Construct Fuel Storage and Dispensing Facility Environmental Assessment

April 2024

Kalaupapa National Historical Park

Kalaupapa National Historical Park ♦ National Park Service ♦

U.S. Department of the Interior

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Summary

- Project Title: Construct Fuel Storage and Dispensing Facility at Kalaupapa National Historical Park
- Type of Document: Environmental Assessment (EA)
- Legal Authority: Chapter 343, Hawai‘i Revised Statutes
- Location: Kalaupapa National Historical Park, Kalaupapa, Hawai‘i 96742-9998
- Tax Map Key: 261001001; 261001002
- Ownership: State Department of Hawaiian Home Lands
- Proposing/Determining Agency: National Park Service
- Contact: Nancy Holman, Superintendent, Kalaupapa National Historical Park 290 Beretania Street Box 2222, Kalaupapa, Hawai‘i 96742-9998, (808) 567-6802 ext. 1100, Nancy_Holman@nps.gov
- Alternative Contact: Linh Anh Cat, Division Lead / Ecologist, Natural Resource Management, (808) 658-0752 -linhanh_cat@nps.gov
- Approving Agency: State Department of Hawaiian Home Lands
- EA Preparation: National Park Service
- Land Area (approximate): Park boundaries include 8,720 acres of land and 2,060 acres of submerged and offshore lands. Proposed disturbance would not exceed one acre.
- Existing Land Use: Kalaupapa National Historical Park
- State Land Use Districts: Urban, Agricultural, Conservation
- County Zoning: Not Zoned
- Special Management Area: No
- Major Approvals that may be Required: See Consultation and Coordination Section

How to Comment on this Environmental Assessment

This EA is being made available to the public; federal, state, and local agencies; and organizations through press releases distributed to a wide variety of news media, direct mailed, and announced on the Park website. The release of this EA will initiate a 30-day public review and comment period.

Copies of the document may be obtained from http://parkplanning.nps.gov (PEPC) or Kalaupapa National Historical Park:

ParkPlanning - Construct New Fuel Storage and Dispensing System (nps.gov)

Mail:

Kalaupapa National Historical Park

Attn: Superintendent

290 Beretania Street Box 2222

Kalaupapa, HI 96742-9998

Note to Reviewers: Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment–including your personal identifying information–may be made publicly available. Although you can ask the NPS in your comment to withhold your personal identifying information from public review, the NPS cannot guarantee that it will be able to do so. Responses to substantive comments on the EA will be addressed in the proposed Finding of No Significant Impact (FONSI) or will be used to prepare an environmental impact statement if warranted.

Chapter 1: Purpose of and Need for Action

Introduction

Kalaupapa National Historical Park (the Park) is located on the Kalaupapa Peninsula on the Hawaiian island of Molokaʻi. The peninsula is a low, flat, and triangular-shaped landform that projects from the island approximately three miles north into the Pacific Ocean. The Kalaupapa Peninsula remains one of the most remote locations in Hawaiʻi due to unique volcanic and geologic activity over millions of years (NPS 2016a).

The Park differs from other national park system units in that most of the land, marine areas, and improvements within its authorized boundary are not federally owned and are managed through cooperative agreements and a lease agreement with the State Department of Hawaiian Home Lands (DHHL). The NPS owns about 23 acres and manages an additional 1,247 acres of the 1,290 acres of DHHL land through a 50-year lease which is renewable in 2041 and 7,853 acres from Hawaiʻi Department of Land and Natural Resources through cooperative agreement; 2,060 acres of which are submerged and offshore lands (NPS 2017). There is a small unincorporated community with a population of approximately 80 residents.

This Environmental Assessment (EA) has been prepared to meet both the project implementation requirements of the State and Federal government in accordance with the National Environmental Policy Act (NEPA) and the Hawaiʻi Environmental Policy Act (HEPA). This EA analyzes the environmental impacts of a no action alternative and the proposed action alternative.

Purpose & Need

The State of Hawaiʻi (State) owns and operates two underground 20,000 gallon and one 6,000-gallon double walled fiberglass fuel tanks for a total fuel storage capacity of 46,000 gallons. These tanks are located at the service station across from the pier and were constructed in 1988-1989. Fuel is shipped in on the annual barge to be used by residents, the State of Hawaiʻi Department of Health and NPS operations. There is no indication that the tanks are leaking or damaged (Mason Architects, Inc. 2018).

The purpose of this project is to provide the Park and the settlement with a reliable fuel facility that is safe, easily serviceable, and complies with federal regulations. This new fuel storage and dispensing facility is needed because the current State of Hawaiʻi-operated fuel facility will be decommissioned in 2028. The tanks at the current facility are at the end of the 30-year warranty and the underground tank configuration provides less environmental protection against spills and leaks. In addition, the current facility is located within the tsunami inundation zone. The new fuel facility would be located outside the tsunami inundation zone and include above ground storage tanks with modern spill and leak prevention and containment. The preferred site was selected to minimize impacts to cultural and natural resources. The project was discussed in the 2021 General Management Plan (GMP) for the park under Reasonably Foreseeable Future Actions, stating: "Establishment of an above-ground storage tank for unleaded fuel to replace the DOH underground storage tanks (NPS 2021b).

Chapter 2: Alternatives

Alternative 1: No Action (Continue Current Management)

Under the no action alternative, the National Park Service and the Kalaupapa community would continue to use the State of Hawai‘i fuel facility adjacent to the dock until 2028. The State of Hawai‘i will decommission this facility before relinquishing land management responsibility to the National Park Service due to potential tsunami threat and storage tank service life. Once the site is decommissioned, it is unclear how the NPS would continue to provide fuel for the Park and community.

Alternative 2: Construct Fuel Storage and Dispensing Facility (Proposed Action)

This project proposes to construct a new fuel storage and dispensing facility to serve the entire Kalaupapa settlement fuel needs. The work would include the installation of five) 5,000-gallon modular, above ground, double-walled fuel storage tanks (four gasoline and one diesel), a fuel dispensing and monitoring system, site clearing & grubbing, a concrete pad to support the fuel tanks and appurtenances, road improvements to safely fuel vehicles and deliver fuel to tanks, and an extension of telecommunications and electrical service from a nearby electrical pole to the site to control the dispensing system. The approximate total area of disturbance, including staging, is about 0.83 acres to include a fuel storage and distribution facility and 206 foot long graded and graveled access road with turn around area of varying width.

The project location is situated at the eastern edge of Kalaupapa Settlement, on the western side of the Kalaupapa Peninsula, Kalawao County, Kalaupapa Ahupua‘a, Tax Map Key (TMK): (2) 6-1-001:001. The proposed location is within Kalaupapa National Historical Park, located east of Staff Row and the Damien Loop intersection. The site is within a cleared field behind the Staff Row Quarters, on the north side of Damien Road and is separated from Staff Row by a rock boundary wall and a fire break road and is visually obscured from Damien Road by a 5-meter-high swath of oleander and haole koa trees. The area east and north of the proposed project location is covered in a mixture of java plum, banyan, kiawe, oleander, and haole koa. No vegetation clearing is planned for the project. See Appendix A for maps and photos of the site.

The fuel facility site was chosen due to its proximity to the Settlement, as well as the location at the edge of the developed area away from most of the residential and business activity. The location was also selected because the natural "wall" of vegetation screens the site from Damien Road reducing visual impacts to the National Historic Landmark (NHL) district. Previous land clearance of this area means that there is a low probability of disturbing extant historic properties. Ingress and egress to the fuel facility is to be made via the existing entrance into the field that will be graded, and gravel will be installed. Traffic flow within the station would feature a circular loop to access the fuel pumps.

Construction duration would depend on the contractor's means and methods. The Kalaupapa Settlement is only serviced once a year via barge. If mobilization occurs on the first-year barge, then a total construction time of about 13 months is anticipated. If mobilization is spread over two barges and a third-year barge is needed to demobilize heavy equipment, total construction

time would take about 25 months. In either case, active construction on site would take approximately six months.

Alternatives Considered but Eliminated from Detailed Study

Convert Vehicles to Electric

The NPS considered converting the entire fleet of vehicles to electric and found it would take time to convert the vehicle fleet at the Park, including the installation of a charging station and the purchase of electric vehicles. The electrical distribution project needs to be completed (see Cumulative Effects) and electrical generation requires more sustainable power sources to realize the environmental benefits of transitioning to electric.

The alternative is considered infeasible for the following reasons:

- In addition to NPS vehicles, there are an estimated 75 State of Hawai‘i, and personal vehicles owned by residents at Kalaupapa. The NPS would have to either continue to provide fuel for these personal and state vehicles, replace the vehicles with electric, or otherwise facilitate residents and staff mobility. There are no other fueling stations on the peninsula.
- Most energy is currently generated on Moloka‘i by burning fossil fuels. It is estimated that 85 percent of Moloka‘i homes and businesses are powered by the diesel-powered generators at Pala‘au, and the other 15 percent of energy needs are met by the solar systems (Moloka‘i Dispatch 2022). The NPS would be increasing the need for fossil fuel energy that is generated topside Moloka‘i to provide energy for all electric vehicles at the Park. Power generation may change over time with efforts to bring a more sustainable mix of power sources to the island, including increased solar. Yet, currently, given the relatively limited number of vehicles on the island, electrical generation requires more sustainable power generation to realize the full environmental benefit of transitioning to electric.
- The capacity to convert NPS vehicles to an all-electric fleet is cost-prohibitive and would require replacing 28 vehicles (cars and trucks) and 15 heavy equipment vehicles (total 43 vehicles). There are limited electric alternatives for the 15 heavy equipment vehicles which may always need a fuel source. In addition, an electrical charging facility would need to be built to accommodate multiple vehicles and the cost of electricity on Moloka‘i is very high.
- The Kalaupapa Settlement regularly loses power during the stormy winter season which would lead to the inability to charge and operate vehicles.

