

Kalaupapa National Historical Park General Management Plan and Environmental Assessment Finding of No Significant Impact

Introduction

This Finding of No Significant Impact (FONSI) documents the decision of the National Park Service (NPS) to adopt Alternative 2: NPS Preferred Alternative in the *Kalaupapa National Historical Park General Management Plan and Environmental Assessment* as the selected alternative for the General Management Plan (GMP) for Kalaupapa National Historical Park (Kalaupapa NHP or park) in accordance with the National Environmental Policy Act (NEPA), the NPS Director's Order (DO) 12, and the NPS NEPA Handbook. This FONSI also summarizes the other alternative considered in the environmental assessment (EA), documents the rationale for selecting Alternative 2, and documents why the selected alternative will result in no significant effect on the human environment as defined by NEPA regulations (41 Code of Federal Regulations (CFR) 1500-1508). The NPS started the GMP project as an environmental impact assessment (EIS) but determined in 2018 that an environmental assessment (EA) was more appropriate based on changes to the preferred alternative, reduced potential impacts, and on current Department of the Interior guidance on the NEPA process. The NPS has determined that no significant impacts on the quality of the human environment will occur from implementation of this plan.

The Determination of Non-Impairment (Attachment 4) documents the NPS's determination that none of the park's resources and values would be impaired by implementation of the selected alternative. The Floodplains Statement of Findings (Attachment 5) documents the decision of the NPS to adhere to certain mitigation measures in the management of the park.

Purpose and Need

Purpose

The purposes of the GMP/EA are:

• to articulate a vision and overall management direction for Kalaupapa NHP that will guide near- and long-term decision-making by current and NPS future NPS managers;

- to provide guidance about how to best protect Kalaupapa NHP's resources, how to manage visitor use and provide quality visitor experiences, and identify what kinds of facilities are needed for management of the park;
- to ensure that the plan has been developed in consultation with the public, interested stakeholders and adopted by NPS leadership after adequate analyses of the benefits and impacts of alternative courses of action; and
- to fulfill the four statutory requirements for a GMP set out in 54 USC 100502.

The GMP provides guidance and broad direction for Kalaupapa NHP's near-term and long-term futures. Near-term is defined as the time period while Hansen's disease patients are still living at the park and supported by the State of Hawaii Department of Health (DOH) operations. Long-term is defined as a period when there are no patients living at Kalaupapa NHP and the DOH ceases operations within the park.

The GMP is a programmatic document that provides conceptual guidance to NPS managers. Subsequent activities and implementation plans will focus on how to implement a specific action or project and include more extensive details and analyses which this GMP does not address.

Need

Although Congress established the park in 1980, the NPS has not completed a GMP for it. Management guidance has come from enabling law creating the park (P.L. 96-565 – "park's enabling law"), the NPS Organic Act (54 USC 100100 et seq.), laws and policies applicable to the national park system, NPS Management Policies and guidance, lease and cooperative agreements with state agencies, resource management documents, and from the Kalaupapa NHP Advisory Commission and Kalaupapa Patient Advisory Council. A GMP is necessary to comply with the park's enabling law and to address the changing conditions at the park and the full range of resource management, visitor use, and operational issues.

In the near future, a fundamental transition in the operation of the park will occur. While Hansen's disease patients remain at Kalaupapa NHP, park operations must prioritize services and health care for the patients, patient privacy, and maintaining patients' lifestyles, substantially managed by the DOH. Once the park is no longer a home for the Hansen's disease community, the fundamental management direction of the park will have to change.

The GMP provides guidance for the management of the park's cultural and natural resources necessary to determine program goals and desired future conditions and address future visitor use at Kalaupapa NHP. When there is no longer a patient community at Kalaupapa NHP, the GMP will be critical to addressing visitor use issues related to access and transportation to and within the park, as well as visitor facilities and services.

These decisions will affect the amount of visitor use and the types of visitor experiences, NPS operations, and land uses within the park. The exact amount and the conditions for particular uses will be determined in future implementation plans.

Selected Alternative

The selected alternative is Alternative 2: NPS Preferred Alternative. Alternative 2 will best achieve improved management conditions, satisfy national environmental goals, and integrate resource protection with an appropriate range of visitor uses and understanding. In addition to the guidance and actions in this section, desired conditions from law and policy in Appendix B of the EA will apply to the selected action.

Implementation of the selected alternative will depend on future funding. Approval of the selected alternative does not guarantee that the funding and staffing needed to implement the plan will be forthcoming. Full implementation will likely take many years. Additionally, some future long-term funding needed to implement actions called for in the selected alternative could come from nonfederal partners.

Description of the Selected Action

In the spirit of mālama i ka 'āina, the selected alternative emphasizes stewardship of Kalaupapa's land and waters to ensure the long-term preservation of Kalaupapa stories. The diverse resources will be managed from uka to kai to protect and maintain their character and historical significance.

The selected alternative will cultivate, establish, enhance, and maintain a wide range of partnerships with varied entities throughout Hawai'i, nationally, and abroad for the long-term stewardship of Kalaupapa NHP.

As long as patients live at Kalaupapa NHP, the NPS will manage it in cooperation with DOH and its other partners to maintain and preserve the character of the community.

In the near-term, the ongoing transfer of DOH responsibilities (unrelated to health care) to NPS will continue. In the long-term, the NPS will assume management of visitor access, activities, and resources in consultation with partners.

Throughout the planning process for this GMP, patient residents, 'ohana (family, relative, kin group) of patient residents, kama 'āina (native-born Hawaiians and long-time residents) of Kalaupapa, Hawaiians, Molokai residents, and citizens have expressed concern about potential changes to Kalaupapa that could detrimentally affect Kalaupapa as a wahi pana (sacred place). Core to the future of Kalaupapa NHP is honoring the legacy of the Hansen's disease community and the long history of Native Hawaiians who called Kalaupapa their home. The need to mālama i ka 'āina (care for the land) in a manner that shows respect for the peninsula's people, stories, and way of life will be at the core of present and future NPS management of Kalaupapa.

Through hands-on stewardship activities, service and volunteer work groups will have meaningful learning experiences focused on Kalaupapa's history and significance, while contributing to the long-term preservation of the 'āina. Volunteers engaged in NPS-managed resource management activities will be trained and/or supervised by qualified practitioners and professionals and will follow resource management protocols and goals. Engaging youth will be a key component to elevating awareness about Kalaupapa in Hawai'i and nationally. Select historic buildings and neighborhoods will be reserved to provide lodging and administrative

space for partners or volunteer service groups. The NPS will direct staff time, funding, and facilities to maintaining and enhancing partnerships. Partnership entities could include state and local agencies, schools and universities, historical institutions, Hawaiian cultural groups, environmental organizations, neighboring landowners, patient and kamaʻāina families, and other nonprofit organizations such as KaʻOhana O Kalaupapa. Agreements with partners will be updated to reflect the intent and actions of the selected alternative as necessary.

Visitation by the general public will be supported and integrated into park management. Visitor regulations will change, including allowing children under adult supervision to visit Kalaupapa. The 100 person per day visitor cap will be removed, and the park staff will use new management strategies to control visitation. A day-use entry pass system would be instituted as a free option for visiting the park, allowing independent access to select areas for personal reflection and learning. A nonprofit organization or concessioner could provide for visitor services such as lodging, meal service, tours, and merchandise sales. The NPS will explore a variety of ways to fund the cost of rehabilitating historic structures for these services.

In consultation with federal, state, and local agencies and partners, the NPS would recommend recognition for highly significant resources to further highlight their regional, national, and potential international significance to the general public. New designations and changes to existing designations could include expanding the current National Natural Landmark status, local marine managed area, National Register of Historic Places designation for an archeological district, and traditional cultural property, Wild and Scenic River designation for Waikolu Stream, and World Heritage designation.

Resource management actions would maintain and enhance the integrity of resources through active management and stewardship opportunities with partners, visitors, and service groups.

Hansen's Disease Patients and Department of Health Operations

The NPS is committed to fulfilling its responsibilities under the park's enabling law with respect to the patient community. The experiences of the living and deceased Hansen's disease patients are the primary reason for which the park was established and exists today. As long as patients live at Kalaupapa NHP, the NPS will manage the park in cooperation with DOH and other partners to maintain and preserve the present character of the community.

Management of Specific Areas within Kalaupapa NHP

The following management strategies and uses for specific areas in Kalaupapa NHP were described as common to the no action and selected alternative.

Kalawao

Now and into the future, Kalawao would be preserved for its historic values as the first settlement on the peninsula for individuals with Hansen's disease, who were forcibly removed from their homes to live in isolation. The character of Kalawao with its iconic churches, cemeteries, and quiet and spiritual ambiance is a contrast to Kalaupapa Settlement. Kalawao offers an opportunity for visitors to contemplate the early experiences of thousands of people afflicted with Hansen's disease. The association of Saint Damien with Kalawao as embodied in St. Philomena Church and his nearby gravesite would be preserved. Siloama Church would continue to be co-managed with the Hawai'i Conference Foundation. The churches would

continue to be actively used by the Roman Catholic Church and the Hawai'i Conference Foundation for services and special events.

The Kalaupapa Memorial, a new development in Kalawao, will provide recognition and honor for the thousands of individuals afflicted with Hansen's disease who lived at Kalaupapa peninsula, whose names and identities have been lost to time. The Memorial will be located within the boundaries of the former Baldwin Home for Boys site at Kalawao and constructed as set out in the *Memorial EA – Construct and Build the Memorial, Finding Of No Significant Impact (FONSI)* (NPS 2011). The NPS, DLNR, and Ka 'Ohana O Kalaupapa are collaboratively working to identify roles and responsibilities related to the long-term management of the memorial.

The Judd Park visitor facilities and overlook will continue to be maintained to provide visitors with a place to relax, reflect, and view the rugged coastline of the North Shore Cliffs and offshore islands.

Above all, Kalawao will continue to be a place of contemplation and compassion, where the ethereal qualities of Kalawao's history of forced isolation can be illuminated for all visitors.

In the long term, the NPS could allow visitors with entry passes who have taken the required park orientation, to have unescorted public access to Kalawao along Damien Road.

Kalaupapa Settlement

In the near term, Kalaupapa Settlement will continue to function much as it does today. The DOH will continue to maintain patient homes, the care facility, and operational functions related to the care and treatment of the remaining patients. Patients will continue to reside in their houses, maintain beach houses on the outskirts of the settlement, and be cared for by the DOH at the care facility. The NPS will continue its role in maintaining the historic fabric of the community. Permitted visitors may continue to visit key locations within the settlement including the staging area near the base of the pali (cliff) trail, bookstore, the churches, the pier area, and other locations.

In the long term, the NPS will strive to maintain buildings, structures, and cultural landscape features within Kalaupapa Settlement that are eligible for listing in the National Register and /or contribute to the NHL. Many of the structures and associated areas within the settlement provide specific functions for the operation of the community. Based on design, use, and location within the settlement, the NPS will continue to maintain these buildings for their existing functions where appropriate. In the long term, houses and other structures may be adaptively reused and managed by other entities, such as agency partners, organizations, and concession operations, pursuant to appropriate agreements or contracts.

In the long term, while the overall character of the settlement will be protected, the function and uses of some of the neighborhoods and many of the historic structures in the settlement could change. The goal and long-term vision is to concentrate similar uses into specific neighborhoods and localized areas within the settlement to improve operational efficiencies and promote safety and security for staff, partners, and visitors. A building use and infrastructure plan could be developed to define further NPS responsibilities and goals for the settlement. Also, see the "Historic Structures" section for additional information.

Buildings, structures, and associated areas within the settlement owned by religious institutions and co-managed with the NPS through cooperative agreements will continue to be used for religious purposes and serve their congregations.

Molokai Light Station

The Molokai Light Station will be preserved and could be adaptively used for other functions. Cultural and archeological sites in the immediate area of the Molokai Light Station will be inventoried, monitored, and undergo preservation treatments.

Peninsula and Kauhakō Crater

Terrestrial, geologic, and marine resources and archeological or historical resources related to the Hansen's disease era and history of Native Hawaiian habitation and use will be preserved on the peninsula in the Kalaupapa, Makanalua, and Kalawao ahupua'a (a major Hawaiian land division usually extending from the uplands to the sea). Access to the peninsula and Kauhakō Crater will be focused on research and monitoring activities. In the near term, visitation by the general public will be prohibited, and all sponsored visitors will be escorted in the area.

In the long term, public and stewardship-focused access to the peninsula will require an official escort in order to protect the area from potential adverse uses and activities. Considering health and life safety, unescorted public access to the rim of Kauhakō Crater from Damien Road could be allowed to visitors who have an entry pass obtained at the NPS orientation facility.

Pālā'au State Park

The NPS does not administer this land within the park boundary. Visitor access to Pālā'au State Park within the boundary of Kalaupapa NHP is governed by DLNR regulations. The NPS will maintain the Kalaupapa Overlook in Pālā'au State Park in cooperation with DLNR including the wayside facilities, trailhead, and assisting with vegetation management to maintain views to Kalaupapa.

Visitor facilities at the Kalaupapa Overlook could be improved to include information about how to visit the park. In collaboration with DHHL, DLNR, and R.W. Meyer Ltd., the NPS may consider establishing a kiosk on Pālā'au State Park lands or near the trailhead to provide interpretive and orientation information for visitors seeking to learn about Kalaupapa and for those who descend the pali trail to Kalaupapa.

Seabird Sanctuaries on 'Ōkala and Huelo Islands

DLNR will continue to manage these islands. Access to the islands is currently limited to scientific and resource management activities; public entry and landings are currently prohibited-to protect indigenous wildlife in sanctuaries.

Waikolu Vallev and Pu'u Ali'i Natural Area Reserve

These areas will continue to be managed cooperatively by NPS and DLNR primarily for their outstanding resource values. Access will continue to be limited.

The NPS and DLNR could develop a joint Waikolu ahupua'a plan to define agency roles and responsibilities, engage the public and community and address resource management and use, including restoration projects in the watershed and protection of Waikolu Stream's outstandingly remarkable values (ORVs) which make it eligible for designation as a wild and scenic river.

Molokai Forest Reserve

This area is managed by DLNR and allows public hunting. The NPS does not administer the Molokai Forest Reserve but cooperates with DLNR for resource protection and monitoring and this will continue.

Management Structure, Partnerships, and Agreements

The NPS will establish and maintain partnerships and projects with state and local agencies, adjacent landowners, and organizations for resource management, interpretation, and visitor use. Partnerships could include schools and universities, historical institutions, Hawaiian cultural groups, environmental organizations, and neighboring landowners, Cooperative agreements with State agencies --DOH, Board of Land and Natural Resources (BLNR), Department of Transportation (DOT)--and the lease with the Department of Hawaiian Home Lands (DHHL) will continue. More information about these agreements can be found on the park's website.

Transition planning between the NPS and state agencies and other partners will develop a strategy to improve the effectiveness of existing and future partnerships by prioritizing actions to meet the goals of the various parties.

Governance of Kalawao County

In the near term, the DOH will continue to govern Kalawao County under Hawai'i Revised Statute Chapter 326. However, once the DOH no longer provides any services to patients in Kalaupapa NHP, the State of Hawai'i may change how Kalawao County is governed. The NPS will work collaboratively with the State of Hawai'i to manage the park when such a change occurs.

Department of Health Partnership

In the near term, the existing structure of shared DOH and NPS management will continue under the current cooperative agreement through 2024. Once the DOH no longer provides services to patients in Kalaupapa NHP, DOH departs Kalaupapa, and ownership of their buildings transfers to DHHL. Continued maintenance and management of the structures transferred by the DOH to DHHL will remain the responsibility of the NPS under their lease with DHHL

The DOH will continue to manage operations related to the care of the patient community and DOH staff support including continued operation of the care facility, general store, and gas station for patient residents and DOH staff. The DOH will also continue to oversee and operate the visitor permit and sponsorship system and some visitor facilities, including the Visitors' Quarters, continue to maintain patient homes and yards, and manage the state-mandated closure of Kalaupapa Landfills.

The NPS will continue to manage visitor protection, education and interpretation, natural resources, cultural resources, historic buildings and structures, and infrastructure, including roads and trails. The NPS will continue to assume management and operational responsibilities and facilities as the DOH transitions out of management responsibilities at Kalaupapa.

The NPS and DOH will collaborate for transition planning to guide the turnover of management responsibilities for visitor use, historic structures and facilities, and operational responsibilities. Once DOH no longer provides services to patients and, ownership of its buildings transfers to DHHL, the NPS will manage them under the lease with DHHL.

Department of Hawaiian Home Lands Partnership

The NPS will continue the 50-year lease agreement with DHHL (through 2041) and work collaboratively with DHHL to define and plan for long-term management of DHHL lands. NPS does not have the authority to regulate homesteading.

The issue of homesteading on the DHHL lands within the park has been raised in multitude of venues. Any decision to allow homesteading within the park will be for DHHL to make and would require a change to the existing lease between DHHL and the NPS, and DHHL would be responsible for compliance with state laws as well as NHPA (106). The NPS would also need to evaluate such a change in use (or any other change in use) to see if it met the requirements of the park's enabling law and the NPS Organic Act.

The NPS and DHHL could develop an agreement consistent with the lease to define roles and responsibilities for the long-term care and use of the settlement and DHHL lands within the park boundary, including community use areas identified in DHHL's plan for Kalaupapa. Such an agreement with DHHL could be effective upon DOH's departure.

To further DHHL and NPS goals at Kalaupapa, the NPS will recommend partnering with DHHL to develop agreements for facilities and lands to support future programs and activities for native Hawaiians related to the purpose of the park. In particular, stewardship programs could include archeological and historical site rehabilitation, preservation of structures and cultural landscapes within DHHL lands to further the shared place-based stories and traditions.

Department of Land and Natural Resources, Department of Transportation, and R. W. Meyer, Ltd. Partnerships and Churches

In the near term, the NPS will continue to work collaboratively with DLNR and DOT for management of these lands, resources, facilities, and operations within Kalaupapa NHP boundary.

The NPS will work collaboratively with R. W. Meyer, Ltd., and religious institutions under existing or new agreements for long-term management of Kalaupapa NHP to meet the goals set out in the selected alternative.

Kalaupapa NHP Community-based Group

The NPS will encourage that a community-based group be established to provide their mana'o (thoughts, ideas, knowledge, or opinions) during and after the transition and once there is no longer a living patient community at Kalaupapa.

Ka 'Ohana O Kalaupapa

The NPS will continue to collaborate with Ka 'Ohana O Kalaupapa as a partner and will support their public education and outreach programs, patients, and descendants of patients. The organization has done extensive and important work and a formal partnership will benefit both organizations and their shared missions.

East Molokai Watershed Partnership

The NPS will continue to participate in the East Molokai Watershed Partnership by partnering with landowners and agencies to protect native forest watershed areas, engage the local community, and support building the capacity of the partnership.

Research

The NPS will encourage and foster research about Kalaupapa, its history, and resources. NPS staff will facilitate research in park collections and on-site within the park's boundaries.

Cultural Resources

The NPS will continue to consult, conduct cultural resource projects, monitoring, inventories, and interpretation related to cultural resources. NPS actions include continuing to stabilize and perform preservation treatments on historic buildings and structures, archeological sites, and landscape features that contribute to the NHL designation.

The NPS will manage cultural resources through engagement with partners, visitors, and service groups for visitor learning and enjoyment.

The NPS recognizes the dynamic nature of planning for and managing Kalaupapa's cultural resources. Therefore, the NPS will adaptively manage these resources to address changing conditions, including adaptive management plans for specific resources as needed. Such adaptive management plans could include indicators that would help guide when and how management might or should change, collaboration with other partners to be inclusive to incorporate partner goals where possible or required, and consideration of new opportunities and risks as they arise and reprioritizing historic preservation projects as needed.

Many of Kalaupapa's cultural resources are in vulnerable locations along the ocean shore within the 100-year floodplain and are at-risk from tsunami, hurricanes, sneaker waves, storm surges, flooding, and sea level rise. Continued documentation, monitoring, and planning will help determine responses to a catastrophic losses and appropriate actions and future management of impacted resources.

The 2021 programmatic agreement, developed in response to comments on the GMP/EA, identifies the qualifications and training requirements for the staff that advise and make recommendations to the Superintendent on NPS actions, and includes the ability for non-NPS staff to serve this role. It also draws attention to the special hiring authority and training opportunities for native Hawaiians at Kalaupapa NHP; it identifies a community engagement program with routine reporting and opportunities for conversation and feedback on park projects and operations; it identifies that the NPS will play a role in information-sharing when non-NPS organizations are proposing projects within the park boundary; it outlines procedures in the event of inadvertent finds and identifies the need to create a stand-alone Protocol for Inadvertent Finds at the park; it identifies a procedure in the event of an emergency action; and the PA identifies specifics for an annual report with timelines.

Values, Traditions, and Practices of Traditionally Associated People (also referred to as ethnographic resources)

The NPS will continue the anthropology program in which NPS staff, partners, and researchers engage patients, lineal descendants, and other subject matter experts in ethnographic research through oral histories and participant observation in the form of informal discussions or openended interviews.

The NPS will enhance the ethnography program with additional staff and collaboration with partners focused on patients, their 'ohana, kōkua, and kama'āina, including Ka 'Ohana O Kalaupapa. The NPS will foster connections with lineal descendants of kama'āina and patients for healing and cultural practices. The NPS will conduct formal and informal oral histories, documentation, and research of existing and past cultural traditions and peoples associated with Kalaupapa. Given the complexity of occupation and displacement of people in Kalaupapa, further studies will be needed to continue research regarding the traditionally associated people of Kalaupapa. Opportunities for interpretation, cooperation, and collaboration with traditionally associated people will be developed in support of cultural and resource management activities. The NPS will support a nomination for a traditional cultural property designation.

Archeological Resources

To the extent possible, National Register eligible and potentially eligible archeological sites will be protected, and managed for their cultural, interpretive, and research values. With appropriate consultation, ongoing efforts to monitor and conduct condition assessments of archeological sites and perform archeological inventory surveys will continue. Baseline documentation will be prepared including a site-specific research design, updated archeological overview and assessments, and standard operating procedure documents.

The NPS will increase preservation and research of archeological sites and prepare a National Register of Historic Places nomination for a potential Kalaupapa peninsula archeological district. The NPS will manage and increase hands-on learning, research, stabilization, and other preservation treatments of archeological resources through stewardship activities including community engagement, integrated training opportunities, monitoring, and consultation.

Native Hawaiian sites and features from the pre-settlement period will receive preservation treatments, including stabilization, rehabilitation, and restoration. The NPS will collaborate with practitioners and partners to ensure community engagement and appropriate consultation for projects and the long-term management of archeological features and sites that contribute to the NHL and cultural landscape. The opportunities for rehabilitation and restoration projects are numerous and could include work on heiau (Hawaiian temple platform), agricultural rock walls, holua slide, invasive vegetation clearing, and native plant restoration.

Historic Structures

The NPS will continue to conduct condition assessments and employ historic preservation treatments to protect historic structures that were constructed during the NHL's period of significance (1866-1969). With appropriate consultation, the NPS will continue to evaluate structures that were constructed after 1969 to determine whether they are historic and/or contribute to the NHL.

Historic structures will be managed through adherence to NPS cultural resource, facility, and asset management programs, laws, and policies, including the *Secretary of the Interior's Standards for Treatment of Historic Properties (Secretary's Standards)*.

In the long term, and with appropriate community consultation regarding specific projects and undertakings, the NPS could develop a building and infrastructure plan that will help the NPS meet preservation goals and would include an adaptive management component. The plan would provide implementation level guidance for preservation, maintenance, housing, and potential adaptive reuse of buildings and infrastructure consistent with this GMP. Historic structures will be stabilized, preserved, and rehabilitated for compatible current and future uses, including visitor facilities, partner uses, park operations, and as interpretive exhibits.

Key components of the selected alternative, which will be reflected in any plan, are that the NPS will strive to meet preservation goals while working with the park's state, religious, and other partners and involve community and other stewardship groups in appropriate historic preservation projects through consultation for projects that could include hands-on stewardship activities which would provide community engagement with projects and might help offset NPS costs.

Cultural Landscapes

The NPS will continue to document, research and preserve Kalaupapa's cultural landscape features, and manage historic vegetation within the settlement. The NPS will consult with community and descendants and continue stabilization, preservation, and active management of known cemeteries and gravesites.

