

FINDING OF NO SIGNIFICANT IMPACT

Suppression of Invasive Mosquito Populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui

Summary

The U.S. Fish and Wildlife Service (FWS) proposes to adopt the U.S. National Park Service's (NPS) Final Environmental Assessment (EA) entitled "Suppression of Invasive Mosquito Populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui" (NPS 2022). The FWS has conducted its independent evaluation of the NPS final EA and consistent with procedures described at 40 CFR 1506.3 and the DOI's National Environmental Policy Act (NEPA) requirements at 516 DM 1-6 and 550 FW 3 has determined the EA meets all the requirements for adoption.

In compliance with the National Environmental Policy Act of 1969, as amended, and its implementing regulations (40 CFR 1500-1508) as revised by the Council on Environmental Quality in 2022, as well as Department of the Interior NEPA Regulations (43 CFR 46), the NPS and State of Hawai'i Department of Land and Natural Resources (DLNR), as a joint lead agency, prepared an EA to examine alternative actions and potential impacts to the human environment associated with suppressing invasive mosquito populations to reduce transmission of avian malaria to threatened and endangered forest birds on East Maui. The purpose of the project is to substantially suppress or eliminate invasive southern house mosquitoes (*Culex quinquefasciatus*) and, thus avian malaria, in threatened and endangered forest bird populations on East Maui, thereby reducing extinction risks and contributing to the recovery of these species. To prevent the extinction of threatened and endangered forest birds on East Maui, timely management action needs to be taken to control avian malaria.

The statements and conclusions reached in this FWS Finding of No Significant Impact (FONSI) are based on documentation and analysis provided in the NPS EA. Relevant sections of the EA are summarized and incorporated by reference below. Although the EA was a cooperative federal and state compliance document satisfying both NEPA and the Hawai'i Environmental Policy Act (HEPA) regulations, this FONSI analyzes only the impacts under current NEPA standards.

Preferred Alternative

The NPS and DLNR analyzed two alternatives in detail in the EA. Based on this analysis, the NPS selected the Proposed Action as the alternative for implementation because it best meets the purpose of, and need for, the goals and objectives of the project, without causing significant impacts on the human environment. The FWS also selects the proposed action in the NPS EA as the preferred alternative which is described in detail in Chapter 2 of the EA as it meets the need and goals for the project without causing significant impacts on the human environment.

This finding is based on consideration of CEQ criteria for significance (40 CFR 1501.3 (b)), regarding the potentially affected environment and degrees of effects of the impacts described in the EA. Additionally, a reasonable range of alternatives were considered but dismissed from

detailed analysis because they did not meet the purpose and need of the proposed action (see Chapter 1 of the EA).

Under the preferred alternative, the NPS and DLNR, along with other non-governmental partner organizations and with funding and technical support from FWS, will attempt to reduce threatened and endangered forest bird mortality from avian malaria by suppressing mosquito populations on Maui. This consists of repeatedly releasing incompatible male mosquitoes to reduce the reproductive potential of mosquitoes in the project area. This approach employs an Incompatible Insect Technique (IIT), which uses a naturally occurring bacteria termed *Wolbachia* that is present in the eggs and sperm of many insect species, including the southern house mosquito. When male mosquitoes with an incompatible strain of *Wolbachia* are introduced to a population of female mosquitoes, mating is unproductive, thereby substantially suppressing mosquito populations. Releases under the preferred alternative will be conducted repeatedly over time to achieve and maintain significant suppression of the mosquito population. Monitoring mosquito populations will guide the frequency, number, and location of the proposed releases, and will need to continue for as long as the preferred alternative is implemented. The preferred alternative will begin with small-scale on-the-ground or aerial releases of incompatible male mosquitoes within the project area, where field teams will be able to monitor effectiveness of IIT implementation. Much of the project area is inaccessible by ground, and thus will require aerial applications (i.e., helicopters and unmanned aircraft systems (UAS)/drones) to implement large-scale mosquito releases throughout the project area. Releases will be expected to continue until nonnative mosquito populations are significantly reduced and the status of threatened and endangered forest birds stabilizes, or until new mosquito population suppression techniques are developed. Release efforts may be concentrated within smaller management areas if there are limitations in the availability of aerial resources, personnel, or incompatible mosquitoes, and then scaled up throughout the project area once additional resources are available. In addition, the uppermost elevations in the project area may have even fewer mosquitoes than estimated by Samuel et al. (2011) and population suppression in these areas may only require infrequent releases of incompatible mosquitoes. Alternatively, suppression at lower elevations may be sufficient to reduce or eliminate the threat of disease at the higher elevations by eliminating the individuals that could disperse uphill.

