Appropriate Refuge Uses (603 FW1.10D(4)) policies indicate priority for scientific investigatory studies that contribute to the enhancement, protection, use, preservation, and management of native wildlife populations and their habitat as well as their natural diversity. Projects that contribute to refuge-specific needs for resource and/or wilderness management goals and objectives, where applicable, would be given a higher priority over other requests.

Availability of Resources:

Refuge staff responsibilities for projects by non-Service entities will primarily be limited to the following: review of proposals, prepare Special Use Permits (SUP) and other compliance documents (e.g., Section 7 of the ESA, Section 106 of the National Historic Preservation Act), and monitor project implementation to ensure that impacts and conflicts remain within acceptable levels (compatibility) over time. Additional administrative support, logistical and operational support may also be provided depending on each specific request. Estimated costs for one-time (e.g., prepare SUP) and annually recurring tasks by Refuge staff and other Service employees will be determined for each project. Sufficient funding in the general operating budget of the Refuge must be available to cover expenses for these projects. The terms and conditions for funding and staff support necessary to administer each project on the Refuge will be clearly stated in the SUP.

The Refuge has the following staffing and funding to administratively support and monitor research that is currently taking place on the Refuge (see table below). Any substantial increase in the number of projects would create a need for additional resources to oversee the administration and monitoring of the investigators and their projects. Any substantial additional costs above those itemized below may result in finding a project not compatible unless expenses are offset by the investigator(s), sponsoring agency, or organization.

Category and Itemization	One-time \$	Annual \$/yr
Administration and management	\$0	\$2,000
Maintenance	\$0	\$0
Monitoring	\$0	\$3,900
Special equipment, facilities, or improvement	\$0	\$0
Offsetting revenues	\$0	\$0

Itemized costs in the table above are current estimates calculated using 7 percent of the base cost for a GS-11 Refuge Biologist and 3 percent of the base cost for a GS-12 Refuge Manager.

Anticipated Impacts of the Use:

Use of the Refuge(s) to conduct research, scientific collecting, and surveys will generally provide information that would benefit fish, wildlife, plants, and their habitats. Scientific findings gained through these projects provide important information regarding life-history needs of species and species groups as well as identify or refine management actions to achieve resource management objectives in Refuge management plans (especially CCPs). Reducing uncertainty regarding wildlife and habitat responses to management actions in order to achieve desired outcomes reflected in resource management objectives is essential for adaptive management in accordance with 522 DM 1. If project methods impact or conflict with Refuge-specific resources, priority wildlife-dependent public uses, other high-priority research, and Refuge habitat and wildlife management programs, then it must be clearly demonstrated that the scientific findings will contribute to resource management and that the project cannot be conducted off-Refuge for the project to be compatible. The

investigator(s) must identify methods/strategies in advance required to eliminate or minimize the potential impact(s) and conflict(s). If unacceptable impacts cannot be avoided, then the project will not be compatible.

Impacts would be project- and site-specific, where they will vary depending upon nature and scope of the field work. Data collection techniques will generally have minimal animal mortality or disturbance, habitat destruction, no introduction of contaminants, or no introduction of nonnative species. In contrast, projects involving the collection of biotic samples (plants or animals) or requiring intensive ground-based data or sample collection will have short-term impacts. To reduce impacts, the minimum number of samples (e.g., water, soils, vegetative litter, plants, macroinvertebrates, and vertebrates) will be collected for identification and/or experimentation and statistical analysis. Where possible, researchers would coordinate and share collections to reduce sampling needed for multiple projects. Investigator(s) obtaining required State and Federal collecting permits will also ensure minimal impacts to fish, wildlife, plants, and their habitats. If, after incorporating the above strategies, the project results in long-term or cumulative effects, it will not be deemed compatible. A Section 7 consultation under the ESA will be required for activities that may affect a federally listed species and/or critical habitat. Only projects that have no effect or will result in not likely to adversely affect determinations will be considered compatible.