The NPS will improve the overall condition of Kalaupapa's documented cultural landscapes within the park boundary, including the Kalaupapa and Kalawao settlements and the Molokai Light Station. A cultural landscape report to provide guidance and to identify long-term strategies that reduce fragmentation and incremental loss of cultural landscape features and to prescribe preservation treatments for landscape characteristics and features has been completed, including research on cultural traditions expressed in the landscape and stabilization. The cultural landscape report includes patient residential gardens, compatible adaptive reuse of selected areas for public use and education, and reintroduction of native plants. It also identifies viewsheds that the NPS will maintain to enhance understanding of the larger landscape, particularly from overlooks and viewpoints.

The NPS will expand an already active cemetery preservation program that may include conducting formal investigations to identify and quantify additional gravesites, marking cemeteries, and marking gravesites and continuation of stabilization efforts as well as community consultation and the potential for the integration of training programs to engage community in knowledge transfer and sharing of maintenance and management responsibilities for the sites.

A key component of the long-term preservation of Kalaupapa's cultural landscapes is collaboration with a variety of partnership entities that will engage to malama, stabilize, preserve and rehabilitate landscape features and characteristics within the 'āina.

Museum Collections

Museum collections items will continue to be documented and preserved as part of the archives and manuscript collections, which provide source materials for potential research projects. The NPS will continue to consult with patients and 'ohana to better understand objects in collections. Management of the museum collections will be guided by the current museum management plan, the museum collections plan, and the museum emergency operations plan.

To better understand and manage the full range of collections related to Kalaupapa, held by the NPS or other entities, the NPS will collaborate with partners in managing, documenting, and conducting research related to the collections and further partner with repositories to house Kalaupapa museum collections as well as identify Kalaupapa-related collections housed in offsite repositories. The NPS and its partners will develop digital tools, finding aids, and media products that support research and offer creative ways for visitors to interact with the collections both onsite and offsite. Museum collection items could be displayed in exhibits within historic structures and at visitor facilities as appropriate and the NPS will work with appropriate partners for long-term arrangements for the conservation of these items.

Natural Resources

The NPS will continue to implement natural resource management priorities including: research, inventory, monitoring, feral animal control, fencing, rare species stabilization, and invasive nonnative plant removal. The NPS will continue active participation and pursuit of East Molokai Watershed Partnership goals. The NPS will continue to monitor and inventory marine resources within the ¼ mile offshore park boundary. In consultation with the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS), the NPS will actively manage sensitive, threatened, and endangered species and associated habitats to help perpetuate these species.

Research and monitoring programs will expand to improve understanding of ecosystem processes using both traditional and contemporary methods. The NPS will involve partners and stewardship groups in natural resource management activities.

Air Quality

The NPS will work with national, state, and local entities to better understand air quality at Kalaupapa and implement Molokai and NPS initiatives that improve air quality.

Soundscapes

The NPS will conduct baseline acoustic monitoring through the NPS Natural Sounds and Night Skies Division. The NPS will work to restore the natural soundscapes by reducing the number of feral animals and increasing the number of native species in the park, quantifying soundscape levels in developed areas, identifying noise level management and assessing levels compatible with the historic, cultural, and contemplative character of the park.

Lightscapes

Baseline night sky and lightscapes monitoring will identify ways in which the NPS would work to improve natural dark night sky conditions, protect the park from light pollution, and reduce electrical power usage by using sustainable design and technologies in the park.

Water Resources

The NPS will continue water resources monitoring and research of water resources to characterize water quality in the ocean, streams, Kauhakō Crater Lake, and wetlands.

High water quality areas will be protected and preserved, and poor water quality areas will be improved where possible. The NPS will work with partners outside the park that utilize and manage water resources to improve water quality and flows.

Marine Resources

In consultation with DLNR and community partners, the NPS will explore establishing a managed area of important resources within the marine portions of the park as well as management strategies for invasive species.

Soils and Geologic Resources

The NPS will continue to inventory soils and monitor geological resources.

The NPS will manage geologic resources as a component of natural systems and viewsheds, mitigate for soil erosion and landslides, and take preventive measures to stabilize sensitive and erodible areas, as feasible.

Vegetation

The NPS will continue to restore native vegetation in demonstration restoration areas by removing nonnative species and planting native species. In the native forests within the park, the NPS will continue feral animal capture to reduce destruction of native vegetation. The NPS will continue preservation of areas with native vegetation such as the coastal strand and Pu'u Ali'i NAR. The NPS will also continue nursery activities supporting rare and threatened native plant propagation.

The NPS will expand the vegetation monitoring program to track status and trends of plant species in the park, expand the plant nursery program, manage invasive nonnative vegetation, implement an integrated pest management plan and manage culturally important vegetation in coordination with the cultural resources staff.

Wildlife

Management of wildlife will focus on reducing nonnative wildlife species within the park and improving native habitat for native birds and other native wildlife. Management methods will include fencing and removing feral ungulates in management units of the park and increasing efforts to reduce nonnative small mammals (such as mongoose) from the settlement. The NPS will also establish a monitoring program to track wildlife status and trends.

Scenic Resources

The NPS will continue current management efforts for the preservation of scenic resources, such as removal of nonnative vegetation to maintain historic viewsheds.

The NPS will partner with stewardship groups to remove invasive nonnative vegetation that obscures or impacts views and features.

Contemporary Resource Use

The park's enabling law provides that "patients shall continue to have the right to take and utilize fish and wildlife resources without regard to Federal fish and game laws and regulations... [and] Patients shall continue to have the right to take and utilize plant and other natural resources for traditional purposes in accordance with applicable state and federal laws" (16 USC 410jj-5). NPS laws and regulations apply within the marine area of the park and on lands administered by the NPS pursuant to the lease with DHHL and the cooperative agreement with BLNR.

In addition to NPS laws and regulations, applicable DOH rules for fishing and gathering will also continue until the DOH departs and DLNR regulations will continue to apply to areas under the jurisdiction of DLNR.

No hunting will be allowed in areas administered by the NPS; DLNR's Division of Forestry and Wildlife will continue to manage public hunting in the Molokai Forest Reserve that is within the park's boundary and where hunting is allowed (the NPS does not administer this area).

The NPS will work cooperatively with the State of Hawai'i, in consultation with community groups, including through formalized rulemaking as necessary, to manage marine resource use and also ensure the sustainability of the resources for future generations. The NPS will look to cooperative models for fishing best practices, such as those at Ha'ena, 'Āhihi Kīna'u, and Kaho'olawe.

The NPS will also engage partners and service groups in preservation activities that support traditional cultural uses consistent with NPS laws and regulations, and other federal laws.

Wild and Scenic River

Waikolu Stream and its immediate environs will be protected. The NPS will not undertake any actions that would diminish its free-flowing conditions within Kalaupapa NHP. The NPS will work with the Molokai Irrigation System (MIS) to prevent additional extraction of water to maintain the integrity of Waikolu Stream.

Based on findings of the eligibility analysis for Waikolu Stream included Appendix F: Wild and Scenic River Analysis for Kalaupapa NHP, the NPS could recommend amending the national rivers inventory to add culture and history to Waikolu Stream's outstandingly remarkable values related to scenery, fish and wildlife based on new information.

The NPS will evaluate and/or complete a suitability analysis related to wild and scenic river designation of Waikolu Stream. Additional analyses for wild and scenic river eligibility and suitability of Waihānau, Waiʻaleʻia, and other streams could also be conducted.

Visitor Use and Experience

The structure of shared DOH and NPS management of visitor use via a cooperative agreement to provide a well-maintained community for the patient residents and to protect their privacy

will continue. The NPS will continue to manage visitor protection and facilities that support visitation.

In the near term, general public visitation would continue to be limited to 100 people per day as specified in the enabling legislation and desired by the patients. Visitation will continue to be day-use only, and visitors will continue to be escorted while visiting the park. Organized tours for the general public will be provided. The NPS will provide interpretive and safety information and training to support tour operators and visitor services entities. There will be no entrance fees; however, fees for services such as the mule ride and tours will continue. Children under the age of 16 will not be allowed while there are still patients there. Patient residents and DOH and NPS staff will continue to sponsor family, friends, and nonresident staff for day and overnight stays. The DOH will continue to manage its visitor permit and sponsorship program.

In the near and long term, specific recreational uses that are not compatible with the purpose of the park will continue to be prohibited.

In the near and long term, public camping will not be allowed within the boundary of Kalaupapa NHP, including Waikolu Valley, because of potential damage to resources and to protect the safety of visitors and staff.

To preserve Kalaupapa's serenity, sacredness, and sense of isolation in the long term, visitor use will be designed to provide a variety of high-quality visitor experiences focused on learning about Kalaupapa's history and stewardship. Structured and unstructured visitor use activities will accommodate a range of visitor needs and desires compatible with the park purpose. A visitor use management plan will be developed to help the NPS emphasize personal reflection, contemplation, culture, and history through opportunities for hands-on stewardship activities that contribute to the preservation, rehabilitation, and restoration of resources.

Additional planning will address all aspects of visitor use, including number of visitors, orientation and access, overnight use, and user capacity and infrastructure carrying capacity. The quantity and breadth of visitation affects multiple areas of park management, and more detailed planning will be necessary for structuring visitation at Kalaupapa in the future. Changes to visitor use will be designed, implemented, and monitored so that use does not exceed facility capacity or alter the character of Kalaupapa NHP.

Currently, all visitors, including lineal descendants of kama'āina and patient descendants can access the park through day use, private sponsorship by a Kalaupapa resident, or sponsorship through the NPS, including the Volunteers in Parks (VIP) program.

Lineal Descendants of Kama'āina

The NPS is committed to sharing all stories associated with Kalaupapa, including those of Native Hawaiians and kamaʻāina. The NPS recognizes the importance of involving descendants of kamaʻāina in the long-term preservation and management of Kalaupapa NHP. The park will continue to identify, engage, and consult with kamaʻāina descendants and to include them as park partners. Several outreach attempts have been made to identify descendants of kamaʻāina, but it has been challenging to find information regarding ancestors at Kalaupapa.

The NPS will include opportunities for kamaʻāina descendants to reconnect with their ancestral lands at Kalaupapa NHP. Lineal descendants of kamaʻāina will have opportunities to conduct research about their families and be involved in interpretation, education, and stewardship. Opportunities for research are available by contacting the park directly. Kalaupapa NHP's curatorial staff will be available to facilitate access to the park archives and collections with advanced notice. Descendants will also participate in developing and conducting outreach programs and activities within and beyond the park.

The NPS will reach out to Native Hawaiian communities and others to provide opportunities for participation in cultural practices, resource stewardship activities, and interpretation and education. This could occur through partnerships, commercial services, and NPS employment. Partners could include DHHL, Office of Hawaiian Affairs, other state and local agencies and institutions, and nonprofit organizations focused on promoting Hawaiian culture and improving the lives of Native Hawaiians.

Lineal Descendants of Patients

The NPS recognizes that Hansen's disease patients were separated from their families and banished to Kalaupapa against their will. The peninsula became their home, and there are roughly 8,000 patients buried throughout the peninsula. The NPS understands that patient descendants have an important connection to the Makanalua peninsula and, as descendants, have the intent and kuleana to mālama (care for or preserve) their ancestral gravesites through visitation and stewardship of the 'āina. The NPS will seek to establish and strengthen relationships with patient descendants and engage and consult with them.

There are many ways that patient descendants could be involved at the park in operations, staffing, and management. They could also share their family stories as part of interpretation and education for visitors to the park, do educational outreach about Kalaupapa's history to schools and their local communities, and participate in consultations about park projects.

The park's curatorial facility is also available to visit. With advanced notice, the curatorial staff will be available to assist families doing research and to make the archives and collections available to families.

Interpretation and Education

In the near term, the park's website and interpretive media will be maintained as ways to share the park's history with the public and orient visitors to Kalaupapa NHP. The NPS will continue to expand its interpretation and education division, developing limited interpretive programs and activities, such as a self-guided walking tour of the settlement.

Most onsite interpretation and education will continue to be provided by private patient-run tour companies and by allied organizations and institutions. Limited and occasional outreach programs on topside Molokai will be continued and expanded.

The NPS will greatly expand the growing interpretation and education division over time, including hiring staff to support a range of interpretive opportunities, such as onsite interpretation and hands-on stewardship and learning, educational, and outreach programs to reach people who may not be able to visit the park. The NPS will collaborate with Ka 'Ohana O Kalaupapa in the development of interpretation and education programs. In addition, the NPS will involve patient residents, 'ohana, and kama'āina as cultural interpreters to tell the story of

Kalaupapa. NPS staff, commercial guides, docents, and partners will be trained to convey accurate information about Kalaupapa's history, patient community, and Hawaiian culture.

Through activity, experience, and service, park visitors will be engaged in the long-term care of Kalaupapa's history and 'āina. A focus on youth groups will help to share Kalaupapa's unique history with future generations and promote a stewardship ethic for the long-term care of Kalaupapa NHP. Stewardship groups will be engaged in a wide variety of park projects.

In the long term, the NPS and its partners will provide facility-based interpretive programs, interpretive media (publications, exhibits, and films), digital experiences (computer and webbased programs, apps), onsite demonstrations, and opportunities for people to interact with NPS interpretive staff and partners at the park. A variety of demonstrations and interpretive tours by NPS staff, partners, and experts will provide visitors with a greater understanding of Kalaupapa's resources.

Paschoal Hall, or another compatible building, will function as the primary interpretive and orientation center and multipurpose space. It will be a hub for orienting visitors when they first arrive at the settlement. It will house interpretive exhibits and could be used for film screenings, presentations, and other group functions. All visitors will be required to complete an orientation and before travelling to other areas of the park.

Interpretive information, such as wayside panels, will be sited at key locations throughout the park. Signs and interpretive waysides will be improved to provide clear and accurate information to visitors. A park-wide wayfinding and site identification plan could guide the development of signage and wayside panels for visitor enjoyment and learning. Select patient homesites and buildings, historic and natural features, and scenic viewing areas could provide visitors with a varied and in-depth understanding about Kalaupapa's cultural and natural history. Museum collections items could be displayed as exhibits for interpreting Kalaupapa's Hansen's disease community and Hawaiian history and traditions.

Youth and communities on Molokai and throughout Hawai'i will be targeted through curriculum-based educational programs and materials, such as lesson plans and traveling educational exhibits This could be done in partnership with educational institutions.

A long-range interpretive plan will be developed to plan for the park's interpretive and educational goals including visitor experience, themes and sub-themes and detailed planning for specific sites and recommendations about interpretive media, facilities, personal services, and direction for interpretive and educational programs and partnerships.

Number of Visitors

In the long term, the number of visitors allowed per day could change. The number of visitors allowed will be determined and managed by: 1) the capacity of facilities to provide high quality visitor experiences, 2) limits on numbers of visitors through concessions contracts and commercial use authorizations, 3) an entry pass system, and 4) user capacity guidance contained in this GMP, see the "User Capacity" appendix. The NPS will manage visitation to ensure the preservation of Kalaupapa's qualities that are most valued: the special spirit of the people and their stories, the sacred mana (spiritual power), the cultural landscape and historic surroundings, the peace and quiet, and the feeling of isolation and solitude.

The capacity of historic building, facilities, and infrastructure at Kalaupapa is finite and will not substantially increase. When facilities and systems need replacement or improvements, the capacity will generally be maintained at current levels. The NPS will have the priority for occupying and using facilities for park operations followed by park partners.

The NPS will set limits in concessions contracts and commercial use authorizations on the number of visitors who purchase commercial services as part of their visit to Kalaupapa NHP. For example, limits of users will be instituted to manage the number of people who enter the park by mule, who use concession-led tours within the park, and who could stay overnight (when that is allowed). In the event that such services are not financially viable for a private company, the NPS could approve a nonprofit entity to offer these services under the same limits.

An entry pass system will be established to provide structured access to portions of Kalaupapa NHP which will provide greater opportunities for more people to learn about, see, and experience Kalaupapa. Foot access from the top of the pali will be allowed to the settlement for day use by Molokai residents and general visitors. This would allow Molokai residents and visitors the opportunity to regularly visit the park and will seek to strengthen the connection between topside Molokai and Kalaupapa's people and 'āina. Air access to Kalaupapa will also be allowed, and people not associated with a commercial tour or lodging could visit the park for day-use.

Certain days per year could also be designated by the NPS for special events, such as "Ohana Days," based on availability of staff and user capacity standards.

Orientation and Entry Pass

Orientation and visitor information will be provided on the internet, phone, apps, at offsite locations, and at key entrance points within the park boundary. Visitor information on the internet and at offsite locations will prepare visitors for their trip to Kalaupapa. An orientation and interpretive exhibit could be at the Hoʻolehua and Kalaupapa Airports. The NPS will consider establishing an NPS presence for visitor orientation in Kaunakakai and in partnership with other state agencies or entities. Orientation information could be at a kiosk at Pālāʻau State Park and topside trailhead and at the bottom of the pali trail upon entering the settlement.

An entry pass system will be established for all visitors to the settlement and other areas of the park. The purpose of an entry pass system will be to protect resources, to orient visitors, and to monitor and evaluate visitor use. The entry pass will describe the conditions for visitation and regulations for use at Kalaupapa NHP.

All visitors wishing to enter the settlement and other areas of the park will be directed to Paschoal Hall or other facility to receive a required entry pass and orientation to the park. The orientation will include introducing visitors to the purpose and significance of Kalaupapa and conveying regulations for use so that visitors are respectful, especially in sensitive areas such as cemeteries and archeological sites, and safe during their visit. Provisions for repeat visitors could be established. Visitors using the free day-use option will need to ensure they leave the park by dusk, unless they have made previous arrangements for overnight accommodations within the park.

Access within Kalaupapa

In the long term, the NPS will manage visitor access within Kalaupapa in order to protect resources, provide high quality visitor experiences, and promote visitor safety within the park. Escorted and unescorted access within the park will be allowed after visitors are oriented to the park and receive an entry pass.

The NPS will move towards allowing unescorted access to select areas within the park to provide self-guided opportunities for those seeking to learn about Kalaupapa on their own. After receiving an entry pass, visitors will be allowed unescorted access within the Kalaupapa Settlement and from the settlement to the airport and Molokai Light Station. Visitors will have unescorted access within the Engagement Zone (see Appendix A: Management Zones) along travel corridors from Pālā'au State Park to Kalaupapa Settlement and to Kalawao. After receiving an entry pass, visitors could walk or travel unescorted on Damien Road to Kalawao, including Saint Philomena Church and Judd Park. Allowing visitors to travel to Kalawao would provide access for family members to visit the memorial on their own.

Access will be ranger-led to Kauhakō Crater initially. Considering health and safety, future unescorted access could be allowed to provide visitors with an opportunity to hike to the high point on the peninsula, see the crater lake, and learn about the geology and cultural resources related to the crater. Increased ranger patrols along Damien Road and Kalawao would be necessary.

Visitors will need an NPS, partner, or commercial guide to access all other locations within the park below 500 feet, including the peninsula and Waikolu Valley. Areas above the 500-foot elevation are steep and largely inaccessible. Access to Kalaupapa through the upland areas will be discouraged and could be prohibited to ensure safety and compliance with the entry pass system.

A transportation plan will be developed to address visitor transportation, such as considering whether a commercially operated shuttle service is appropriate and viable, the types of appropriate vehicles, circulation routes, universal accessibility, and costs as well as addressing Kalaupapa's roads and trails and appropriate historic preservation treatments.

Age Limit

In the near term, the NPS will honor the wishes of the patients to maintain the age limit. The NPS would work with the Kalaupapa Patients Advisory Council if the patients desired a change to the age limit.

When there is no longer a patient community at Kalaupapa NHP, allowing youth to visit as part of group activities would share Kalaupapa's history and significance with children. The intent of the selected alternative is to create future stewards of Kalaupapa, and instilling in youth a genuine understanding and experience of Kalaupapa is the first step to developing a conservation ethic and continuing cultural traditions at the park. In the long term, the age restriction will be lifted to allow visitation by children, though this policy will be periodically evaluated and could be changed. Children under the age 16 will be required to have an adult escort in the park. This requirement will be established for children's safety within the park and to ensure that children follow the park rules for visitor use.

Overnight Use

Limited overnight use will be offered for organized groups and park partners; select historic buildings and facilities will be identified for overnight use, where appropriate.

Organized groups will be engaged in stewardship and learning activities, and park partners could include those with pre-existing associations and ancestral connections to Kalaupapa. The NPS will manage overnight use, but could have other entities, including agencies, concessions, and nonprofit organizations, conduct the operations.

Overnight use by the general public will be explored to provide a more in-depth experience of Kalaupapa NHP and to serve those seeking a multiple-day visit. Visitor accommodations will need to meet safety codes and would provide a more in-depth experience of Kalaupapa. The rehabilitation of historic buildings for public overnight use may require securing nonfederal partner contributions.

Recreational Activities

Visitor activities will be focused on learning and experiencing the history of Kalaupapa NHP as a settlement for Hansen's disease patients, as a home to Native Hawaiians, and a place rich in geological and ecological resources. Recreational activities that detract from the park's special character and are not compatible with the park's purpose, such as scuba diving, geocaching and skateboarding, will be prohibited. Appropriate recreational uses will be identified in the superintendent's compendium.

Commercial Visitor Services

The goal for commercial operations at Kalaupapa NHP will be to provide for visitors' basic needs and appropriate visitor services that enrich their experiences through services that are safe, suitable and compatible with the park's purpose.

In the near term, commercial activities operated by patient residents, will continue. The NPS will continue to partner with Pacific Historic Parks Association to operate the bookstore for educational and merchandise sales. NPS management of concessions and commercial services will be governed by the park's enabling law which provides patients a first right of refusal for revenue-producing visitor services, including such services as providing food, accommodations, transportation, tours, and guides.

In its lease with the NPS, DHHL has reserved the authority to give native Hawaiians a "second right of refusal," after patient residents have exercised their first right of refusal, to provide revenue-producing visitor services for the areas of the park covered by the lease. The NPS will work collaboratively with DHHL to establish appropriate revenue-producing visitor services in the areas of the park covered by the lease, which could allow native Hawaiians opportunities to be involved in Kalaupapa NHP's visitor services.

In the long term, concessioners or nonprofit organizations may assist the NPS in providing a range of visitor services. NPS management of commercial services will be governed by Public Law 96-565, federal laws, regulations, and policies for concessions and commercial uses, and the lease with DHHL. The NPS will provide guidance to potential concessionaires and nonprofit entities who seek to provide services in the park that are consistent with the purposes of the park.

Commercial services could include tours, mule rides, shuttle services, merchandise sales, the general store, gas station, food and beverage service, and overnight lodging. In the event that these services are not profitable, a nonprofit entity could assist the park with providing visitor services.

Access and Transportation Facilities

The current ways for entering the park will continue. No new transportation routes or methods to access to Kalaupapa NHP will be allowed or constructed.

Land Access and Pali Trail

The NPS will continue to maintain the historic pali trail for foot and mule traffic. The NPS will complete additional trail planning to support access and enhance the visitor experience. The NPS will develop a Kalaupapa (pali) trail management plan to identify management objectives and strategies to guide the protection, management, maintenance, and use of the trail. In addition, NPS will enhance the pali trail by clearing vistas, establishing rest stops, and defining places for mules to pass along the trail. The NPS could partner with others for trail maintenance. The NPS will offer to assist the local community with trail planning adjacent to Kalaupapa NHP on topside Molokai.

Air Access and Kalaupapa Airport

The Kalaupapa Airport is managed by the State of Hawai'i Department of Transportation and will continue to serve the transportation needs of the community and visitors. Air access to the Kalaupapa Airport will continue for planes and helicopters by commercial carrier and private planes from Honolulu, Ho'olehua Airport, and other island airports. The NPS will encourage the DOT and FAA to: 1) provide safe and adequate access without increasing pressure on Kalaupapa's way of life, and 2) work with commercial tour flight operators to continue avoiding flight paths in airspace over the settlement. FAA common procedures direct air tour aircraft to maintain an altitude of at least 1,500 feet above the ground which also helps minimize the impact of aircraft noise on Kalaupapa NHP and all aircraft in flight over the Kalaupapa peninsula are subject to FAA regulations. The NPS will seek to be a consulting party for any changes to the airport that have the potential to impact resources, including military activities.

The Kalaupapa Airport will be open for public access to Kalaupapa. Upon arrival, visitors will be directed to Paschoal Hall or another facility where they will receive an orientation and obtain an entry pass.