Rationale

This Proposed Action alternative is the FWS's preferred alternative because it best meets the purpose and need and provides the most effective and feasible solution to suppress nonnative mosquito populations to reduce transmission of avian malaria to threatened and endangered forest birds on Maui. The threat that introduced species pose to habitat and native wildlife makes addressing their impacts one of the FWS's top recovery priorities. Numerous other potential alternatives were considered but dismissed from further analysis as described in Appendix B "Issues, Impact Topics, Alternatives Dismissed from Detailed Analysis" of the EA.

Avoidance and Minimization Measures

The FWS places strong emphasis on avoiding and minimizing potentially adverse environmental impacts. Therefore, the NPS and DLNR along with other project partners will implement avoidance and minimization measures and best management practices to protect Federal and State listed plants and animals, non-listed flora and fauna, cultural/historic/ethnographic

resources, public health and safety, and recreation. These measures and practices are described in detail in Tables 6, 7, and Appendix D of the EA and are hereby incorporated by reference. As stated in the EA, these mitigation measures and best management practices are included as integral parts of the preferred alternative.

OTHER ALTERNATIVES CONSIDERED AND ANALYZED

No Action Alternative

The EA considered the preferred alternative described above and a no action alternative. Under the no action alternative, releases of incompatible male mosquitoes would not occur. Although ongoing conservation and other management activities would continue in the project area (e.g., fencing, construction of field camps, removal of nonnative ungulates and predators, and invasive plant control), native forest birds would continue to be adversely affected by their primary threat, avian malaria, because the mosquitoes that carry this disease would remain uncontrolled and are anticipated to continue to spread into the remaining forest bird habitat.

The populations of two endangered Hawaiian forest birds, kiwīkiu and ‘ākohekohe, have decreased by more than 70 percent over the last 20 years on Maui, and population projections predict their extinction in the next two to ten years (Mounce et al. 2018, Paxton et al. 2022). Under the no-action alternative, projected warming climates and range expansion by mosquitoes spreading avian malaria will continue to impact these endangered birds that already have very limited ranges and therefore could lead to their extinction sooner than projected (Paxton et al. 2022).

SIGNIFICANCE CRITERIA REVIEW

Potentially Affected Environment

All public lands within much of the current and historic ranges of threatened and endangered forest birds on East Maui were evaluated for inclusion in the project area. The project area covers 64,666 acres (26,169 hectares) of Maui (Figure 1 in the EA). This area is comprised of NPS land (12,042 acres), DLNR lands in forest reserves and natural area reserves (37,989 acres), adjacent lands privately managed in a conservation easement by TNC (8,606 acres), East Maui Irrigation Company, LLC (4,409 acres), Haleakala Ranch (393 acres), and Mahi Pono (1,227 acres) lands managed for conservation (Table 1 and Figure 1). The project area includes areas downslope from many birds' current ranges that may serve as high-density mosquito breeding grounds from which mosquitoes may move upward in elevation into native forest bird habitat. The upper elevation limit of the project area was defined by the boundary of the park along the north slope and Palikū Ridge between Pōhaku Pālaha and Kuiki, separating native forest from Haleakalā Crater. The lower limit of the project area, 1,969 feet above sea level, is the low elevation range of vulnerable native forest birds, such as the ‘apapane and ‘i‘iwi (Judge et al. 2019) except within the boundaries of the park in the lower Kīpahulu Valley and Ka‘apahu where the project area extends to sea level. Designating the project area was developed collaboratively between NPS, DLNR, MFBRP, FWS and other project partners.

Degree of Effects of the Action

The FWS considered the following actual or potential project effects in evaluating the degree of effects (40 CFR 1501.3(b)) for the preferred alternative. No significant impacts to resources were identified that would require further analysis in an Environmental Impact Statement (EIS).

Whether taken individually, or as a whole, the impacts of the preferred alternative, including direct, indirect and cumulative effects, do not reach the level of a significant effect because most adverse impacts associated with implementation will be minimal or temporary, lasting only as long as actions are being executed. The preferred alternative will result in substantial long-term beneficial impacts to threatened and endangered bird species. Best management practices measures, as mentioned above (and described in detail in Tables 6, 7, and Appendix D of the EA), will further avoid and minimize any potential adverse impacts. It is expected that the frequency of actions and any associated adverse impacts will decline as nonnative mosquito population suppression is achieved over time.