Alternative Fuel Facility Locations

A Value Analysis Study and Scoping Trip Report (Mason Inc. 2018) included detailed descriptions of alternative site assessments for the fuel facility. NPS considered 12 possible locations for the fuel facility and eventually identified the proposed site as the preferred location.

Chapter 3: Affected Environment and Environmental Consequences

Introduction

This chapter describes the affected environment and analyzes the potential environmental impacts of the alternatives described in Chapter 2: Alternatives. The affected environment describes existing conditions for those elements of the natural and human environment that would be affected by the implementation of the alternatives considered in this EA. Impacts on each of these topics are then analyzed in the Environmental Consequences section for each alternative. Mitigation measures are identified in Appendix B and incorporated into the evaluation of impacts. The comparative analysis of impacts includes changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives (40 Code of Federal Regulations [CFR] 1508.1; CEQ 2023). This EA has been prepared in accordance with NEPA and HEPA and provides compliance for project implementation on both federal and state lands.

General Methodology for Establishing and Assessing Impacts

In accordance with Council on Environmental Quality (CEQ) NEPA regulations, direct, indirect, and cumulative impacts are described for each alternative (40 CFR 1502.16) (CEQ 2023). The impact analysis in this EA has also been prepared in accordance with HEPA. According to Hawai‘i Administrative Rules (HAR) Chapter 11-200.1, Environmental Impact Statement Rules, “(a) In considering the significance of potential environmental effects, agencies shall consider the sum of effects on the quality of the environment and shall evaluate the overall and cumulative effects of an action. (b) In determining whether an action may have a significant effect on the environment, the agency shall consider every phase of a proposed action, the expected consequences, both primary and secondary, and the cumulative as well as the short-term and long-term effects of the action.” HEPA Significance criteria are evaluated in Appendix C.

The potential impacts of the alternatives are described in terms of type, as follows:

- **Direct:** Impacts that would occur as a result of the proposed action at the same time and place of implementation (40 CFR 1508.1(g)(1)) (CEQ 2023).
- **Indirect:** Impacts that would occur as a result of the proposed action but later in time or farther in distance from the action (40 CFR 1508.1(g)(2) (CEQ 2023).

Cumulative: Effects on the environment that result from the incremental effects of the action when added to other past, present, or reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions are called cumulative effects. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.1(g)(3) (CEQ 2023). Cumulative impacts are determined for each impact topic by combining the impacts of the alternative being analyzed and

other past, present, and reasonably foreseeable actions that would result in beneficial or adverse impacts. Because some of these actions are in the early planning stages, the evaluation of the cumulative impact is based on a general description of the project. These actions were identified through the internal project scoping process and are summarized below. The no-action alternative would not contribute new impacts; therefore, no cumulative impacts would be associated with it.

Past, present, and reasonably foreseeable actions include:

- Kalaupapa Water Treatment Facility Repairs – The NPS replaced the groundwater well pumps, drop pipe, and pump power cable at the Kalaupapa Water Treatment Facility. The NPS also repaired and replaced the water system controls and appurtenances at the facility. Repairs were completed 2022.
- Water Tank Replacement – The NPS plans to replace one 160,000-gallon glass-fused steel drinking water storage tank. The newly installed tank would be selected to match existing tank, which was installed in 2015. Work would include replacing the shell sheets and roofs; installing new bolts, bolt caps, water level indicators, lightning arrest system, cathodic protection, and necessary sealants; and disinfecting the new tank. The old tank would be disposed of off island. This project is anticipated to be completed in 2024.
- Pavement Preservation on Paved Settlement Roads – The NPS plans to implement a pavement preservation project for the Park's paved road network throughout the Kalaupapa Settlement and community. Pavement preservation would be performed on roughly 5.5 miles of primary and secondary roads and paved parking lot locations. This project is anticipated to be started by 2030.
- Resurfacing and Stabilization of Damien Road – The NPS plans to resurface and stabilize about a half mile portion of Damien Road between the emergency evacuation site and the interpreted heiau (Hawaiian temple). Work would include routine blading and adding gravel as needed. Gravel would be transported to the work site via barge and truck and added in accordance with Hawai‘i Department of Transportation specifications. Road improvements are scheduled to be complete by the end of 2024.
- Rehabilitate Perimeter Fences to Protect Unique Park Ecosystems – The NPS plans to rehabilitate approximately nine miles of perimeter exclusionary fencing, the primary tool to protect native ecosystems and watersheds from damage by large numbers of invasive nonnative animals. The long-term integrity of these biocultural resources is enhanced by having effective perimeter fencing for ungulate and predator exclusion. Work includes replacing and upgrading fence segments, prioritized by most urgent potential to fail and construction is anticipated to begin in 2024.
- Rehabilitate the Existing Electrical System – The project would rehabilitate the settlement's single and three-phase aboveground electrical distribution system to a looped system. Improvements would meet current industry standards and codes, remove safety hazards, improve reliability, make the system easier for an outside entity to maintain, and

reduce dependency on the diesel generator for electricity. Work is anticipated to start in 2025.

Issues and Impact Topics

The NPS identified a range of issues and impact topics to evaluate in this EA. During internal, agency, and public engagement, NPS staff identified potential issues that could result from implementation of the proposed alternatives. The NPS *NEPA Handbook* (NPS 2015a) provides specific guidance for determining whether to retain issues for detailed analysis. Issues should be retained for consideration and discussed in detail if:

- the environmental impacts associated with the issue are central to the proposal or of critical importance.
- a detailed analysis of environmental impacts related to the issue is necessary to make a reasoned choice between alternatives.
- the environmental impacts associated with the issue are a big point of contention among the public or other agencies; or
- there are potentially significant impacts to resources associated with the issue.

Issues carried forward for detailed analysis fall under the following impact topics:

- Cultural Resources
- Threatened and Endangered Species
- Invasive Species
- Air Quality / Climate Change

Impact Topics Dismissed from Detailed Analysis

Impact topics were dismissed because the issues did not meet one of the requirements listed above.

Geology / Soil Resources (Dismissed)

The site is flat and soil disturbance could occur on about 0.83 acre of the site from staging and construction including grading, compaction, and construction of an entrance. Concrete would be placed atop some project area soils resulting in long-term reduction of soil permeability. These impacts are anticipated to be long term, adverse, and minimal because the site has already been graded and compacted from past activities.

Socioeconomics (Dismissed)

Construction of the fuel facility would not adversely affect the local economy. Minor increases in employment from the construction workforce and revenues for the businesses engaged in the

construction process are expected. The increase in workforce and revenue, however, would be minimal and temporary, lasting only as long as construction.

Soundscapes (Dismissed)

The general ambient quiet of the Park provides a sense of place, historic setting, and feeling of isolation. During construction, anthropogenic noise would increase because of construction activities, equipment, vehicular traffic, and field crews. The duration of noise impacts would be limited to the construction period and are considered direct, short term, minor, and adverse. No long-term effect on visitors, employees, patient-residents, or natural soundscape conditions are anticipated.

Vegetation (Dismissed)

The proposed location for the fuel facility is a field that has been cleared historically. Subsurface testing and artifact identification on the fringes of the field indicate the field has been bulldozed during the creation of the field/pasture for both plant and animal agriculture. The site is enclosed in tall vegetation along the roadway and surrounding the work area. Construction would occur entirely on the cleared field and no trees or shrubs are anticipated to be removed. The 2014 Vegetation Mapping Inventory Report for the entire Kalaupapa peninsula mapped vegetation types throughout the peninsula. The project area is classified as "Polynesian Semi-natural Lowland Shrubland, Grassland & Savanna" consisting of Bermuda grass - Mixed Grass Pacific Semi-Natural Herbaceous Vegetation. The project would result in the disturbance and paving over of these non-native grasses, resulting in direct negligible adverse impacts to vegetation.

Visitor Use and Experience (Dismissed)

The Park's mission is to provide a well-maintained community that ensures the present patient-residents of the Kalaupapa Settlement may live out their lives peacefully and comfortably. In keeping with this mission, visitor access to the Park is allowed by permit only through the State of Hawai‘i Department of Health, and access is strictly limited to registered guests of Kalaupapa residents, employees, patients, commercially guided tourists, and NPS volunteers. Additionally, persons under 16 years of age are not permitted to visit the Park. Therefore, annual visitation at the Park is low compared to most national park units and from 2012 to 2021, annual visitation at the Park averaged approximately 62,500 visitors per year (NPS 2022). Visitation was impacted by abnormally low rates of visitation during 2020 and 2021 because of Park closures for the COVID-19 pandemic. Visitation from 2012 to 2019 ranged from approximately 59,000 to 101,000 visitors per year, while visitation in 2020 and 2021 was approximately 16,000 and 25,000 visitors, respectively (NPS 2022). The project would not affect annual visitation at the Park and construction activities would be a short term minor adverse to the visitor experience due to noise and visual disturbance.

Wetlands/Water Resources/Floodplains (Dismissed)

The proposed project would not include work in wetlands and the nearest wetland is over one mile away from the project location. The project would not affect the Park's ability to manage its wetland resources or to meet or maintain the desired conditions outlined in its GMP (NPS

2021b). Similarly, there are no waterways near the site, it is not within a mapped floodplain, and it is located outside of the tsunami inundation zone.

Wildlife and Wildlife Habitat (Dismissed)

The NPS strives to maintain the components and processes of naturally evolving park unit ecosystems, including the natural abundance, diversity, and ecological integrity of native animal populations. Increased noise levels during the construction phase of this project could temporarily increase localized disturbances to wildlife resulting in direct short term minor adverse impacts. The project would not affect the viability of species or alter population dynamics.