Spread of pest plants and/or pathogens is possible from ground disturbance and/or transportation of project equipment and personnel, but it will be minimized or eliminated by requiring proper cleaning of investigator equipment and clothing as well as quarantine methods, where necessary. If after all practical measures are taken, an unacceptable spread of pest species is anticipated to occur, then the project will be found not compatible without a restoration or mitigation plan. Localized and temporary effects may occur from vegetation trampling, collecting of soil and plant samples, or trapping and handling of wildlife. Impacts may also occur from infrastructure necessary to support a project (e.g., permanent transects or plot markers, enclosure devices, monitoring equipment, solar panels to power unattended monitoring equipment). Some level of disturbance is expected with these projects, especially if investigator(s) enter areas closed to the public and collect samples or handle wildlife. However, wildlife disturbance (including altered behavior) will usually be localized and temporary in nature. Where long-term or cumulative unacceptable effects cannot be avoided, the project will not be found compatible.

At least 6 months before initiation of field work (unless an exception is made by prior approval of the Refuge Manager), project investigator(s) must submit a detailed proposal. Project proposals will be reviewed by Refuge staff and others, as needed, to assess the potential impacts (short-term, long-term, and cumulative) relative to benefits of the investigation to Refuge management issues and understanding of natural systems. This assessment will form the primary basis for allowing or denying a specific project. Projects that result in unacceptable Refuge impacts will not be found compatible. If allowed and found compatible after approval, all projects also will be assessed during implementation to ensure impacts and conflicts remain within acceptable levels. If the proposal is approved, the Refuge Manager will issue a SUP(s) with required stipulations (terms and conditions) of the project to avoid and/or minimize potential impacts to Refuge resources as well as conflicts with other public-use activities and Refuge field management operations. After approval, projects also are monitored during implementation to ensure impacts and conflicts remain within acceptable levels based upon documented stipulations. Projects that are not covered by the CCP will require additional NEPA documentation.

Public Review and Comment:

Public review and comments were solicited in conjunction with release of the Draft CCP/EA (2011) in order to comply with the NEPA and Service policy.

Determination: (check one below)

The use is not compatible.

The use is compatible with the following stipulations.

Stipulations Necessary to Ensure Compatibility:

Each project will require an SUP. Annual or other short-term SUPs are preferred; however, some permits will be a longer period, if needed, to allow completion of the project. All SUPs will have a definite termination date. Permit renewals will be subject to Refuge Manager review and approval based on timely submission of and content in progress reports, compliance with SUP stipulations, and required permits. Other stipulations and provisions would include the following:

- Projects will adhere to scientifically defensible protocols for data collection, where available and applicable.
- Investigators must possess appropriate and comply with conditions of State and Federal permits for their projects.
- If unacceptable impacts to natural resources or conflicts arise or are documented by the Refuge staff, then the Refuge Manager can suspend, modify conditions of, or terminate an on-going project already permitted by SUP(s) on a Refuge.
- Progress reports are required at least annually for multiple-year projects.
- Final reports are due 1 year after completion of the project unless negotiated otherwise with the Refuge Manager.
- Continuation of existing projects will require approval by the Refuge Manager.
- The Refuge staff will be given the opportunity to review draft manuscript(s) from the project before being submitted to a scientific journal(s) for consideration of publication.
- The Refuge staff will be provided with copies (including, but not limited to: reprints, videos, and electronic media) of all publications resulting from a Refuge project.
- The Refuge staff will be provided with copies of raw data (electronic database format) at the conclusion of the project.
- Upon completion of the project or annually, all equipment and markers unless required for long-term projects must be removed and sites must be restored to the Refuge Manager's satisfaction. Conditions for clean-up and removal of equipment and physical markers will be stipulated in the SUP(s).
- All samples collected on Refuge lands are the property of the Service even while in the possession of the investigator(s). Any future work with previously collected samples not clearly identified in the project proposal will require submission of a subsequent proposal for review and approval. In addition, a new SUP will be required for additional project work. For samples or specimens to be stored at other facilities (e.g., museums), a memorandum of understanding will be necessary.
- Sampling equipment as well as investigator(s) clothing and vehicles (e.g., all-terrain vehicles, boats) will be thoroughly cleaned (free of dirt and plant material) before being allowed for use on Refuge lands and/or waters to prevent the introduction and/or spread of pests.

- The Service, specific Refuge unit, names of Refuge staff and other Service personnel who supported or contributed to the project will be appropriately cited and acknowledged in all written and oral presentations resulting from projects on Refuge lands.
- At any time, Refuge staff may accompany investigator(s) in the field.
- Investigator(s) and support staff will follow all Refuge-specific regulations for access and travel on the Refuge.