Water Access

Water access to the park will continue to be limited to the annual barge that provides general supplies and project materials to Kalaupapa and official NPS boat access. In the near term, visitors will not be permitted within the marine area of the park unless they have been sponsored and have the required permits from the DOH and NPS.

Safe sea access to the park is limited by the location and configuration of the Kalaupapa pier and seasonality of ocean conditions. Other water access and special events within the ¼-mile ocean boundary will require a special use permit and will be determined on a case-by-case basis. General visitors will not be allowed to anchor within the offshore ¼-mile ocean boundary without a special use permit.

In the long term, visitor access to Kalaupapa by boat, including boat landings on the east side of the park, will need further evaluation and consultation with state agencies. Any access to the land portion of the park following arrival by boat will also be subject to the same visitor limits (numbers and use) and entry passes as apply to access by land and air. The NPS will not support a ferry service to Kalaupapa because of safety concerns at the harbor.

Kalaupapa Roads and Trails

Transportation by motor vehicles within Kalaupapa will be reduced. Whenever possible, the NPS will use fuel efficient or electric vehicles, bicycles, and pedestrian transport for both visitors and operations, and wherever possible, historic roads and trails will be adaptively reused.

The NPS will develop a transportation plan for visitor and operational transportation that will address universal accessibility and identify areas where access will be restricted for resource protection. The plan will address historical integrity of the road and trail network, preservation treatments, and could be completed in conjunction with a cultural landscape report.

The character of roads throughout the settlement will be maintained, including road width, shoulder treatments, materials, and alignments to assure compatibility with the historic character. Deteriorated unpaved roads could be improved and stabilized with techniques that maintain the unpaved character but improve driving conditions, such as surfacing aggregate instead of asphalt or gravel. The NPS will replace and/or establish directional signs necessary for safety and orientation.

Sustainable Practices and Responses to Climate Change

The park will strive to be energy independent by reducing energy consumption, reducing reliance on outside sources of energy, and instituting sustainable practices. Consistent with the NPS's Climate Change Response Strategy, the park's goals and objectives will guide the protection of park resources through four integrated components: science, adaptation, mitigation, and communication.

Existing efforts to achieve these goals will continue, including bicycle use, the community recycling program, monitoring possible climate change effects, and engaging in the NPS Climate Friendly Parks program and Climate Action Plan. The NPS will seek to minimize motor vehicle use by staff, volunteers, and visitors to reduce gas consumption and carbon emissions. The NPS will encourage a "pack-in, pack-out" policy for all visitors.

The NPS will continue to install photovoltaic panels in selected areas on a limited basis to minimize visual impacts to the cultural landscape and consider the feasibility of a comprehensive energy conservation strategy, including the consolidation of renewable energy generation equipment in one or more locations.

The selected alternative will increase documentation and monitoring efforts by the NPS, partners and stewardship groups, to understand the effects of climate change, including assessing the vulnerability of resources.

The NPS will conduct scenario planning and explore adaptation strategies for resources with partners and subject matter experts including increasing resilience and protection, physical relocation, pre-loss documentation, and interpretation of climate change consequences.

Potential climate change adaptation actions may affect decisions about visitor use and facilities management. Decisions will be made on a case-by-case basis depending on the significance, condition, and vulnerability of the resource(s) with the overarching goal of sustainable practices.

The NPS will formally study the feasibility of consolidating energy generation in one or more locations such as topside Molokai, building roofs or other non-sensitive visually screened areas and implement a variety of energy conservation practices. Through value analysis, the NPS will determine the most advantageous renewable source(s).

The implementation of water conservation policies and actions will include monitoring and restricting potable water usage and gray water recycling options.

The NPS fleet will be reduced to the minimum number of vehicles required to support park operations. To the extent possible, vehicles that do not use fossil fuels will be procured.

Operations

Types and General Intensities of Development

The management and use of historic structures and facilities by patient residents, DOH, NPS, and partners within Kalaupapa NHP will continue in the near term. The NPS will continue to manage infrastructure, including the water, sewage, electrical, and trail systems. Ongoing projects, such as repairs to the electrical system, improving water conservation measures and addressing the park's fuel storage needs, will continue. Communication facilities will be maintained to provide phone, radio, and internet connectivity. The selected alternative does not call for new development for public enjoyment and use of the area, so associated cost estimates as required by the National Parks and Recreation Act of 1978 are not included.

If adaptive re-use of structures is not feasible for future required functions, new facilities may be deemed necessary. If so, in consultation with the Hawai'i SHPO and in compliance with Section 106, future new construction, including communications facilities, will incorporate sustainable energy systems, be appropriately sited and designed to be compatible with the settlement's historic structures and character; avoid archeological resources; minimize impacts on the soundscape, night sky and viewsheds; and consider sea level rise. See the "Historic Structures" section in the selected alternative for related guidance.

Safety and Security

Safety and security will continue to be a high priority for the NPS in its management of Kalaupapa NHP. Operational Leadership (an NPS safety program) concepts and strategies will be integrated into all aspects of park management. The NPS will continue current partnerships with emergency management agencies, including Maui County Police and Fire and Coast Guard for search and rescue operations, air medical transport, and law enforcement. Emergency medical services will include first responder capability by NPS or others. NPS will continue to facilitate getting individuals to the next level of care.

The NPS will collaborate and coordinate with DOH in the development and modifications of emergency management plans to meet changing needs.

The NPS will also continue to implement the fire management plan, including establishing and maintaining fire breaks around the settlement, maintaining fire suppression systems, and adding new fire suppression systems to historic buildings as feasible.

In the long term, the NPS will increase ranger patrols along Damien Road and to Kalawao. Ranger patrols on the pali trail will focus on general visitor safety and resources protection.

Staffing

The NPS will continue to maintain NPS staff and volunteers at Kalaupapa NHP to support the purpose of the park. NPS staff administer the park, manage resources, provide visitor protection and law enforcement, and maintain Kalaupapa's historic structures and facilities, including roads, grounds, cemeteries, and infrastructure systems.

In the near term, the hiring preference and provision for training opportunities for patient residents and native Hawaiians under Public Law 96-565 will continue. In the long term, the preferences and opportunities will continue for native Hawaiians.

The NPS will formalize a training program that provides a range of training opportunities for Native Hawaiians and Molokai residents to learn skills that would better enable them to qualify for NPS positions at the park in all divisions and programs and leadership levels. The investment in training and succession planning of the next generations of park stewards will implement and develop long-range management and operations which will eventually be led by the community to benefit the community with the NPS facilitating support.

The NPS will evaluate facility capacities, update the housing plan, and consider allowing family members of NPS staff, concessions, and partners if there is available housing space and infrastructure to accommodate them at the park. Based on this analysis and planning, the NPS will develop rules related to staff, concessions, and partner family members residing at Kalaupapa. The NPS will not build additional housing or substantially increase the capacity of infrastructure to support family members in the park.

Boundaries and Land Protection

Lands within the Kalaupapa NHP Boundary

The NPS will continue to follow Public Law 96-565 which authorizes the DOI to acquire lands within the park boundary with the consent of the owner. Should the state or private landowner express an interest, the NPS could explore acquisition options via legislatively authorized means. The NPS will continue to follow the park's land protection plan.

Lands Adjacent and Close to Kalaupapa NHP

No boundary modifications are recommended.

The findings of the Hawai'i Area Studies that fulfilled the direction of Public Law 105-355, Sec. 511 continue to be valid, and Congress could decide to act on the study's findings. The two pertinent sections of the Hawai'i Area Studies were the "Kalaupapa Settlement Boundary Study Along the North Shore to Hālawa Valley, Molokai" and the "Study of Alternatives—Hālawa Valley, Molokai" completed in 2000. Both studies surveyed and analyzed the area's natural and cultural resources and determined that they are of national significance and designation of the areas would support the park's legislative purpose, provide effective long-term protection and

public use opportunities. In 2000, the position of the local community favored local community management over any management by non-Molokai entities and state and federal agencies.

In addition to the guidance and actions in this section, desired conditions from law and policy in Appendix B will apply to the selected alternative.

Action Plans, Studies, and Agreements

A number of action plans, studies, and agreements will be developed to implement the selected alternative. Some of these items will require additional special project funding or increases to the operating base funding. Plans for actions with potential to affect the environment will require formal analyses of alternatives in compliance with the NEPA, NHPA, and related laws. Such documents will reference and be tiered to the selected alternative.

The following plans and studies will support the implementation of the selected alternative: accessibility transition plan; administrative history; archeological survey, site recording and documentation, including NRHP nominations, and determinations of eligibility, if applicable; building systems data; building use and infrastructure plan; climate change vulnerability assessment; comprehensive energy conservation plan; cooperative management agreement with Department of Hawaiian Home Lands; cultural landscape report; ethnographic overview and assessment; ethnographic research and oral histories; geographic Information System (GIS) database with a public web-based interface for interactive interpretation; Historic American Buildings Survey, Historic American Engineering Record, Historic American Landscapes Survey documentation of coastal historic buildings; historic resources study; historic structures report(s); invasive species management plan; Kalaupapa (pali) trail management plan; longrange interpretive plan; outreach plan; partnership stewardship strategy; renewable energy feasibility study; resource stewardship strategy; resource management record survey; scenario and adaptation planning related to climate change; soundscape management plan; staffing plan; strategic plan; transition planning; transportation plan; vegetation management plan; visitor use management plan; visitor use study; visual resource management plan; Waikolu ahupua'a plan; wildlife and ecosystem status and trends monitoring; and wild and scenic river designation assessment of Waikolu Stream and other streams.

Management Zones

The selected alternative includes management zones that are applied to the landscape to identify an area's predominant use and desired future conditions. The specific boundaries and guidance provided is in Attachment 1: Management Zones. It is important to note that some actions in the management zones, particularly related to visitation and use, will only be implemented after the DOH no longer manages visitation at Kalaupapa NHP.

User Capacity

Park staff will monitor resource and visitor experience indicators, evaluate current conditions against established standards, and take appropriate steps to ensure the unit's user capacity is not exceeded. User capacity and specific guidance for resource preservation is described in the revised EA, Appendix C: User Capacity with Indicators and Standards on pages 117-120.

Modifications Incorporated in the Selected Alternative

There are no substantive additions, nor did any of the changes result in altering the magnitude, duration, and extent of environmental impacts. Based on additional staff analysis and public review, modifications for impact-related actions and program changes that affect unit operations are as follows:

- To the extent possible, National Register eligible and potentially eligible archeological sites will be protected, preserved, and managed for their cultural, interpretive and research values.
- Kalaupapa NHP Community-based hui: A community-based hui (group) be established to provide their mana'o (thoughts, ideas, knowledge, or opinions) during and after the transition and once there is no longer a living patient community at Kalaupapa.

Mitigation Measures Incorporated in the Selected Alternative

Resource protection measures that will be implemented to avoid or minimize potential planrelated impacts to natural and cultural resources are identified below. Kalaupapa NHP will have the primary responsibility for implementation of these measures in consultation with community and other stakeholders where practicable, on projects in furtherance of this GMP.

Within the broad context of this management framework for the park, the following measures will be used to minimize potential impacts from the implementation of the selected action. These measures will be applied subject to funding and staffing levels. Additional mitigation measures will be identified as part of implementation planning and for individual projects to further minimize resource impacts.

Scenic Resources

- Use facilities such as trails to route people away from sensitive natural and cultural resources while still permitting access to important viewsheds.
- Design, locate, and rehabilitate facilities in ways that minimize adverse effects on scenic views.
- Provide vegetative screening to mask unwanted visual intrusion of facilities or infrastructure.

Cultural Resources (General)

• The NPS will continue to consult with the Kalaupapa Patients Advisory Council, Kalaupapa NHP Advisory Commission, Kalaupapa NHP community-based hui, native Hawaiian Organizations, and interested parties to identify any cultural or natural resources of value to people associated with the lands and waters of Kalaupapa NHP, and develop appropriate strategies to mitigate impacts on these resources.

Archeological Resources

• Archeological investigations and/or surveys will precede ground disturbance activities.

- Undertakings will be identified and analysis and documentation under Section 106 of the NHPA will be conducted to avoid and/or minimize adverse effects on archeological resources.
- The NPS will employ techniques to reduce potential impacts on archeological resources, including visitor education programs, restrictions on visitor and NPS activities, and law enforcement patrols. The required orientation for all visitors will convey the rules for visitation and protection of resources.
- The NPS could prohibit travel in certain areas to protect archeological resources.

Cultural Landscapes and Historic Structures

- All project work relating to historic structures and cultural landscapes will be conducted in accordance with Director's Order 28 and the Secretary's Standards, including the standards and guidelines for the treatment of historic properties and cultural landscapes.
- To the extent possible, historic structures under NPS management, that contribute to the NHL or districts, will be stabilized until a further appropriate preservation treatment can be undertaken.
- Adverse effects on historic properties listed in, determined eligible for listing, or not yet assessed for eligibility to the NRHP will be avoided, if possible. If adverse effects cannot be avoided, an agreement document will be developed through a consultation process with all interested parties according to Section 106.
- Changes to individual features and resources comprising the cultural landscape will also be assessed in the larger setting and environmental context to ensure incremental change does not adversely affect the integrity of the historic districts.
- The inadvertent discovery of human remains will follow all provisions outlined in the Native American Graves Protection and Repatriation Act and Hawai'i State Burial Laws as applicable.

Water Resources: Hydrological Processes

- The NPS will post signs along coastal areas advising about the danger of sneaker waves, undertows and rip currents including self-rescue techniques.
- The NPS will provide information about tsunami behavior by various means, which may include websites, kiosks, and waysides, in order to create awareness and reduce the potential risk of injury.
- The NPS will participate in the current tsunami warning system and maintain the evacuation routes, safety area, and center.
- Overnight facilities will be sited to expedite evacuation or be located outside of the mapped inundation zone.
- Improving knowledge base by completing an assessment of coastal vulnerability to wave overtopping, sea level rise, and extreme wave events for the park. Products will include a paleo tsunami evaluation and maps of historical shoreline change showing coastal erosion areas.
- The GMP/EA includes a Floodplains Statement of Findings to document risks of tsunami, hurricanes, sneaker waves, storm surges, flooding and SLR.

Wildlife including Marine

- The NPS will employ techniques to reduce impacts on fish and wildlife, including visitor education programs, restrictions on visitor and NPS activities, and law enforcement patrols.
- A wildlife protection program, will be implemented including evaluation of project scheduling (season and/or time of day); monitoring; erosion and sediment control, fencing, or other means to protect sensitive resources; disposing of food-related items or rubbish; salvaging topsoil; and revegetating.
- The NPS will protect known spawning aggregation areas for fish and other targeted organisms.
- The NPS will identify and protect marine areas within the park that are resistant and/or resilient to climate change impacts.
- Sediment control and prevention plans for projects that impact coral reef habitats in nearshore areas will be enhanced.
- The NPS will establish and enforce mooring sites to minimize anchor damage to coral reefs from vessel traffic.

Special Status Species

General

The NPS will continue ongoing efforts to control introduced feral animals, including axis deer, goats, pigs, mongoose, rats, cats, and dogs.

Hawaiian Hoary Bats

 There will continue to be ongoing surveys for and monitoring of Hawaiian hoary bat habitat to determine their occurrence in the park.
 Vegetation modification for trail maintenance and other activities that affect trees and shrubs 15 feet or taller will be conducted outside the Hawaiian hoary bat nesting/pupping season.

Hawaiian Sea Turtles and Monk Seals

- The superintendent's compendium will be updated to support protections under the Endangered Species Act regarding green sea turtles and Hawaiian monk seals.
- Visitors will be restricted from nesting beaches during the early nesting season, as nest sites are being established. Depending on the establishment of nests, visitors will continue to be restricted from the area until the hatchling turtles have emerged.
- During monitoring of nests, staff (including qualified volunteers) and researchers could be escorted into the vicinity of nests or hatchling turtles.
- During monk seal pupping season, staff (including qualified volunteers) and researchers could be escorted into the vicinity of monk seal pups.
- The NPS will continue to conduct monitoring for and of sea turtle nests and shoreline monitoring of monk seals. The NPS will also continue to conduct monk seal population studies in cooperation with NMFS.
- NPS law enforcement staff will continue to conduct patrols to ensure sea turtles and monk seals are protected from harassment and predation.
- Feral and nonnative animals that may prey on sea turtles or monk seals will be controlled.

- Restoration activities will continue to include removal of nonnative shoreline vegetation in nesting and nursing habitats.
- Because sea turtles may become disoriented and nest below the high tideline or become
 exhausted when they come ashore to nest, no artificial lighting will be visible along the
 beaches where green sea turtles nest.
- Only fully shielded lights will be used near beaches and shoreline areas. Shielded lights reduce the direct and ambient lighting of beach habitats within and adjacent to the lighted area. Effective light shields should be completely opaque, sufficiently large, and positioned so that light from the shielded source does not reach the beach/shoreline.
- Any closures or restrictions that are identified by a superintendent's compendium to protect sea turtle nesting areas and monk seal pupping beaches will be communicated when a visitor receives their entry pass.
- The NPS will also employ the conservation measures suggested by the USFWS (2015) to protect sea turtles, including educating visitors and staff to: maintain a 6-10 foot distance, not surround the turtle or block its access to the water; not feed, touch (or ride) the turtles, keep pets on a leash, use barbless circle hooks when fishing, and if there is an accidental interaction during fishing (hooking or entangling), the park staff will assist the turtle if it is safe to do so.

Seabirds

- Only fully shielded lights will be used near beaches and shoreline areas. Shielded lights reduce the direct and ambient lighting of beach habitats within and adjacent to the lighted area. Effective light shields should be completely opaque, sufficiently large, and positioned so that light from the shielded source does not reach the beach/shoreline.
- To avoid seabird confusion, injury or mortality, automatic motion sensor switches and controls will be installed on all outdoor lights or lights turned off when human activity is not occurring in the lighted area (especially during the seabird fledging season (September 15 December 15).
- No nighttime construction or activities along the shoreline will be permitted to avoid attracting adult seabirds during the nesting season as they travel from the ocean to their breeding areas.

Plants

- The superintendent's compendium will be updated to identify closure in areas where special status plants are present.
- The NPS will continue its program of invasive plant and feral animal control to protect remaining areas with rare plants (pali trail, coastal spray zone, crater, pali, and Pu'u Ali'i rainforest) and use fencing to create safe areas for cultivated plants.
- To assess the possible impact to rare, threatened and endangered plants, a qualified biologist will conduct surveys in any areas proposed for modification to document the distribution and status of listed plant species in the future proposed disturbance areas.
- Any plants that will be affected by future proposed projects will be propagated and outplanted in areas that are protected from ungulate browsing, wildfire, competition from invasive species, and other disturbance.

Sphinx Moth

• Removal of non-native tree tobacco will be avoided to minimize impacts to Blackburn's sphinx moths.

• Potential project areas will be surveyed for the presence of adult and larval host plants by a qualified biologist. To minimize the potential for the project to adversely impact the Blackburn's sphinx moth, tree tobacco or other host plants will not be cut or removed and the soil within 33 feet of the host plants will not be disturbed.

Vegetation

- The NPS will implement, in consultation with community and other interested parties, a non-native invasive plant management program and protocols. The operational aspects of the protocols may include:
- The management program and protocols may include using only weed-free materials for road and trail construction, repair, and maintenance, cleaning construction equipment, treating noxious weeds or topsoil before construction; covering imported materials to prevent weed introduction; limiting the movement of material; regularly treating vector areas, such as staging areas, maintenance facilities, borrow pits, and corrals; revegetating with genetically appropriate native species; and monitoring locations of ground disturbing operations for at least five years following the completion of projects.
- Kalaupapa NHP will monitor areas used by visitors (such as trails) for signs of native vegetation disturbance and use public education, revegetation of disturbed areas with native plants, erosion control measures, and barriers to control potential impacts on plants from erosion or social trails.
- The NPS will designate river and stream access/crossing points and use barriers and closures to prevent trampling and loss of riparian vegetation.
- Revegetation plans will be developed for disturbed areas and require the use of genetically appropriate native species (revegetation plans should specify species to be used, seed/plant source, seed/plant mixes, site-specific restoration conditions, soil preparation, erosion control, ongoing maintenance and monitoring requirements, etc.; salvaged vegetation should be used to the extent possible).
- The NPS will investigate and/or conduct surveys for rare plants prior to any ground disturbing activities and to the greatest extent possible, disturbance to rare or unique vegetation will be avoided.
- Visitors will be required to sanitize equipment and footwear to prevent the importation and spread of weeds and pathogens such as Rapid Ohia Death and other organisms harmful to native ecosystems.

Additional Measures Identified by the USFWS

Biosecurity

All activities, including site surveys, risk introduction of nonnative species into project areas. Specific attention needs to be made to ensure that all equipment, personnel and supplies are properly checked and are free of contamination (weed seeds, organic matter, or other contaminants) before entering project areas. Quarantines and or management activities occurring on specific priority invasive species proximal to project areas need to be considered or adequately addressed. This information can be acquired by contacting local experts such as those on local invasive species committees (Molokai: http://www.molokaiisc.org/).

All work vehicles, machinery, and equipment should be cleaned, inspected by its user, and found free of mud, dirt, debris and invasive species prior to entry into the natural areas or native habitat.

- a. Vehicles, machinery, and equipment must be thoroughly pressure washed in a designated cleaning area and visibly free of mud, dirt, plant debris, insects, frogs (including frog eggs) and other vertebrate species such as rats, mice and non-vegetative debris. A hot water wash is preferred. Areas of particular concern include bumpers, grills, hood compartments, areas under the battery, wheel wells, undercarriage, cabs, and truck beds (truck beds with accumulated material (intentionally placed or fallen from trees) are prime sites for hitchhikers).
- b. The interior and exterior of vehicles, machinery, and equipment must be free of rubbish and food. The interiors of vehicles and the cabs of machinery must be vacuumed clean. Floor mats shall be sanitized with a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.
- c. All cutting tools, including machetes, chainsaws, and loppers must be sanitized to remove visible dirt and other contaminants prior to entry into natural areas or areas with native habitat, and when moving to a new project area within the native habitat area. Tools may be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution. One minute after sanitizing, you may apply an oil-based lubricant to chainsaw chains or other metallic parts to prevent corrosion.
- d. Any machinery, vehicles, equipment, or other supplies found to be infested with ants (or other invasive species) must not enter natural areas or native habitat. Treatment is the responsibility of the equipment or vehicle owner and operator.

Base yards and staging areas inside and outside areas must be kept free of invasive species.

- a. Base yards and staging areas should be inspected at least weekly for invasive species and any found invasive removed immediately. Pay particular attention to where vehicles are parked overnight, keeping areas within 10-meters of vehicles free of debris. Parking on pavement and not under trees, while not always practical is best.
- b. Project vehicles or equipment stored outside of a base yard or staging area, such as a private residence, should be kept in a pest free area.

For individuals working in the field:

- a. Before going into the field, visually inspect and clean your clothes, boots, pack, radio harness, tools and other personal gear and equipment, for seeds, soil, plant parts, insects, and other debris. A small brush is handy for cleaning boots, equipment and gear. Soles of shoes should be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.
- b. Immediately before leaving the field, visually inspect and clean your clothes, boots, pack, radio harness, tools, and other personnel gear and equipment, for seeds, soil, plant parts, insects, and other debris. Soles of shoes should be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.

Other Alternatives Considered

Alternative 1: Continue Current Management

The no-action alternative is required by the NEPA and serves as a baseline for comparing the changes and impacts of the NPS preferred alternative. Alternative 1 assumes that management, programming, facilities, staffing, and funding will generally continue at their current levels providing protection of the park values without substantially increasing park operations. Resource preservation and protection will continue to be a high priority for NPS management of Kalaupapa NHP. Alternative 1 predominantly focuses on near-term guidance while the DOH and patient community exists at Kalaupapa NHP. Upon the departure of DOH from Kalaupapa NHP, this alternative provides no additional long-term guidance.

In addition to the "Actions Common to Both Alternatives" described in the GMP/EA, the following management guidance is specific to Alternative 1.

Visitor Use and Experience

Number of Visitors

In the long term, general public visitation will continue to be limited to 100 people per day at any one time through tours that will rely on concessions contracts and commercial use authorizations.

Age Limit

In the long term, children under the age of 16 will continue to be unable to visit Kalaupapa NHP.

Management Zones

There will be no management zoning guidance under Alternative1 since the park does not have a management zoning scheme. Management guidance will be based only on the enabling legislation, the NPS Organic Act, NPS regulations and policies and agreements with state agencies.