Issues Identified for Further Analysis

Information in this section is derived from a comprehensive review of existing information pertaining to the project area including information from field studies, the Park's GMP, natural and cultural resources management plans, and park planning documents. Information in this section has been gained from management, research, and analysis throughout the history of Kalaupapa community and the Kalaupapa National Historical Park. In addition, consultation and coordination with agencies including the US Fish and Wildlife Service, the State Historic Preservation Division, and the State of Hawai'i provided information that assisted in determining relevant issues for analysis.

Affected Environment- Cultural Resources

Cultural resources include a variety of resource types such as archeological resources, ethnographic resources, and structures. As a management strategy, the NPS also includes cultural landscapes and museum objects in its categories of cultural resources. Cultural resources can be grouped in broader districts or landscapes that have significant associations with prehistory or history. Under the National Historic Preservation Act (NHPA), cultural resources include districts, sites, buildings, structures, and objects, and their significance is assessed by their eligibility for inclusion on the National Register.

History

The precise timing and nature of the settlement of Hawai'i is unknown. The most convincingly supported theory suggests that Polynesians first arrived in the islands around AD 1000 to 1200. Initial settlements focused on sheltered bays and coastal resources of the windward sides of the islands, but by AD 1400, inland settlements and increasing dependence on agricultural products began to link the inland areas more closely to coastal-based local ahupua`a (i.e., subdivision of land) systems. Historical documentation and ethnographies of Moloka'i's traditional history are not as well recorded as those for the main islands of O`ahu, Maui, and Hawai'i, though the genealogies of the first ali`i nui (i.e., ruler) of Moloka'i, the Kamauaua and Kane'alai lineages, extend from the 19th century back to the 13th century. These genealogies, themselves largely referenced in the histories of neighboring islands, reveal significant intermarriage between the ali`i of O'ahu, Maui, and Hawai'i with the Moloka'i chiefs. By the 19th century, Kalaupapa was renowned for its agricultural production, specifically for sweet potatoes.

Kalaupapa Peninsula lies within the Ko`olau traditional district, or moku, which encompasses the central windward portion of Moloka‘i Island. The Ko`olau moku includes three ahupua`a, land divisions that extend from the highlands to the shore. Most of the project area is located in Kalaupapa Ahupua`a, and includes a portion of Makanalua Ahupua`a. The Hawaiian system of land tenure was supplanted by the Western system of fee-simple ownership in the mid-19th century in an event known as the Great Mahele. Land Commission Awards were granted for approved land claims, which became known as kuleana lands and included de facto title to the lands by Royal Patent. Kalaupapa Ahupua`a was granted to Kaunuohua, a chief and female descendant of several high-ranking chiefs. Makanalua Ahupua`a was granted to the Kamehameha family, whose ancestor gained control of Moloka‘i in 1795 (Chambers and Pacheco 2020).

Kalaupapa Leprosy Settlement was formed from Makanalua Ahupua`a, which was deeded to the Hawaiian government in the mid-19th century. In 1865, the Hawaiian government relocated residents of Kalaupapa Peninsula, and the settlement was established. The natural setting served to isolate the settlement, which received its first settlers in 1866. Family members and friends accompanied the early settlers, aiding in the construction of shelters and daily tasks. Initially, supplies, funding, and other basic facilities were in short supply. During the 1870s and 1880s, the arrival of religious leaders, including Father Damien, and a growing awareness of hardships faced by the isolated settlers led to attempts at reform and improvements. Despite growing evidence about the very limited communicability of the disease, strict segregation of settlers was enforced and even increased as the US government increased control on the Hawaiian Island in the early 20th century. However, changes in leadership at Kalaupapa beginning in 1902 resulted in the transformation of the settlement to one of the world’s foremost institutions for Hansen’s disease, including new medical, housing, and recreational facilities. Further modernization efforts in the 1930s included a power plant, power distribution, a water system with fire hydrants, and streetlights. Telephone lines and an airfield were also added during this period. A 35-foot tsunami severely affected the settlement and surrounding area in 1946. The same year saw the introduction of successful medicinal treatment for Hansen’s disease through sulfone drugs, after which new arrivals decreased sharply. In response to budgetary constraints, medical treatment developments, and slowly improving public attitudes, the policy of isolation of Hansen’s disease patients was ended in 1969 (Chambers and Pacheco 2020; NPS 2021a).

Archeological Resources

Kalaupapa Leprosy Settlement was designated as a National Historic Landmark (NHL) in 1976 and is listed on the National Register. The NHL is significant for its architecture, social history, religious history and historic figures, and archeology. The landmark includes the entirety of the historic settlement and most of the extant buildings, structures, grave markers, sites, and other aspects of the built environment (NPS 2021a). The original NHL nomination of the Kalaupapa District considered the whole peninsula a single multicomponent archeological site with features dating from 800 years before present through the modern Hansen’s disease settlement period. The updated NHL nomination (NPS 2021a) notes that the whole peninsula can still be considered an archeological site that contributes to the significance of the district. Much of the

Park has not been systematically surveyed, and it is noted that many resources are likely extant but not yet identified that would be contributing elements to the broader site (NPS 2021a).

During two weeks between July 2020 and June 2021, NPS Archaeologists conducted an Archaeological Inventory Survey (AIS) of approximately 3.65 acres area of land adjacent to Damien Road at the eastern edge of the Kalaupapa Settlement, Kalawao County, Kalaupapa Ahupua‘a, Moloka‘i, TMK: (2) 6-1-001:001. This survey was conducted to identify historic properties within the Area of Potential Effect (APE) for the proposed Fuel Facility. The proposed location for the Fuel Facility is a field that has been cleared historically and utilized for plant and animal agriculture. Subsurface testing and artifact identification on the fringes of the field indicate the area had been bulldozed to create field/pasture for both plant and animal agriculture.

Twelve shovel test probes were excavated to identify historic properties likely to be affected by the project. No archaeological material, and only a limited amount of historic and modern debris was revealed during these excavations. Surface artifacts recorded during the survey consisted primarily of historic debris and modern trash, as well as a single pre-Contact modified stone artifact that has likely been removed from the original context. Observation of the surface materials revealed that the rock cleared from Damien Road has been pushed/deposited into a shallow, wide, vegetated ditch between the field and Damien Road. This ditch is adjacent to, but not within the Project APE. In addition to dispersed rocks, the ditch strip is littered with historic and modern trash, including glass shards, sections of pipe, and car parts.

Several dispersed artifacts were observed within the swath of vegetation that separates the fuel station field from Damien Road. The strip of oleander and Koa haole forest is adjacent to, but not within the Project APE. The area may have served as a repository for trash and may also contain items displaced from the field.

Trends affecting archeological resources include an increase in archeological site documentation, weather events, and the spread of invasive vegetation. Recent archeological investigations for the electrical rehabilitation project have identified over 80 previously undocumented archeological sites (Chambers and Pacheco 2020). Newly documented archeological sites require a combination of management, National Register evaluation, and protection. Weather events may damage or destroy archeological remains, and invasive vegetation may obscure the ground surface, landscape features, and structural remains, thus preventing archeological documentation.

Ethnographic Resources

Dark night skies have been identified as an important ethnographic resource. In the Cultural Landscape Report for the Kalaupapa and Kalawao Settlements, Wiss, Janney, Elstner Associates, Inc. (2020) describe dark night skies as an important natural quality of the peninsula. Dark night skies are an essential part of the sense of place, feeling of isolation, and historic setting of the Park. Dark skies are included in the Park’s Planning and Data Needs Management Plan. The unique natural setting of the Kalaupapa and Kalawao Settlements, which includes dark night skies, possesses cultural value that has been documented historically and ethnographically among residents of the peninsula (Wiss, Janney, Elstner Associates, Inc. 2020).

The restoration and preservation of culturally significant natural dark settings are important to the national park experience (NPS 2018). The NPS identifies light pollution as a major threat to naturally dark environments in national parks. Light pollution is a negative trend, and sources include outdoor electrical lighting, aircraft, vehicles, and satellites. When human-made light overpowers natural sources of light, such as moonlight, starlight, galactic light, zodiacal light, and airglow, the natural lightscape is degraded. Resource inventories provide crucial data regarding the quality of and impacts on existing lightscapes (NPS 2016c). The 2020 treatment plan for the cultural landscape of the Kalaupapa and Kalawao Settlements specifically recommends dark sky-compliant lighting for public paths and select parking areas (Wiss, Janney, Elstner Associates, Inc. 2020). The Park's current management direction and strategies, as identified in its 2021 GMP, are designed to meet the desired condition of protecting natural darkness and other components of the Park's natural lightscape (NPS 2021c).

Cultural Landscapes

In 2011 and 2012, the NPS developed a Cultural Landscapes Inventory (CLI) for the Kalaupapa and Kalawao Settlements (CLI Identification No. 975012) and the Molokaʻi Light Station (CLI Identification No. 975016) at the Park (NPS 2011a, 2012). The 2011 inventory states that cultural landscape of the Kalaupapa and Kalawao Settlements is considered a single landscape. The single cultural landscape does not include smaller component landscapes because the County of Kalawao is identical to the existing NHL district and the legal settlement boundary. Contributing landscape elements identified in the Kalaupapa and Kalawao Settlements CLI include buildings, structures, natural systems and features, and land use. Important characteristics of these elements include circulation, clustered arrangement, spatial organization, and vegetation. The inventory describes the condition of the Kalaupapa and Kalawao Settlements as poor. In particular, the Kalawao Settlement has deteriorated because of lack of use and deferred maintenance since the early 20th century. Nonnative invasive plants and rapid overgrowth obscure large areas of cultural resources (NPS 2011a).