Justification:

Research, scientific collecting, and surveys on Refuge lands are inherently valuable to the Service because they will expand scientific information available for resource management decisions. In addition, only projects that directly or indirectly contribute to the enhancement, protection, use, preservation, and management of Refuge wildlife populations and their habitats generally will be authorized on Refuge lands. In many cases, if it were not for the Refuge staff providing access to Refuge lands and waters along with some support, the research project would likely not occur and less scientific information would be available to the Service to aid in managing and conserving resources. By allowing the use to occur under the stipulations described above, it is anticipated that wildlife species that could be disturbed during the use would find sufficient food resources and resting places so their abundance and use will not be measurably lessened on the Refuge. Additionally, it is anticipated that monitoring, as needed, will prevent unacceptable or irreversible impacts to fish, wildlife, plants, and their habitats. The combination of stipulations identified above and conditions included in any SUP(s) will ensure that proposed projects contribute to the enhancement, protection, conservation, and management of native wildlife populations and their habitats on the Refuge. As a result, these projects will not materially interfere with or detract from fulfilling Refuge purpose(s); contributing to the mission of the Service and Refuge System; and maintaining the biological integrity, diversity, and environmental health of the Refuge.

Mandatory Re-evaluation Date: (provide month and year for “allowed” uses only)

_____ Mandatory 15-year re-evaluation date (wildlife-dependent public uses)

September

_____ 2021 Mandatory 10-year re-evaluation date (uses other than wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision: (check one below)

___ Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

___ Environmental Impact Statement and Record of Decision

Refuge Determination:

Prepared by:

Refuge Planner,
Hawaiian and Pacific Islands NWRC

Laura Beauregard 9-20-11
(Signature) (Date)

Project Leader,
Maui National Wildlife Refuge Complex
Approval:

Gyminia Nakai 09-20-11
(Signature) (Date)

Concurrence:

Project Leader,
Hawaiian and Pacific Islands NWRC

Barry W. Steeg 9/22/11
(Signature) (Date)

Regional Chief,
National Wildlife Refuge System:

Dr. S. West 9/23/11
(Signature) (Date)

Keālia Pond National Wildlife Refuge Comprehensive Conservation Plan

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Keālia Pond National Wildlife Refuge

Use: Research, Scientific Collecting, and Surveys

This form is not required for wildlife-dependent recreational uses; take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997. Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence. Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate Appropriate

Refuge Manager: *Ayumi Nakai* Date: 09-20-11

If found to be Not Appropriate, the refuge supervisor does not need to sign concurrence if the use is a new use. If an existing use is found Not Appropriate outside the CCP process, the refuge supervisor must sign concurrence. If found to be Appropriate, the refuge supervisor must sign concurrence.

Refuge Supervisor: *Barry W. Steg* Date: 9/22/11

A compatibility determination is required before the use may be allowed.

02/06

Attachment 1: Appropriate Uses Justification

Date: May 5, 2011

Refuge: Keālia Pond National Wildlife Refuge (Refuge)

Project: Research, Scientific Collecting, and Surveys

Summary: The Refuge receives requests to conduct scientific research on Refuge lands and waters. Research applicants must submit a proposal that would outline: (1) objectives of the study; (2) justification for the study; (3) detailed methodology and schedule; (4) potential impacts on Refuge wildlife and/or habitat, including disturbance (short-term and long-term), injury, or mortality; (5) personnel required; (6) costs to Refuge, if any; and (7) end products (i.e., reports, publications). Research proposals would be reviewed by Refuge staff, Regional Office Branch of Refuge Biology, and others as appropriate prior to the Refuge issuing a SUP. Projects will not be open-ended, and, at a minimum, will be reviewed annually.

For each of the findings listed on FWS Form 3-2319, a justification has been provided below:

a. Do we have jurisdiction over the use?

Some or all of the proposed activities would take place within Refuge boundaries. The Refuge has jurisdiction over those research projects that are sited within Refuge boundaries.

b. Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?

Proposed research activities should comply with all applicable laws and regulations. Any restrictions or qualifications that are required to comply with law and regulations would be specified in the SUP. The State DLNR was invited on two occasions to participate on core planning teams, but declined due to insufficient staffing. However, as this Appropriate Refuge Use Justification does not propose a significant deviation from the status quo, and no comments on this topic were received from the State during the comment period, we believe additional coordination is not necessary.

c. Is the use consistent with applicable Executive orders and Department and Service policies?