Summary of Alternatives Considered and Dismissed

The following alternatives were considered but were rejected because they were deemed unreasonable and/or met one or more criteria for dismissal under NEPA [40 CFR 1504.14 (a)].

The draft GMP/EIS included four alternatives, two of which were considered and dismissed for consideration in the EA after public review of the GMP/EIS. "Alternative B" was very similar to the no action alternative and focused more on external and outreach programs. "Alternative D" offered a wide range of visitor experiences and more opportunities for unescorted public access within the park. Alternative D was dismissed because the high level of visitor use was not supported by public comments and because a high level of visitor use could result in negative impacts to resources.

Other Preliminary Options Considered and Dismissed

Termination of NPS Management of Kalaupapa NHP

During public meetings, NPS was asked to consider terminating NPS management and consider, potential impacts and consequences. This action was dismissed from further consideration because such an approach would not meet the Congressional mandate set out in the park's enabling law to preserve the story of Hansen's disease patients and the resources within the park. The NPS is committed to continuing management of Kalaupapa NHP as guided in the long-term lease with DHHL and cooperative agreements with the state agencies and other landowners regardless of the long-term tenancy of state-owned lands. In the long term, any changes regarding NPS management would be determined by legislation or changes to the lease and agreements. The NPS will continue to reevaluate management as the GMP is implemented, and during the lifetime of the existing cooperatives agreements and the 50-year lease with DHHL. Additionally, the NPS considered comments from patients, the public, and partners on this topic who largely support NPS's management role at Kalaupapa NHP.

Camping

Individuals expressed a desire for camping in Kalaupapa Settlement, Waikolu Valley, and other locations as a less expensive option for overnighting in the park. Camping was initially included in the draft alternatives; however, public comments did not support the idea of camping. Many patients and other individuals expressed that camping is a recreational activity that is incompatible with the purpose of the park and establishing designated camping areas and building support facilities, including restrooms, would require new construction and introduce new land uses. Protecting and preserving the character of Kalaupapa NHP is a primary purpose of the park. For these reasons, camping was dismissed from further consideration.

New Access to Kalaupapa

New forms of access, including a tram and road from topside Molokai, were proposed to provide easier access and transport of goods and materials to Kalaupapa NHP. These ideas were dismissed from further consideration because they would dramatically alter the historic character of Kalaupapa NHP, would introduce new uses and challenges to managing a small isolated community, and be costly to construct and maintain over the long term.

Boundary Modification

The draft proposal to recommend external boundary modifications along the North Shore to include 5,259 acres of Pelekunu Preserve and 7,323 acres of Pu'u O Hoku Ranch was included in the draft GMP/EIS. Due to numerous opposing public comments and the NPS's priorities to focus on Kalaupapa NHP operations during and after the transition, the boundary proposal was removed from the plan.

Rationale for the Decision of the Selected Action

Under the no action alternative (Alternative 1), long term guidance for the park after there is no longer a living patient community at Kalaupapa NHP would continue to be absent and therefore would not meet the purpose and need for the GMP.

Alternative 2 was selected for implementation because it meets the purpose, need, and statutory requirements for the general management. The selected action best protects the Kalaupapa NHP's resources while providing quality visitor experiences. This alternative will also provide the greatest educational and partnership opportunities to foster better understanding of Kalaupapa NHP's resources.

Why the Selected Alternative (Preferred Alternative) Will Not Have a Significant Effect on the Human Environment

As defined in the Code of Federal Regulations (40 CFR §1508.27), significance is determined by examining the following criteria of context and intensity of an action:

- (a) Context includes geography, baseline conditions, affected interests, agency mandate, and duration and timing.
- (b) Intensity refers to the severity of impact.

The following resource topics were considered in the environmental impact analysis and documented in the EA: cultural resources (including values, traditions, and practices of traditionally associated people, and historic structures and cultural landscapes); natural resources including water resources (hydrologic processes and floodplains), vegetation, marine and terrestrial wildlife, and special status species; and social resources (including visitor experience, visitor use, interpretation and education, and access, transportation and socioeconomics).

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that, on balance, the effect will be beneficial: While the selected action will result in both adverse and beneficial impacts on park resources, most of these impacts are short-term and minor. No significant adverse or beneficial impacts were identified in the EA that require analysis in an environment impact statement.

Degree to which the proposed action affects public health or safety: As analyzed in the EA, there will be no adverse effects on public health or safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: As analyzed in the environmental assessment, there will be no significant adverse effects on historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. While there is the potential to adversely affect historic or cultural resources, the NPS will actively manage the historic properties to promote long-term protection. Additionally, any potential adverse effects to historic properties will be mitigated and appropriate Section 106 compliance and consultations will be conducted.

Degree to which the effects on the quality of the human environment are likely to be highly controversial: No highly controversial effects were discovered during the preparation of the EA, including during the public comment period. There was disagreement associated with the determination of effect to historic properties under Section 106. To address this, the determination of effect for the purposes of Section 106 was changed from no adverse effect to potential for adverse effect and the combined approach for NEPA and Section 106 was modified into two separate processes. Consultation under Section 106 continued, and a Programmatic Agreement (PA) to resolve the potential adverse effects was executed.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: There will often be some uncertainty about the impacts of management actions and some level of associated risk. The focus of this consideration is on high levels of uncertainty and risks that are unique or unknown, which would make it difficult or impossible to reasonably predict impacts of an action. During the GMP process, uncertain, unique and unknown risks were recognized, considered, and analyzed. These risks have been addressed through mitigation measures, consultation, and also in the GMP/EA in Appendix G: Draft GMP/EIS Public Review Summary, Public Concerns, and NPS Responses. There are no further highly uncertain or unique or unknown risks that merit the preparation of an EIS.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The selected action neither establishes a precedent for future actions with significant effects nor represents a decision in principle about a future consideration. Future actions not addressed in the GMP will require further environmental impact analysis.

Whether the action is related to other actions with individually insignificant, but cumulatively significant, impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or breaking it down into small component parts: Other past, present, or reasonably foreseeable actions were analyzed for their potential to contribute to cumulative impacts in association with implementation of the selected alternative. The selected alternative and mitigation measures seek to arrest or ameliorate the overall level of cumulative impact under each impact topic, compared to the no-action alternative. The effects of the selected alternative will comprise a very small component of these cumulative impacts. Overall, the impacts of the selected alternative, combined with the negligible to major adverse impacts from other past, present, and reasonably foreseeable future actions, will not result in a significant cumulative adverse effect. The selected action is not related to other actions with individually insignificant, but cumulatively significant impacts.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: The selected action has the potential for adverse effects to districts, sites, highways, structures, or objects listed on or eligible for listing on the National Register of Historic Places, however with mitigation measures, the degree to which the action may adversely affect properties listed in the National Register of Historic Places is not considered to be significant. The selected action will not cause loss or destruction of significant scientific, cultural, or historical resources

Degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973: No actions are proposed that would adversely affect listed endangered or threatened species or critical habitat.

Whether the action threatens a violation of federal, state, or local environmental protection laws: The selected action is compliant with all applicable federal, state, and local environmental protection laws as demonstrated by the analysis in the environmental assessment.

Public Involvement

Public Scoping and Review of the Preliminary Alternatives (March 11 – July 15, 2009 and May 15 – July 16, 2011)

Public scoping included 12 workshops across 4 islands. More than 450 comments were received from individuals or organizations and were used to identify a range of issues informing the development of alternatives. Public review of the preliminary alternatives was conducted between May 16, 2011 and July 16, 2011 and included 7 public open houses across 3 islands. More than 200 individuals or organizations provided comments regarding concerns and preferences that helped shape the selected alternative.

Public Review of Draft GMP/EIS (April 10 – June 8, 2015)

Public review of the draft GMP/EIS included 8 public meetings held on 3 islands, with 250 people participating and approximately 120 written comments received. A summary of the public review of the draft GMP/EIS and NPS responses to public comments on the draft GMP/EIS is included in Appendix G of the EA.

Public Review of the EA (November 15, 2018 – March 7, 2019)

The GMP/EA was released for a 30-day public review on November 15, 2018 and included a comment period and Section 106 consultation call. The comment deadline was extended two times in response to public requests and the partial government shutdown. The first extension was from December 15, 2018 to February 1, 2019. The second extension was to March 7, 2019. Thirty-five written comments were received.

The NPS received comments on the following topics: management structure and partners, management of specific areas, cultural and natural resources, public use, operations, legal and policy requirements, NEPA pathway, NEPA compliance and environmental analysis, planning and compliance process, transition and plan implementation, and NHPA Section 106. Attachment 3 of this FONSI includes a summary of the comments received and NPS responses to comments.

Agency Consultation

Consultation with the State of Hawai'i Historic Preservation Officer and the Advisory Council on Historic Preservation for Section 106

In accordance with Section 106 of the National Historic Preservation Act, the National Park Service provided the State Historic Preservation Officer (SHPO) many opportunities to comment on the plan and effects of the plan.

The NPS formally initiated consultation with the State of Hawai'i Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) under Section 106 of the National Historic Preservation Act, as amended, in April 2009 during the public scoping period. In the initiation letters, NPS stated it would use the process and documentation required for the preparation of an EIS to comply with Section 106 of the National Historic Preservation Act (NHPA) in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. (36 CFR § 800.8 (c). Identified Native Hawaiian Organizations and consulting parties also received the notification. In addition, the NPS communicated with the SHPO and consulting parties and involved the public during the public review of the draft alternatives (2011).

To meet the requirements of Section 106 consultation, the NPS initiated scoping with agencies, stakeholders, and the interested public. The NPS identified and engaged interested parties including individuals, groups, and communities associated with Kalaupapa's history prior to and during public scoping (2009) and draft alternatives (2011). The NPS held in-person and virtual public meetings. In-person meetings were held at Kalaupapa, on Molokai, and other Hawaiian Islands. Historic preservation issues raised during the course of the planning process by the public and consulting parties were considered in the documentation of the affected environment, development of the alternatives, and impact analysis.

On April 10, 2015, the NPS sent letters to the SHPO, ACHP, and consulting parties notifying them of the release of the draft GMP/EIS. The letters invited consultation on the draft GMP/EIS, including the APE, historic properties within the APE, assessment of effects, and a preliminary determination of *no adverse effect*. The NPS held public meetings and consulted with SHPO, ACHP, Native Hawaiian Organizations, and other consulting parties during the public review of the draft GMP/EIS and additionally held a focused Section 106 consultation call on May 14, 2015. In a letter dated June 15, 2015, the SHPO provided several substantive comments including a recommendation to develop a programmatic agreement. Based on the SHPO letter and requests by consulting parties and the public for additional consultation, the NPS conducted 18 additional consultation conference calls with the SHPO, Native Hawaiian Organizations, and consulting parties from June 2015 to July 2016.

The NPS held an in-person meeting with the SHPO and State Historic Preservation Division (SHPD) staff and other State of Hawai'i Department of Land and Natural Resources agencies to provide project updates and share changes to the GMP document conducted on May 18, 2016. On August 1, 2016, the NPS held a consultation call with SHPD staff to review the status of the GMP and identify a path forward for completion of the Section 106 process. During the call, NPS provided verbal responses to the SHPO June 8, 2015 comment letter.

On November 7, 2018, the NPS notified the SHPO, consulting parties, and public in writing that an EIS was no longer warranted based on the reduction in impacts that could result from the plan's alternatives and released a draft EA for public comment on November 15, 2018.

On November 20, 2018, a consultation call was held. The results of the impact analysis were articulated in the GMP/EA using methods and terminology appropriate to NHPA. The GMP/EA identified the APE and included a determination of effect to historic properties for the preferred alternative as *no adverse effect*. It also stated that subsequent Section 106 reviews were necessary to implement site-specific actions and mitigations to ensure consistency with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* as stated in 36 CFR § 800.5 (3)(b).

In a letter dated March 7, 2019, the SHPO did not concur with the *no adverse effect* determination and requested additional specific information be included in the plan as well as more detailed inventories. Consulting parties and Native Hawaiian Organizations also objected to the determination of *no adverse effect* and adequacy of the Section 106 documentation.

On July 8, 2019, the NPS notified the SHPO, ACHP, and consulting parties of its intent not to use the NEPA process for section 106 purposes for the GMP/EA, to change the determination of effect from *no adverse effect* to *potential for adverse effect*, and develop a programmatic agreement to resolve potential adverse effects. The NPS requested SHPO concurrence with this method to address the potential for adverse effect to historic properties. The NPS notified and invited the ACHP to participate in Section 106 consultation for the resolution of adverse effects. The NPS also took the opportunity to request information regarding ethnographic resources yet to be identified from consulting parties, and any historic property of religious or cultural significance to Native Hawaiian Organizations. On August 9, 2019, SHPO concurred with the effect determination of "adverse effect" on historic properties and agreed that the preparation of a programmatic agreement was appropriate.

In April 2020, the NPS started to organize a deliberate and focused consultation process to engage in National Historic Preservation Act 106 consultation with various consulting parties to develop a Programmatic Agreement (PA) to address potential adverse effects to historic resources identified in the GMP/EA process . The final PA is the result of more than a year of intensive, focused consultation that set the backbone for the Park's procedures to move through the Section 106 consultation process with SHPD, agency partners and landowners, and members of the community that have immeasurable knowledge and passion for the resources at Kalaupapa. The consultation process gave all parties a much stronger understanding of the complexities of consultation, other parties points of view and developing documents to address how resources would be managed in the future as well as how future projects would meaningfully engage the community. The final PA document represents a long-term commitment to the park and a lot of hard work and is the result of many conversations, discussions, disagreements and heartfelt communications with a very dedicated group of consulting parties and staff who all care deeply about the important resources within Kalaupapa National Historical Park.

The PA identifies the qualifications and training requirements for the staff that advise the Superintendent on NPS actions, and includes the ability for non-NPS staff to serve this role. It also draws attention to the special hiring authority and training opportunities for native Hawaiians at Kalaupapa NHP; it identifies a community engagement program with routine

reporting and opportunities for conversation and feedback on park projects and operations; it identifies that the NPS will play a role in information-sharing when non-NPS organizations are proposing projects within the park boundary; it outlines procedures in the event of inadvertent finds and identifies the need to create a stand-alone Protocol for Inadvertent Finds at the park; it identifies a procedure in the event of an emergency action; and the PA identifies specifics for an annual report with timelines.

U.S. Fish and Wildlife Service

In accordance with the Endangered Species Act, the National Park Service contacted the USFWS by letter in April 2009 to determine which federally listed special status species should be included in the analyses. At the time of the release of the GMP/EIS in April 2015, the NPS submitted a copy of the GMP/EIS to the USFWS (April 10, 2015) along with a letter requesting review and concurrence with the NPS's determinations of effect for the preferred alternative. USFWS responded with a comment letter dated 6-8-15 offering technical assistance. Based on subsequent analysis of the project and its potential effects, the NPS has determined that proposed actions *may affect*, but would *not be likely to adversely affect* listed species and critical habitat present in the park. USFWS provided concurrence with these determinations of effect in a letter dated December 7, 2018.

National Marine Fisheries Service

Communication with the NMFS began in April 2009. When the GMP/EIS was released, the NPS submitted a copy of the GMP/EIS to NMFS (4-10-15) along with a letter requesting concurrence with the determinations of effect for the preferred alternative. NOAA responded informally in an email dated 11-14-16. Another request for concurrence was sent to NMFS with the release of the EA on November 15, 2018. Based on analysis of the project and its potential effects, the NPS determined that proposed actions are *may affect*, but are *not likely to adversely affect* endangered or threatened species in the marine environment of the park. NMFS responded on February 21, 2019, concurring with the determinations of effect for species within their jurisdiction.

The NPS informally consulted with NMFS on essential fish habitat (EFH). The NPS has determined that activities in the preferred alternative will have minimal adverse effects to EFH given incorporation of all proposed best management practices. NMFS concurred with the determinations of effect to essential fish habitat on March 12, 2019.

Other Consultation

Kalaupapa National Historical Park Advisory Commission

The Kalaupapa National Park Advisory Commission was briefed and consulted at every major milestone for the GMP/EIS. The GMP was on the agenda for commission meetings on 3-15-11; 7-26-11; 1-23-12; and 6-14-12. Concerns were described in Chapter 6 of the draft GMP/EIS. Concurrent with the release of the GMP/EIS, the NPS held commission meetings on 4-21-15 and 7-29-15 that focused on the draft GMP/EIS, andon questions and general opposition to the boundary proposal for Pelekunu Preserve and Pu'u O Hoku Ranch.

Department of Hawaiian Home Lands Beneficiary Consultation

The Department of Hawaiian Home Lands led beneficiary consultations on the topic of Kalaupapa NHP and the GMP/EIS as described in Chapter 6 of the draft GMP/EIS on June 29-30, 2011 and also on 5-26-15 and 5-27-15. Full meeting notes for the 2011 and 2015 consultations are available on the DHHL website: http://dhhl.hawaii.gov/po/beneficiaryconsultation.

Finding

On the basis of the information contained in the EA as summarized above, the NPS has determined that implementing the selected action is not a major federal action significantly affecting the human environment. This determination is based on consideration of the park's purpose, a thorough analysis of the environmental impacts described in the EA, and comments provided by agencies and the public. There are no unmitigated adverse effects on public health, public safety, threatened and endangered species, sites or districts listed in or eligible for the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, highly significant cumulative effects, or elements of precedence were identified. The NPS has determined that implementation of the selected alternatives will not constitute an impairment of the resources or values of Kalaupapa National Historical Park. Therefore, in compliance with the National Environmental Policy Act, an environmental impact statement will not be prepared, and the plan may be implemented as soon as practicable, but not sooner than 30 days following the date of the approval of the general management plan.

Espaisla 5/21/2021 Recommended: Erika Stein Espaniola, Superintendent

Kalaupapa National Historical Park

CINDY **CINDY ORLANDO** Date: 2021.08.10 Approved:

Cindy Orlando, Acting Regional Director Date

Digitally signed by

8/10/2021

National Park Service, Regions 8, 9, 10 and 12

Attachment 1: Management Zones

Management zoning is the method used by the NPS to identify and describe the appropriate variety of resource conditions and visitor experiences to be achieved and maintained in the different areas of a park. Zoning is generally a two-step process: (1) identify a set of potentially appropriate management zones, and (2) allocate those zones to geographic locations throughout the park.

Unlike most national park units where most of the land is owned by the federal government and managed by the NPS, most of the land within Kalaupapa NHP is owned by the State of Hawai'i. Through the lease with DHHL and cooperative agreements with the DLNR, DOH, and DOT, the NPS has varying responsibilities for administration of the park, depending on the specific area within the NHP. Management zones were applied to the entirety of Kalaupapa NHP in order to promote cooperation with State of Hawai'i agencies for the protection of resources and management of visitor use within the NHP and to guide future management if conditions change.

The following four management zones define and spatially apply goals and objectives for resource management, levels of development, and different types of potential visitor experiences.

Integrated Resource Management Zone

This coastal and shoreline zone emphasizes the interconnectedness of nature and culture that is evident in people's connection with the 'āina at Kalaupapa.

Resources

Cultural resources will be preserved to perpetuate their historic, natural, and scenic character and for their interpretive and research values and traditional cultural activities. Selective reconstruction of non-extant cultural or historic features may be appropriate.

Terrestrial and marine native plant communities and wildlife habitat will be preserved and promoted to the greatest extent possible. Ecological processes will be primarily left unimpeded.

The natural soundscape, night sky, and viewsheds will be preserved or restored. Natural sounds dominate, however distant artificial sounds associated with resource management operations and visitor experiences could be heard at times. Habitats for sensitive species would be free or nearly free of intrusive noise. Limitedartificial outdoor lighting would be present. Uninterrupted views of natural, cultural, and scenic resources will continue to be a part of the visitor experience.

Access and Transportation

Access in this zone will be via trails and by the unimproved roads. PIn the near term, patients and residents of Kalaupapa NHP will continue to have access along the unimproved roads to traditional gathering and use areas. and visitorsneed an escort.

In the long term, residents of Kalaupapa NHP will continue to have access along the unimproved roads to traditional gathering and use areas. Visitor access will be by escort only or through a special use permit to allow for cultural practices, research, and protection activities.

Visitor Use and Experience

Visitation levels will be generally low, with moderate visitation at entry points or points of interest. Group sizes will be limited to protect experiential and resource protection objectives. Structured programs may include hands-on stewardship activities. Visitors will have opportunities to participate in interpretive and stewardship programs including guided walks/hikes. Passive interpretation such as wayside exhibits will be available. Traditional cultural practices of Kalaupapa may be perpetuated in this zone, and visitors (anybody who is not park personnel or a resident), could perhaps experience these practices through observation and/or participation. A moderate to high degree of physical effort may be required to experience this zone. Visitors should be prepared for challenges and use of outdoor skills.

Facilities

Facilities will be minimal and only allowed in support of resource protection, visitor use, and visitor safety. Types of facilities may include: trails; unimproved roads; fences for resource protection, temporary facilities for resource management (staging areas, storage, helipad); unobtrusive signs and wayside exhibits; existing structures to support utilities (Waikolu water systems) and resource management (U.S. Geological Survey stream gauges); and limited, small scale telecommunications facilities and power facilities may be allowed in this zone if designed and sited to minimize visual impacts.

Engagement Zone

This zone, (primary developed areas of the park), emphasizes providing opportunities for visitors to engage, learn about, and experience Kalaupapa. (Rim of Crater, Kalawao Road to lighthouse and developed areas)

Resources

Cultural landscape elements/features could be adapted for visitor use, administrative purposes, safety, and resource protection where compatible with the character defining features of the cultural landscape. Many historic structures canbe rehabilitated and used as interpretive exhibits and to serve operational and visitor needs, such as food service and potential lodging.

Native plant communities and wildlife habitat can be modified to support important cultural features or to illustrate a particular historic period. Invasive nonnative species (i.e. haole koa or christmasberry) will be managed. Non-invasive nonnative species (i.e. ornamental or fruit trees), could be maintained if determined to be a contributing resource to cultural landscapes. Ecological processes (erosion, wetlands conversion?) would be primarily left unimpeded except to provide visitor learning opportunities where appropriate.

The natural soundscape, night sky, and viewsheds will remain largely intact and enhance the visitor experience. Natural sounds will be generally audible, mixed with sounds from visitor and park operations activities. There may be effects associated with the Kalaupapa airport (operations and overflights), that may impact the natural soundscape and night sky.

Outdoor lighting will be present when needed to support visitor services or park operations, and will be designed to minimize light pollution.

Historically and culturally appropriate sounds (parties, laughter and ukuleles) and lighting from the period of significance (historic poles and lines) could modify the otherwise intact natural soundscape and night sky.

Access and Transportation

Access will occur along roads and historic trails. Universal access opportunities will be provided. Ranger led tours could occur in this zone. In the near term, escorted access will occur in all parts of this zone except the overlook at Pālā'au State Park topside, which will remain open to unescorted use. In the near term, access between topside and the park along the pali trail will be by DOH permit. In the long term, escorted and unescorted visitor access will be allowed.

Visitor Use and Experience

Visitation levels will generally be moderate in the long term. Visitors could encounter a moderate to high level of contact with staff and other visitors during peak use. A range of group sizes could be accommodated. The NPS will allow visitors with entry passes who have taken the required park orientation, to have unescorted public access.

Visitors will receive an orientation in this zone describing what activities are appropriate through a variety of interpretive tools and opportunities to learn and participate. Ranger-led tours in certain areas could be a part of the visitor experience.

In addition, special events such as cultural events and community celebrations may be allowed, but group sizes may be limited.

Facilities

Facilities in this zone consist primarily of buildings, structures, utilities, and transportation facilities supporting visitor use and park operations.