The Kalaupapa and Kalawao Settlements include historic areas associated with the historic Hansen's disease settlements, two pali trails, and a water system that date to the defined settlements' period of significance from 1869 to 1969 (NPS 2011a). The Kalaupapa and Kalawao Settlements on Molokaʻi are significant under Criterion A at a national level due to historic and notable changes during the period of significance to the prevailing national social attitudes, health policies, and treatment paradigms for patients with Hansen's disease. The settlements are significant under Criterion B on both national and state levels for their association with notable historic figures, including Father Damien (Joseph De Veuster), Mother Marianne Cope, and Brother Joseph Dutton, among others. The Kalaupapa Settlement is largely intact and therefore significant at a state level under Criterion C. The Kalaupapa and Kalawao Settlements historic district is highly likely to yield information important to the both the prehistory and history of the landscape and therefore significant under Criterion D (NPS 2011a).

Trends to consider with respect to the cultural landscapes within the project area include shifts in the nature and uses of the landscapes. Deterioration of historic structures and encroachment of

invasive vegetation have had a negative effect on the cultural landscapes. Preservation concerns revolve around active use of the landscape that supports connections to the history. Measures may include preservation maintenance of historic structures, reestablishment of native species, removal or mitigation of invasive vegetation, and consultation with Native Hawaiian organizations and the Hawai‘i State Historic Preservation Division (SHPD).

Environmental Consequences- Cultural Resources- Alternative 1: No Action

Under the no-action alternative no construction would occur at the proposed site and the existing conditions would persist.

Environmental Consequences- Cultural Resources- Alternative 2: Proposed Action

Archeology

The project is expected to result in no adverse impacts to archeological resources because the proposed site is a cleared field that was likely used historically for agriculture and is devoid of surface features. Investigations indicate that subsurface soils were disturbed by bulldozer push that resulted from the creation of the open field (NPS 2021c). The project APE and access route have previously been used for storing vehicles and that has continually been disturbed by earthmoving events related to clearing the field. No archaeological or historic sites were identified within the APE. The modifications are characteristic of the resourcefulness of Kalaupapa residents, who have continuously re-purposed and re-used existing features and utilitarian items to meet current demands.

There is a possibility of direct minor adverse impacts if dispersed artifacts are uncovered during grading and site preparation. Dispersed artifacts documented in the vegetated ditch and in the nearby trees outside the APE are not indicative of a unified function; rather it provides evidence that the area between the proposed site and Damien Road was disturbed and possibly used to deposit domestic trash in the modern period. The artifacts found in the vegetation buffer are out of context and cannot be used to provide reliable information about past use of the proposed project area. The results of a Geotechnical Survey (NPS 2021c) and the materials that were observed in the vegetated ditch also suggest that the APE and adjacent areas have been subject to ground disturbance related to the clearing, bulldozing, and grading. Historic documents and ethnographic interviews with the patients indicate that the field itself was utilized for agriculture. Clearing for cattle, mowing the grass, and vehicle parking has likely removed or displaced material remains of these activities. Given the dispersed nature of the items and seemingly unintentional function of the vegetated ditch, this area is not considered an archeological site.

Despite the limited recovery of artifacts from the shovel test pits, archaeological monitoring during ground disturbance would be conducted for previously unidentified subsurface artifacts or deposits. The monitoring would also ensure integrity between the plans and implementation of access routes, retention of vegetation screens, and proposed location of the area impacted by ground disturbance. Although artifacts recovered during ground disturbance are likely to be out of context due to the plow/bulldozed history of the field, findings may still prove valuable in

understanding what and how objects were used and reused within Kalaupapa settlement. An Archeological Monitoring Plan has been prepared and would guide monitoring for the project.

Ethnographic Resources and Cultural Landscapes

The project would result in direct minor long term adverse impacts to cultural landscapes and ethnographic resources. The project site is outside of the sensitive cultural landscapes including the Damien Road Character Area and the Kalaupapa Settlement and will be adequately screened by existing vegetation along the road corridor. This installation would not be able to be seen from primary viewsheds along Damien Road. It would be briefly visible along one section of Damien Road resulting in a direct minor impact to the cultural landscape. The location is compact and, while there are two historic rock walls that delineate former agricultural uses on the periphery of the project, the walls would not be disturbed by the planned footprint of the project. The corral, which could be a contributing element to the cultural landscape, identified adjacent to the project site is outside the APE and will not be affected. There are no existing buildings or other built environment elements within the APE.

The presence of dark night skies maintains the Park's sense of place, historic setting, and feeling of isolation (NPS 2018). The addition of lighting at the new fuel facility would be a direct, long term, and minor impact to night skies. The design specifications call for three lights underneath the canopy and the fixtures would be dark night sky compliant, reducing the potential for impact to the nighttime visibility. In addition, the vegetative screening at about 15 feet high around the site would limit the impacts.

Cumulative Impacts- Cultural Resources

Overall, the cumulative impact on cultural resources from the proposed project along with the other projects would result in a cumulative minor adverse impact. The Park manages its cultural resources to meet the desired conditions identified in its 2021 GMP (NPS 2021b) and in accordance with NPS's *Cultural Resource Management Guideline* (NPS 1998). Alternative 2 is adding a non-historic feature to an NHL District, that along with the other non-historic elements in the other projects described in the Cumulative Impacts section, would result in minor direct adverse cumulative impacts to cultural resources. The impact is minor because of the implementation of mitigation measures (Appendix B) would minimize the impacts.

Affected Environment- Threatened and Endangered Species

Threatened, endangered, and other special status species include federally listed species that are protected under the Endangered Species Act (ESA), as well as species that are protected under other federal or state laws. The Park consulted with the US Fish and Wildlife Service (USFWS) in accordance with section 7 of the ESA and consultation was completed in October 2022. The USFWS identified federally listed species that could occur in or near the project area. The project area does not contain federally designated critical habitat. A brief description of the species and the potential for occurrence in the project area is provided below.

- **Hawaiian hoary bat or ʻōpeʻapeʻa (*Lasiurus cinereus semotus*)** – The Hawaiian hoary bat is the only terrestrial mammal native to the Hawaiian Islands and was federally listed

as endangered on October 13, 1970 (35 *Federal Register* 16047). Hawaiian hoary bats roost in both exotic and native woody vegetation, generally in trees and shrubs 15 feet or taller, across the Hawaiian Islands. Breeding has not yet been documented on the island of Molokaʻi, but usually occurs between September and December on Hawaiʻi and Kauaʻi (DLNR 2015a). Pupping season occurs between June 1 and September 15. Hawaiian hoary bats forage in a variety of habitats, including native and nonnative forests and shrublands, along roads and trails, and over streams and areas of open water, including the ocean. The species is also attracted to insects that congregate near lights (USFWS 1998).

An acoustic study conducted by Fraser, Parker-Geisman, and Parish (2007) indicated that Hawaiian hoary bats were rarely heard on the Kalaupapa Peninsula, probably due to year-round heavy winds, but were incidentally observed and reportedly active during the spring at the top of the Kalaupapa trail at an elevation of 1,700 feet (NPS 2015b). More recent monitoring found Hawaiian hoary bats throughout the Park, most commonly along roadways, at lower elevations along the cliff's edge, and less commonly in coastal windswept sites or at cooler mesic higher elevations (Poland and Hosten 2018, as cited in NPS 2021c).

- **Hawaiian goose or nēnē (*Branta sandvicensis*)** – The Hawaiian goose may be observed in a variety of habitats but prefers open areas, such as pastures, golf courses, wetlands, natural grasslands and shrublands, and lava flows. Though rare on the Kalaupapa Peninsula, this species has the potential to occur in grassy, open areas in or near the project area.
- **Hawaiian seabirds, including the Hawaiian petrel or ʻuaʻu (*Pterodroma sandwichensis*), Newell's shearwater (*Puffinus auricularis newelli*) or ʻaʻo, and the Hawaiʻi DPS of the band-rumped storm-petrel (*Oceanodroma castro*) or ʻakeʻake –** Hawaiian seabirds may transit over the project area at night when flying between the ocean and nesting sites in the mountains during the breeding season from March through November.
- **Hawaiian waterbirds, including the Hawaiian stilt or aeʻo (*Himantopus mexicanus knudseni*) and the Hawaiian coot or ʻalae keʻokeʻo (*Fulica americana alai*)** – Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, *Colocasia esculenta* (kalo or taro) loʻi or patches, irrigation ditches, sewage treatment ponds. Hawaiian stilts may also be found wherever ephemeral or persistent standing water may occur.
- **Sea turtles, including the Central North Pacific DPS of the green sea turtle or honu (*Chelonia mydas*) and the hawksbill sea turtle or ʻea (*Eretmochelys imbricata*)** – Green and Hawksbill sea turtles nest on sandy beach areas in the Pacific Islands. Both species exhibit strong nesting site fidelity with nesting occurring from May through September, peaking in June and July, with hatchlings emerging through November and

December. Artificial lighting that is visible from nesting beaches poses a threat to hatching sea turtles because it can cause hatchlings to become disoriented, potentially preventing them from reaching the surf zone.

- **Blackburn's sphinx moth (*Manduca blackburni*)** – The adult Blackburn's sphinx moth feeds on nectar from native plants, including *Ipomoea pes-caprae* (beach morning glory), *Plumbago zeylanica* (`ilie`e), *Capparis sandwichiana* (maiapilo), and others. The moth larvae feed on nonnative *Nicotiana glauca* (tree tobacco), and native, federally listed, *Nothocestrum* spp. (`aiea). None of the required host plants are known to occur in the project area.
- **Hawaiian damselflies, including the Pacific Hawaiian damselfly (*Megalagrion pacificum*), and the orangeblack Hawaiian damselfly (*Megalagrion xanthomelas*)** – Hawaiian damselflies are found in aquatic habitats across the Hawaiian Islands, with high species endemism within islands. Breeding habitat includes anchialine pools, perennial streams, marshes, ponds, and even artificial pools and seeps. Both damselflies have been found in the wetland south of the airport (Loko `Īliopi`i), which is adjacent to the airport road about one mile away from the project site.