Through the review of individual projects, the Refuge would ensure that they are consistent with applicable policies, especially Research on Service Lands Policy (803 FW 1).

d. Is the use consistent with public safety?

Through individual project review, the Refuge will ensure that each project is consistent with public safety. If necessary, stipulations to ensure public safety will be included in the project's SUP.

e. Is the use consistent with goals and objectives in an approved management plan or other document?

Research activities are approved in instances where they can provide meaningful data that may contribute to Refuge management and public appreciation of natural resources.

f. Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?

Earlier documented analysis has approved the use and touted the benefits of research, scientific collecting, and surveys on national wildlife refuges.

g. Is the use manageable within available budget and staff?

The Refuge receives <10 requests per year for this activity, and it is manageable with available budget and staff.

h. Will this be manageable in the future within existing resources?

The proposed activity at current levels would be manageable in the future with the existing resources.

i. Does the use contribute to the public's understanding and appreciation of the Refuge's natural or cultural resources, or is the use beneficial to the Refuge's natural or cultural resources?

The proposed use is beneficial to the Refuge's natural and cultural resources because the types of research projects approved are those that have the distinct likelihood to help achieve Refuge purposes by providing information useful for the management of trust resources and may contribute to the public's understanding and appreciation of natural and/or cultural resources.

j. Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?

The Refuge will ensure that the research activities will not impair existing or future wildlife-dependent recreational use of the Refuge during individual project review, prior to issuing a SUP for the project.

B.5 Compatibility Determination for Kiawe Tree Harvesting

Refuge Name(s): Keālia Pond National Wildlife Refuge

County and State: Maui County, Hawai‘i

Establishing and Acquisition Authority(ies):

Keālia Pond NWR was established in 1992 under the authority of the:

- Fish and Wildlife Coordination Act of 1956, as amended (16 U.S.C. 742a – 742j)
- Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1544)

Refuge Purpose(s):

“...to conserve (A) fish and wildlife which, are listed as endangered or threatened species... or (B) Plants ...” 16 U.S.C. 1534, Endangered Species Act of 1973.

National Wildlife Refuge System Mission:

“The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Administration Act).

Description of Use(s):

The forested area at Keālia Pond NWR is predominantly kiawe trees (mesquite) – a nonnative species which is advantageous as a buffer around the wetland but is host to cattle egret colonies, particularly along the north edge of the wetlands. The Refuge has occasionally (0-1 annually) received requests to cut kiawe for firewood and fence posts to accomplish specific community events (Kīhei Canoe Club, Halau Maui Nui o Kama) and projects (The Nature Conservancy, Kamehameha Schools, East Maui Watershed Partnership).

Kiawe removal areas are predefined and delineated by Refuge staff. A typical project would cover 4 acres with the removal of 20 trees to be used for 40 fence posts. Unused woody debris may be mulched. Stumps are treated with glyphosate to keep them from re-sprouting. All kiawe debris material that has not been finely mulched, including excess branches, must be removed at the user’s expense and taken off-Refuge to the green waste site.

Although the wood was not sold, it represents a commodity with market value, therefore, by definition removing the wood is a commercial use. By regulation (50 CFR 29.1, we can only allow commercial uses to occur if the use contributes to achieving Refuge purposes. The activity of removing kiawe is for the benefit of the wetland and waterbirds by removing pest plant species and reducing predation and disturbances by nonnative cattle egrets. Kiawe removal at targeted locations is also necessary for native forest restoration. In the past, a couple of groups known to manage natural areas were given the opportunity to take wood when they assisted Refuge staff as a volunteer. This volunteer effort was only allowed in a predefined area that the Refuge was already clearing to open up the perimeter of a permanent pond.

Availability of Resources:

Category and Itemization	One-time \$	Annual \$/yr
Administration and management:	\$0	\$800
Maintenance:	\$0	\$0
Monitoring costs:	\$0	\$0
Special equipment, facilities, or improvements:	\$0	\$0
Offsetting revenues:	\$0	\$0

The Refuge has sufficient budget and staff to manage this use.

Anticipated Impacts of the Use(s):

Short-term impacts:

Removal of cattle egrets' roost and colonies provides only short-term impacts because other kiawe trees are available; however, the Refuge targets areas adjacent to wetlands to minimize disturbance and predation on endangered Hawaiian waterbirds. Allowing clubs to harvest and remove kiawe reduces the Refuge cost to pay to have the wood hauled to a green waste facility.