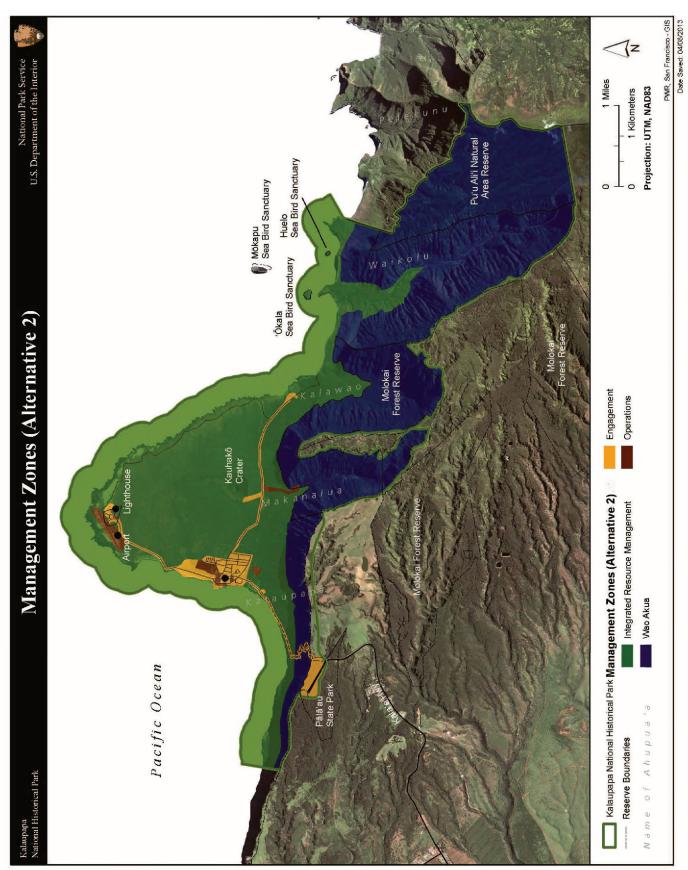


Figure A: Management Zones (Alternative 2)

Operations Zone

This zone consists mainly of operation and maintenance facilities for the park and its partners (airport, settlement, water and waste systems).

Resources

Cultural landscape elements/features could be adapted for visitor use, safety, and resource protection where compatible with the character-defining features of the cultural landscape. Some historic structures could be rehabilitated and used to serve operational needs. Limited operational-based development (i.e. fuel station), may occur in suitable areas.

Native plant communities and wildlife habitat would be mostly intact, but may be modified by future operations-related activity (i.e. native tree impacts on utility lines), in suitable areas. Invasive nonnative species would be suppressed and actively managed.

Intact natural soundscapes, night skies, and viewsheds could be experienced at certain locations. Natural sounds would be generally audible mixed with sounds from visitor and park operations activities. Artificial sound levels would be highest in this zone as a result of park operations. Outdoor lighting would be used when needed to support visitor services or park operations, but would be designed to minimize light pollution.

Access and Transportation

This zone would encompass major transportation infrastructure such as the airport, harbor and pier, as well as improved roads. Access may be controlled in certain locations. Universal access opportunities would be provided.

Visitor Use and Experience

Low use levels would be expected since this area is intended for operations, staff and official business. Passive interpretive tools could include waysides.

Facilities

Facilities in this zone consist primarily of buildings, structures, utilities, and transportation facilities supporting park operations.

Wao Akua Zone

This zone is based on the Hawaiian land classification called "wao akua" (place of the spirits). These upland forests would be managed for their sacredness, biocultural resources and natural features.

Resources

No adaptive re-use of cultural landscape features would occur in this zone. There would be minimal introduced features, and only for resource protection.

Terrestrial and marine native plant communities and wildlife habitat would be preserved and promoted to the greatest extent possible. Ecological processes would be primarily left unimpeded. Measures will be taken to prevent the importation of weeds and pathogens harmful to the native ecosystems.

The natural soundscape, night sky, and viewsheds would be intact. Natural sounds would dominate in these areas, with few artificial sound disturbances limited to occasional park resource management operations and visitors. Habitats for sensitive species would be free or nearly free of intrusive noise. No artificial outdoor lighting would be present (except on the pali above 500'). Viewsheds would be protected to a high degree. There would be no visible human constructed features.

Access and Transportation

Access to this zone would be by limited trails, and would be afforded mainly to managers, researchers, cultural practitioners. A landing zone clearing could afford helicopter access in support of resource management operations. Motorized/vehicular access would not be allowed.

Visitor Use and Experience

Visitation levels would be low and encounters with other visitors would be infrequent. Park managers have the discretion to allow uses that would not be disruptive to conduct research or resource protection activities.

Interpretation and education will emphasize the sacredness, significance, and/or sensitivity of the area and the importance of protecting it. A moderate to high degree of physical effort may be required to experience this zone.

Facilities

Facilities will be allowed only in support of resource protection and safety (i.e. equipment storage and staging)

Attachment 2: Public Comments and NPS Responses

Kalaupapa NHP GMP/EA Public Review

The *Kalaupapa National Historical Park General Management Plan and Environmental Assessment* was released to the public on November 15, 2018 for a 30-day review. The GMP/EA and e-newsletter were distributed to agencies, organizations, and individuals on the park's mailing list, including more than 1,500 contacts (see the list of entities consulted on page 73 of the 2018 GMP/EA). Press releases further announced the release of the GMP/EA and public comment period. In response to requests for an extension, on December 13, 2018 the NPS announced a deadline extension to February 1, 2019. In response to further requests for an extension due to the unavailability of the project website during the partial government shutdown in December 2018 and January 2019, the NPS extended the comment deadline to March 7, 2019.

Written Comments and Public Meetings

The NPS received 35 written responses in the form of letters, e-mails, and comments submitted through the project website at http://parkplanning.nps.gov/kalagmp. Written comments were received from the following organizations, affiliates, and elected officials:

Agencies and Organizations Submitting Official Comments

'Āina Momona

Church of Jesus Christ of Latter-day Saints

County of Maui: Department of Planning

Historic Hawai'i Foundation

Ka 'Ohana O Kalaupapa

Office of Hawaiian Affairs

Sisters of the Sacred Hearts

State of Hawai'i:

Department of Hawaiian Home Lands

Department of Land and Natural Resources, State Historic Preservation Division

Office of Planning

U.S. Fish and Wildlife Service

U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service

U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Habitat Conservation Division

Substantive Comments on the GMP/EA and NPS Responses

Analysis of Substantive Comments

Consistent with the requirements of 43 CFR 46 46.305 (a) (1), the NPS must consider all comments on the GMP/EA that are received during the public comment period. Substantive comments are defined by Director's Order 12, "Conservation Planning, Environmental Impact Analysis, and Decision-Making" (NPS 2015) as those comments that:

- question, with reasonable basis, the accuracy of the information in the GMP/EA;
- question, with reasonable basis, the adequacy of the environmental analysis;
- present reasonable alternatives other than those presented in the GMP/EA; or
- cause changes or revisions in the proposal

Substantive comments raise, debate, or question a point of fact or analysis.

NPS Responses to Comments

All comments and suggestions were thoroughly considered and reviewed. Many comments received were similar or duplicative to previous comments on the draft GMP/EIS and are addressed in Appendix G: Draft GMP/EIS Public Review Summary Public Concerns, and NPS Responses. Therefore, this section includes comments that presented new substantive and non-substantive points regarding information in the GMP/EA as well as continuing concerns previously expressed in the planning process. Some previously expressed concerns in the planning process were again voiced in the EA version and those comments are addressed again to acknowledge the concern, add additional context, and present the park's final response. To facilitate responses to similar comments, concern statements were developed to summarize the comment.

The NPS has responded to substantive comments raised by the public as part of finalizing the GMP/EA. These responses are included below. In general, the NPS responded to comments by:

- making factual corrections in the GMP/EA;
- supplementing, improving, or modifying the analysis and descriptions;
- modifying the alternatives;
- explaining why the comments do not warrant further response by citing sources, authorities, or reasons in support of the NPS position.

The NPS received many non-substantive comments and suggested technical and editorial corrections. At the NPS's discretion, the responses to some non-substantive comments have been provided. Select non-substantive comments in the table include comments that are of high interest but outside the scope of the plan, comments about the planning process and compliance requirements, and other minor comments. Comments in favor of or against the preferred alternative or other alternative, or those that only agree or disagree with NPS policy are not considered substantive. Comments that requested more detailed information about implementation of the GMP, about current park operations, and about management by non-NPS partners were determined to be beyond the general scope of this GMP and are not included in the table. Based on comments received and further NPS review, a revised GMP/EA (2021) has been prepared and released along with this FONSI. The revised GMP/EA makes necessary clarifying changes addressing the comments below.

The following table organizes comments by topic in the order presented in the GMP/EA. Comments are noted as substantive (Sub) and non-substantive (Non).

Note: Page numbers refer to the November 2018 Kalaupapa NHP General Management Plan and Environmental Assessment, except where noted.

Table 1: Concern Statements and Responses

Com ment #	Sub/ Non	Concern Statement	Response
		Management Structure and Partners	
1	Sub	It's unclear whether proposed partnerships will transfer, lease, or sell property out of federal ownership or control without adequate or enforceable conditions to protect historic properties.	Because the NPS does not own property, except for the 23 acres at the Molokai Light Station, the NPS would not transfer, lease or sell property associated with Kalaupapa NHP. With prior approval of DHHL, the NPS may sublease, assign, or permit other persons to occupy or use the premises or any portion thereof in order to carry out the purposes of Public Law 96-565. The preferred alternative would allow the NPS to continue, update, and enter into new agreements for the long-term management of Kalaupapa NHP consistent with the park's enabling legislation. Any new agreements for the management of buildings or structures would be to support the intent of the GMP and would comply
			with Section 106 and applicable state law.
2	Sub	Homesteading is only barely addressed in the GMP/EA with the NPS stating that it has no authority on permitting homesteading. NPS might not have the authority, but it has a responsibility to discuss this important matter and reach a decision with Kalaupapa residents, beneficiaries (especially those on the waitlist), topside Molokai residents and DHHL staff. Can homesteading and Kalaupapa NHP co-exist in the future?	Homesteading on DHHL land within the park has been an issue throughout the GMP planning process with many commentators requesting that it be allowed and many opposing such use because it would be inconsistent with the memory of the patients, would not maintain the historic nature of the settlement, and not meet the goals set out in the park's enabling law. A decision to allow homesteading on DHHL lands within the park is within the authority of DHHL and

			not the NPS. DHHL has no plans to allow homesteading within the park.
			The text of the EA has been updated to provide a slightly expanded discussion of this topic at page 33 of the GMP/EA.
			The NPS is unaware of any authority or plan on the part of DLNR to allow homesteading on DLNR administered lands within the park.
			See also the previous responses to similar comments on the draft EIS in the 2018 GMP/EA Appendix G: Topic 5: Native Hawaiians: <i>Homesteading</i> , pages 154-155.
3	Sub	Support a public panel made up of parties who have a stake at Kalaupapa and have been involved in the GMP/EA public process and form true partnerships with organizations that can help the NPS with work, funding, and ideas.	Kalaupapa NHP has an advisory commission that advises the NPS on management of the park. The GMP/EA has been revised to state, "Kalaupapa NHP Community-based Group: The NPS would encourage that a community-based group be established to provide their mana'o (thoughts, ideas, knowledge, or opinions) during and after the transition and once there is no longer a living patient community at Kalaupapa." This can be found on page 23 of the revised GMP/EA. The NPS is committed to partnerships for the long-term care and management of Kalaupapa NHP.
4	Non	The current lease agreement states that at the end of the lease between the NPS and DHHL, the DHHL will have to pay the NPS for the improvements made on DHHL lands. The concern is that this decision by DHHL could lead to the loss of	The lease between the NPS and DHHL provides that DHHL would have to pay for any improvements built by the NPS <i>only</i> if DHHL terminates the lease early. Otherwise, DHHL will receive the land and improvements on the expiration of the lease, unless the NPS removes any

5	Non	homestead lands in perpetuity due to a lack of funds for repayment. NPS states that current management guidance has come from cooperative agreements. What have been the cooperative agreements in place for the last 38 years?	improvements and restores the property to its natural state within a reasonable time. For the lease, see: www.nps.gov/kala/getinvolved/planning.htm For the agreements and other planning guidance, see: www.nps.gov/kala/getinvolved/planning.htm
		Management of Specific Areas	
6	Sub	Any studies associated with a wild and scenic river designation should include an analysis of potential impacts to future kalo lo'i restoration and other exercises of rights of traditional and customary access and use by Native Hawaiians.	The WSR study in Appendix G only confirms the continued eligibility of the river for wild and scenic designation. A suitability study must also be conducted before a recommendation for designation can be made to Congress. One requirement of a suitability study is that the NPS consider the compatibility of wild and scenic river designation with other potential uses of the river segments, including traditional uses and access rights of Native Hawaiians. The GMP proposes moving forward with the suitability study and pursuing a joint management plan for Waikolu with DLNR and other partners
		Cultural Resources	
7	Sub	Archeological sites should be protected and preserved for their cultural preservation and cultural value.	The GMP/EA has been revised on page 13 to state, "To the extent possible, National Register eligible and potentially eligible archeological sites would be protected, preserved, and managed for their cultural, interpretive, and research values."
8	Sub	On page 9, the GMP/EA states that archeological sites in the immediate area of the lighthouse will continue to be monitored, inventoried, and	DOT's weather station is proposed for construction on DOT land. The NPS would comment on DOT's federal and state law compliance for

		preserved. Does the State of Hawai'i Department of Transportation's Kalaupapa Airport's new weather station compromise this statement?	these projects and advocate minimizing effects to historic properties. This project has been added to the projects included in the cumulative effects analysis.
		Natural Resources	
9	Sub	The analysis of sea level rise should evaluate the feasibility of adaptive measures to safeguard historic properties and important facilities and infrastructure.	Because this analysis would require decisions for individual buildings, it is not within the scope of this programmatic plan. As needed, the NPS will consult relevant agencies and reports, to obtain data for implementation level planning.
10	Sub	The State of Hawaii Department of Planning should be consulted about federal consistency with the Coastal Zone Management Act (CZMA).	The NPS consulted with the Department of Planning in 2013. Federally "controlled" lands are exempt from the requirement for a federal consistency determination under the CZMA. Kalaupapa NHP is considered federally controlled because of the leases and agreements that the NPS has with the state. In addition, broad programmatic plans are exempt from CZMA. Implementation of any specific projects could require additional consultation with the Department of Planning. See the response to similar comments to the draft EIS in the 2018 GMP/EA: Appendix G: Draft GMP/EIS Public Review Summary, Public Concerns, and NPS Responses on pages 179-180.
		Public Use	
11	Sub	On page 48 of the 2018 GMP/EA, there is a misleading statement that claims that there were 76,000 visitors to Kalaupapa NHP in 2017. The statement should have pointed out	Comment noted. Text in the revised EA has been updated on page 51.

		that this number is mostly made up of visitors who stop by the part of Kalaupapa NHP that is located at the Kalaupapa Overlook. The number of visitors to the Kalaupapa peninsula average about 25 per day according to NPS's latest State of the Park 2015 report.	
		Operations	
12	Sub	Proper maintenance is lacking, resulting in the poor condition of Damien Road and overgrowth of vegetation at the cemeteries and Kalawao. There is currently not enough staff to properly maintain the cultural and historic properties. Descriptions of staff and job positions should be provided for the near-term and long-term to ensure the proper management of resources.	As noted on page 9 of the revised GMP/EA, the approval of a GMP does not guarantee that the funding (including funding for staff) to implement the plan would be forthcoming; plans are always subject to Congressional appropriations. Thus, due to the relative uncertainty of future operating budgets, descriptions of specific staff and positions were not included in the GMP/EA. The NPS is working to address operational staffing capacity to support Kalaupapa NHP for both the near- and long-term, but needs to remain flexible and responsive to changing needs and priorities.
13	Sub	The costs could have been estimated based on different scenarios, such as a scenario where DHHL takes over the management and maintenance of ten percent of the structures, another scenario where nonprofits "adopt a structure" and maintain a certain percentage of the buildings, etc.	The scenarios set out in the comments could be part of an implementation level plan dealing with historic buildings and structures. Since the GMP is a programmatic planning document, the details of how particular building could be used or managed (including having other entities contribute to the management) are beyond the scope of the GMP. However, these kinds of scenarios could be part of implementation level plans that themselves would require additional collaborative planning and firm commitments from partners.

NHP. See the responses to similar comments to the draft EIS in the 2018 GMP/EA: Appendix G: Topic 14:	14 Sub	With the unclear jurisdictional issues, commitments, and mutual compacts between Federal, State and County authorities, response to safety and security is critical and it's unclear how that will be accomplished. What is the role of the NPS and other entities in emergencies?	See the responses to similar comments to the draft EIS in the 2018
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		Legal and Policy Requirements	
		9	
15	Sub	The GMP/EA document should be in compliance with State laws: Chapter 343 (State NEPA); HRS 326 (Hansen's Disease); and 6E (State Historic Preservation). The state constitutional rights and privileges of Native Hawaiians are not addressed in the GMP/EA; therefore, it is non-compliant and in conflict with NHPA, NEPA, HRS 326, and 6E. It would be helpful to know the opinion of the Department of Health's Office of Environmental Quality Control on NPS's position on these matters.	The GMP is a programmatic planning document for a federal agency (the NPS) in compliance with federal laws, including NEPA and NHPA (Section 106). In general, state laws, including state environmental planning and historic preservation laws, do not apply to federal agency actions. In implementing parts of the GMP, the NPS may need additional approvals and/or planning with state agencies that administer the state lands within the park; at that time, additional compliance with state laws by those state agencies may be necessary. The constitutional rights and privileges of Native Hawaiians under state law are appropriate for various state agencies to address but beyond the scope of the GMP, which documents the management direction of the NPS (a federal agency) for its administration of Kalaupapa NHP under federal law. In the event that the state agencies that manage state lands within the park desired to implement plans or activities to address any requirements of state law regarding the rights and privileges of Native Hawaiians, the NPS would work with those agencies on how such plans would comply with applicable federal law and whether changes to existing agreements between the NPS and those agencies would be needed. See responses to similar comments to the draft EIS in the 2018 GMP/EA: Appendix G: Topic 17: Compliance and Planning Process: Hawai'i laws, policies, and compliance on pages 179-180.

			The NPS has consulted with DOH throughout the GMP planning process. The NPS suggests that the commenter inquire with DOH on its position on these questions.
16	Sub	The GMP/EA does not follow NPS Management Policies 2006 (§ 2.3.1) for general management planning. There is no "clearly defined direction for resource preservation and visitor use" and no priorities, cost estimates, timelines, and enough detail to assess whether the plan is "achievable and sustainable." Clarify whether or not the regional director approved an exemption to the general rule of preparing an EIS for the GMP.	The GMP/EA is a programmatic planning document that provides direction to NPS staff for near-term and long-term management of Kalaupapa NHP, including guidance on protecting and preserving park resources, visitor use, operations and maintenance. Additional implementation level planning will provide more detail on specific issues but based on the general guidance provided by the preferred alternative. In addition, the GMP will provide direction to NPS staff once a fundamental change at the park occurs when there are no longer Hansen's disease patients living within the park. On November 1, 2018, the Regional Director did approve an exception to the general rule that an EIS be prepared for a GMP – see the response to the next comment for more details. In addition, on January 11, 2021, Director's Order #2 superseded existing policy (NPS Management Policies 2006, section 2.3.1.7), removed the recommendation that environmental impact statements be prepared for all GMPs.

		NEPA Pathway: EIS to EA	
17	Sub	More description about the rationale for the change from a lengthy GMP/EIS to a shortened GMP/EA is necessary.	The NPS acknowledges that the EA's discussion of the change from an EIS to an EA was short, leading to confusion on why the change was implemented. The text of the EA has been revised to provide a rationale for why the NPS moved from the EIS to the EA at page 1.
			Based on public comments regarding the draft EIS and upon further analysis, the NPS decided to remove the proposed boundary expansion for the park, which was the issue that created the most controversy with the public. The NPS also determined that only one of the three proposed action alternatives in the draft EIS truly met the purpose and need for the GMP – again based on public comments as well as Congressional intent set out in the park's enabling law.
			Further analysis of the potential environmental impacts confirmed that the preferred alternative would not pose significant environmental impacts that would require an EIS under NEPA (which is separate from the general direction in the NPS Management Policies to complete an EIS for GMPs).
			In addition, the decision to move from an EIS to an EA was in compliance with Secretarial Order 3355 "Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807, 'Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure

			Projects." (issued on August 31, 2017) and subsequent guidance memoranda issued by the Secretary. The decision is now also in line with the new Director's Order #2, as discussed in the comment above. For current DOI NEPA requirements, see: <a a="" according="" all="" an="" and="" are="" associated="" away.="" buildings="" caused="" change="" complete="" complexities="" complexities"="" complexities,="" ea="" eis.="" eis?<="" for="" format="" from="" gmp="" gmp,="" gmp.="" gone="" have="" historic="" href="www.doi.gov/nepa/requirements-guidance/DOI-requiremen</th></tr><tr><td>18</td><td>Sub</td><td>Clarify how the " if="" involved="" is="" longer="" management="" more="" no="" not="" nps="" nps's="" of="" own="" policies="" process="" proper="" removing="" segment="" so="" structures="" td="" the="" then="" there="" they="" this="" thorough="" those="" to="" trying="" use="" were="" with=""><td>The NPS's intent for historic buildings is to meet preservation goals that fulfill the purpose of the park while working with the park's state, religious, and other partners, in consultation with the community. Without knowing the future plans and commitments of partners regarding historic structures and buildings, it is not possible at this time to make informed decisions and be specific about the future uses and treatments of the historic buildings and structures. As noted in the response to the previous concern statement, the NPS agrees that the discussion of how the GMP moved from the draft EIS to the EA was not fully developed. The text on page 1 in the revised EA has been updated to better capture NPS's decision. The "complexities" referenced in the EA and in this comment do not refer to the potential for significant impacts to the environment; rather those complexities are the nature and extent of the historic buildings and structures within Kalaupapa NHP, the multiple parties that are or could be involved – NPS leasing land from</td>	The NPS's intent for historic buildings is to meet preservation goals that fulfill the purpose of the park while working with the park's state, religious, and other partners, in consultation with the community. Without knowing the future plans and commitments of partners regarding historic structures and buildings, it is not possible at this time to make informed decisions and be specific about the future uses and treatments of the historic buildings and structures. As noted in the response to the previous concern statement, the NPS agrees that the discussion of how the GMP moved from the draft EIS to the EA was not fully developed. The text on page 1 in the revised EA has been updated to better capture NPS's decision. The "complexities" referenced in the EA and in this comment do not refer to the potential for significant impacts to the environment; rather those complexities are the nature and extent of the historic buildings and structures within Kalaupapa NHP, the multiple parties that are or could be involved – NPS leasing land from
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			DHHL and administering lands of DLNR and non-profits and churches who also currently manage historic buildings, and the various goals of all of the interested parties. The more detailed guidance in the draft EIS was NPS's attempt to set out a general direction for how to manage these historic buildings and structures. However, based on public and state agency input and upon more review, the NPS decided that a more iterative approach to management would be better – this would allow more flexibility in the future, while still ensuring that there are not significant impacts to the environment.
			Along these lines, the EA has been updated (at pages 23-24) to state that the NPS would develop an adaptive management plan related to the historic buildings and structures in the park. In addition, as noted, the NPS has created a separate compliance effort for Section 106 of the NHPA that will also deal directly with these buildings and structures and allow more collaborative planning with state agencies, the public, and other partners.
			The removal of the guidance did not "remove" the historic buildings and structures from the purview of the GMP; those buildings and structures are still governed by the general management direction in the preferred alternative – with the additional planning, consultation, and compliance that would be needed or required for implementation plans in the future.
19	Non	Consultation with agencies and stakeholders did not occur prior to the major shift from a GMP/EIS to a GMP/EA.	On November 8, 2018, the NPS notified the public, agencies, and stakeholders that a full environmental impact statement (EIS) was no longer

			needed and was being replaced with a more concise plan and environmental assessment (EA). This was based on the comments received, further analysis, and the removal of the boundary expansion. In addition, it was determined that many of the important concerns of the public and state agencies would best be addressed through the creation of a separate and focused consultation process resulting in a Section 106 programmatic agreement.
20	Sub	Past consultation efforts on the aborted Kalaupapa NHP GMP/EIS cannot and should not transfer or be accepted as due process compliance for environmental justice for this GMP/EA.	The GMP was not aborted – the type of environmental document changed. The issues, alternatives, and analysis are substantially the same, except as noted. Thus, the public engagement for the GMP prior to the issuance of the WA is still relevant, and comments received on the draft EIS have been evaluated as part of the EA process, including those dealing with environmental justice.
21	Sub	Why were cost estimates available in the 2015 draft GMP/EIS and not in this GMP/EA? Cost figures should be re-inserted, including for implementation of the plan, for current operations, and for the substantial deferred maintenance backlog. Take more time to allow for transition planning with DHHL and others, so that more specificity for the historic buildings and associated cost estimates can be re-inserted into the GMP/EA.	The purpose of providing cost estimates in GMPs is to show the relative comparison among alternatives of new developments. Cost estimates in the draft GMP/EIS were the most general level of cost estimating, and which is subject to changes over time. As stated on page 17, the alternatives do not call for new development, such as a newly constructed visitor center, so associated cost estimates are not required by the National Parks and Recreation Act of 1978. Additionally, specific guidance for the Kalaupapa Settlement's historic buildings, structures, and facilities was removed, making detailed cost estimates speculative and unreliable. Consultation on specific projects will

			be required in the future and detailed cost estimation will occur then as more specific proposals are made. See responses to similar comments to the draft EIS in the 2018 GMP/EA: Appendix G: Topic 14: Operations: Cost estimates and funding on page 175. The deferred maintenance backlog information for Kalaupapa NHP can be found at: www.nps.gov/subjects/infrastructure/identifying-reporting-deferred-maintenance.htm.
22	Sub	The draft GMP/EIS included references to preserving some houses and other places at Kalaupapa, but this has been removed from the GMP/EA. How will the future of Kalaupapa look? Who determines the fate of each of these buildings?	Nearly all the buildings are contributing to NHL status, which requires special consideration to avoid adverse effects. The fate of each building is to be determined in the years ahead and largely incumbent on the managing entity. NPS manages about half of the buildings.
23	Non	In the 2015 GMP/EIS, this statement appeared on page 30, "Kalaupapa NHP needs guidance for a fundamental change in park management that will occur in the near future." That guidance is not in the 2018 GMP/EA.	The fundamental change referenced in both the draft EIS and the EA (pages 6-7) is the changed circumstance faced by the NPS when there are no longer Hansen's disease patients living in the park. The preferred alternative as set out in Chapter 2 of the EA does provide the guidance for NPS management, in consultation with the community, for the short-term (while patients are still there) and long-term (after they are gone) – specially for resources protection, visitor use (including the number of visitors), park operations, and working with partners among other things. The 2021 programmatic agreement sets out the process for consultation on more specific direction related to broad guidance in the GMP.

