

## Finding of No Significant Impact/Decision Document

## Issuance of an Incidental Take License and Proposed Conservation Measures Associated with the Advanced Technology Solar Telescope Project, Haleakalā, Maui, Hawai'i

Pursuant to the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508) for implementing the National Environmental Policy Act (42 USC 4321 et seq.) (NEPA), NSF's NEPA implementing regulations at 45 CFR Part 640, and State of Hawai'i environmental review (Hawai'i Revised Statutes [H.R.S.] Chapter 343), the National Science Foundation (NSF) prepared an environmental assessment (EA) to evaluate the potential environmental effects of the issuance of an Incidental Take License (ITL) and implementation of a series of conservation measures to avoid, minimize, and mitigate potential impacts of the Advanced Technology Solar Telescope (ATST) project to federally- or State of Hawaii-listed species.

**Proposed Action**. Pursuant to H.R.S. Chapter 195D, the Hawai'i Department of Land and Natural Resources (DLNR) proposes to issue to the NSF an ITL for potential take of the endangered Hawaiian petrel resulting from construction of the ATST facilities.

NSF proposes to implement the following nine conservation measures, as authorized by the issuance of the proposed ITL:

- Measure 1: Conservation Fencing. (Installation of hog wire conservation fencing connecting with existing Park boundary fence to exclude ungulates.)
- Measure 2: Visibility Painting and Polytaping of Structures and Equipment. (Makes structures/equipment more visible to minimize flight hazards to Hawaiian petrels.)
- Measure 3: Long-term Predator Control. (Includes trapping and removal of known predators such as cats and mongoose and baiting of rats.)
- Measure 4: Hawaiian Petrel Monitoring and Reporting. (Assesses the effectiveness of conservation measures on the productivity of the Hawaiian petrel.)
- Measure 5: Traffic Calming Devices. (Installation of temporary devices such as speed humps to minimize vehicle collisions with Hawaiian geese.)
- Measure 6: Hawaiian Goose (Nēnē) Monitoring and Reporting. (Includes informal identification of Hawaiian geese struck by vehicles along the Park Road.)
- Measure 7: Construction of Hawaiian Goose (Nēnē) Holding Pen. (For the purpose of rescuing and rehabilitating injured geese.)
- Measure 8: Haleakalā Silversword Propagation and Planting. (Includes planting of silverswords on State property.)

• Measure 9: Year-round Construction. (Eliminates most construction restrictions originally imposed during Hawaiian petrel incubation season [April-July] in order to shorten the ATST construction period by as much as one year, yielding net recovery benefits to petrels.)

Purpose and Need. The purpose of the Proposed Action is to avoid, minimize and mitigate potential impacts to two endangered species, the ua'u (Hawaiian petrel, Pterodoma phaeopygia sandwichnesis), and the nënë (Hawaiian goose, Branta sandvicensis), resulting from implementation of the ATST project. Despite an initial finding that impacts to listed species were either found to not adversely affect species, or to be mitigable, thereby avoiding "incidental take" of these species, NSF engaged in additional consultations with U.S. Fish and Wildlife Service (USFWS), the Hawai'i State Division of Forestry and Wildlife (DOFAW), the National Park Service (NPS), and the University of Hawai'i Institute for Astronomy (IfA), triggered by concerns raised by the State during the environmental impact statement (EIS) process. Subsequent consultation and analysis found that adverse effects on endangered species could be substantial enough such that "take" might occur, as defined by Endangered Species Act Section 7 and H.R.S. 195D. This resulted in the development of a Habitat Conservation Plan that includes conservation measures to reduce or avoid take of the Hawaiian petrel, and a Biological Opinion (currently in preparation by USFWS). The purpose of the EA was to evaluate those specific measures that were not evaluated in the original EIS.

**Project Alternatives**. In the EA, NSF identified two action alternatives, in addition to the Proposed Action discussed above, that would meet the purpose of avoiding, minimizing or mitigating potential impacts to threatened and endangered species associated with the ATST project. These alternatives are:

- <u>Alternative 1</u>: Implementation of the same nine proposed conservation measures comprising the Proposed Action, but with white polytape woven into the conservation fence.
- <u>Alternative 2</u>: Implementation of Proposed Action conservation measures, but with black polytape woven into the conservation fence.

Issuance of the proposed ITL is common to the Proposed Action, Alternative 1, and Alternative 2.

Furthermore, the No-Action Alternative considers implementation of the ATST project without issuance of the ITL or incorporation of the nine proposed conservation measures to reduce these impacts to threatened and endangered species.

