

State of Hawai‘i  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Forestry and Wildlife  
Honolulu, Hawai‘i 96813

March 28, 2023

Endangered Species Recovery Committee  
State of Hawai‘i  
Honolulu, Hawai‘i

Committee Members:

**SUBJECT:** Request for Comments on the Hawaiian Hoary Bat Tier 5 Site-Specific Implementation Plan as part of Auwahi’s Habitat Conservation Plan, Maui

**BACKGROUND:**

This Tier 5 Site-Specific Mitigation Implementation Plan (SSMIP) follows the mitigation planning for the Hawaiian hoary bat or ‘ōpe‘ape‘a (*Lasiurus semotus*) in response to Auwahi Wind Farm’s Habitat Conservation Plan (HCP) amendment in 2019 (Tetra Tech 2019). The SSMIP identifies specific mitigation actions for review and approval by the U.S. Fish and Wildlife Service (USFWS) and the State of Hawai‘i Division of Forestry and Wildlife (DOFAW) at the time mitigation is triggered. Tier 5 mitigation must offset the take of 34 bats. The proposed Tier 5 bat mitigation site consists of 690 acres located within the Kamehameui Forest Reserve (KFR) on Maui and a small 2-acre area on the adjacent privately-owned Haleakalā Ranch lands north of the KFR.

DOFAW is in the process of creating a comprehensive-multiuse management plan for the KFR. As part of the preparation of the SSMIP, Auwahi Wind has consulted USFWS, DOFAW HCP and Maui Branch staff for input and approval of mitigation actions that would benefit the Hawaiian hoary bat within the proposed mitigation site. Auwahi Wind also consulted with Haleakalā Ranch on proposed mitigation actions on their land. This SSMIP describes Auwahi Wind’s mitigation actions, all of which are additive and complementary to the management actions planned by DOFAW Maui for the KFR.

**ANALYSIS & RECOMMENDATIONS:**

DOFAW Staff has worked with Auwahi through several rounds of revisions of the draft SSMIP. The following are concerns that Staff has with the current version of the document:

- Overall, the SSMIP needs to provide more clarity and details regarding the actions Auwahi will be implementing vs the actions DOFAW-Maui will be implementing on behalf of Auwahi. These include actions related to fencing, ungulate removal, outplanting, and invasive species removal/control. The HCP amendment states that Auwahi will work with the agencies to develop a SSMIP that is based on current

information and circumstances and that complements management actions to benefit bats that DOFAW may have already initiated within the parcel. This may include the implementation of distinct portions of the DOFAW management plan. But this must be fully described in the SSMIP.

- We consider that a specific section dedicated to the biological goals and objectives should be added to the plan. DOFAW understands that due to the lack of biological and life history knowledge regarding the Hawaiian hoary bat, determining species-based goals is difficult. Thus, we recommend the use of habitat-based goals. We want to see a connection between the habitat to be improved and how it benefits 34 bats.
  - The goal(s) of the Plan should be descriptive, open-ended, and should include a broad statement of the desired future conditions that conveys the purpose of the Plan but does not define measurable units.
  - The objectives of the Plan should be concise statements of what you want to achieve, how much you want to achieve, when and where you want to achieve it, and who is responsible for the work. Objectives derive from goals and provide the basis for determining strategies, monitoring effectiveness, and evaluating the success of the mitigation actions.
  - The number of objectives per goal will vary, but there should be enough to describe how to achieve the goal adequately.
  - The mitigation measures (e.g., outplanting, ungulate removal, etc.) will lay out the actions needed to meet the objectives. Describe the mitigation measures that Auwahi has committed to implement to ensure that the proposed action will offset take of 34 bats.
  - Ensure that adequate information is provided so that objective and goals are being met.
  - Ensure that enough information is provided to adequately evaluate progress in achieving the goals quantitatively and qualitatively.
- Section 3.1 KFR Baseline Habitat Conditions – DOFAW would like to see more emphasis on the habitat baseline conditions as it pertains to the mitigation area and not the KFR in general. Furthermore, this would help adequately demonstrate how the difference in baseline conditions will support that the SMMIP actions will offset take of 34 bats.
- Section 6.2 Acoustic Monitoring - Acoustic monitoring should be consistent with the frequency and timing of monitoring in order to provide sufficient information to consider the cumulative impacts of the proposed mitigation actions on the recovery potential of the HHB. Therefore, DOFAW recommends that more specific details regarding frequency and timing of monitoring is included in the plan (e.g., season, days, nights and or months of data collection).
- Section 6.5 Insect Monitoring – DOFAW recommended a more comprehensive approach for insect monitoring consisting of modified malaise traps with a collection reservoir, light traps, and pitfall traps.
- Section 7.0 Success Criteria - As stated in Auwahi's HCP amendment section 6.2.5.1 (pg. 6-43), in developing the SSMIP success criteria for restoration/land-management actions, Auwahi will create management actions that are specific, measurable, achievable, relevant and time-bound. From DOFAW's perspective, the success criteria outlined in the

Plan is based on efforts and not on outcome. It should also reference the biological goals and objectives of the Plan.