Long-term impacts:

We will see a net reduction of kiawe over time. The long-term impacts would be a minor decrease in the number of cattle egrets present on the Refuge, thereby reducing egret predation on waterbird chicks. Removal of kiawe is necessary for native planting reforestation efforts.

Cumulative impacts: The level and type of use from activities described in this CD is not expected to result in any significant cumulative impacts as the amount of wood removed is negligible compared to the total forested area.

Public Review and Comment:

The period of public review began (Month) 2011 and ended (Month) 2011.

Public review and comments were solicited in conjunction with release of the Draft CCP/EA (2011) in order to comply with the NEPA and Service policy.

Determination: (check one below)

Use is Not Compatible

Use is Compatible With Following Stipulations

Stipulations Necessary to Ensure Compatibility:

User stipulations:

- Submit formal written request with documentation on the purposes for kiawe wood;
- Use is restricted to daylight hours when Refuge staff are present;
- Pets are not allowed;
- User is limited to areas predefined and delineated by Refuge staff;

- All kiawe debris material, including excess branches, must be removed at the user's expense and taken off-Refuge to the green waste site;
- Equipment is limited to a chain saw (user supplied) which is in safe operating condition and all personal protective equipment must be worn (hard hat with safety shield, chaps, gloves, etc.);
- Refuge staff will inspect site and kiawe load being removed upon user departure;
- Access to site off entrance road or parking area is on foot only; and
- User will arrive with vehicle, equipment, and clothing free of any soil, seeds, or invertebrates to prevent introduction of pest species to the Refuge.

Administrative stipulations:

- Regulations will be provided in writing and verbally reviewed with the user before initiating work;
- Permit will be specific to the individual (primary point of contact that must be present) and will cover no more than 3 workers for a set period of time;
- Kiawe removal will only be in areas where the Refuge is performing restoration, typically adjacent to wetlands;
- Kiawe harvesting is limited to the months from September-November;
- The Refuge has the right to disapprove a request if the intent is for sale purposes; and
- The Refuge has the right to terminate an already approved user/permittee if: rules and regulations are not followed; safety is impaired due to carelessness; waterbird impacts are greater than expected; safety of Refuge staff, visitors, or volunteers are in jeopardy;

Justification:

Kiawe trees are a pest plants on the Refuge that provide breeding and roosting habitat for the nonnative cattle egret. Cattle egrets have been known prey on chicks of all endangered waterbird species occurring on the Refuge. Kiawe overshadows native plants and deep taproots use all available water. Dense kiawe thickets have replaced native plants in the coastal dry forest at Keālia Pond NWR.

Harvesting of kiawe trees will achieve an indirect predator control strategy for cattle egrets identified under Objective 1.1 and enhance shrub land habitat as identified in Objective 2.1 of the CCP. This management action will remove an existing cattle egret rookery adjacent to Kanuimanu ponds and may be used to control future rookeries in other stands of kiawe trees on the Refuge. Partnering with nongovernmental, nonprofit, conservation-oriented organizations to remove the trees and process the wood for use on other conservation projects supports environmental sustainability and promotes the recovery of endangered Hawaiian waterbirds. By allowing the use to occur under the stipulations described above, it is anticipated that adverse impacts to wildlife species can be avoided by timing the harvesting activities when birds are not using the area. Monitoring will prevent unacceptable or irreversible impacts to fish, wildlife, plants, and their habitats. As a result, not only does this kiawe tree harvesting activity not materially interfere with or detract from fulfilling the Refuge purpose, it contributes to achieving CCP goals by removing a pest plant species from the habitat and reducing the habitat for another pest species.

Mandatory Reevaluation Date: (provide month and year for “allowed” uses only)

_____ Mandatory 15-year reevaluation date (for wildlife-dependent public uses)

September

_____ 2021 Mandatory 10-year reevaluation date (for all uses other than wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision: (check one below)

_____ Categorical Exclusion without Environmental Action Statement

_____ Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

_____ Environmental Impact Statement and Record of Decision

Refuge Determination:

Prepared by:

Refuge Planner,
Hawaiian and Pacific Islands NWRC

Laura Beauregard 9-20-11
(Signature) (Date)

Project Leader,
Maui National Wildlife Refuge Complex
Approval:

Glynnis Nakai 09-20-11
(Signature) (Date)

Concurrence:

Project Leader,
Hawaiian and Pacific Islands NWRC

Barry W. Steeg 9/22/11
(Signature) (Date)