Although there could be intermittent disturbance to some listed species from drone and helicopter use, the preferred alternative will result in long-term beneficial impacts to threatened and endangered bird species. The project will substantially suppress or eliminate nonnative southern house mosquitoes (*Culex quinquefasciatus*) and, thus avian malaria, in threatened and endangered forest bird populations on Maui, thereby reducing extinction risks and contributing to the recovery of these species. The preferred alternative, therefore, will primarily benefit federally listed species and will not result in significant adverse effects.

Acoustic Environment

Activities associated with the selected alternative will result in noise that could impact the acoustic environment, visitor experience, sensitive wildlife, and wilderness character. Noise impacts will be mitigated through careful planning of aerial flight paths, timing of mosquito releases, and the use of drones (Chapter 3 of the EA). Noise from the drone and helicopter release methods and monitoring will be the most intense acoustic impacts to result from this project. However, the adverse impacts from the drone and helicopter release methods and monitoring will be confined largely to backcountry areas and will largely go unnoticed by humans and will only briefly disturb wildlife. Humans and animals will experience slight perceptible increases in sound/noise in certain areas at certain times resulting in fleeting disruption or annoyance. The selected alternative will contribute a measurable but largely unnoticeable adverse impact to the acoustic environment during mosquito release and monitoring activities. Impacts to the acoustic environment will not be significant because impacts from mosquito releases and monitoring would be intermittent and would occur during daylight hours on weekdays only, primarily in areas of the park and state forest reserves not heavily visited by the public. And because drones would be the primary mosquito release method rather than helicopters, noise impacts from aerial releases would be minimized. Therefore, significant adverse effects to the acoustic environment are not expected.

Threatened and Endangered Species

The impacts to threatened and endangered species from the preferred alternative and the foreseeable actions can be effectively reduced to negligible levels using the avoidance and minimization measures outlined in Tables 6, 7, and in Appendix D of the EA. Although there would be temporary and localized impacts to wildlife and plants from mosquito release activities,

the population and health of rare and listed species and their habitats would improve or remain stable. As previously described, the preferred alternative would directly reduce mortality of listed Hawaiian forest bird species due to the suppression of mosquitoes that spread avian malaria. The preferred alternative along with other planned foreseeable federal, state and private management actions, including invasive plant control, feral ungulate control, and predator control would enhance survival of native forest bird species by reducing stressors. Over time, the populations of these listed bird species may increase due to the combined actions of the agencies and private partners to manage for avian malaria and other threats. Therefore, the overall cumulative increment of the proposed action would be substantially beneficial.

In summary, impacts to federally listed species and state species of concern will not be significant because very few direct impacts are anticipated from mosquito release and monitoring activities, and indirect impacts will be limited in duration, frequency, and intensity. Over the long term, there will be a substantial beneficial impact to listed birds and bird species of concern due to anticipated suppression of the mosquito population that transmits avian malaria to forest birds on Maui.

Wildlife Resources

As described in Chapter 3 of the EA, the preferred alternative would not contribute additional significant impacts to the wildlife species beyond that of the ongoing and future known activities. Trends and impacts from planned foreseeable actions would be expected to remain the same, or similar to, what is currently occurring.

The *Wolbachia* bacteria used to generate incompatible male mosquitoes occurs in Hawai'i in the Asian tiger mosquito (*Aedes albopictus*), introduced to Hawai'i in 1896. Additionally, the southern house mosquitoes released through the proposed action would be obtained from Hawaii and bred in captivity. IIT technique does not modify any or part of the genome of either mosquitoes or the *Wolbachia* bacteria. Therefore, no new organisms would be introduced to Hawai'i by the proposed action.

The FWS, NPS, DLNR, and partners participating in this project will comply with all State and Federal requirements relating to biosecurity for mosquito rearing and the movement of invasive species. Invasive species biosecurity protocols provided in Appendix D of the EA help the project avoid or minimize the inadvertent transportation or spread of other invasive species that could potentially impact plants, fish, wildlife, and their habitat within the project area.