Other Special Status Species

In addition to those species federally listed under the ESA, other "special status" species include birds of conservation concern (USFWS 2021) and species of greatest conservation need identified by the DLNR (2015b) State Wildlife Action Plan. Other special status species that occur on Moloka'i and could potentially occur in the project area include birds, insects, and terrestrial plants. Surveys have been performed in the Park for forest birds (Marshall and Kozar 2008) and shoreline birds (Kozar, Swift, and Marshall 2007). The only special status bird documented in the vicinity of the project area is the `apapane, which is listed as a bird of conservation concern and species of greatest conservation need. The `apapane is a honeycreeper (Fringillidae) that used to occur in Hawaiian forests but is now restricted to higher elevations. Two additional bird species of greatest conservation need, I'iwi (*Vestiaria coccinea*) and Maui Amakihi (*Hemignathus virens wilsoni*) occur in the Park but are found in native forests at elevations above the project area (Marshall and Kozar 2008).

Environmental Consequences- Threatened and Endangered Species- Alternative 1- No Action

No federally listed species or other sensitive species are being adversely impacted under the existing conditions that would persist under the no-action alternative.

Environmental Consequences- Threatened and Endangered Species- Alternative 2- Proposed Action

Terrestrial habitats on the Kalaupapa Peninsula have been altered by previous development and historic land uses that have resulted in an overall decrease in native vegetation cover (Fung and SWCA 2010, Green et al. 2014). The ongoing trend in increased stressors on species populations

resulting from habitat alteration, the spread of invasive species, and global climate change would continue to affect threatened, endangered, and other special status species at the Park. The Park's current management direction and strategies to maintain its desired conditions for ecosystem communities and processes, as described in its 2021 GMP, aim to protect and sustain the Park's threatened, endangered, and other special status species populations (NPS 2021c).

Most actions proposed under alternative 2 would occur in an area that is previously disturbed and where potential for adverse impacts on threatened and endangered species is minimal. Potential direct adverse impacts could result from disturbance associated with equipment, noise, and human activity in the project area. Potential direct and indirect adverse impacts could also include noise and visual disturbances.

ESA section 7 consultation with the USFWS was completed in October 2022. The USFWS determined that the proposed project *may affect but is not likely to adversely affect* federally listed species. Furthermore, the USFWS concluded that with the Park's implementation of the recommended avoidance and mitigation measures provided potential adverse impacts would be insignificant and/or discountable. Appendix D provides a table that analyzes the potential direct and indirect impacts on federally listed species and the rationale for lack of adverse impacts.

Cumulative Impacts- Threatened and Endangered Species

The present and reasonably foreseeable future actions described in the Cumulative Impacts section could adversely affect threatened and endangered species, with potential adverse effects consisting mostly of short-term disturbances from construction and indirect long-term impacts if invasive species are introduced and become established. The implementation of appropriate mitigation measures (Appendix B) would minimize the contribution of Alternative 2 to the overall cumulative impact.

Affected Environment- Invasive Species

Invasive animals have been introduced through past anthropogenic activities and have established populations in the Park and surrounding areas. Invasive species have affected native wildlife populations and the wildlife community structure through predation, competition, and habitat alternation (Fung and SWCA 2010). The introduction of non-native species including invasive weeds and plants; invasive pests such coqui frogs and frog eggs, little fire ants, and insects including termites; other vertebrae species such as rats, mice, and reptiles; and diseases such as Rapid ʻŌhiʻa Death (ROD) spread through contaminated soil can indirectly adversely threaten wildlife or can create new populations of non-native species not traditionally found in the Park. The Park's 2021 GMP identified reducing nonnative wildlife species within the Park and improving native habitat for birds and other native wildlife as a management priority (NPS 2021c).

Environmental Consequences- Invasive Species - Alternative 1- No Action

The ongoing trend in increased stressors on species populations resulting from the spread of invasive species would continue to affect wildlife. NPS efforts to exclude invasive species populations, including the fence project, would help control the spread of invasive species.

Environmental Consequences- Invasive Species- Alternative 2 – Proposed Action

The project includes the importation of fill and base rock resulting in the potential for nonnative plant or other species to be introduced. The Contractor is required to ensure vehicles, equipment, machinery, cutting tools, base yards, staging areas, materials, material packaging, material deliveries, material storage, and personal protective equipment are clean and free of invasive weeds and plants, invasive pests, and ROD spread through soil. Mitigations included in Appendix B would be implemented for the materials, machinery, and other equipment coming from O‘ahu to ensure cleanliness and removal of potential invasive species. To prevent the spread of invasive species within the park and adjacent lands, NPS personnel would perform inspections of vehicles, equipment, machinery, cutting tools, base yards, staging areas, materials, material packaging, material deliveries, material storage, and personal protective equipment. The implementation of the mitigation measures included in Appendix B would minimize the potential of spreading invasive species to Kalaupapa.

Cumulative Impacts- Invasive Species

Past actions have resulted in long term adverse impacts on wildlife through the introduction of invasive species. Alternative 2 would contribute an adverse increment to the overall cumulative impact due to the potential for introduction of invasive species. The implementation of appropriate mitigation measures in Appendix B would minimize the contribution of Alternative 2 to the overall cumulative impact. In addition, other projects, such as the fence project, would reduce the spread of invasive species at Kalaupapa.

Affected Environment- Air Quality/Climate Change

The Park is a Class II air quality area and the NPS’s desired conditions are for air quality in the park to meet national ambient air quality standards for specified pollutants, that the park’s air quality is maintained or enhanced with no major deterioration, and to continue unimpaired views of the landscape (NPS 2021b).

Relating to climate change, Kalaupapa is a coastal park and sea level rise may inundate low-lying resources such as nesting and nursing habitat for threatened and endangered species, historic structures, and archeological sites. Higher storm tides may result in more frequent flooding and coastal erosion. In Hawai‘i, sea level has risen over five inches since 1918 (Firing and Merrifield 2004). This rise is expected to accelerate in the future with melting of the polar ice caps and thermal expansion of the ocean with increasing water temperature. As sea level rises, normally non-hazardous wave events occurring on annual and interannual frequencies would penetrate further inland and threaten coastal ecology, cultural resources, and park

infrastructure. Areas at risk include the zone of potential inundation by water due to flood or tsunami.

Environmental Consequences- Air Quality/Climate Change- Alternative 1- No Action

Air quality is not being adversely impacted under the existing conditions that would persist under the no-action alternative. The existing fuel facility would continue to operate and the associated emissions from that operation would continue until decommissioning in 2028. The number of vehicles would remain the same and the current Greenhouse Gas Emissions would be unchanged.

Environmental Consequences- Air Quality/Climate Change- Alternative 2- Proposed Action

There are two potential sources of air quality impacts for this project, with the first being construction and second is releases of volatile organic compounds during the operation of the fuel facility.

The construction impacts on air quality would be minor, short term, direct, adverse and mainly consist of dust generated from grading, clearing, and preparing the site and exhaust from construction vehicles. Active construction is anticipated to last for six months. The project would result in greenhouse gas emissions during construction activities and in localized release of fugitive dust during the construction period. The mitigation included in Appendix B would reduce the impacts including watering down dust generating activities and requiring construction equipment to have appropriate technology to reduce exhaust.

The second potential impact is the release of Volatile Organic Compounds (VOCs) during the filling of the aboveground storage tanks, the pumping of gas or diesel into vehicles, and from potential spills. These impacts would be short term, direct, minor, and adverse. The impacts are a reduction from the current impacts of the state operated fuel station because the new fuel facility would be outfitted with a modern leak detection system, secondary containment, and the pumping system includes integrated strainer filtration, bypass valve, outlet control valve, atmospheric chamber, vortex style air eliminator, and self-lubricating bearings. The technology recovers gas fumes that are not recovered by older systems. The state operated system was constructed in 1988/1989 and does not include the same air quality protections as modern fuel pumping and dispensing systems. Overall, operationally, the project would result in reduced VOC impacts.

In relation to climate change, the project would have both beneficial and adverse impacts. The project maintains the current use and number of gasoline and diesel-powered vehicles at the Park which has direct, long term minor adverse effects on climate change from ongoing vehicle-related greenhouse gas emissions. However, vehicle emissions would remain unchanged in connection with the proposed action and would not result in new vehicle emissions relative to the no action alternative. As stated above, the newer tanks and pumping system would reduce overall air emissions from the facility resulting in a minor beneficial long-term impact. In addition, the

project also results in long term indirect moderate beneficial impacts by moving the fuel facility out of the tsunami inundation zone. The current facility is directly adjacent to the shoreline and could be impacted by wave run up or storms which may become more frequent with climate change. The new location reduces the potential for inundation of the fuel tanks, pumps, and associated infrastructure.

Cumulative Impacts- Air Quality / Climate Change

The project's construction impacts along with the other construction projects would result in direct short term cumulative minor adverse impacts to air quality. Dust and particulate matter would be disturbed by the construction and temporarily affect the air quality. Mitigation measures (Appendix B) are in place for each project that would reduce the impacts. In relation to climate change, cumulative impacts would remain unchanged from the current condition because the same number of vehicles would be retained and operated at the Park.