		National Environmental Policy Act Compliance and Environmental Analysis	
24	Sub	Both alternatives could result in the potential for significant impacts to historic resources because of the deferred maintenance backlog and outstanding maintenance work. How can a FONSI be supported for the GMP/EA, when the GMP fails to reassure there will be funds allocated for the historic preservation treatments and maintenance of the Settlement in the long-term?	The NPS acknowledges the deferred maintenance backlog and outstanding maintenance. The GMP does address the issue of preserving resources with general direction but all such plans are always subject to funding decisions of Congress. A GMP cannot guarantee or reassure that these funds will be available. Even though funds cannot be allocated until they are received from Congress, the NPS can still adaptively plan and prioritize projects based on reasonable expectations of funding. By working with partners to leverage funds and prioritize actions, and through smart fiscal management, the NPS will implement GMP actions and prevent significant impacts.
25	Sub	The NPS says it will limit the number of visitors to the Kalaupapa NHP through "new mechanisms" that are not identified. How will impacts to cultural and historic resources be limited when there is no estimate of the daily number of visitors?	Mechanisms for limiting visitation are described on pages 24-28. Measures to protect resources are identified in Chapter 4: Environmental Consequences under the sections "Impact Avoidance, Minimization, and Mitigation Measures" for each resource type. User capacity and specific guidance for resource preservation is described in the 2018 GMP/EA: Appendix C: User Capacity with Indicators and Standards on pages 101-104. The user capacity framework is a type of adaptive management which informs and guides decision-making to protect resources while allowing appropriate levels of visitation.

26	Sub	Provide additional rationale/justification for exclusion of safety activities from further evaluation due to minimal or no potential impacts.	The NPS has a robust operational safety and leadership program that applies to its staff, volunteers, and park management. Under both alternatives safety and security would continue to be a high priority as described on pages 17 and 29.
		Planning and Compliance Process	
27	Sub	It appears from Figure 1 that land within the APE boundaries are under the control of several state agencies. Provide clarification as to whether those agencies, or any others that may be affected by this undertaking, have been consulted and whether they provided their written concurrence with what is proposed within the GMP/EA.	Agreements with the State of Hawai'i agencies provide the mechanism for the NPS to conduct long-term planning for Kalaupapa NHP, including the GMP. State agencies, including DHHL, DOH, DLNR, and DOT, and others who may be affected by this undertaking were invited to participate in the planning, NEPA, and Section 106 processes and consultations throughout the multi-year planning process. Additionally, the NPS has maintained active communications with the State of Hawai'i agencies' partners and landowners within the park boundary. All comments received were thoroughly reviewed and addressed. In addition, all those agencies were contacted for compliance specifically required by Section 106.
28	Non	The comment deadline should be extended to allow for additional time for agencies and the public to review the plan and for public meetings to occur. Public meetings are an important way that Molokai residents participate in planning processes and projects that affect the island.	The comment deadline was extended twice, first to February 1, 2019 and then following the government shutdown to March 7, 2019. All comments received regarding the GMP/EA were thoroughly reviewed and considered in the preparation of the FONSI. The NPS agrees that public meetings are important to the planning process,

			and previous public meetings held between 2009 and 2015 have greatly informed and influenced the content of the GMP/EA.
29	Sub	Beneficiaries of Hawaiian homestead lands have had no consultation on how their property/lands may be adversely affected by an increase in tourism, accommodations and transportation on beneficiary lands.	The NPS administers DHHL lands in the park under a lease; DHHL has the authority and responsibility to consult with beneficiaries of Hawaiian homestead lands. However, beneficiaries of Hawaiian homestead lands have been engaged in the public planning for the GMP since the beginning of the process and as consulting parties for Section 106, including in the development of a programmatic agreement. As with other members of the public, beneficiaries will also have opportunities to join consultations in any future implementation-level planning.
		Transition and Plan Implementation	
30	Sub	On Page 30 of the GMP/EA, 36 studies and plans are listed to implement the GMP/EA. In the 2015 draft GMP/EIS, there were 13 plans and studies listed and none of them appear to have been completed. If none of the 13 studies identified in 2015 have been completed in 3 1/2 years, how long will it take to complete the 36 studies and plans needed to implement the GMP/EA?	The NPS recognizes the complexity of implementing the plan, and the GMP is the appropriate place for listing the studies and plans necessary for park management and projects. Several of the stated studies and plans are currently underway. The text has been modified to clarify the role of these plans and studies, which will support the implementation of the GMP/EA rather than being required prior to taking actions for implementation.
31	Non	The GMP/EA doesn't include a schedule, outline, or strategy with priorities for implementing the plan, and GMP end date, and it is unclear whether NPS has the capacity to implement the plan.	Implementation of the preferred alternative will occur over many years and some elements will only occur when there are no Hansen's disease patients living at the park. Because the GMP is a programmatic document and implementation of parts of the

			plan are dependent on various factors, including Congressional funding, it is outside the scope of the GMP/EA to provide a specific outline or schedule for implementation. The NPS has the capacity to implement the plan but its ability to do so is always subject to appropriate appropriations by Congress. GMPs, unlike a plan for a specific construction project, do not have "end dates" but instead are updated as needed in the future when conditions in a park change or goals identified in a GMP are meet or need to change. See response to similar comments on the draft EIS in the 2018 GMP/EA: Appendix G: Topic 18: Transition and Plan Implementation on pages 183-184.
		National Historic Preservation Act: Section 106	
32	Sub	The GMP/EA does not adequately identify historic properties under 36 CFR Part 800.4, including the identification of properties of religious and cultural significance in consultation with Native Hawaiian Organizations (NHOs).	In response to these comments, the NPS separated the NEPA and Section 106 processes and worked with SHPD, agency partners and landowners, and members of the community through over a year of intensive consultation to develop a
33	Sub	The GMP/EA has not sufficiently determined the Area of Potential Effects (APE).	Consultation with NHOs and other consulting parties will continue under
34	Sub	The Hawaii State Historic Preservation Officer (SHPO) does not concur with the no adverse effect determination under 106 for the GMP/EA. Other consulting parties and NHOs object to the no adverse effect determination under 106 for the GMP/EA.	the NHPA Section 106 process as outlined in the 2021 programmatic agreement (PA) to address the potential for adverse effects to historic properties well beyond the current NEPA process and FONSI.

35	Sub	Additional NHOs have requested to be consulting parties under the NHPA Section 106 process for the GMP/EA.	Accordingly, the Section 106 determinations of effect have been removed from the GMP/EA. The final PA document is the result of many conversations, discussions,
36	Sub	Pages 54-55: The determinations of effect for cultural landscapes and historic structures are inconsistent.	disagreements and heartfelt communications with a very dedicated group of consulting parties
37	Sub	Additional Section 106 consultation is necessary to resolve the effects to historic properties associated with the plan. An agreement document should be developed for the GMP under 106.	and staff who all care deeply about the important resources within Kalaupapa National Historical Park. Among other things, it identifies a community engagement program
38	Sub	The Hawaii SHPO requested a summary of comments received by consulting parties and the public.	e e
		Technical Corrections	
39	Sub	Use the full and correct name of "the Church of Jesus Christ of Latter-day Saints" when referencing the church.	Comment noted; text revised where necessary.

Attachment 3: Determination of Non-Impairment

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of the Interior and the National Park Service (NPS) to manage units "to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (54 U.S.C. 100101). NPS *Management Policies* 2006, Section 1.4.4, explains the prohibition on impairment of park resources and values:

"While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them."

An action constitutes impairment when its impacts "harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values" (NPS 2006, Section 1.4.5). To determine impairment, the NPS must evaluate the "particular resources and values that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts. An impact on any park resource or value may constitute impairment, but an impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance (NPS 2006, Section 1.4.5).

Fundamental resources and values for Kalaupapa National Historical Park are identified in the enabling legislation for the park, the Foundation Document, and other planning documents. Based on a review of these documents, the fundamental resources and values come from the Patients; Kamaʻāina (original Hawaiian inhabitants); Patient Helpers' work with Hansen's Disease Patients; Stories, Oral Histories, and Mana (Spirits); Native Hawaiian Traditional Cultural Use; Historic Buildings, Structures, Cultural Landscapes, and Archeological Features Associated with the Hansen's Disease Settlement; Museum Collections; Educational Values; Geological Features and Unobstructed Viewshed; Soundscapes and Dark Night Skies; Terrestrial Ecosystem; Marine Ecosystem; and Waikolu Stream associated with the park.

Resources that were carried forward for detailed analysis in the EA and are considered necessary to fulfill specific purposes identified in the establishing legislation or proclamation of

the park; are key to the natural or cultural integrity of the park; and/or are identified as a goal in relevant NPS planning documents include: cultural resources (including values, traditions, and practices of traditionally associated people, and historic structures and cultural landscapes); natural resources including water resources (hydrologic processes and floodplains), vegetation, marine and terrestrial wildlife, and special status species. Accordingly, a non-impairment determination is made for each of these resources. Non-impairment determinations are not necessary for social resources (including visitor experience, visitor use, interpretation and education, access, transportation and socioeconomics) because impairment findings relate back to park resources and values, and these impact topics are not generally considered park resources or values according to the Organic Act.

This non-impairment determination has been prepared for the selected action, as described in the Finding of No Significant Impact for the Kalaupapa General Management Plan Environmental Assessment.

Values, Traditions, and Practices of Traditionally Associated People (Ethnographic and Biocultural Resources)

Biocultural resources are defined as any physical, biological, and human elements that strengthen a people's evolving relationship with a defined place, and maintain their unique set of customs, beliefs, language, traditional knowledge, objects and built environment (Pacific Island Climate Change Cooperative Culture and Communities Working Group, 2016).

Kalaupapa has many layers of human history. They include the landscapes and resources associated with the pre-1866 native Hawaiian community and displaced Hawaiians, relocated to other areas of the peninsula until the late 1890s. The central ethnographic resources are associated with the patient population at Kalawao and Kalaupapa from 1866–1969.

Kalaupapa connects people through traditional Hawaiian stories from the kamaʻāina (nativeborn Hawaiians and long-time residents) and the stories of the patients to the āina. It is a place with a compelling story to tell the world.

<u>Traditionally Associated People</u>: In 2009 the park started a formal ethnography program to gather information about resources and historic properties, and to conduct individual and group consultation to aid in park planning and management. The NPS consults with the patient community in general, as well as with the Kalaupapa Patients Advisory Council, who represent the broader patient community.

<u>Description of the Patient Community at Kalaupapa</u>: There are fewer than 11 patients at Kalaupapa. Current patients were admitted to Kalaupapa, many of them as children, between 1936 and 1969. All patients are assigned a residence, although several live on other islands and only stay in their homes at Kalaupapa occasionally. Most are retired, though some continue to work part-time. Almost all are mobile and many are able to drive around the settlement. Due to health reasons, several patients live at Hale Mōhalu, the Hansen's disease ward at Leahi Hospital in Honolulu, and rarely visit Kalaupapa.

Resource Use by the Patient Community: When the patients were young they were taught to fish and gather resources by the older patients in the community: a pattern that repeated itself at Kalawao and Kalaupapa. They explored the beaches, ocean, and mountain valleys and streams

for sustenance and recreation. The foods harvested supplemented meals at the group homes: for the predominantly Hawaiian or part-Hawaiian patients, fish and other ocean delicacies were ties to their cultural identity. Plants, wildlife and items were also collected for cultural purposes, medicine, and healing. Hunting with guns was a later tradition that began in the early 1950s. In earlier years, patients hunted pigs and goats; axis deer arrived in the park in 1984 and kōkua take them today via a DLNR animal control permit, administered by the DOH. The tradition of giving fish, salt, and other resources to widows, the elderly, and others in need is rooted in Hawaiian culture and is still carried on today among kōkua and patients. Current resource use by the patients is limited by their age and physical ability. The one gathering practice that is still accessible to most patients is the collection of salt along the rocky northern coast. None of the patients fish or hunt any longer.

<u>Pre-settlement Native Hawaiian Community</u>: The displacement and removal of the presettlement Hawaiian community between 1865 and 1895 contributed to a loss of ancestral connections, cultural knowledge, and traditions relating to the landscape. The disruption of the oral tradition by the removal of the Hawaiian community resulted in a fragmented history with incomplete information about earlier cultural resources and significant sites.

At the very heart of Hawaiian culture lies a sense of place and connection to the 'āina woven together through wind and rain names, stories, chants, songs, cultural sites and the resting places of the kupuna (elders). Across the peninsula, from Papaloa to Kauhakō to Kalawao and Waikolu, an important part of the Kalaupapa narrative is about reconnecting to the 'āina once again.

The NPS is learning more about the Hawaiian communities who lived on the peninsula prior to 1866. The NPS continues to work to identify descendants of the displaced Hawaiian community who once were associated with the park's biocultural resources. In the future, the NPS hopes to engage more fully with these descendants and include their input in decisions that will be made about park resources and future management.

Impacts to Values, Traditions, and Practices of Traditionally Associated People (Ethnographic and Biocultural Resources)

Ethnographic research would be expanded to include additional staff and partners focused on gathering and documenting the stories of the kama 'āina, patients, their families, kōkua, and long-time visitors and friends and connecting with these associated individuals and groups. Use of volunteer service groups and partnerships with other agencies and organizations, such as Ka 'Ohana O Kalaupapa, would occur.

Collected information would be used to strengthen 'ohana and descendant place-based connections, teach and educate the volunteer service groups and for offsite and experiential interpretation and education using modern media and technology. The park would encourage implementation of culturally sustainable practices to educate the public and ensure continuation of the indigenous culture. Combined, there would be long-term beneficial effects on ethnographic and biocultural resources.

Conclusion: With a wide array of long-term beneficial effects, the selected action will not impair ethnographic resources.

Archeological Resources

The Kalaupapa region is a layered complex of archeological sites, diverse in type and representative of the full historical continuum from pre-contact to the present day. Due to its physical isolation and lack of modern development, it is regarded as one of the most intact archeological complexes in Hawai'i. In 1976, several individual archeological sites and structures within Kalawao County were identified in the National Historic Landmark and the National Register of Historic Places. The archeological sites have also been recognized in the enabling legislation for Kalaupapa NHP.

Within Kalaupapa NHP 669 acres have been surveyed for archeological resources. To date, researchers have documented 567 archeological sites. Of the documented sites, all are eligible or listed in the National Register of Historic Places. Resource types include both pre-contact sites and complexes—agricultural sites such as lo'i (pond fields) and kula (dryland) field systems; and ritual sites such as ko'a (shrines dedicated to fishing), and heiau (temples). Historic sites and complexes include features at Kalawao, Kalaupapa Settlement and throughout the park—artifacts such as glass, household sites, and historic building remains.

For more detailed information about the archeological features and associated history and culture of Waikolu Valley, see Appendix F: Wild and Scenic River Analysis for Kalaupapa NHP.

Impacts to Archeological Resources

Expanded hands-on learning for research, stabilization, and other preservation treatments of archeological resources would occur via stewardship activities. Opportunities for more research, and potential and training opportunities in archeological inventory, monitoring, preservation treatments and cultural resource management through partnering with universities and other entities for field training programs would include qualified professional oversight. More knowledge of individual and contributing historic properties, and more National Register nominations could result. While increased visitation could create the potential for adverse impacts, visitors would be highly managed to protect archeological resources.

Conclusion: Because archeological sites would be inventoried, studied and protected and visitors would be managed to avoid impacts, there would be no impairment of archeological resources or values from implementation of the selected action.

Historic Buildings and Structures

here were more than 400 buildings identified as part of the Kalaupapa Leprosy Settlement Historic District when it was designated a National Historical Landmark (NHL) in 1976. Some of these buildings have since been lost due to weather-related deterioration and termite infestation. When the park was established in 1980, an inventory of historic buildings identified approximately 200 for preservation. A small number of others were also identified that were not listed in 1980, but which contribute to the historic district's character and setting.

There are four major types of historic buildings in the park: state-constructed residential, administration/ industrial, religious, and patient-built structures. Most buildings share an architectural cohesion that is the result of a consistent handling of form, material, and style. Similarly, the 26 marked cemeteries in the park display relatively consistent use of materials, construction styles, and techniques.

A small number of residential buildings date to the late 19th century or early 20th century. Some of these may predate the movement of the settlement from Kalawao to Kalaupapa, while others were built in the early 1900s out of materials taken from buildings abandoned in Kalawao. Their form is distinctive and was once much more prominent in the settlement. They are similar to the early housing built by Hawai'i sugar planters for immigrant laborers during the expansion of the industry in the late 1890s and early 1900s. Mid-period buildings were constructed between 1919 and the 1930s and also reflect many features of standard plans produced by the Hawai'i Sugar Planters Association. After World War II, residences at Kalaupapa were typically built in the style known as "Hicks Homes," a standardized, pre-fabricated housing type popular in Hawai'i at the time. This style is named for Hicks Construction, which offered many of these homes in a catalog of floor plans. Hicks provided necessary documents to expedite financing and would even assist in obtaining a building permit. Hicks Homes were also attractive because they were marketed aggressively, resulting in a large number of homes that held their value. More information about the historic buildings and structures is available in the EA.

Cultural Landscapes

There are three cultural landscapes in the park: 1) the Kalaupapa and Kalawao Settlements, 2) the Molokai Light Station and 3) the Peninsula.

<u>Kalaupapa and Kalawao Settlements</u>: The Kalaupapa Leprosy Settlement Historic District was designated a National Historical Landmark (NHL) in 1976. Kalaupapa and Kalawao settlements are managed as a single cultural landscape with both designed and vernacular characteristics. The cultural landscape is historically significant because it retains many of the physical resources and landscape characteristics associated with the establishment, development, and operation of the settlement for the treatment of individuals with Hansen's disease between 1866 and 1969.

Characteristics and features of the overall spatial organization of the settlements, reflect both historic vernacular elements and historic design components; planting and use of vegetation; circulation systems that reflect historic patterns of movement across the peninsula and within the settlement; the arrangement of buildings and structures in residential neighborhoods and functional areas; and small-scale features that add character and meaning to the landscape. These characteristics are described in the EA.

Molokai Light Station: The Molokai Light Station Historic District (listed NRHP 1982) is on the extreme northern tip of Kalaupapa peninsula. The district surrounds a majestic 138-foot lighthouse, which guides mariners sailing from the west through the narrow and dangerous Kaiwi Channel that separates the islands of Molokai and Oʻahu; light from the station can be seen up to 28 miles away and was automated in 1966.

Cultural landscape characteristics and features that convey the significance of the historical Molokai Light Station include natural systems and features, spatial organization, land use, vegetation, buildings and structures, circulation, and archeological sites. The period of significance for the Molokai Light Station is from 1908, when construction of the lighthouse began, through 1955 when the last addition was made to the wash house.

<u>Peninsula</u>: The Kalaupapa Peninsula cultural landscape covers the entire park outside of the Kalaupapa and Kalawao Settlements and Light Station cultural landscape units. The cultural landscape property boundary follows the park boundary and includes the entire peninsula including its coastal waters within a quarter of a mile, three deep valleys (Waikolu, Waihānau and Waiʻaleʻia), and the adjoining cliffs ranging from 1,600 feet to 3,000 feet within the park's boundaries. Much of the peninsula cultural landscape dates to the period prior to the Hansen's disease period of significance, and includes archeological resources. However, it is important to note that there are additional features that date to the settlements period of significance beyond the heavily developed areas, such as the two pali trails and the water system (historically connecting Waikolu Valley to Kalawao and Kalaupapa Settlements).

Impacts to Cultural Landscapes and Historic Structures

Protecting the overall character of the settlement would have long-term beneficial effects on historic structures and cultural landscapes. Although the function and uses of some of the neighborhoods and many of the historic structures in the settlement could change, stabilizing, rehabilitating and retaining the character-defining features of the buildings and landscape would have long-term beneficial effects. Developing a building use and infrastructure plan, which would include recommendations from the CLRs and HSRs, would further define NPS responsibilities and goals for the settlement and would lead to additional consultation with the SHPO. This would identify the most important components of the area for preservation and for use. In consultation with SHPO and DHHL, Kalaupapa's NHL-contributing historic structures would be stabilized, preserved, and rehabilitated for current and future uses, including visitor facilities, partner uses, park operations, and as interpretive exhibits, a long-term beneficial effect.

Because the NPS would generally prioritize stabilization of NHL-contributing historic structures before conducting more intensive rehabilitation projects, there would be a focus on preserving key buildings and structures. Reestablishment of some viewsheds would also benefit protection and understanding of the cultural landscape.

Preservation of the historic buildings and structures is dependent on staffing and funding, and a lack of stable and necessary funding could result in adverse effects to structures that do not rank highly in the NPS's asset management system resulting in lower priorities for rehabilitation. In conjunction with SHPO, opportunities for partners to assist in hands-on historic preservation projects are a key component of the preferred alternative. Preservation plus partnerships would have long-term beneficial effects through conducting preservation treatments for some buildings and structures along and small impacts consistent with the exclusions in the 2008 programmatic agreement) from rehabilitation that would address health, life safety, and accessibility requirements.

An initial focus on stabilization of landscape features followed by needed rehabilitation according to the *Secretary's Standards* within the Kalaupapa and Kalawao Settlements would prevent loss of resources. Treatments, including compatible adaptive reuse would benefit historic structures because it would help to preserve them. Minor changes to structures for adaptive reuse could also result in adverse impacts. Documentation, development of historic structures reports, and additional adaptive management planning for the buildings and infrastructure would also benefit long-term preservation efforts.

Preservation or rehabilitation of landscape features that illustrate Kalaupapa's many histories and allowing new compatible uses could have short- and long-term adverse impacts from

changing the use of some areas but would result in long-term preservation of key character-defining historic structures and cultural landscape features.

Conclusion: Because actions would be focused on adhering to the Secretary's Standards and on preservation of building and structures with important contributions to the landscape, there would be no impairment of historic buildings, structures or cultural landscapes or values from implementation of the selected action.