Although the project would cause minor, periodic, and short-term adverse impacts (e.g. increased air and foot traffic), success of the project would reduce the prevalence of nonnative *Culex* mosquitoes in the Maui wilderness environment. Suppression of nonnative mosquito populations in turn, indirectly impacts the transmission rate of avian malaria infection among native birds. The indirect impact would result in long-term beneficial indirect impacts to general wildlife or wildlife habitat. Successful implementation of the proposed action would result in cumulative impacts that will not significantly affect and are beneficial to wildlife resources that occur within the proposed project area.

Vegetation Resources

As described in Chapter 3 of the EA, the preferred alternative would result in limited cumulative impacts to native vegetation that would be short lived and intermittent in nature. There is potential under the proposed action, existing actions, and foreseeable future actions for minimal adverse impacts to vegetation from localized plant removal or disturbance along trails, fencelines, and at landing zones and camps by ground crews. These impacts would be temporary in nature and largely occur in previously disturbed locations. To help minimize any vegetation or ground disturbance, monitoring efforts and the dispersal of incompatible male mosquitoes via ground based pedestrian releases would be conducted on existing resource management trails and fence lines to avoid disturbance of soils and plant communities. Additionally, best management practices (Appendix D of the EA) would be implemented to reduce or remove the threat of introducing invasive plants within the project area; however, a risk of introduction still exists. Crews would be trained to follow best management practices (BMPs) to minimize this risk (see Table 6, 7, and Appendix D of the EA), thus, effectively reducing anticipated effects to negligible. Other management actions that are ongoing or that may occur in the project area are identified in Appendix E.

Recreation and Wilderness

As discussed in Chapter 3 of the EA, the preferred alternative would have both beneficial and adverse effects on wilderness and recreation. Although many release packages containing incompatible male mosquitos would be dropped across the project area throughout the duration of the project, the small packages would be spread diffusely, and the biodegradable material would decompose quickly given the typical rainfall patterns in the project area, making the chance of observing multiple packets unlikely. Based on the degradable nature of the delivery packages and diffuse nature of release locations, the impacts on recreationalists and the wilderness would be negligible.

The release of the incompatible male mosquitoes would not be expected to cause additional bites or nuisance to recreationalists and users of the wilderness resources. Unlike female mosquitoes that consume blood, male mosquitoes consume nectar and thus, would not be attracted to humans or pets. Localized concentrations of incompatible male mosquitoes could be expected to occur in the immediate vicinity (1 to 2 feet) of the release package as the mosquitoes emerge, but the mosquitoes would be expected to disperse within minutes.

The preferred alternative would adversely affect the visitor experience for land-based recreationists (e.g., campers, hikers, hunters) through increased human activity and noise (e.g., from project staff, vehicles, drones, and aircraft). No changes in public use or access to federal and state-managed recreational areas are anticipated to be required for project operations. Most of the project area on federal park lands are closed to visitors. Most state forest reserves within the project area are open to the public, however, the visitor use is very low due to the difficult terrain and limited roads and trails that are remote and hard to access. Minimal clearing of vegetation at LZs, trails, and fence lines will be required at the onset of the project to accommodate mosquito monitoring, but impacts will be limited to areas that have already been cleared for administrative use and mechanized equipment will not be used. Existing recreational uses in the project area would continue to occur in the future, and there are no reasonably foreseeable changes to the types of use or levels of use that are allowed to occur within the

project area (see Appendix E of the EA). Ongoing and reasonably foreseeable conservation activities (i.e., ecological research, monitoring, and management) would continue to have both beneficial and adverse effects for recreational users. Adverse effects would result from localized increases in noise and human activity when those activities are implemented in proximity to public spaces. However, because of the low use, the impacts to the public are expected to be minor. As describe earlier in the acoustic environment section the proposed action would contribute a measurable but largely unnoticeable adverse impact to the acoustic environment.

The preferred alternative could cause intermittent, but temporary increases in overall number of aircraft operating in the project area. Commercial air tour agencies, however, are not authorized to fly their aircraft at the low altitudes necessary for release of incompatible male mosquitoes in the project area. Rather, tour operators would fly well above the height or altitude necessary for project operations. Therefore, there would be no adverse effects to commercial helicopter air tour flight routes expected to occur.