Chapter 4: Consultation and Coordination

The park initiated civic engagement on September 1, 2023, with the release of a newsletter that described the project, and the public comment period ran through September 30, 2023. Public notices were distributed through the following sources:

- The newsletter was posted on the PEPC website.
- Social media posts by the park
- A news release sent electronically via email to various stakeholders, agencies, and media groups.

The project was discussed in an article in the Molokaʻi Dispatch on September 20, 2023 (Fuel Facility Article). Two comments were received from the public on the PEPC website in response to the newsletter. Both comments requested that the NPS look at alternatives to the installation of a fuel facility including moving away from fossil fuels. These comments were considered and led the NPS to add discussion to the Alternatives section.

Federal, State, Local Permits and Consultation Requirements

- Consultation under Section 106 of the National Historic Preservation Act with the Hawaiʻi State Historic Preservation Office is ongoing. NPS determined that the proposed undertaking has the potential to affect the Kalaupapa NHL and that project design and site protection considerations would ensure the project is accomplished within the guidelines of the Secretary's Standards for the Treatment of Historic Properties; the NPS found that the project would result in ***no adverse effect***.
- The proposed action required consultation with the USFWS under the Endangered Species Act that was completed on October 20, 2022, with a finding of Not Likely to Adversely Effect listed species as described in the Threatened and Endangered Species section.
- At the State level, the Department of Hawaiian Home Lands is an approving agency for the project because DHHL owns the land on which the fuel facility is proposed for construction. In accordance with the lease agreement between the NPS and DHHL, new construction requires approval by DHHL. This EA meets the compliance requirements of the Hawaiian Environmental Policy Act (HEPA), allowing DHHL to adopt an equivalent FONSI to approve the project.
- Consultation with the State of Hawaiʻi Coastal Zone Management Program was completed on October 11, 2023, with a finding that the project was consistent with the Coastal Zone Management Plan. The public was offered the opportunity to comment on the project and no comments were received through the Coastal Zone Management process.
- The construction is not anticipated to exceed one acre with anticipated disturbance of about 0.83 acre including staging. NPS would include the requirement to prepare an Under-An-Acre Pollution Prevention Plan in the project specifications. If the contractor proposes ground disturbance that exceeds once acre, the contractor would complete a Stormwater Pollution Prevention Plan, Notice of Intent, National Pollution Discharge Elimination System Per Application, and Notice of Termination to the State of Hawaiʻi, Department of Health under Section 401 of the Clean Water Act.

Public Review

This environmental assessment is available for a 30-day public review period. Notice of it will be mailed or emailed to a list of persons and agencies who have expressed interest in Kalaupapa National Historical Park proposed actions and events. This document will be posted on the NPS Planning, Environment and Public Comment (PEPC) website. KALA Fuel Facility Public Comment

Comments on this environmental assessment should be entered into PEPC or directed to:

Kalaupapa National Historical Park

Attn: Superintendent

290 Beretania Street Box 2222

Kalaupapa, HI 96742

A final decision document would be prepared based on the public comments and notice of the decision document will be sent to reviewers. If substantial environmental impacts are not identified by reviewers, this environmental assessment would be used to prepare a Finding of No Significant Impact (FONSI) which would be sent to the Regional Director, Pacific West Region for signature.

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Acronyms and Abbreviations

AIS	Archeological Inventory Survey
APE	area of potential effect
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLI	Cultural Landscapes Inventory
DHHL	Hawai‘i Department of Hawaiian Homelands
DLNR	Hawai‘i Department of Land and Natural Resources
DPS	Distinct Population Segment
EA	environmental assessment
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
GMP	General Management Plan
HAR	Hawai‘i Administrative Rules
HEPA	Hawai‘i Environmental Policy Act
HRS	Hawai‘i Revised Statutes
HDOH	Hawai‘i Department of Health
HECO	Hawaiian Electric
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NOAA NMFS	National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NPS	National Park Service
Park	Kalaupapa National Historical Park
PEPC	NPS Planning, Environment, and Public Comment
ROW	right-of-way
SHPD	Hawai‘i State Historic Preservation Division
TMK	Tax Map Key
U.S.C.	United States Code
USFWS	US Fish and Wildlife Service
VOC	Volatile Organic Compound

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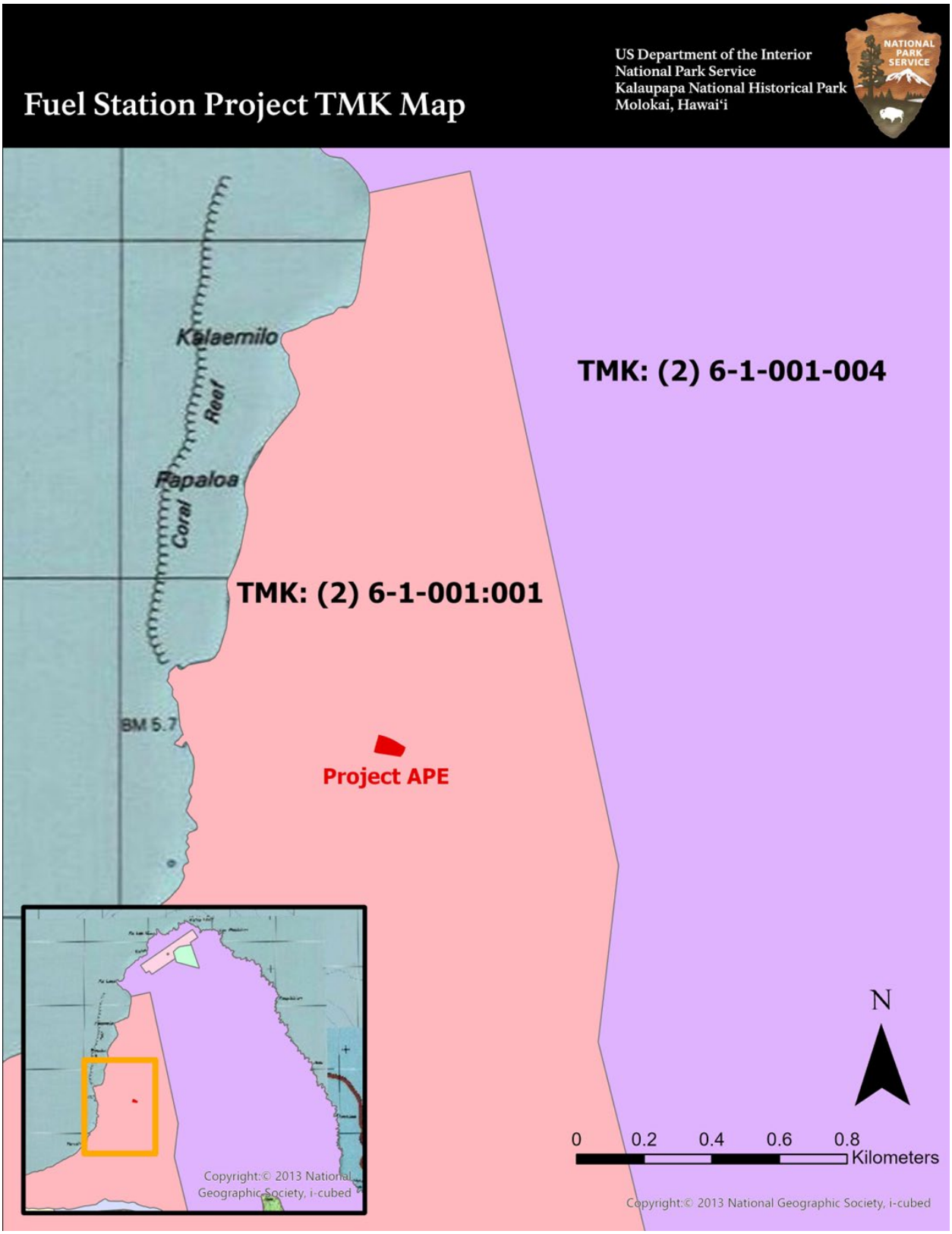
Appendix A- Maps and Photos of Project Location, Area of Potential Effect (APE), and Specifications

FIGURE 1: PROJECT APE WITHIN TMK (2) 6-1-001:001.