Water Resources

Hydrology: Eight named streams or their headwaters ('Awahua, Pūwāhi/Keōlewa, Waihānau, Wai'ale'ia, Waikolu, Wainēnē, Anapuhi, Waioho'okalo) plus two unnamed streams occur within the boundaries of Kalaupapa NHP and provide important aquatic habitat. Most of Waihānau, Wai'ale'ia, and Waikolu watersheds and streams are in the park, except for the headwaters. Waikolu Stream is the only perennial stream within the park boundaries. The Waikolu watershed is a major source of water for the island of Molokai and is included in the National Rivers Inventory as well as being eligible for other federal and state designations. Waihānau watershed drains the western half of the peninsula including Kalaupapa Settlement, and the Nihoa area on the far western side of the park. A single well in Waihānau Valley supplies water to the residents of Kalaupapa. Wai'ale'ia watershed drains the eastern half of the peninsula, including Kalawao.

<u>Floodplains</u>: Many of the park's historic structures are in vulnerable locations along the ocean shore within the 100-year floodplain. These structures are at-risk from tsunami, hurricanes, sneaker waves, storm surges, flooding, and sea level rise (Note: Appendix E in the EA contained the Floodplains Statement of Findings). The structures are of major historical significance, and the NPS acknowledges that many facilities with the settlement of Kalaupapa are subject to damage or destruction from seismic events and tsunami.

Impacts to Water Resources, including Hydrology and Floodplains

The continued maintenance and use of existing facilities within the settlement would have ongoing long-term localized adverse impacts on water resources and hydrologic processes. Current projects to improve natural habitat values and ecosystem function, such as coastal revegetation and feral ungulate removal, would benefit water resources and hydrologic processes by improving and restoring the function and integrity of some natural hydrologic systems. The removal and reclamation of facilities and structures, the stabilization of natural wetland, coastal strand vegetation, and dryland forest (e.g. Kauhakō Crater) areas, under the alternatives would result in beneficial impacts, while maintenance of roads, trails, and other facilities would have continuing small adverse impacts on water resources.

<u>Floodplains</u>: As shown by the Floodplains Statement of Findings, approximately 1,000 structures would remain in the 100-year floodplain. This would continue to have adverse impacts on floodplain functions and would also continue to be a threat to administrative infrastructure. Retention of these facilities would continue to affect the flow of water during floods and the capacity of the floodplain to store floodwaters.

New structures would be kept to a minimum to reduce intrusions into the ocean views and preserve the historic viewscape. The structures along the coast that would create debris moved by a tsunami are all of a historic nature. There are no mitigation measures that could be applied

to protect facilities within the tsunami hazard zone. The NPS is focusing on protecting human life and safety through warning and evacuation rather than minimizing property damage.

The Floodplains Statement of Findings provides justification for the retention of facilities in the floodplain and the NPS would document and seek to maintain the integrity of NHL-contributing structures along the ocean shoreline. In the event of a catastrophic loss of historic structures, the NPS would monitor the remaining structures and would make decisions on a case-by-case basis to determine the future management of impacted buildings in consultation with SHPO. Depending on the results of consultation, the historic buildings could be rehabilitated, treated to increase their resiliency to future events, be abandoned, or functions relocated. Replacement structures may be warranted under some scenarios.

Conclusion: Although there would be small impacts to water quality and the threat of loss for historic buildings and structures in the floodplain, there would be no impairment of water resources or floodplain values from implementation of the selected action.

Terrestrial and Marine Vegetation

<u>Pu'u Ali'i Plateau</u>: State of Hawai'i Natural Area Reserve (NAR), 1,329 acres. The Pu'u Ali'i plateau is in the southeast corner of the park at an elevation of 2,500 to 4,222 feet. It supports one of the best examples of Hawaiian montane wet forest or 'ōhi'a rainforest in Hawai'i and is an essential habitat for rare and endangered native forest birds, including the Molokai creeper (*Paroreomyza flammea*).

The Pu'u Ali'i region is considered one of the Special Ecological Areas of Kalaupapa NHP. It contains 160 plant species and eight natural vegetation communities, including 'ōhi'a/mixed shrub montane wet forest, 'ōhi'a/ montane wet shrubland, mixed fern/mixed shrub montane wet cliffs, 'ōhi'a/'ōlapa montane wet forest, 'ōhi'a/uluhe lowland wet forest; uluhe lowland wet shrubland; Hawaiian intermittent stream; and 'ōhi'a/uluhe montane wet forest (Hawai'i Heritage Program 1989).

North Shore Valleys: The 1,562-acre Hawai'i Molokai Forest Reserve is dominated by nonnative plant species, particularly in the lower and middle elevation areas (Hawai'i, Division of Forestry and Wildlife [DOFAW] 2009). Vegetation within the upper elevation areas (1,500+feet) of Wai'ale'ia Valley includes scattered native species reported along the upper eastern ridge of the valley (DOFAW 2009). The upper elevation area of Waihānau Valley, just outside the park boundary has high species richness (Hughes et al. 2007). The Forest Reserve Area is managed by the Hawai'i DLNR, DOFAW as a public hunting unit for pigs, goats, deer, and game birds.

North Shore Cliffs National Natural Landmark (NNL) is 27,100 total acres with 5,085 acres in the park above the 500-foot contour line. The 2,000 to 3,000-foot cliffs separate the peninsula from the rest of the island of Molokai. Native plants survive due to the steepness of the cliffs and the inaccessibility to goats, deer, and pigs. In the western NNL, from Nihoa to the western boundary of Waihānau Valley, vegetation is comprised of nonnative forest, dominated by Christmas berry and java plum. Lantana and other nonnative shrubs and grasses are also common in this area.

<u>Kauhakō Crater/Pu'u 'Ua'u (141 acres)</u>: Historically, botanists described the crater as "one of the finer examples of dryland forest remaining on Molokai or elsewhere in the Hawaiian

Islands" (Medeiros et al. 1996) containing an area of "pristine native lowland forest" that is "unexcelled elsewhere in Hawai'i" (Linney 1987). Previous studies and inventories in Kauhakō Crater and the surrounding environs have documented a total of 134 vascular plant species.

<u>Coastal Lowland (</u>2,701 acres): Most lowland coastal vegetation is comprised of nonnative species. Guava, Christmas berry, lantana, and java plum are common. The highest percentage of coastal lowland native vegetation (76 plant taxa) is found at Kūka'iwa'a peninsula. The Kūka'iwa'a peninsula vegetation community is a relic coastal forest.

<u>Coastal Spray Area (766 acres)</u>: Because the coastal spray area supports a more diverse and extensive native coastal vegetation community, it is designated a Special Ecological Area. The relatively intact nature of this area is because the major invasive species cannot tolerate the salt spray. The area is affected by grazing, cultivation, nonnative species and other human activities that have altered historic vegetation.

Offshore Islets (9.1 acres): The offshore islets (Huelo and 'Ōkala) are "the last strongholds where some of the rarest lowland and coastal plant species in the archipelago occur in natural populations" (Wood 2008). Both islets support relict vegetation and rich native species diversity; however, these are threatened by nonnative plants, landslides, rat predation ('Ōkala), and loss of reproductive vigor.

Huelo is considered one of the most pristine natural areas in Hawai'i, because it never had permanent human occupants (NPS 1990) and the "most botanically significant islet in the Hawaiian chain" (Wood 2008) because it contains one of the two remaining loulu coastal forests in the Hawaii.

'Ōkala has the highest native plant diversity of all the Hawaiian Islets (33 native plant taxa, of which 15 are endemic and 18 are state indigenous, and 26 nonnative species) (Hughes et al. 2007; Swenson 2008; Wood 2008). 'Ōkala is primarily comprised of mixed native shrubland of low-stature species and also is the only islet with the indigenous tree species keahi (*Nesoluma polynesicum*) or any member of the genus Tetramolopium. The endangered dwarf naupaka (*Scaevola coriacea*) also occurs on the islet.

Terrestrial and Marine Wildlife

Marine Wildlife: Kalaupapa NHP's seaward boundary extends one-quarter mile offshore. Three distinct marine habitats, the intertidal zone, sandy regions, and the coastal reefs, lie inside the boundary. Park waters shelter the endangered Hawaiian monk seal and humpback whale, the threatened green sea turtle, protected marine mammals such as the Hawaiian spinner dolphin, and well-preserved reef communities of coral, fish, and invertebrates. The two islets, 'Ōkala and Huelo serve as seabird sanctuaries, and there is one rocky pinnacle, Nāmoku, on the northwestern section of the peninsula.

<u>Terrestrial Wildlife</u>: The only terrestrial mammal native to Hawaii is the Hawaiian hoary bat (*Lasiurus cinereus semotus*) which is found throughout the park (Poland and Hosten 2018).

Native birds, including kākāwahie, oloma'o, crested honeycreeper, and the black mamo, are all thought to be extinct—or in the case of the crested honeycreeper, extirpated—from Molokai and the park. 'I'iwi is rarely seen on Molokai, however, it was sighted at Pu'u Ali'i in 2004 during

the Hawai'i Forest Bird Survey. Three native bird species ('apapane, maui 'amakihi, and 'i'iwi) and 12 nonnative bird species were detected during the surveys in 2005.

Three common migratory shorebirds—the Pacific golden plover, ruddy turnstone, and wandering tattler—are regularly observed at Kalaupapa, and occasionally sanderlings and bristle-thighed curlews are found foraging on the beaches. Seabirds typically found on the cliffs and offshore islets include black noddies, great frigatebirds, red-tailed tropicbirds, wedge-tailed shearwaters, and white-tailed tropicbirds. The rare Hawaiian petrel was spotted several times in recent years flying around the park at night, but no nesting areas have been documented.

Few surveys have examined the distribution of reptiles and amphibians at Kalaupapa NHP. Kraus (2005) found only stump-toed gecko (*Gehyra mutilate*) in the crater.

Aquatic Wildlife and Invertebrates: Waikolu Stream contains five native diadromous fish species, native snails, and shrimp that spend part of their early life cycle in the ocean before returning to the stream as juveniles. Water diversion from Waikolu Stream for western Molokai affects surface and groundwater and therefore native fauna (Brasher 2003).

<u>Invertebrates</u>: The isolated plants and animals in Lake Kauhakō appear restricted to its shallow surface layer; nutrients in the upper 10 feet support a dense and highly productive phytoplankton community (Maciolek 1982; Donachie et al. 1999; Halliday 2001). Invertebrates in the lake include the native paleomonid shrimp (*Palaemon debilis*), which is exceedingly abundant and is common in anchialine pools throughout Hawaiʻi (Mitchell et al. 2005). Maciolek (1982) noted that the endemic 'ōpae 'ula or red anchialine shrimp (*Halocaridina rubra*) were historically observed, but have not been recently seen.

Excluding the cave inventories, only incidental surveys of insects and other invertebrates have been conducted. The most extensive list was created for the native forests of the Pu'u Ali'i area. The indigenous isopod *Australophiloscia societatis* was collected in a forested area of Waihānau Stream (Rivera et al. 2002). No other surveys have been conducted in Molokai Forest Reserve, although rare species are known to occur nearby. Informal surveys have shown Hawaiian yellow faced bees occur commonly in the coastal salt spray zone, while three rare bee species are known from the nearby Mo'omomi Preserve. These may also be present in park coastal areas. Opportunistic surveys on Huelo Islet collected three endemic moths from three different families.

Organisms in the coastal wetland and riverine habitats at Kalaupapa NHP include insects such as the North American net-spinning caddisfly (*Cheumatopsyche pettiti*) which has become an important part of the diet of native stream fish (Kondratieff et al. 1997). They also support an introduced dragonfly (*Orthemis ferruginea*) and an introduced aquatic backswimmer (*Anisops kuroiwae*) (Evenhuis and Eldredge 1999).

Other invertebrates, including some endemic species are known from the nearly 20 known lava tubes and caves. The caves and lava tubes are remnants of larger caves plugged by siltation, breakdown, or subsequent lava flow. Most are part of three lava tube systems. An inventory of the cave flora, fauna and cultural resources has been conducted.

Impacts to Terrestrial and Marine Vegetation and Terrestrial and Marine Wildlife

There would be ongoing beneficial effects from restoration of native vegetation by removing nonnative species and planting native species, including rare and threatened species propagated by or delivered to the park nursery. Management programs to reduce feral ungulates and to preserve sensitive vegetation communities, such as coastal spray, dry forest, and high elevation rainforest, would also have beneficial effects.

The presence of nonnative (feral) cats, rats and mongoose would continue to threaten nest sites for low elevation terrestrial birds. The cat population is currently managed through spay-neuter programs. Native birds would also continue to be threatened by avian malaria-transmitting mosquitoes (including a recently introduced species that can live at higher elevations).

The nursery would also be expanded to cultivate ethnographically important ornamental, food, and medicinal plants. The park would also manage remaining field populations of legacy plants, including identifying and preserving historic vegetation. In the settlement and restoration areas, animal control reduction of small nonnative mammals increases vegetation recovery opportunities, improves native plant re-establishment and increases bird fledgling survival in key areas. Increasing understanding of the influence of nonnative wildlife management on native plants and animals through research would also improve future project success.

Additional adverse impacts on marine resources would be expected from increasing the number of visitors who may engage in fishing in new areas and target key resource species. Working cooperatively with DLNR to establish a marine managed area would improve opportunities for recovery of fish populations and concomitant benefits to reefs and reef habitats.

Conclusion: There would be no impairment of terrestrial or marine vegetation or wildlife from the small range of adverse impacts associated with implementation of the selected action.

Special Status Species

Over 580 species of terrestrial plant taxa have been recorded in the park. Approximately 282 species are native to the Hawaiian Islands. Of these, there are 35 plant species listed as federally endangered or threatened. At least one is also state-endangered. There are also four federally listed threatened or endangered mammals, six birds, and seven insects.

The park has been designated critical habitat for specific species. The park and most of the main Hawaiian Islands are designated critical habitat for monk seals. Critical habitat has been designated for 10 plant species in the park and is proposed for another 10 plant species. Another 15 listed plants do not have designated or proposed critical habitat in the park.

<u>Hawaiian hoary bat (Lasiurus cinereus semotus)</u>: The federally endangered Hawaiian hoary bat is the only extant native terrestrial mammal from the Hawaiian archipelago (USFWS 1998). It is listed as endangered throughout its range. It occurs across a broad range of habitats in the state (on Hawai'i, 'Oahu, Maui, Kaui, and Molokai) and roosts in native and nonnative woody vegetation. Based on current trends, the hoary bat is likely to remain stable in the short term, but spread of disease may result in future declines.

Surveys within the park from 2007 through 2009 reported only a few Hawaiian hoary bat detections at locations including the Old Damien Road, the pali trail, and along the cliff's edge. Recent monitoring (Poland and Hosten 2018) using more modern acoustic detectors found 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. Threats to the bats include habitat loss, roosting site disruption, pesticides, and both the decrease in availability and alteration of prey (due to an increase in nonnative insects) (USFWS 1998).

<u>Humpback Whales (Megaptera novaeangliae)</u>: Endangered humpback whales transit through the park boundaries from December to May each year. The Hawaiian Islands Humpback Whale National Marine Sanctuary was designated by Congress to protect humpback whales and their breeding habitat around the Hawaiian Islands, but it does not include the park waters and north shore of Molokai.

<u>Hawaiian Monk Seal (Neomonachus schauinslandi)</u>: Monk seals are endemic to Hawai'i and are one of the most endangered mammals in the world. Monk seals may live 25-30 years, but do not reach sexual maturity until they are 4-5 years old. They forage on the sea floor and frequent the same beaches. Unlike sea lions and elephant seals, they are not colonial and do not defend territories; however, they sometimes occur in small groups (NOAA 2018).

Prior to 1997, long-time residents in Kalaupapa indicated that monk seals rarely used the beaches and that no births had been observed since at least 1941 (NPS 2018). Monk seals currently use the intertidal habitat at the park for pupping, resting, and feeding and their presence is closely monitored (SWCA 2010: xix). Between 1997 and 2008, 38 pups were born in the park. By 2008, a total of 40 monk seals (22 males and 18 females) were using the intertidal zone in the park and up to seven pups are born annually on the peninsula (Brown et al. 2008, NPS unpublished).

Green Sea Turtle (*Chelonia mydas*) (FWS 2018): Green sea turtles occur worldwide. Within the U.S., green turtles nest in small numbers in the U.S. Virgin Islands, Puerto Rico, Guam, American Samoa, the Northern Mariana Islands, Georgia, South Carolina, and North Carolina, and in larger numbers in Florida and Hawai'i, including on Kalaupapa (SWCA 2010: xix).

In the park, green sea turtles are frequently seen and occasionally haul out on Kalaupapa beaches (demonstrating this basking only in Hawai'i, the Galapagos and Australia). The park conducts monitoring of sea turtle nests and habitat surveys, including law enforcement patrols to preclude human harassment and predation both at sea and on area beaches and installation of shielded lamps to protect nesting. The park also conducts feral animal control to reduce the threat of predation from a range of nonnative species, including mongooses. Green sea turtles are also occasionally hooked during subsistence/recreational fishing activities.

<u>Hawksbill Sea Turtle (Eretmochelys imbricate)</u>: Only four regional Pacific populations remain with more than 1,000 females nesting annually (one in Indonesia and three in Australia). Hawksbills are not known to nest in the park; however, they occur in the vicinity. There have been three documented sightings of hawksbill turtles since 2010 (pers. comm. P. Hosten).

<u>Seabirds</u>: The endangered Hawaiian Petrel (*Pterodroma sandwichensis* or ua'u) and threatened Newell's shearwater (*Puffinus auricularis newelli* or 'a'o) and other seabirds (other shearwaters and tropicbirds) are routinely present on the offshore islets ('Ōkala and Huela).

<u>High-elevation terrestrial birds</u>: The Molokai thrush or oloma'o (*Myadestes lanaiensis*), Molokai creeper or kākāwahie (*Paroreomyza flammea*), and 'i'iwi (*Vestiaria coccinea*) are currently

adversely affected by avian malaria. Only a small number of 'i'iwi are present on Molokai (Mitchell et al. 2005 *in* SWCA 2010: 41), documented from Pu'u Ali'i in 2004 during the Hawai'i Forest Bird Survey.

<u>Pacific Hawaiian Damselfly (Megalagrion pacificum)</u>: Historically, M. pacificum was the most common and widespread of the native damselfly species (Gagne and Howarth 1982). Current populations are known to occur on Maui, Molokai, and Hawai'i. It has been recorded from Waikolu Stream and Wai'ale'ia Stream.

Orangeblack Hawaiian Damselfly (*Megalagrion xanthomelas*): This species is known to occur on 'Oahu, Maui, Molokai, and Hawai'i. It was historically abundant throughout all the main Hawaiian Islands and has been translocated from 'Oahu elsewhere. It has been recorded from Waikolu Stream and Waihānau Stream. In 1995, a single orangeblack damselfly larva was seen along the margins of Lake Kauhakō, but no adults have been observed or collected since.

<u>Blackburn's sphinx moth (Manduca blackburni)</u>: These moths are one of Hawai'i's largest insects. Thought extinct in 1970, a small population was found on Maui in 1984. They are hornworms and feed on relatives of the nightshade family. Since the native larval host species, 'aiea, (Nothocestrum spp.) has declined, the moths have shifted to feed on invasive nonnative tree tobacco (Nicotiana glauca), which is spreading across dry, arid landscapes.

<u>Yellow-faced Bee (Hylaeus anthracinus, H. facilis, H. hilaris, and H. longiceps)</u>: Hawaiian yellow-faced bees are threatened by development (especially in coastal areas), fire, feral ungulates such as pigs, invasive ants, and the loss of native vegetation to invasive plant species. Because remnant populations of many species of Hawaiian yellow-faced bees are small and isolated, they are especially vulnerable to habitat loss, predation, stochastic events, and other changes to their habitat.

Threatened and Endangered Plants: The park works closely with DLNR, USFW, the University of Hawai'i, and other partners to propagate threatened and endangered plants in suitable and critical habitat. Restoration projects undertaken by the park have increased the prevalence or sustained the populations of some species. Others have continued to decline, despite efforts to propagate and outplant them. Many of the most sensitive low elevation special status plants have recently received increased protection as a result of successful feral animal projects on the peninsula and the higher elevation rainforest. Short-term stabilization has improved the short-term outlook for some other species (*Canavalia molokaiensis*, *Tetramolopium rockii*, *Scaevola coriacea*, and *Sesbania tomentosa*) and these are likely to increase over time pending additional implementation.

Other plants on Huelo and 'Ōkala islets, such as makou (*Peucedanum sandwichense*), are also likely to stabilize and improve as a consequence of rat eradication. Critical habitat for a variety of plant species has been designated along the northeastern coast of the Kalaupapa peninsula as well as upland into the Waikolu, Wai'ale'ia, and Waihānau watersheds.

Impacts to Special Status Species

<u>Hawaiian hoary bat</u>: Ongoing access on the pali trail by staff and visitors to the park would continue to traverse hoary bat habitat at the top of the trail during the day, with little impact to the bats. Maintenance of areas within hoary bat habitat would continue to occur outside of the nesting/pupping season for hoary bats to avoid trimming trees or shrubs (more than 15 feet tall)

which could harm or kill young bats left to roost while parents retrieve food. The park would continue to consult with the USFWS during any proposed maintenance activities that would affect vegetation in the vicinity of areas where hoary bats have been detected and would continue to conduct surveys for bats to expand knowledge of the species and its habitat.

The plan could include allowing visitors unescorted access to the Kauhakō Crater area. To protect hoary bats, the park would restrict visitors from the area during use by the bats (dusk through dawn) and may regulate visitors in other areas, particularly if roosting areas are discovered. The limited overnight use by visitors that may occur in the park would generally be confined to developed areas and is not anticipated to affect hoary bats because there would be no loss of hoary bat habitat.

<u>Humpback Whales</u>: Only the annual barge and marine resource management boating activities result in park-generated vessel traffic. Although there is occasional use by patient-sponsored boaters during fishing season, overall use of park waters by boaters is very low. Therefore it is unlikely that endangered humpback whales would be affected by park actions stemming from the GMP as they transit through park boundaries from December to May each year.

Green and Hawksbill Sea Turtles and Hawaiian Monk Seal: Under existing actions, the park would continue to monitor the distribution, abundance, and habitat use of special status species such as the green sea turtle and Hawaiian monk seal. Nonetheless, there would continue to be a range of impacts on sea turtles and Hawaiian monk seals. Although there is the potential for adverse impacts to occur when the turtles haul out or come ashore to nest (May – September with peak in June and July) and/or are observed by residents and visitors; during the annual fishing tournament; and when the monk seals haul out or pup on Kalaupapa beaches, a range of rules and mitigation measures are in effect at the park to prevent harassment, including the DOH Instructions for Visitors. It is unlikely that park originated vessel traffic, supporting NPS and DOH, impacts turtles or monk seals. Because there is no landing and no commercial tours are allowed in the vicinity of the park, recreational boating is limited to areas outside the park, however occasional use of park waters also occurs from patient-sponsored boaters, who may be on the lee side of the island in park waters.

There would continue to be short- and long-term beneficial impacts on sea turtles and monk seals from reducing feral cat populations consequent to a spay neuter program; from restricting patients and visitors from nesting/pupping areas during the nesting season; from restricting patients and visitors from close proximity to and/or blocking sea access for sea turtles and monk seals; and from the consistent resource monitoring that occurs when turtle nests are likely to occur and/or are detected and/or when monk seals come ashore to pup. The NPS would also continue to survey suitable habitat during the nesting season and to engage staff and trained volunteers in monitoring efforts. Consultation with the USFWS and NMFS for specific projects affecting sea turtles and monk seals would also continue.

Because the GMP is a programmatic, rather than site specific plan, no specific actions that would disturb green sea turtles or monk seals are proposed. Over time, the number of people visiting the park and their engagement opportunities would increase but with protection measures in place, adverse effects would be unlikely. The proposed entry pass system, and orientation to park policies and regulations along with updates to the superintendent's compendium would provide awareness and management to avoid potential adverse effects.

<u>Seabirds</u>: There would continue to be monitoring of seabird nesting and surveys for these species in suitable habitat. Although suitable nesting habitat likely exists inland near the crater as well, no nesting has yet been detected in these areas. Currently, the seabirds nest on the offshore islets, which are essentially unaffected by actions on the peninsula. Access to these islands would continue to be limited to scientific and resource management activities with public entry and landings prohibited by state law to protect the islets and indigenous species.

<u>Terrestrial Birds</u>: There are no specific actions that would affect endangered terrestrial birds. There would continue to be no effect on endangered terrestrial birds from actions in the selected alternative.