In summary, mosquito release activities under the preferred alternative will contribute periodic adverse impacts on recreationalist near landing zones (LZs), helibases, flight paths, and trails from the use of drones, mechanized equipment, and helicopters largely in the form of noise and visual intrusion. Adverse impacts from the pedestrian release method will be confined to a small portion of the overall project area. Impacts to recreationists will not be significant because the majority of the project area is inaccessible to the public and therefore there will be only intermittent impacts during mosquito release and monitoring activities, mostly concentrated near LZs, helibases, and flight paths. These impacts will only occur during daylight hours on weekdays, as operations will not occur at night or on weekends. In addition, aerial flight paths, timing of flights, and flight heights would be selected to reduce noise impacts on visitors, nearby landowners or communities, wilderness, and sensitive environmental resources as described in Chapter 3 of the EA. A permanent beneficial impact on recreationalist and wilderness is anticipated under the preferred alternative, if the mosquito control effort is successful and native forest bird populations stabilize or recover. For those who are visiting portions of the analysis area to enjoy a unique native rainforest ecosystem or birdwatching, the beneficial impact could be considered substantial. Additionally, the proposed action is not expected to have adverse effects on ongoing or future hunting or resource collection activities within the project area.

Overall adverse impacts to wilderness and recreation will be brief and minimal and should be outweighed by the overall benefits to wildlife and ecosystems enjoyed by visitors to the project area.

Cultural Resources

The potential physical impacts that the proposed action would have on the landscape, both archaeological and cultural, would be minimal and no greater than the current level of use by the public, the DLNR, NPS, and its management partners in maintaining the National Park, State Forest Reserves, and Natural Area Reserves, and private lands located within the project area.

Given that not all the project area has been archaeologically surveyed, it is possible that previously unrecorded sites could be present in the vicinity of the access routes where project activities would take place. To avoid and minimize effects, project personnel would stay on

designated roads and trails. Project related activities would be limited to existing routes of travel (fence line corridors, trails, and roads), established helicopter landing zones, and field camps already utilized for other resources management activities. No new roads, trails, landing zones, or camps would be created to support this project (see the best management practices in the cultural resources section of Table 6 in the EA).

Incompatible male mosquito releases, monitoring, and other project related activities would be limited to existing routes of travel (e.g., fence line corridors, trails, and roads), established helicopter landing zones, and field camps already utilized for other management activities. No new roads, trails, landing zones, or camps would be created to support this project. Most of the known archaeological sites and culturally significant places within the project area are located far from the trails and areas where the project activities would take place. No archaeological or cultural sites have been recorded near planned project access routes, landing zones, or field camps. As has previously been mentioned, archaeological surface structures are relatively rare in the forested uplands where most incompatible male mosquito releases would occur. For these reasons, it is expected that the project would have no adverse impact on archaeological sites or culturally significant places.

The findings of the cultural impact analysis (CIA) (see Appendix C of the EA) indicate that the proposed action is unlikely to adversely impact cultural resources, practices, and beliefs. While cultural practitioners may make use of roads or trails within the project area to gather forest plants, hunt, or to carry out other cultural practices, incompatible male mosquito releases and monitoring activities are unlikely to interfere with their access.

One of the primary impacts of the proposed action on cultural resources is the anticipated positive outcome that reduced mosquito populations would have toward protecting and preserving native forest bird populations. Their existence and presence within the forest environment are important for maintaining cultural continuity between traditional and contemporary cultural customs, practices, and beliefs and therefore, overwhelmingly benefit cultural resources within the proposed project area.

Public Health and Safety

The preferred alternative considers public health and safety during project implementation; there is no evidence that release of incompatible male mosquitoes on Maui would have human health impacts.

Only incompatible male mosquitoes will be released and only female mosquitoes bite animals or humans. Employing this and other available sorting methods, Crawford et al. (2020) estimated that the risk of releasing a female is 1 out of 900 million released *Aedes aegypti* mosquitoes. The proposed action would use *Culex quinquefasciatus*, a different species of mosquito, and while the methodology is very precise the estimated number of females released is expected to differ. There is no data suggesting that the rare and inadvertent release of mosquitos through IIT programs can result in wild populations of mosquitos.

Even if a female is released, a bite from a released female will pose no more risk to humans or wildlife than the nonnative wild female mosquitoes currently in the environment. *Wolbachia*

cannot live within vertebrate cells and cannot be transferred to humans or other vertebrates even through the bite of an infected mosquito (Popovici et al. 2010).

Diseases transmitted to humans by the southern house mosquito includes West Nile virus. Health and wildlife agencies in Hawai'i are actively working to prevent the introduction and spread of West Nile virus to the state (DOH 2022). An ancillary benefit of the IIT is that it will employ a promising southern house mosquito control method in Hawai'i and help to establish infrastructure to support southern house mosquito suppression in the event of an outbreak of West Nile or other mosquito disease-borne illness.