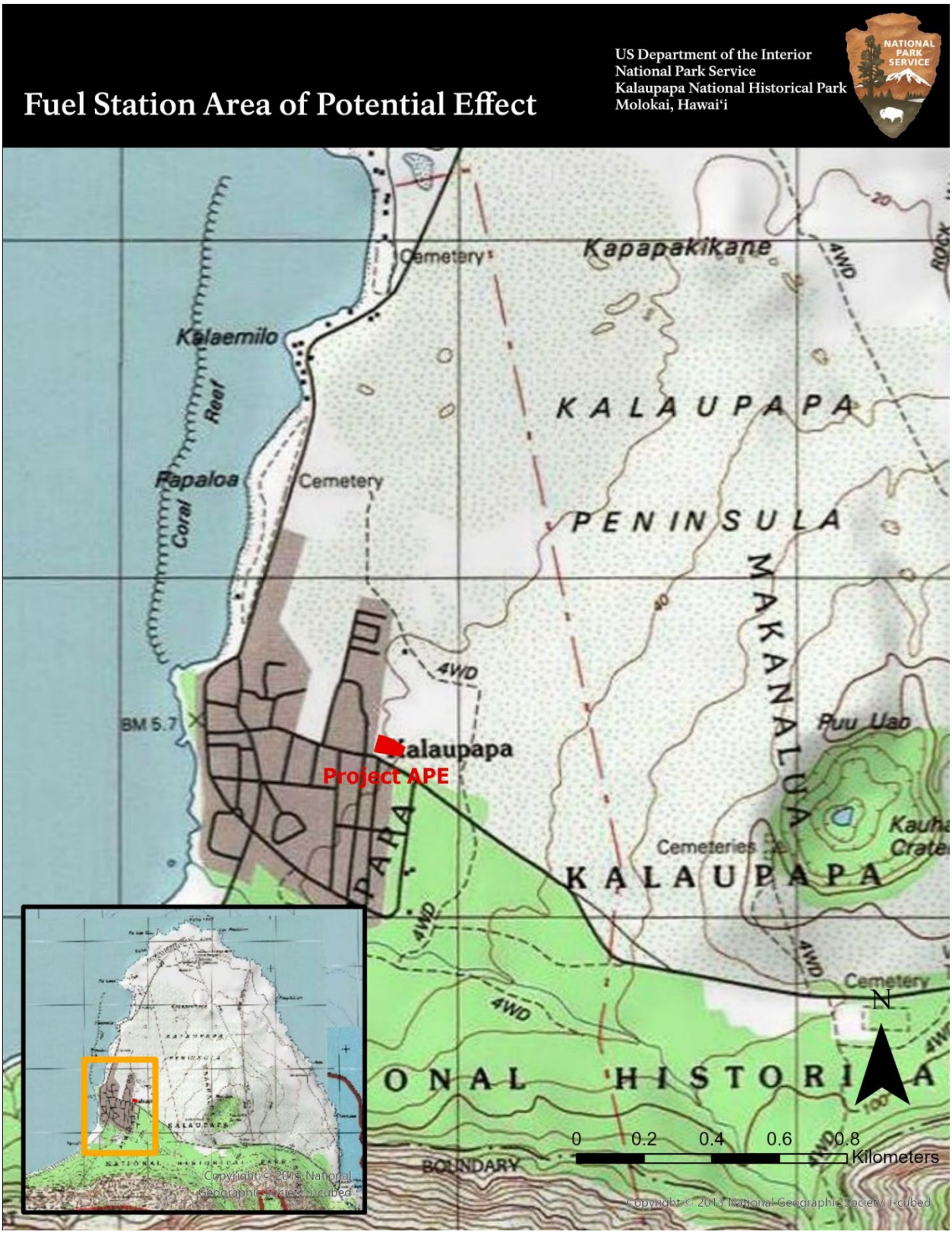


FIGURE 2: APE LOCATION RELATIVE TO A USGS QUAD MAP.

FIGURE 3: APE LOCATION RELATIVE TO EXISTING STRUCTURES OF THE KALAUPAPA SETTLEMENT.

FIGURE 4: DETAIL OF APE AGAINST AERIAL IMAGERY.

FIGURE 5: CONSTRUCTION FOOTPRINT ORIENTATION WITHIN THE PROJECT AREA.

Proposed Site Location

Entrance off Damien Road

Looking at the Site from Across Damien Road


The Proposed Site

Appendix B: Mitigation Measures

Number	Mitigation Measure	Authority	Responsibility
General (GEN)-1	Clearly state resource protection measures in the construction specifications and instruct workers to avoid conducting activities outside the project area. Limit disturbances to roadsides and other areas inside the project area.	NPS	Contractor
Gen-2	Hold a preconstruction meeting to inform contractors about NPS sensitive areas, including natural and cultural resources.	NPS	Contractor
Gen-3	Delineate construction zones outside existing disturbed areas with flagging and confine surface disturbance to the construction zone.	NPS	Contractor
Gen-4	Site staging and storage areas for construction vehicles, equipment, materials, and soils; and wash rack for cleaning vehicles and equipment, in previously disturbed or paved areas approved by the NPS. These areas would be outside visitor use areas and clearly identified in advance of construction.	NPS	Contractor
Gen-5	Require contractors to properly maintain construction equipment to minimize noise and do not allow construction vehicle engines to idle for extended periods.	NPS	Contractor
Gen-6	Remove tools, equipment, barricades, signs, and surplus materials from the project area upon completion of the project.	NPS	Contractor
Cultural Resource (CR-1)	Follow the archeological monitoring plan to identify monitoring locations and describe procedures and methods to ensure resources are avoided.	NPS	NPS
CR-2	Conduct archeological monitoring during construction in accordance with the approved archeological monitoring plan. Prepare an archeological monitoring report in accordance with Hawai‘i State Historic Preservation Division Administrative Rule 13-279.	NPS	NPS
CR-3	Implement measures during construction such as the use of plywood or other ground cover to protect the subsurface from heavy machinery.	NPS	Contractor
CR-4	Install new lighting with dark sky-compliant fixtures.	NPS	NPS

Number	Mitigation Measure	Authority	Responsibility
Threatened and Endangered Species (TES-1)	Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat-birthing and pup-rearing season (June 1 through September 15).	USFWS	NPS & Contractor
TES -2	Do not use barbed wire fencing.	USFWS	Contractor
TES -3	Do not approach, feed, or disturb the Hawaiian goose.	USFWS	Contractor
TES -4	If the Hawaiian goose is observed loafing or foraging within the project area during the breeding season (September through April), engage a biologist familiar with Hawaiian goose nesting behavior to survey for nests in and around the project area prior to the resumption of work. Repeat surveys after subsequent delays of work of three or more days (during which the birds may attempt to nest).	USFWS	NPS
TES -5	Cease work immediately and contact the USFWS for further guidance if a nest is discovered within a radius of 150 feet of the proposed project, or a previously undiscovered nest is found within the 150-foot radius after work begins.	USFWS	NPS
TES -6	In areas where the Hawaiian goose is known to be present, post and implement reduced speed limits and inform project personnel and contractors about the presence of endangered species on-site.	USFWS	NPS
TES -7	Use only downward facing and shielded lighting for lighting used during construction or installed as part of the project to prevent it from being visible from above.	USFWS	Contractor
TES -8	Do not conduct project work during the night.	USFWS	Contractor
TES-9	Do not conduct project work directly in aquatic environments.	USFWS	NPS & Contractor
TES-10	In areas where waterbirds are known to be present, post and implement reduced speed limits and inform project personnel and contractors about the presence of endangered species on-site.	USFWS	NPS & Contractor
TES-11	Do not stockpile project construction-related materials (e.g., fill, revetment rock, pipe) in or near aquatic	USFWS	Contractor

Number	Mitigation Measure	Authority	Responsibility
	habitats; implement erosion control measures (e.g., protect with filter fabric) to prevent materials from being carried into waters by wind, rain, or high surf.		
TES-12	Fuel project-related vehicles and equipment away from aquatic environments and develop a contingency plan to control petroleum products accidentally spilled during the project, especially when being unloaded from the barge. Retain the plan on-site with the person responsible for plan compliance. Store absorbent pads and containment booms on-site to facilitate the clean-up of accidental petroleum releases.	USFWS	Contractor
TES-13	Protect deliberately exposed soil or under-layer materials used in the project near water from erosion and stabilize as soon as possible with geotextile, filter fabric, or native or noninvasive vegetation matting or hydroseeding.	USFWS	Contractor
TES-14	If Blackburn's sphinx moth or its host plants are identified in the project area before or during project construction, contact the USFWS for guidance on mitigation measures to be implemented.	USFWS	NPS
TES -15	Prohibit tree tobacco from entering the project area to avoid attracting Blackburn's sphinx moth.	USFWS	NPS
Invasive Species (IN-1)	Thoroughly pressure wash vehicles, equipment, and machinery such that they are visibly free of dirt, mud, plant debris, and invasive pests at an NPS-approved location prior to entering the Park.	NPS	Contractor
IN-2	Sanitize cutting tools including handsaws, machetes, chainsaws, and loppers to remove visible dirt, contaminants, and potential pathogens prior to entry into the Park.	NPS	Contractor
IN-3	Before entering the Park, visually inspect and clean personal protective equipment, including boots, clothes, hard hats, harnesses, belts, and equipment for dirt, mud, seeds, plant debris, and insects.	NPS	Contractor
IN-4	At their discretion, NPS personnel from the Park would perform inspections of vehicles, equipment, machinery, cutting tools, base yards, staging areas, materials, material packaging, material deliveries, material storage,	NPS	NPS

Number	Mitigation Measure	Authority	Responsibility
	and personal protective equipment to confirm that they are visibly free of dirt, mud, plant debris, and invasive pests.		
IN-5	Fill materials imported from outside the park would be from approved sources and would be inspected and/or approved by NPS staff prior to importation into the park to avoid inadvertent importation of invasive species. Materials used in project work would be transported and stored so as not to acquire noxious weed seeds from adjacent areas. The project area would be monitored for undesirable plant species and control strategies implemented if such species occur.	NPS	NPS & Contractor
IN-6	Clean the project area at the end of each work shift so that tools, materials, debris, and trash do not attract animals. Hazmat spill prevention protocols shall be employed when using gas-powered equipment. Ensure no standing water on tarps or other construction surfaces that may be a breeding ground for mosquitoes.	NPS	Contractor
Air Quality Climate Change (AIR-1)	The Contractor shall minimize the adverse impacts to outdoor air quality from construction, including: • Control of emissions from vehicles or heavy equipment by ensuring vehicles and heavy equipment do not idle when not in use. • Control of particulates and dust from outdoor operations by ensuring particulates and debris are collected and disposed of on a regular basis and use of water trucks or temporary irrigation devises for dust control.	NPS	Contractor

Appendix C: Hawaii Environmental Policy Act Significance Criteria Analysis

Justification for the NPS's anticipated determination that the proposed action would not have a significant effect on the environment, in accordance with HEPA HAR Chapter 11-200.1 and the applicable "significance criteria" identified in HEPA HAR Chapter 11-200.1-13 is provided below. This determination will be made pursuant to the requirements of HEPA and is separate from a FONSI determination that will be made by the NPS, if appropriate, pursuant to NEPA, following review of public comments on the EA. Based on the analysis in the EA, the NPS anticipates that the proposed action would not result in significant effects on the environment for the following reasons:

Irrevocably commit a natural, cultural, or historic resource

The work associated with the proposed project would occur at a site that has been previously disturbed. The proposed action would not require vegetation clearing. The NPS consulted with USFWS in accordance with ESA section 7, and USFWS determined that the proposed project *may affect but is not likely to adversely affect* federally listed species. Under the proposed action, the NPS would implement appropriate mitigation measures to avoid, minimize, or mitigate potential adverse impacts on natural resources.