<u>Threatened and Endangered Plants</u>: The park would continue to monitor the distribution, abundance, and habitat use of special status plant species. The park would also continue its program of invasive plant and feral animal control to protect remaining areas with rare plants (such as in the coastal spray zone, crater, pali, and Pu'u Ali'i rainforest) and use fencing to create safe areas for cultivated special status plants.

Park staff currently collects propagules (seeds and cuttings) from plants within the nursery, or receive propagules from past collections maintained at botanical gardens. These plants are grown out in the nursery and then reintroduced to the field in the form of seeds, seedlings, or potted plants. Volunteers are commonly used for nursery maintenance and plant propagation.

Although there are no specific actions under the selected alternative that would affect threatened or endangered plants, actions to inventory, monitor, and propagate special status plants would continue and would continue to benefit these species. In addition, there are several programmatic actions, which could, if conservation measures were not applied, affect special status plants. These include increased visitation, ongoing browsing by nonnative ungulates, ongoing spread of nonnative invasive species and the risk of fire. Actions are currently being undertaken by the park to minimize the risks from fire, ungulate browsing (such as fencing and direct reduction) and nonnative invasive species (such as removal) and these would continue. Potential effects from increased visitation would be part of the selected alternative. With implementation, visitor travel would be restricted to developed areas and would thereby avoid adverse effects on listed species. In addition, issuance of a visitor day use permit (entry pass) would apprise visitors of additional rules regarding travel in formerly inaccessible areas. All other areas would require an NPS partner or commercial guide to access areas below 500 feet. Above that access would be discouraged and could be prohibited. This requirement would ensure that special status plants were avoided. Similarly, off trail travel would be restricted in areas where restoration of special status species has occurred, including along the pali trail and near the crater.

Pacific Hawaiian and Orangeblack Damselflies: Under both alternatives there would continue to be long-term beneficial effects from continued removal of feral animals from Waikolu Stream. Improvements to the riparian area of Waikolu Stream would likely improve habitat of the listed damselfly from implementation of the selected alternative.

Blackburn's Sphinx Moth: This species is restricted to disturbed areas, including on non-NPS managed areas, such as the landfill. Other host plants from the family Solanaceae occur throughout the park as well and could be important to the sphinx moth, however because none

would be removed and no actions in the GMP would affect them, there would be no effect on the sphinx moth from implementation of the selected alternative.

Hawaiian Yellow-faced Bees: There would continue to be no effect on yellow-faced bees from implementation of the selected alternative because no changes would occur to suitable habitat for them on the peninsula. Continued improvement of coastal plant communities could improve habitat for bees.

Conclusion: There would be no impairment of threatened or endangered species or their values from implementation of the selected action.

Conclusion Summary

Therefore, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the selected action. The NPS has determined that implementation of the selected alternative will not constitute an impairment of the resources or values at Kalaupapa National Historical Park. This conclusion is based on consideration of the park's purpose and significance, a thorough analysis of the environmental impacts described in the EA, comments provided by the public and others, and the professional judgment of the decision maker guided by the direction of NPS *Management Policies* 2006.

Attachment 4: Floodplains Statement of Findings

Floodplains Statement of Findings for the Kalaupapa NHP GMP

Recommended:

Superintendent, Kalaupapa National Historical Park

Date

Certification of Technical Adequacy and Servicewide Consistency:

Chief, Water Resources Division, National Park Service

Concurrence:

Hay Date

Concurrence:

Approved:

CINDY ORLANDO Digitally signed by CINDY ORLANDO Date: 2021.08.10 16:14:06-0700'

Regional Director, Regions 8, 9, 10 and 12, National Park Service

Date

INTRODUCTION

The NPS prepared the Floodplains Statement of Findings for the Kalaupapa NHP GMP to describe proposals to implement broad actions described in the GMP and to review the GMP in sufficient detail to:

- provide an accurate and complete description of the coastal hazards assumed by implementation of the GMP (without mitigation);
- provide an analysis of the comparative risk between proposed alternatives;
- describe the effects on coastal values associated with the proposed action, and;
- provide a thorough description and evaluation of mitigation measures developed to achieve compliance with Executive Order 11988 (Floodplain Management) and the NPS Floodplain Management Guideline (Director's Order 77-2).

Resource Description

Kalaupapa NHP consists of a relatively flat peninsula (the Peninsula) midway along the north shore of Molokai and is backed by three deeply carved valleys and steep cliffs (pali) rising from 1,600 feet above sea level at the western end of the park to more than 3,000 feet at the highest elevation of the pali.

Kalaupapa NHP's seaward boundary extends one-quarter mile offshore. Two distinct marine habitats, the intertidal zone and the coastal reefs, lie inside the boundary. Park waters shelter the endangered Hawaiian monk seal and humpback whale, the threatened green sea turtle, protected marine mammals such as the Hawaiian spinner dolphin, and well-preserved reef communities of coral, fish, and invertebrates. The ocean portion of the park also includes two islets, 'Ōkala and Huelo which serve as seabird sanctuaries, and one rocky pinnacle, Nāmoku; on the northwestern section of the peninsula.

The intertidal zone wraps around the peninsula to cover a total area of 0.22 square miles. Like other exposed north shores throughout Hawai'i, the intertidal area includes sandy beaches, cobble and boulder beaches, sea cliffs, raised benches, and tide pools.

Compared to other coastal areas throughout the main Hawaiian Islands, the Coastal Spray Area at Kalaupapa NHP (766 acres) supports a diverse and extensive native coastal vegetation community. For this reason, the Coastal Spray Area of the eastern coast of the Kalaupapa peninsula has been identified as a Special Ecological Area. Other terrestrial resources for which Kalaupapa NHP is known include the dryland forest remnants within the Kauhakō Crater and the higher elevation Pu'u Ali'i Rainforest. Areas dominated by native plants have been fenced off to define areas of ongoing feral animal control (goats, deer, and pigs), and form Special Ecological Areas.

Kalaupapa NHP has approximately 1,500 historic buildings and structures which includes roughly 270 historic buildings, 4 outdoor sculptures, 2 main roads, 30 ruins, 1,199 grave markers, 27 cemeteries, 1 special feature (Waikolu water line), and 1 marine/waterway feature (Kalaupapa Landing). The preservation of these buildings and structures is paramount because they are the physical evidence and remnants that help tell the story of Kalaupapa. Since the designation of the Kalaupapa as a national historic landmark in 1976 and designation as a national park unit in 1980, several dozen buildings and structures have been lost due to lack of maintenance, weather-related deterioration, and termite infestation.

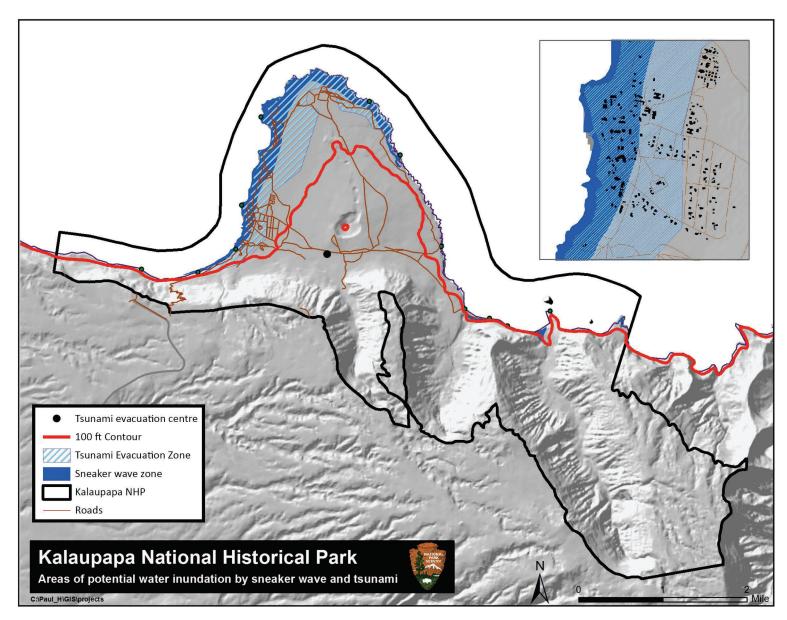


Figure A: Areas of Potential Inundation by Water Due to Flood or Tsunami

Coastal Hazards

Tsunami

Tsunamis are a series of waves most commonly caused by large earthquakes below or near the ocean floor on thrust faults associated with subduction zones. Tsunamis can also be caused by undersea landslides. Tsunamis differ from ordinary ocean waves and storm surges in that the entire water column from the sea floor to the ocean surface is displaced, not just the upper few feet of the ocean surface as with ordinary ocean waves. As tsunamis enter shallower coastal waters, the speed of the wave slows down and the height increases. A wave that may be only 3 feet high or less in the ocean may climb to more than 60 feet when it hits the coastline.

Tsunamis can cause great loss of life and property damage where they come ashore. The first wave is almost never the largest; successive waves may be spaced tens of minutes apart and continue arriving for many hours. All low lying areas along the Pacific Coast of the U.S. are subject to inundation by tsunamis. Two kinds of tsunami could affect Kalaupapa NHP.

The Pacific Rim is the name given to the land masses surrounding the Pacific Ocean. Very large earthquakes anywhere around the Pacific Rim may cause a distant source tsunami that could strike the Kalaupapa NHP coastline. The first waves would reach the coastline many hours after the earthquake occurred depending on the distance of the quake from Kalaupapa NHP. Tsunami Warning Centers will alert local officials, who may order evacuation along the coastline in Kalaupapa NHP.

The effects of a distant-source tsunami on Kalaupapa NHP may be negligible or severe, depending on the magnitude of the earthquake, the distance of the earthquake from the parks, and the direction of approach. Valley mouths or inlets are more vulnerable than exposed coastlines because the height of the waves may increase as the wave energy becomes concentrated as it moves through a constricted valley/inlet entrance.

If a large earthquake occurs within the major Hawaiian Islands, the first waves (a local source tsunami) may reach the coast within minutes after the ground-shaking stops. There is no time for authorities to issue a warning. People on the beach or in low coastal areas need to move to higher ground as soon as the ground-shaking stops and stay away from low-lying coastal areas until an official "all clear" is broadcast. Locally gene_rated tsunamis constitute the most serious threat because they can strike suddenly, before a tsunami warning system has been activated and sometimes before ground-shaking stops.

Lack of information about how tsunamis behave is widely responsible for loss of human life in many situations. Often the damage from a tsunami is caused not by the water but by large amounts of debris carried in the water. The arrival of a tsunami may be preceded by a withdrawal of water from the coastline. Tsunamis are not breaking waves like those usually seen along a beach, but most often hit the coast as debris-filled turbulent water. Debris entrained in the tsunami strikes whatever is in its path and can cause extensive damage to structures. Strong currents are also a common feature of tsunamis and can cause extensive scour and deposition of debris.

Other Coastal Dangers

Other seismic hazards in the coastal area are ground-shaking and liquefaction. Liquefaction can also occur when loosely packed, wet sand is shaken in an earthquake causing the sand flow like a liquid. Ground shaking is amplified in soft sediments such as sand, which increases the potential for damage to structures.

The cliffs for which Kalaupapa NHP is famed present yet another hazard. Local earthquakes would likely result in loose boulders and landslides posing a threat to hikers on the trail and residents and visitors below the cliffs.

Although earthquake derived hazards such as tsunamis are assumed by many people to be the most serious hazard to human life and safety along the Hawaiian coastline, there is also a great risk to park visitors along the coast from exceptionally large waves that are impossible to predict and that occur every year. They are called rogue or sneaker waves because they appear without warning any time of the year, often surging high up on the beach with deadly force. These waves generally result in one or more fatalities across the Hawaiian isles on an annual basis.

Influence of Predicted Climate Change

Direct hurricane strikes to the Hawaiian Islands are relatively rare, averaging fewer than one per decade. However, high wave events related to passing low pressure systems and distant storms that generate long period swell are a common seasonal phenomenon.

Since Kalaupapa NHP is a coastal park, 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. Globally, sea level is rising at the rate of 0.13 inches per year, although this rate has been accelerating in recent years (Church and White, 2011). In Hawai'i, sea level has risen over 5 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 inter annual frequencies will penetrate further inland and threaten coastal ecology, cultural resources, and park infrastructure. Areas at risk likely include the zone of potential inundation by water due to flood or tsunami as defined by Figure A: Areas of Potential Inundation by Water Due to Flood or Tsunami.

Kalaupapa Tsunami Evacuation Plan

The current evacuation map for Kalaupapa is available online from State Civil Defense (http://www.scd.hawaii.gov/). The 1991 map interpolates between the few run-up measurements of the tsunami of 1946. This was converted to inundation distance by one-dimensional modeling. Recent modeling efforts projecting "worst-case" scenarios are currently under examination by Maui County (including Kalawao County). For Kalaupapa, recent modeling shows flooding entirely contained within the evacuation area of the 1991 map. It is expected that the evacuation map for Kalaupapa will not change in the near future. However, evacuation maps may be updated in the future as studies of the 2011 Japanese earthquake are completed.

The current evacuation maps approximate the 60–70 foot contour, and are considered conservative. In 1946, Kalaupapa Settlement saw a maximum run-up of about 32 feet, though a half mile to the west of Kalaupapa the run-up reached 44 feet. The largest run-up anywhere in the islands in 1946 was over 54 feet on the cliffs just east of the Kalaupapa peninsula—the largest run-up ever measured in Hawai'i. It is unlikely that flooding from a tsunami even twice as large as the 1946 event would extend inland beyond the evacuation zone. Other authors suggest the adoption of the 100-foot contour as a measure of inundation zone for an extreme event. The 100-foot contour completely envelopes the settlement of Kalaupapa, see Figure A.

GMP Alternatives

The GMP alternatives differ principally in the incorporation of a long-term plan (no-action versus the preferred) and visitation.

Structures in the Hazard Zone

The NPS Floodplain Management Guideline (Director's Order 77-2) divides actions into the following three groups:

Class I Actions—include administrative, residential, warehouse and maintenance buildings, and nonexempted (overnight) parking lots. Picnic facilities, scenic overlooks, foot trails, and small associated daytime parking facilities that are water-dependent are exempted only if they are in non-high hazard areas.

Class II Actions—those that would create "an added disastrous dimension to the flood event." Class II actions include schools clinics, emergency services, fuel storage facilities, large sewage treatment plants, and structures such as museums that store irreplaceable records and artifacts.

Class III Actions—Class I or Class II Actions that are in high hazard areas such as those subject to coastal hazards.

While no new structures are proposed for construction, a few hundred historic buildings and structures serve a wide variety of functions crucial to the functioning and preservation of the history of the settlement.

The primary historic structures in the hazard zone are the care facility (DOH), State Department of Health administration office, visitors quarters used to house non-volunteer visitors, Kalaupapa NHP administration office, Hale Malama archival facility, Paschoal Recreational Hall, Bishop Home, St Francis Church, Protestant Church; store and warehouse, gasoline station, Bayview Home used for offices and housing, Quonset hut; and many historic maintenance facilities and residences

An Analysis of GMP Alternatives' Influence on Coastal Hazards

Neither alternative proposes construction of new facilities within the tsunami inundation zone. Both alternatives favor the restoration of key buildings symbolic of the history of Kalaupapa.

There is little substantial difference between alternatives but for the number of visitors within the tsunami inundation zone, endangerment to human lives, and coastal hazards. Alternative 2 would have a greater number of visitors within the settlement of Kalaupapa than alternative 1. Alternative 2 would have a larger number of visitors at threat from tsunami or sneaker waves.

All of the actions proposed in the alternatives are considered Class III actions because of their location immediately adjacent to the ocean in an area known to be at risk for a damaging seismic event, including both distant source and local tsunamis and liquefaction. The regulatory floodplain for Class III actions is the extreme floodplain, which in this case is the modeled tsunami generated by a magnitude 8+ earthquake originating along the Pacific margins of South America, Alaska, the Aleutian Islands, Kamchatka, the Kuril Islands, or Japan and assumed to have a run-up of least 20 vertical feet and perhaps as much as 100 vertical feet.

Justification for Use of the Coastal High Hazard Zone

Kalaupapa NHP's facilities serving the patient community, DOH an NPS operations, and dayuse and overnight visitors to Kalaupapa NHP are immediately adjacent the coastline. Based on the enabling legislation, preservation of the buildings and public education are the major purposes of Kalaupapa NHP. There are no alternative sites out of the coastal high hazard zone where historic preservation and interpretation can be located. Designation as a national historic landmark and desire to preserve historic viewscapes prevents the construction of new visitor facilities outside of the tsunami zone.

Because much of the historic Kalaupapa Settlement is subject to extreme seismic events, it is not practicable to locate interpretive sites out of a coastal high hazard zone. It is not possible to relocate historic buildings to avoid damage from a major seismic event. It is only practicable to reduce loss of life and property through preparations before, during and immediately after an earthquake or a tsunami. The primary preparation for tsunamis is to inform people how tsunamis behave and what risks are associated with tsunamis.

The Tsunami Warning System (TWS) was created to monitor seismic activity capable of generating tsunamis (tsunamigenic earthquakes) in the Pacific basin and to provide timely warnings to affected areas to reduce loss of human life. The TWS monitors seismic events and tide stations throughout the Pacific Basin to evaluate potential tsunami-generating earthquakes and to disseminate tsunami warnings. The Pacific Tsunami Warning Center (TWC) in Honolulu, Hawai'i is the operational center for the Pacific TWS. The West Coast and Alaska Tsunami Warning Center (WC/ATWC) in Palmer, Alaska serves as the regional tsunami warning center for California, Oregon, Washington, British Columbia, and Alaska. If the preliminary magnitude of an earthquake detected by one of the TWCs is greater than 7.5 and the expected travel time to the Hawaiian Islands is more than five to six hours (Walker 2008), the TWS issues a tsunami advisory bulletin. If the expected travel time is between two and six hours, a tsunami watch bulletin is issued, with a tsunami warning bulletin issued to areas within two hours travel time to warn of imminent tsunami hazard. Since 1981, the WC/ATWC has issued 17 regional tsunami warnings, with an average response time of 10.6 minutes (range 8–14 minutes) between the quake and the warning.

All beach users are also at risk from sneaker waves. The north coast of all the Hawaiian Islands are renowned for sneaker/rogue waves. People in the intertidal zone (typically local fisherman and opihi (limpet) pickers are under the highest threat, though large waves can endanger visitors well above the high tide mark. Several lives are lost e ery year in Hawai'i to unpredictable sneaker waves.

Description of Site-specific Coastal Hazard Risk

The height of a tsunami and tsunami risk at Kalaupapa NHP depends on the magnitude and location of the seismic event that generates the tsunami. For a distant source tsunami, the NPS will rely on the TWS, the local Office of Emergency Services, and local emergency services providers to disseminate information about the expected arrival time of a tsunami and to evacuate anyone in the coastal high hazard zones until the threat has subsided. There may be no warning time for a locally generated tsunami.

Distant source tsunamis, regardless of run-up height, will be preceded by advisories, watches, or warnings issued by the TWC in Honolulu. Once a watch or a warning is issued, the NPS will

reduce or eliminate the risk at Kalaupapa NHP by evacuating any visitors and most park staff out of the immediate area using trained staff from Kalaupapa NHP and the state Department of Health.

For locally generated tsunamis, the risk depends on the magnitude and duration of ground-shaking and whether liquefaction occurs. Should liquefaction occur, any persons in the immediate area will have to move to the nearest high ground as soon as possible. The current tsunami evacuation plan for locally generated tsunami (identified by earth tremblers strong enough to jar or throw a person to the ground) calls for immediate evacuation on foot to higher ground along a predetermined route. Households and staff with vehicles would drive along the evacuation route within minutes to move all foot traffic to higher ground. Under this scenario, most Kalaupapa residents could evacuate within minutes of the earthquake. Following the issuance of a tsunami warning, the end point for any exodus from the settlement or the east coast of the peninsula is the tsunami evacuation center immediately south of the crater, midway between the crater and the pali.

Design or Modifications to Minimize Harm to Coastal Values or Risks to Life and Property

Actions occurring within the coastal high hazard zone are subject to the provisions of the NPS Floodplain Management Guideline (Director's Order 77-2).

Destruction from tsunamis is the direct result of three factors: wave impact, inundation, and erosion. Less easily perceived is the highly damaging effect of water loaded with debris as it recedes back to the ocean. Water rendered dense with debris including vegetation and artifacts from structures becomes highly erosive as it scours the landscape and objects within the water on the way back to the ocean. Erosion becomes more likely if severe local ground-shaking results in soil liquefaction before or during a tsunami. Erosion of the Kalaupapa coastline is an unavoidable and unmitigatable consequence of a damaging earthquake and ensuing tsunami.

New structures would be kept to a minimum to reduce intrusions into the ocean views and preserve the historic viewscape. The structures along the coast that would create debris moved by a tsunami are all of a historic nature. Vegetation and driftwood that washes down the rivers and onto the beach is an additional source of debris.

The proposed facilities are of major historical significance, and the NPS acknowledges that many facilities with the settlement of Kalaupapa are subject to damage or destruction from seismic events and tsunamis. The GMP acknowledges that both the seismic and tsunami risk are substantially greater than what was known when the settlement was founded. The NPS is focusing on protecting human life and safety through warning and evacuation rather than minimizing property damage.

Risk to life and property at Kalaupapa NHP would be minimized by:

- Posting signs at the beach advising about the danger of sneaker waves, undertows, and rip currents;
- Encouraging visitors to adopt a vigilant attitude (keep attention focused on the water rather than turning their back to the ocean) and to describe swimming techniques for escaping undertow and rip currents;
- Providing information about tsunami behavior such as series of waves and entrained debris will further reduce risk of injury;
- Installation of a tsunami warning system and definition of an evacuation route;

- The construction of a tsunami evacuation center;
- Favoring overnight facilities outside of the mapped inundation zone, and;
- Improving our knowledge base by completing an assessment of coastal vulnerability to wave overtopping, sea level rise, and extreme wave events for Kalaupapa NHP.

Conclusion

The NPS concludes that the proposed action would not appreciably increase the impacts of coastal hazards associated with tsunamis or "sneaker" waves at Kalaupapa NHP.

Exceptionally large sneaker waves and seismic events capable of generating a tsunami are expected to occur but precise timing is unpredictable. Sneaker waves may arrive in any season. Winter storm surges during high tides will increase the hazard associated with large waves. The NPS will monitor weather and sea conditions during all seasons and will post additional warnings and increase beach patrols during periods of hazardous sea conditions.

Property along the coastline will be damaged or destroyed in a major seismic event generated locally or regionally. The extent of property damage will depend on the magnitude and location of the event. A local event will be likely to cause greater damage than a distant event. The reduced warning consequent to a local earthquake event would result in greater loss of life due to a shorter notice for evacuation.

Distant seismic events capable of generating a tsunami allow time for warning and evacuation, which will reduce or eliminate hazards to human life and safety. There is no mitigation that can be prescribed for the infrastructure and facilities along the coastline.

While restricted public access to much of the Kalaupapa coastline reduces the risk posed to the public by rogue and seismically induced waves, it is not practicable to prevent people from accessing the coastline within the bounds of the Kalaupapa Settlement.

NPS investments in historic buildings within the potential tsunami mundation zone amount to over \$20,000,000. Furthermore, key administrative buildings, law enforcement, residences, and the archival center would be destroyed by a sunami event that completely covered the inundation zone depicted by Figure A. The loss of administrative centers (NPS and State Department of Health), the law enforcement buildings and safety equipment/first aid supplies, and other key facilities would cripple short-term and long-term operations within Kalaupapa NHP.

The primary response by the NPS to reduce harm of potential tsunamis on human life would be to:

- Post warning signs describing the hazards and evacuation procedures in the case of a major local event;
- Undertake tsunami warning and evacuation procedures consistent with the directions given by local emergency services agencies;
- Construct an evacuation center outside of the maximum inundation zone;
- Clearly mark an evacuation route to higher and safer grounds beyond the safety inundation zone, and;
- Participate in Kalaupapa-specific, island-wide and regional exercises to prepare for future tsunami events.

Adverse impacts to property, safety, and human life are likely to occur from unpredictable seismic events over the long term, but there is no practicable way to avoid these impacts and continue to meet other legal obligations for providing access to the settlement and adjacent coastal zone. There are no practicable, hazard-free, alternative locations for visitor facilities other than existing historic structures whose purpose is to facilitate access and educate visitors about the history of Hansen's disease on the isolated peninsula encompassing Kalawao and Kalaupapa. Therefore, the National Park Service finds the proposed action to be acceptable under Executive Order 11988 for the protection of floodplains.

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