Air Quality, Greenhouse Gas Emissions and Climate Change

As discussed in Appendix B of the EA, impacts related to air quality, greenhouse gas emissions and climate change were dismissed from detailed analysis because the resources would not be or are only negligibly impacted and there is no potential for significant impacts.

Incompatible male mosquito transport to Maui from the incompatible male mosquito production facility would utilize existing commercial air transport services and would not be expected to increase or otherwise contribute to greenhouse gas emissions. Release methods part of the preferred alternative that produce greenhouse gas emissions include motor vehicle transport of personnel for release and monitoring activities, helicopter transport of personnel for pedestrian release to remote sites, and helicopter or fixed wing release of incompatible male mosquitoes but none of these would perceptibly adversely affect air quality.

Though climate change and associated adverse impacts have and will continue to affect specific resources on Maui and within the project area, greenhouse gases from helicopter, fixed wing aircraft and motor vehicle emissions associated with the proposed action are not expected to have a significant effect on global climate change or local climatic conditions. Although, for example, the release of incompatible male mosquitoes would result in some fossil fuel consumption, the associated greenhouse gas emissions would be minor because of the comparatively limited number of flights anticipated, compared to ongoing commercial and administrative flights daily commercial flights on Maui.

Environmental Justice

According to EJScreen, EPA's Environmental Justice Screening and Mapping Tool, census block groups within and around the project area on East Maui are comprised of populations where at least 50 percent of the population is considered a minority. Therefore, environmental justice communities exist in the study area. The proposed action involves the use of drones and helicopters to release incompatible mosquitoes for the purpose of suppressing the spread of avian malaria. The mosquitoes that would be released provide no threat to the public as they would be male mosquitoes (which don't bite) and do not transmit disease to humans. While the suppression of avian malaria should result in a positive overall effect on the East Maui ecosystem, mosquito release methods would involve the use of aircraft which could cause temporary impact to the public who are recreating on public and conservation lands during project implementation. These potential impacts would mostly be due to the noise or visual disturbance from aircraft. Similar aerial operations are already ongoing on state and federal lands on East Maui. There would be minimal or no adverse effects on the public outside of the project

area. Because noise and visual impacts could primarily affect only those members of the public that are actively recreating in the project area during implementation, there would be no low income or minority populations that would be disproportionately affected by project activities.

The intent and expected outcome of this project is to avoid the extinction of Hawaiian forest birds, which are identified as an important ecological and cultural resource by the Native Hawaiian community. Native Hawaiians identify forest birds as ohana (family), kupuna (ancestors), and ‘aumākua (familial gods), and their unique habitats are revered as sacred places for the cultural ecological services they provide. The preservation of these species has been identified as a priority by Native Hawaiian community leaders (Paxton et al. 2022).

Public Involvement

The public was provided two opportunities to comment on the planning process. The NPS and DLNR held a 45-day public scoping period from December 6, 2021, to January 20, 2022, which initiated the joint NEPA and Hawaii Environmental Policy Act (HEPA) planning process. Virtual public scoping meetings were held on December 14, 2021, and January 6, 2022. In total, 51 people attended the virtual public scoping meetings, including 34 on December 14, 2021, and 17 on January 6, 2022. The project team received 72 pieces of correspondence during the 45-day scoping period. The comments received were reviewed by the NPS and DLNR and considered in developing the EA. A public scoping report documenting the process is available on the NPS PEPC project site at <https://parkplanning.nps.gov/HALE-mosquito>. The NPS and DLNR also requested public input on the EA during a 45-day EA public review period from December 6, 2022 to January 23, 2023. In total, the NPS and DLNR received 853 independent pieces of correspondence, several with substantive comments. A summary of substantive public comments received and responses from the NPS and DLNR are provided in Attachment A of the NPS FONSI which can be found on the NPS Planning, Environment, and Public Comment project website (NPS FONSI 2022).

Public involvement, collaboration with federal and state governments and private entities, as well as partnership support, has all been vital to the success of this conservation planning effort.

Conclusions

Based on review and evaluation of the NPS EA, the FWS has determined that the Proposed Action alternative is not a major Federal action that would significantly affect the quality of the human environment, within the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969, as amended. Accordingly, the Service is not required to prepare an EIS for this proposed action.

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Date

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