Regional Chief,
National Wildlife Refuge System:

D. S. West 9/20/11
(Signature) (Date)

Keālia Pond National Wildlife Refuge Comprehensive Conservation Plan

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name. Keālia Pond National Wildlife Refuge

Use: Kiawe Tree Harvesting

This form is not required for wildlife-dependent recreational uses; take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence. Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate Appropriate

Refuge Manager: *Quinn Nakai* Date: 09-20-11

If found to be Not Appropriate, the refuge supervisor does not need to sign concurrence if the use is a new use. If an existing use is found Not Appropriate outside the CCP process, the refuge supervisor must sign concurrence. If found to be Appropriate, the refuge supervisor must sign concurrence.

Refuge Supervisor: *Barry W. Steg* Date: 9/22/11

A compatibility determination is required before the use may be allowed.

02/06

Attachment 1: Appropriate Uses Justification

Date: May 5, 2011

Refuge: Keālia Pond National Wildlife Refuge (Refuge)

Project: Kiawe tree harvesting

Summary: The Refuge has received requests to cut kiawe for firewood and fence posts for specific community events (Kīhei Canoe Club, Halau Maui Nui o Kama), projects (The Nature Conservancy, Kamehameha Schools, East Maui Watershed Partnership).

Kiawe are nonnative species that serve as a buffer protecting wetlands from upper land use activities; an area where surface water flows from streams filter suspended sediment and slows down water before entering the Main Pond; perching structure for pueo; and cattle egret roost and colonies. Providing habitat for cattle egrets is the primary negative impact of kiawe along the wetland boundaries and a management need that the Refuge has been addressing within the last 2-3 years.

One effort to control cattle egrets at the Refuge is to remove trees where birds are roosting and nesting. These areas are easy to identify because of the large colonies that form. Chemical and mechanical treatment has shown to be an effective method to impact a large number of birds, especially areas adjacent to wetlands where endangered waterbird nesting occurs. Accessibility to these areas is difficult due to the density and moist soil conditions; therefore, the Refuge attempts to remove trees using chainsaws.

Another management objective strategy includes the removal of kiawe to allow for protection of native plant species. Reforestation to a natural native lowland forest will require the removal of nonnative kiawe. If natural resource groups are in need of kiawe for fence posts or Hawaiian cultural practices then it may be possible to permit these specific users to harvest kiawe so long as the areas are in coordination with the Refuge's management objectives and the removal benefits endangered waterbirds (minimize predation and disturbances by cattle egrets).

For each of the findings listed on FWS Form 3-2319, a justification has been provided below:

a. Do we have jurisdiction over the use?

All of the proposed activity would take place within Refuge boundaries. The Refuge only has jurisdiction over those projects that are sited within Refuge boundaries.

b. Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?

Proposed kiawe tree harvesting activities must comply with all applicable laws and regulations. Any restrictions or qualifications that are required to comply with law and regulations would be specified in the SUP.

c. Is the use consistent with applicable Executive orders and Department and Service policies?

Yes. It follows the waterbird recovery plan by minimizing predation by cattle egrets by eliminating roost sites.

d. Is the use consistent with public safety?

Through individual project review, the Refuge will ensure that each project is consistent with public safety. Stipulations to ensure public safety will be included in the project's SUP.

e. Is the use consistent with goals and objectives in an approved management plan or other document?

Kiawe removal will only be permitted if the activity is in conjunction or in assistance with the Refuge's habitat management plan and protection of endangered Hawaiian waterbirds and restoration of a native plant community. This activity is intended as a management tool.

f. Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?

This is the first time the use has been proposed for formal review.

g. Is the use manageable within available budget and staff?

The Refuge receives 0-1 request per year for this activity, and it is manageable with available budget and staff.

h. Will this be manageable in the future within existing resources?

The proposed activity at current levels would be manageable in the future with the existing resources.

i. Does the use contribute to the public's understanding and appreciation of the Refuge's natural or cultural resources, or is the use beneficial to the Refuge's natural or cultural resources?

The proposed use is beneficial to the Refuge's natural and cultural resources and may contribute to the public's understanding and appreciation of natural and/or cultural resources.

j. Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?

The Refuge will ensure that the kiawe tree harvesting activities will not impair existing or future wildlife-dependent recreational use of the Refuge during individual project review, prior to issuing a SUP for the project.