Ground disturbance associated with the proposed action are unlikely to disturb cultural or historic resources. The likelihood of encountering artifacts is minimal because of the past clearing and grading of the site. Archeological monitoring would be conducted to protect nearby features and watch for displaced artifacts. The proposed action would not irrevocably commit a natural, cultural, or historic resource.

Curtail the range of beneficial uses of the environment.

The proposed action would not curtail the range of beneficial uses of the environment. Impacts on the natural environment would be minimal, and beneficial uses of a graded field are minimal. The project does not involve the long-term commitment of resources, such as water, for operation.

Conflict with the State's environmental policies or long-term environmental goals established by law.

The proposed action would not conflict with the State's environmental policies or long-term environmental goals established by law.

Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community or State.

The project would allow for the continued operation of the Park which has beneficial impacts on the lifestyle of the residents, the economy of the island, and the cultural practices of the community. In addition, moving the fuel facility out of the tsunami inundation zone has positive impacts to the welfare of the community by allowing for continued operations in the face of a tsunami disaster. Construction activities would beneficially affect the economy of the community.

Have a substantial adverse effect on public health.

The project would have beneficial impacts on public health by creating a modern code compliant fuel facility. The potential for leaking fuel is reduced by installation of above ground fuel tanks and modern leak detection systems. In addition, the pumps would have anti-siphon technology, reducing the gasoline released as vapor and reducing the potential for exposure when pumping gas.

Involve adverse secondary impacts, such as population changes or effects on public facilities.

The proposed action would not have adverse secondary impacts such as population changes or effects on public facilities. The upgraded facility would improve efficiency, comply with current code standards, increase reliability, and eliminate health and safety concerns. The fuel capacity of the new facility is less than the existing facility and is designed to provide fuel for the existing vehicle fleet.

Involve a substantial degradation of environmental quality.

The proposed action does not involve a substantial degradation of environmental quality. The proposed action would occur in a previously disturbed area and would have minimal impacts on the environment. Environmental quality would be improved by the improved leak detection system, reduced air quality impacts, and less risk of tsunami inundation.

Be individually limited but cumulatively have substantial adverse effect upon the environment or involve a commitment for larger actions.

The proposed action would result in minor cumulative adverse effects on the environment and would not involve a commitment for larger actions. The cumulative impacts include a minor increase in adverse air quality impacts from multiple construction projects occurring during the same period. The project does add a new facility into the NHL District which along with the new electrical system and fence are modernizations that are visible on the historic landscape. The projects are designed to reduce the visual impacts by matching the historic electrical system and maintaining the existing vegetative screening at the fuel facility site.

Have a substantial effect on rare, threatened, or endangered species, or its habitat.

The proposed action would have minimal effects on rare, threatened, or endangered species, or habitats. The NPS would implement mitigation measures in Appendix B to avoid, minimize, or mitigate potential adverse impacts to these species and their habitats. ESA Section 7 consultation was completed in October 2022 and the USFWS determined that the proposed project *may affect but is not likely to adversely affect* federally listed species.

Have a substantial adverse effect on air or water quality or ambient noise levels.

The proposed action would have minor impacts on air or water quality and ambient noise levels. The project could result in localized release of fugitive dust during the construction period and minor impacts from fuel facility operations, which would be less than the current operational impacts. No ground disturbance would occur near a wetland, stream, or other waterbody. The use

of standard construction mitigation measures for storm water management would avoid or minimize the potential for indirect effects on water quality from runoff or sedimentation. Ambient noise levels would increase during the construction period but there would be no long-term changes in ambient noise levels or soundscapes in the Park.

Have a substantial adverse effect or is likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The proposed action would have a beneficial effect on environmentally sensitive areas by moving the fuel facility out of the tsunami inundation zone.

Have a substantial adverse effect on scenic vistas and view planes identified in county or state plans or studies.

The new facility would not be visible from the Kalaupapa overlook because of the distance from the top of the Pali. Driving on Damien Road, the facility would be briefly visible when passing the site, yet it would be screened by the tall vegetation surrounding the site. Overall, the proposed action is not expected to have a substantial adverse effect on scenic vistas and view planes identified in county or state plans or studies.

Require substantial energy consumption or emit substantial greenhouse gas.

The proposed action would require minimal energy consumption, and, in terms of climate change, the project would have both beneficial and adverse impacts. Short term, construction and transport equipment would result in greenhouse gas emissions during construction. Long term, the project maintains the current use of gasoline powered vehicles at the Park which has direct, negligible, long term adverse effects on climate change. It would take time to convert the vehicle fleet at the Park to electric, including the installation of a charging station and the purchase of electric vehicles. The electrical distribution project needs to be completed (see Cumulative Effects) and electrical generation needs more sustainable power sources to realize the full benefits of converting to electric.

Appendix D. Effects of the Proposed Action on Federally Listed Species

Species	Summary of Effects	Effect Determination	Mitigation Measures
Hawaiian hoary bat or ʻōpeʻapeʻa	During roosting season, young Hawaiian hoary bats are left unattended in trees and shrubs while adult bats forage. If trees or shrubs 15 feet or taller are cleared during the pupping season (between June 1 and September 15), young bats could inadvertently be harmed or killed since they are too young to fly or may not move away. Additionally, Hawaiian hoary bats forage for insects from as low as 3 feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing. Because activities proposed under alternative 2 would not disturb, remove, or trim woody plants 15 feet tall or greater during the bat pupping season and because barbed wire fencing would not be used, injury and mortality of the Hawaiian hoary bats would not occur. Based on the Park's implementation of the USFWS-recommended avoidance and mitigation measures, Hawaiian hoary bats are extremely unlikely to be measurably disrupted from their normal behaviors.	Not likely to adversely affect (NLAA)	TES-1 TES-2
Hawaiian goose or nēnē	The Hawaiian goose does not commonly occur in the project area. Should Hawaiian goose appear in the area during project implementation, the Park would implement the USFWS-recommended avoidance and minimization measures. Based on the low likelihood of Hawaiian goose presence in the project area and implementation of avoidance and minimization measures, this species is extremely unlikely to be encountered or measurably disrupted from its normal behaviors.	NLAA	TES-3 TES-4 TES-5 TES-6
Hawaiian petrel or ʻuaʻu, Newell's shearwater or ʻaʻo, Band-rumped storm-petrel or ʻakeʻake (Hawaiʻi DPS)	Hawaiian seabirds, including the Hawaiian petrel, Newell's shearwater, and the Hawaiʻi DPS of the band-rumped storm-petrel, may fly over the project area at night during their breeding season (March through November) and are attracted to artificial lighting, which causes disorientation and subsequent fallout due to exhaustion. Additionally, once grounded, they are vulnerable to predators and are often struck by vehicles along roadways. Under alternative 2, no work would be conducted at night, and existing lighting would be replaced with shielded and downward-facing lighting. Based on the Park's implementation of the USFWS-recommended avoidance and mitigation measures, Hawaiian seabirds are extremely unlikely to be measurably disrupted from their normal behaviors.	NLAA	TES-7 TES-8
Hawaiian stilt or aeʻo, Hawaiian	The activities proposed under alternative 2 would not occur in aquatic environments where Hawaiian waterbirds, including the Hawaiian stilt and the Hawaiian coot, could occur. Based on the Park's implementation of the USFWS-recommended avoidance and mitigation measures, Hawaiian waterbirds are extremely unlikely to be measurably disrupted from their normal behaviors.	NLAA	TES-9 TES-10 TES-11

Species	Summary of Effects	Effect Determination	Mitigation Measures
coot or ʻalae keʻokeʻo			
Green sea turtle or honu (Central North Pacific DPS), Hawksbill sea turtle or ʻea	Under alternative 2, no work would be conducted at night, and existing lighting would be replaced with shielded and downward-facing lighting. The site is about 1,845 feet (0.35 mile) from the only known sea turtle nesting beach, and the Park would implement measures to prevent erosion or contamination of the beach environment. Based on the Park's implementation of the USFWS-recommended avoidance and mitigation measures, sea turtles are extremely unlikely to be measurably disrupted from their normal behaviors, and their nesting habitat would not be measurably affected.	NLAA	TES-7 TES-8 TES-9 TES-11 TES-12
Blackburn's sphinx moth	The project area does not contain suitable habitat for Blackburn's sphinx moth because suitable host plants for this species do not occur in the project area. Therefore, it is extremely unlikely that this species would be present. Based on the low likelihood of this species occurring in the project area and the implementation of the USFWS-recommended avoidance and mitigation measures, this species is extremely unlikely to be measurably disrupted from its normal behaviors.	NLAA	TES-15 TES-16
Pacific Hawaiian damselfly, Orangeblack Hawaiian damselfly	The activities proposed under alternative 2 would not occur in aquatic environments, where Hawaiian damselflies could occur. Based on the Park's implementation of the USFWS-recommended avoidance and mitigation measures, which would prevent erosion or degradation of aquatic environments in and adjacent to the project area, Hawaiian damselflies are extremely unlikely to be measurably disrupted from their normal behaviors.	NLAA	TES-9 TES-11 TES-12 TES-13

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