Factors Considered in Determining That No Environmental Impact Statement Is Required. The EA, which is incorporated by reference into this Finding of No Significant Impact, examined the potential effects of the Proposed Action and the proposed alternatives on several resources. Implementing the Proposed Action would result in both short- and long-term benefits to biological resources. It would also likely result in limited adverse impacts to some resources (i.e., visual resources and visitor use and experience) from implementation of conservation measures designed to bring benefits to other resources (i.e., biological resources).

The proposed conservation fence line would be visible, specifically with the incorporation of either white or black polytape. This would result in long-term, negligible to moderate, adverse impacts to both visual resources and visitor use and experience. Likewise, visitors may hear helicopter deliveries and/or the fencing being installed. These impacts would be short-term and minor. Fencing would not represent a substantial visual change as it would be consistent with the existing conservation fencing surrounding the adjacent Park land to the east.

The fencing would not preclude access to the summit or surrounding conservation area by Native Hawaiians. Although elements of the Proposed Action would occur within close proximity of historic structures within the Crater Historic District, no renovations are proposed and impacts would be negligible. Additionally, while the conservation fence line and the proposed nene pen are proposed in

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areas containing known archeological and historic resources, these resources would be avoided, resulting in no effects to cultural resources.

Traffic impacts associated with the proposed measures would be negligible to minor and short-term, and the anticipated delays resulting from proposed traffic calming devices would be negligible and long-term.

Major cumulative impacts associated with past, present, and reasonably foreseeable future actions in the project area, including the ATST project, relate to cultural, historic and archeological resources; biological resources; visual resources and view planes; and visitor use and experience. While the Proposed Action is expected to result in negligible to minor impacts, those impacts are not anticipated to increase the intensity level of adverse impacts resulting from past, present, and reasonably foreseeable activities. Certain conservation measures would, however, result in long-term beneficial impacts or would reduce the intensity level of adverse impacts resulting from cumulative activities, specifically the adverse impacts to biological resources resulting from the ATST project.

Mitigation. NSF will implement the following measures to reduce the impact of the Proposed Action: 1) maintain cultural and biological monitors on site during staging and construction to ensure avoidance of impacts to archeological resources, petrel burrows, or other sensitive resources; 2) adjust the fence line to avoid sensitive resources; 3) implement Haleakalā High Altitude Observatory (HO) Long Range Development Plan and HO Stormwater Management Plan measures; and 4) phase helicopter activities when the Hawaiian petrel is not present on Haleakalā (November through January).

**Public Comment.** Pursuant to NEPA and H.R.S. 343, a 30-day public review of the draft EA was initiated on August 23, 2010 with a public notice published in the Office of Environmental Quality Control Environmental Bulletin. A public meeting was held on Draft EA on August 30, 2010. The EA was revised based on comments received during the public review period and public testimony received during the public meeting.

During the August 30, 2010 public meeting, NSF carried out its consultation requirements under Section 106 of the National Historic Preservation Act (NHPA) regarding potential impacts to archeological, historic, and cultural impacts resulting from the Proposed Action. An additional consultation meeting pursuant to Section 106 of the NHPA was held on September 1, 2010 with the ATST Native Hawaiian Working Group. The result of both Section 106 consultation meetings was that, as described in the EA, the Proposed Action would not have an effect on archeological, historic, or cultural resources because, under the guidance of a cultural monitor, the proposed fencing would be installed in a manner that would avoid all such resources.

Conclusion. As stated above, implementation of the Proposed Action is intended to provide long-term benefits to biological resources by avoiding, minimizing, and mitigating potential impacts associated with the ATST project. Based on the Final EA, which is hereby incorporated by reference, the implementation of the Proposed Action and project alternatives will have no significant direct, indirect, or cumulative impacts on the quality of the natural or human environment. Because no significant environmental impacts will result from implementing the Proposed Action, an environmental impact statement is not required and will not be prepared. Likewise, no further consultation is required under Section 106 of the National Historic Preservation Act.

Furthermore, because of the success in using white polytape on other conservation fencing to minimize birdstrike, Alternative 1, Issuance of an Incidental Take License and Implementation of Proposed Conservation Measures with White Fence Polytape, was selected as the preferred alternative to best meet the purpose and need of the Proposed Action.

**Decision.** After consideration of the Final EA, including all public comments received during the public comment period, the Proposed Action, implemented through Alternative 1, *Issuance of an Incidental Take License and Implementation of Proposed Conservation Measures with White Fence Polytape*, is hereby approved, subject to the approval of the Habitat Conservation Plan by the State of Hawai'i Board of Land and Natural Resources, and all other approvals necessary to construct the ATST.

SIGNED:

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ATST Program Director

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